

Initial Study

3300 El Camino Real Office Building



Prepared by

CITY OF
PALO ALTO

In Consultation with
50 YEARS
EST. 1972
**DAVID J. POWERS
& ASSOCIATES, INC.**
ENVIRONMENTAL CONSULTANTS & PLANNERS

September 2022



MITIGATED NEGATIVE DECLARATION

CIRCULATION PERIOD 9/26/2022 to 10/26/2022

PROJECT NAME 3300 El Camino Real Office Building

PROJECT LOCATION The project is located at 3300 El Camino Real, in the City of Palo Alto (APN 142-20-046). The site is located at the southwest corner of Hansen Way and El Camino Real.

PROJECT PROPONENT Form 4 Architecture on behalf of Sandhill Properties

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PROJECT DESCRIPTION

The project would involve construction of an approximately 52,872 square-foot (sf) two-story office building on an approximately 2.89-acre parcel located at 3300 El Camino Real in the City of Palo Alto. The office building would include 50,355 sf of office space across both the first and second floors as well as a 2,517-sf traffic amenity space. The project would include a below-grade parking level, and require approximately 15,000 cubic yards of soil removal. The project would include a total of 170 parking spaces spread though the surface parking lot and the new underground parking level. The project site is currently occupied by a surface parking lot for the adjacent commercial tenant at 611 Hansen Way. The project site is located within the California-Olive-Emerson (COE) groundwater plume and is adjacent to 611 Hansen Way, a site listed on the Cortese List. The proposed project would require an Architecture Review Board (ARB) approval.

DETERMINATION

In accordance with the City of Palo Alto's procedures for compliance with the California Environmental Quality Act (CEQA), the City has conducted an Initial Study to determine whether the proposed project could have a significant effect on the environment. On the basis of that study, the City makes the following determination:

- ☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION is hereby adopted.
- ☒ Although the project, as proposed, could have a significant effect on the environment, there will not be a significant effect on the environment in this case because mitigation measures have been added to the project and, therefore, a MITIGATED NEGATIVE DECLARATION is hereby adopted.

The attached initial study incorporates all relevant information regarding the potential environmental effects of the project and confirms the determination that an EIR is not required for the project. In addition, the following mitigation measures have been incorporated into the project:

MM BIO-1.1

The project owner or designee shall schedule demolition and construction activities to avoid the nesting season. The nesting season for most birds, including most raptors in the San Francisco Bay area extends from February 1st through August 31st.

If it is not possible to schedule demolition and construction between September 1st and January 31st to avoid the nesting season, pre-construction surveys for nesting raptors and other migratory nesting birds shall be conducted by a qualified ornithologist, as approved by the City of Palo Alto, to identify active nests that may be disturbed during project implementation on-site and within 250 feet of the site. Projects that commence demolition and/or construction activities between February 1st and August 31st shall conduct a pre-construction survey for nesting birds no more than 14 days prior to initiation of construction, demolition activities, or tree removal.

If an active nest is found in or close enough to the project area to be disturbed by construction activities, a qualified ornithologist shall determine the extent of a construction-free buffer zone (typically 250 feet for raptors and 100 feet for other birds) around the nest, to ensure that raptor or migratory bird nests would not be disturbed during ground disturbing activities. The California Department of Fish and Wildlife (CDFW) will be notified, as appropriate. The construction-free buffer zones shall be maintained until after the nesting season has ended and/or the ornithologist has determined that the nest is no longer active.

The ornithologist shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the City of Palo Alto prior to any grading, demolition, and/or building permit.

MM CUL-2.1

A Qualified Archaeological monitor as well as a Native American monitor shall be present to monitor ground-disturbing activities. The Archaeologist and Native American monitor shall have the authority to halt construction activities in the event any cultural materials are encountered during ground-disturbing construction activities.

MM CUL-2.2

In the event any significant cultural materials are encountered during construction grading or excavation, construction within a radius of 50 feet of the find would be halted, the Director of Planning shall be notified, and the on-site qualified archaeologist shall examine the find and make appropriate recommendations regarding the significance of the find and the appropriate treatment of the resource.

Recommendations could include, but is not limited to, preservation in place or collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovered during monitoring shall be submitted to the Director of Planning. If the discovery is determined to be Native American in nature, the on-site Native American monitor shall be consulted to determine the appropriate treatment of the resource.

MM CUL-2.3

Prior to commencement of any project-related construction activities, a qualified Archeologist and tribal cultural monitor shall provide a worker environmental awareness training to all site personnel that addresses cultural and tribal cultural resources. The training shall discuss the appearance of resources that may be encountered during construction as well as the procedures and notification process in the event of discovery.

MM CUL-3.1

Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission (NAHC) who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this state law, then the landowner shall reinter the human remains, and items associated with Native American burials on the property in a location not subject to further subsurface disturbance. If the Director of Planning, in consultation with the archaeologist and Native American monitor, finds that the archaeological find is not a significant resource, work would resume only after the submittal of a preliminary archaeological report and after provisions for reburial and ongoing monitoring are accepted by the Director of Planning.

MM GEO-6.1

Should a unique paleontological resource or site or unique geological feature be identified at the project site during any phase of construction, all ground disturbing activities within 25 feet shall cease and the City's Planning Director notified immediately. A qualified paleontologist shall evaluate the find, prescribe recommendations for proper treatment of the resource, and, depending on the nature of the discovery, document their findings in a paleontological report. Treatment may include protection in-place or recovery of the resource and placement in a repository. The paleontological report shall be

submitted to the City. If paleontological materials are recovered they shall be cataloged and donated to a paleontological repository, such as the University of California Museum of Paleontology.

MM HAZ-2.1

Prior to conducting earthwork activities at the project site, a Site Management Plan (SMP) and Health and Safety Plan (HSP) shall be prepared. The purpose of these documents will be to establish appropriate management practices for handling impacted soil, soil vapor and groundwater that may be encountered during construction activities. Based on the history of the project vicinity, areas of impacted soil, soil vapor and/or groundwater likely will be encountered during construction activities, which may require special monitoring, handling and/or disposal. The SMP shall be submitted to the Department of Toxic Substances Control (DTSC) for review, and DTSC approval shall be obtained prior to commencing earthwork activities at the project site.

MM HAZ-2.2

Prior to excavation of the proposed below grade parking garage, additional soil sampling will be required to profile the soil for landfill disposal and/or reuse at another construction project. Soil profiling shall be performed in accordance with the acceptance criteria of the selected receiving facilities and/or the DTSC's October 2001 Clean Fill Advisory. Prior to soil transfer, written approval shall be obtained from the selected receiving facility and a copy shall be provided to the Director of Planning upon request.

MM HAZ-2.3

The existing groundwater extraction and monitoring wells and associated piping shall be properly removed in coordination with the DTSC, Varian, and, if warranted, other affected responsible parties within the Varian Study Area. Any well deconstruction activities shall be conducted under permit from the Santa Clara Valley Water District (Valley Water).

MM TRN-2.1

Consistent with Comprehensive Plan Program T-1.2.3, the project applicant shall be required to implement a Transportation Demand Management (TDM) plan to reduce peak-hour vehicle trips by at least 30 percent, given that the project is along El Camino Real and is within the Stanford Research Park. The TDM plan shall include measures such as transit promotion, prepaid transit passes, commuter checks, car sharing, carpooling, employee shuttles, and parking cash-out, bicycle lockers and showers. The TDM plan shall be submitted to the City of Palo Alto's Office of Transportation for review and approval prior to approval of a planning entitlement. The project applicant shall be required to pay a Transportation Impact Fee for all the peak-hour vehicle trips that cannot be reduced via TDM measures. Fees collected by the City shall be used for capital improvements aimed at reducing vehicle trips.

MM TRN-3.1

Prior to issuance of any building permits, the project shall provide at least 15 feet of red curb west of the proposed driveway to prohibit parking and provide adequate sight distance along El Camino Real.

<i>Garrett Sauls</i>	Planner	9-23-22
<i>Signature (Project Planner)</i>	<i>Title</i>	<i>Date</i>

<i>Adopted by City Council, Attested by</i>	<i>Title</i>	<i>Date</i>
<i>Director of Planning + Community Environment</i>		
<i>(signed after MND has been approved)</i>		

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SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of Palo Alto, as the Lead Agency, has prepared this Initial Study for the 3300 El Camino Real Office 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 Palo Alto, California.

The project proposes to construct an approximately 52,872 square-foot (sf), two-story office building on an approximately 125,888 sf parcel located at 3300 El Camino Real in the City of Palo Alto. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 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:

Garrett Sauls, Associate Planner
garrett.sauls@cityofpaloalto.org
(650) 329-2471
City of Palo Alto
250 Hamilton Avenue
Palo Alto, California 94301

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City of Palo Alto will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) for the project at a regularly scheduled hearing. The City shall consider the Initial Study/MND together with any comments received during the public review process and would be required to adopt the MND prior to approval of the project.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City of Palo Alto 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

3300 El Camino Real Office Building

2.2 LEAD AGENCY CONTACT

Garrett Sauls, Associate Planner
City of Palo Alto Development Center
285 Hamilton Avenue
Palo Alto, California 94301

2.3 PROJECT APPLICANT

Form 4 Architecture on behalf of Sandhill Properties

2.4 PROJECT LOCATION

The 2.89-acre (125,888 square-foot) project site is located at 3300 El Camino Real, in the City of Palo Alto. The project site is located at the southwest corner of Hansen Way and El Camino Real.

2.5 ASSESSOR'S PARCEL NUMBER

142-20-046

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

The City of Palo Alto Comprehensive Plan Land Use Element designates the land use at the site as Research/Office Park (RP). The Zoning district for the site is Research Park (RP)(L). The (L), or Landscape, overlay is a combining district that is intended to provide regulations to ensure the provision of landscaped open space as a physical and visual separation between residential districts and intensive commercial or industrial uses.

2.7 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

The City anticipates that the following approvals or permits would be required for the proposed project:

- Major Architectural Review
- Building Permit
- Excavation and Grading Permit
- City of Palo Alto Encroachment Permit
- California Department of Transportation (CalTrans) Encroachment Permit
- Department of Toxic Substances Control approval of Site Management Plan and Health and Safety Plan
- Valley Water Well Destruction Permit

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The project site is located at 3300 El Camino Real and consists of one parcel (Assessor's Parcel Number 142-20-046). The project site is located at the southwest corner of Hansen Way and El Camino Real. Regional, vicinity, and aerial maps are provided in Figure 3.2-1, Figure 3.2-2, and Figure 3.2-3, respectively. The approximately 2.89-acre site is currently occupied by a surface parking lot, supporting the adjacent office building located at 607 Hansen Way, and associated landscaping. The project site also contains several utility easements. There is a 10-foot sanitary sewer easement on the western boundary, a 10-foot underground electric easement running across the northwestern corner, and a 50-foot landscape, utility, and drainage easement on the eastern boundary.

3.1.1 General Plan and Zoning

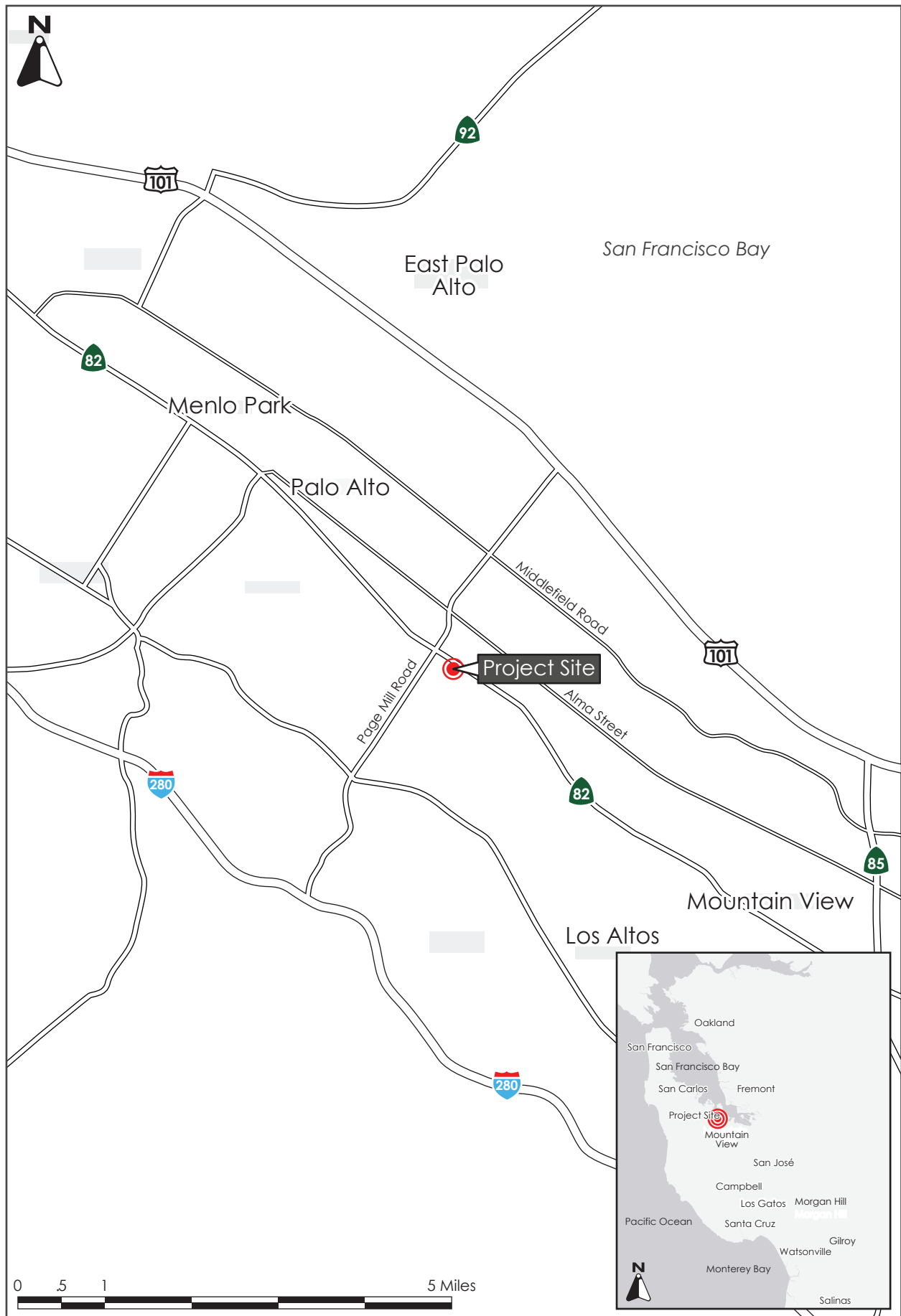
The project site has a land use designation of Research/Office Park (RP) and is zoned Research Park with a Landscape Combining District (RP)(L). The RP district provides for a limited group of research and manufacturing uses that may have unusual requirements for space, light, and air, and desire sites in a research park environment. The Landscape combining district is intended to provide regulations to ensure the provision of landscaped open space as a physical and visual separation between residential districts and intensive commercial or industrial uses. The proposed office building is a permitted use in the RP(L) zoning district.

3.2 PROPOSED PROJECT

3.2.1 Office Building

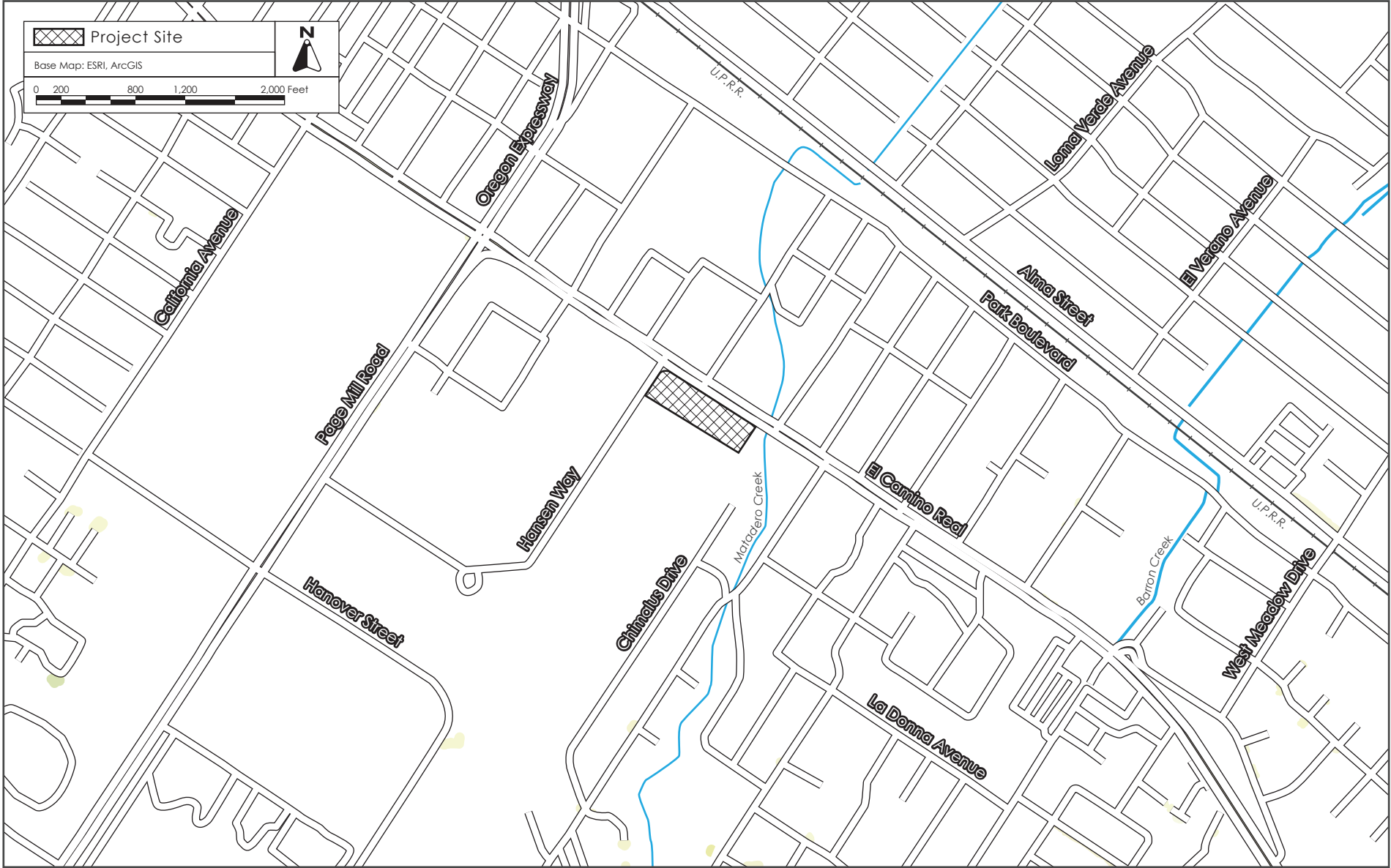
The project would involve construction of an approximately 52,872 sf two-story office building. The office building would include 50,355 sf of office space across both the first and second floors as well as an approximately 2,517 sf traffic mitigating amenity space, likely to be a café or fitness area that serves to reduce off-site trips for employees by allowing them to receive services on-site. The second story would also include a rooftop terrace with landscaped areas, walkways, gathering areas, and canopies. An approximately 261 sf trash and transformer enclosure would also be constructed on-site, in the proposed surface parking lot. The building would accommodate approximately 151 employees. A site plan and floor plans are shown in Figure 3.2-5, and Figure 3.2-6.

The office building would have a street-side setback of approximately 28 feet from El Camino Real, a side setback of approximately 25 feet from 611 Hansen Way, a rear setback of approximately 50 feet from the Creekside Inn to the east, and a front setback of approximately 347.5 feet from Hansen Way to the west. The floor area ratio (FAR) for the site would be 0.4 and the project would result in approximately 29 percent lot coverage. The building would reach a height of 35 feet to the top of the roof, and 42 feet to the top of the mechanical equipment enclosure. Proposed building elevations are shown in Figure 3.2-7 and Figure 3.2-8.



REGIONAL MAP

FIGURE 3.2-1



VICINITY MAP

FIGURE 3.2-2



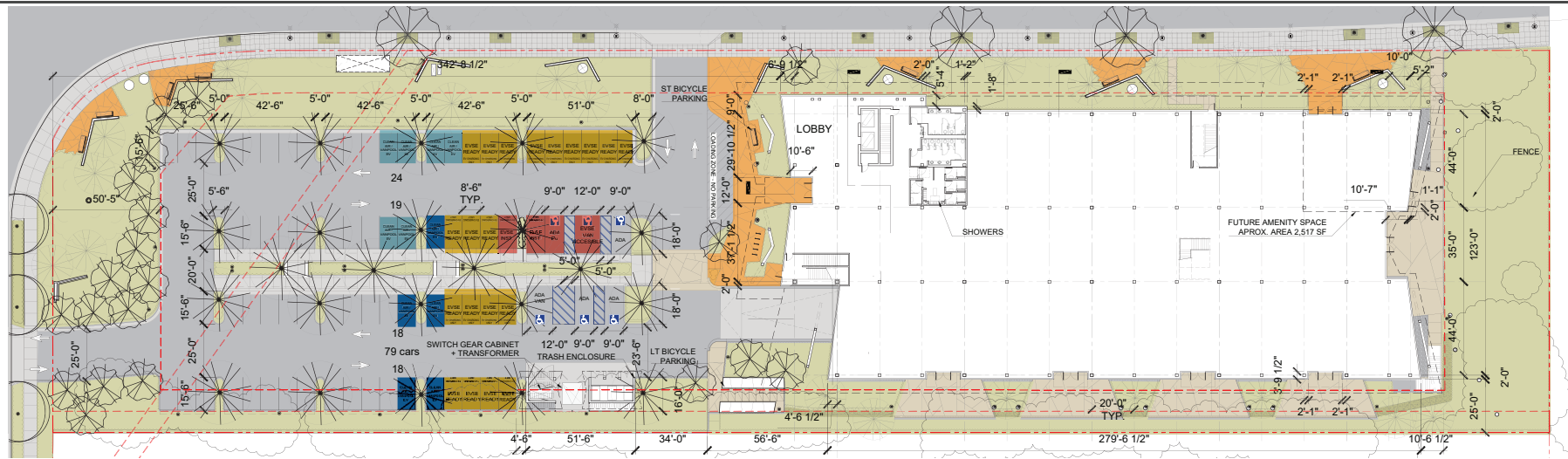
AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 3.2-3

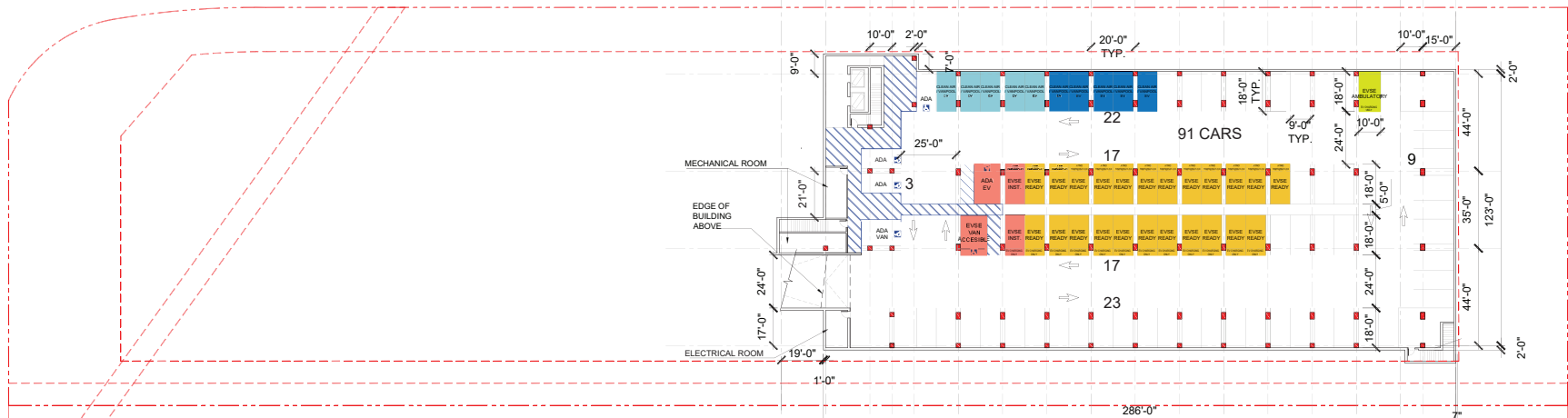


SITE PLAN

FIGURE 3.2-4



FIRST FLOOR PLAN

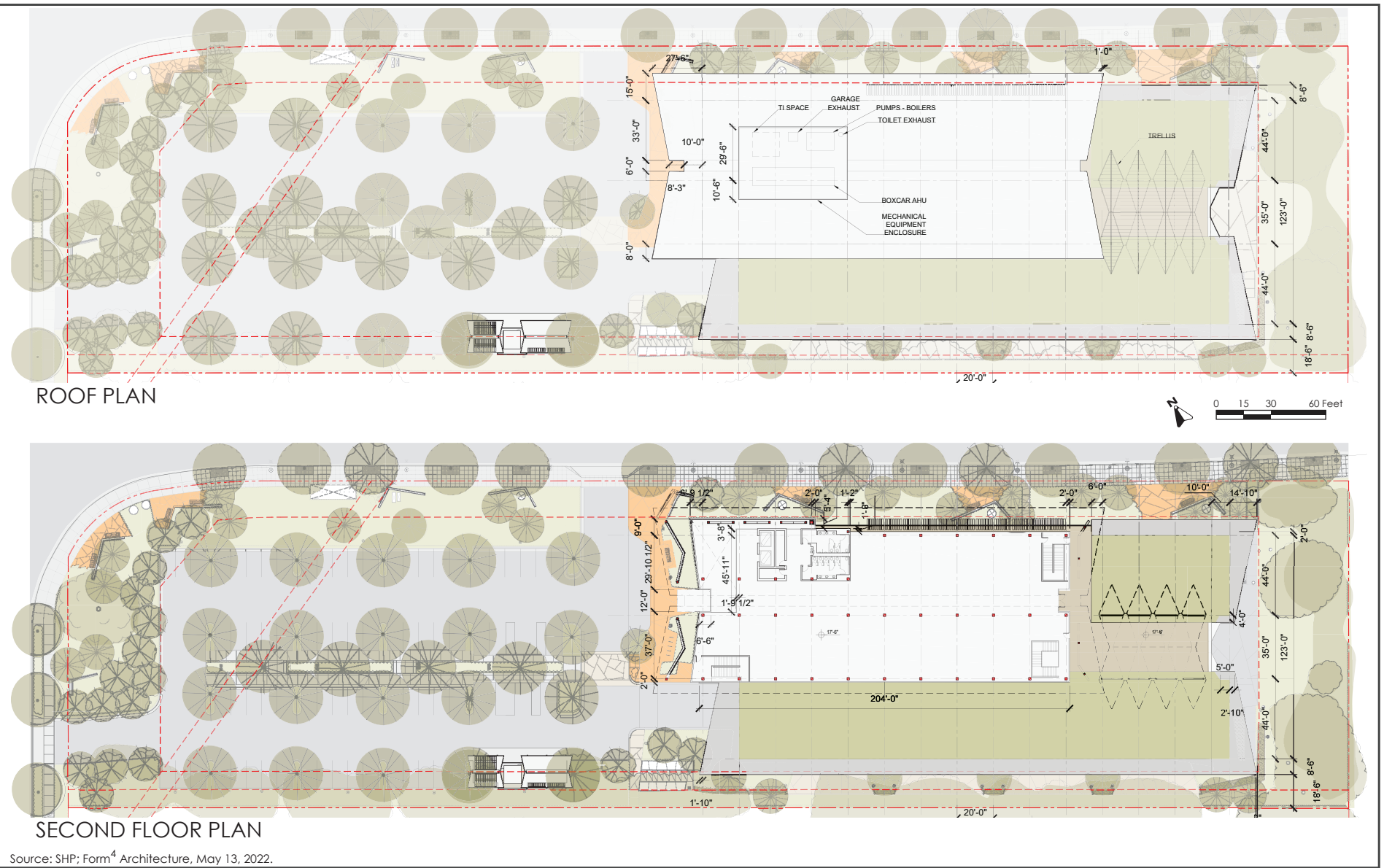


BASEMENT FLOOR PLAN

Source: SHP; Form⁴ Architecture, May 13, 2022.

BASEMENT AND FIRST FLOOR PLANS

FIGURE 3.2-5



SECOND FLOOR AND ROOF PLANS

FIGURE 3.2-6



NORTH ELEVATION

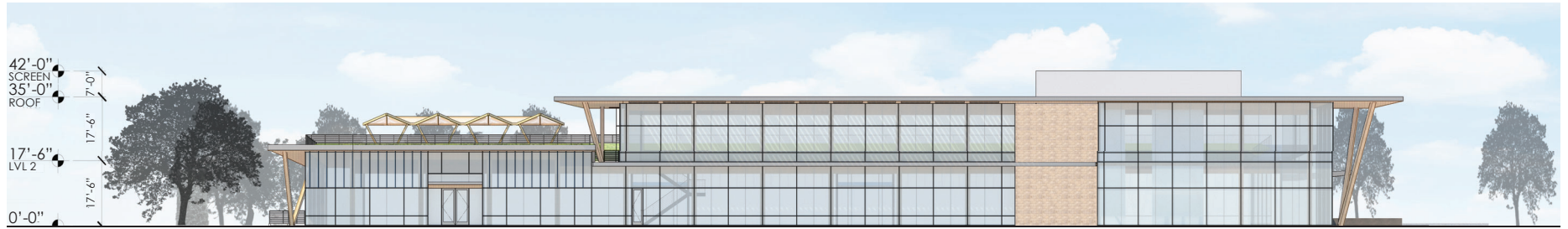


SOUTH ELEVATION

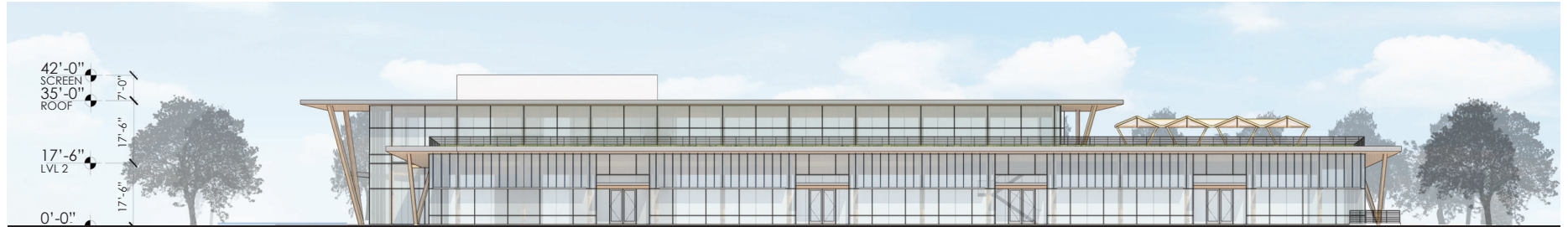
Source: SHP; Form⁴ Architecture, May 13, 2022.

NORTH AND SOUTH BUILDING ELEVATIONS

FIGURE 3.2-7



EAST ELEVATION



WEST ELEVATION

Source: SHP; Form⁴ Architecture, May 13, 2022.

EAST AND WEST BUILDING ELEVATIONS

FIGURE 3.2-8

3.2.2 Site Access and Parking

The project would include a surface parking lot and one level of underground parking, which would require excavation to a depth of approximately 11 feet. Seventy-nine (79) parking spaces would be provided on the surface lot and 91 spaces would be provided in the underground garage for a total of 170 parking spaces.

Additionally, the project would provide 17 bicycle parking spaces. Fourteen (14) out of the 17 bicycle parking spaces would be long-term bicycle parking and the remaining three would be short-term bicycle parking spaces.

Site access would be provided via the relocated driveway along El Camino Real and existing driveway along Hansen Way. The project site is also connected to the adjacent surface parking lot to the south. A pedestrian walkway connecting to the sidewalk along El Camino Real would be constructed to provide pedestrian access to the surface parking lot and office building. Additional pedestrian walkways would be provided along the southern and eastern sides of the office building. A fire access foot path would be constructed at the southeastern corner of the project site.

3.2.3 Landscaping and Trees

Landscaping would be provided throughout the surface parking lot, the border of the project site, and on the rooftop terrace. The project site currently contains 40 trees. There are also 10 street trees along El Camino Real adjacent to the project site and 20 trees along the shared parcel line with 611 Hansen Way, to the south of the project site. Twenty-one (21) trees would be removed from the project site. The 10 street trees and the other trees on-site and along the shared parcel line would remain. The project would include 72 new trees spread throughout the site, resulting in a total of 121 trees on-site. This would be a net increase of 51 trees compared to existing conditions, including the street trees and trees along the shared parcel line.

3.2.4 Green Building and Energy Efficiency

In addition to California Building Code (CBC) requirements, the City of Palo Alto has adopted more stringent green building regulations. The Palo Alto Green Building Ordinance requires applicants to incorporate sustainable design, construction, and operational requirements into development projects. For non-residential projects, the City has adopted California Green Building Standards Code (CALGreen) Tier 2 for new construction. In accordance with the City's Green Building Ordinance, the proposed project would satisfy requirements for CALGreen Tier 2. The green measures proposed by the project include, but are not limited to:

- Rooftop solar panels
- All electric utilities
- Exterior wall shading
- Short and long-term bicycle parking (12 percent of total parking)
- Electric Vehicle (EV) charging for at least 25 percent of parking spaces
- Cool roof for reduction of heat island effect
- 20 percent water savings over the “water use baseline”

- Water-efficient interior fixtures
- Installation of a recycled water irrigation system for exterior vegetation
- Enhanced construction waste reduction – 80 percent diversion rate

3.2.5 Construction

It is anticipated that the project would be constructed over an approximate 15-month period, beginning September 2022. It is estimated that construction of the project would require the export of approximately 16,000 cubic yards of soil for the below grade parking garage. Construction equipment would be staged on the project site, as necessary. Construction hours in the City of Palo Alto are between 8:00 AM to 6:00 PM Monday through Friday and 9:00 AM to 6:00 PM on Saturdays. Construction is not allowed on Sundays and holidays.

3.2.6 Required Approvals

The City anticipates that the following approvals or permits would be required for the proposed project:

- Planning Entitlement-Major Architectural Review
- Building Permit
- Excavation and Grading Permit
- City of Palo Alto Encroachment Permit
- California Department of Transportation (CalTrans) Encroachment Permit
- Department of Toxic Substances Control approval of Site Management Plan and Health and Safety Plan
- Valley Water Well Destruction Permit

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

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

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

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project’s impact on the environmental subject as related to the checklist questions. For significant impacts, feasible mitigation measures are identified. “Mitigation measures” are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered to correspond to the checklist question being answered. For example, Impact BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM BIO-1.1 refers to the first mitigation measure for the first impact in the Biological Resources section.

4.1 AESTHETICS

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Senate Bill 743

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

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

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

Streets and Highway Code Sections 260 through 263

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

Local

City of Palo Alto Comprehensive Plan

According to Policy Program L-9.1 from the Land Use and Community Design Element of the City of Palo Alto Comprehensive Plan, roads with high scenic value include Sand Hill Road, University Avenue, Embarcadero Road, Page Mill Road/Oregon Expressway, Interstate 280, Arastradero Road

¹ An "infill site" is defined as "a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses." A "transit priority area" is defined as "an area within 0.5 mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations." A "major transit stop" means "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." Source: Office of Planning and Research. "Changes to CEQA for Transit Oriented Development – FAQ." October 14, 2014. Accessed April 28, 2021.

<http://www.opr.ca.gov/ceqa/updates/sb-743/transit-oriented.html>.

² CalTrans. California State Scenic Highway System Map. Accessed April 28, 2021.

<https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983>

(west of Foothill Expressway), Junipero Serra Boulevard/Foothill Expressway, and Skyline Boulevard. These roads are to be maintained as local scenic routes.

Palo Alto 2030 Comprehensive Plan

The Palo Alto 2030 Comprehensive Plan (Comprehensive Plan) includes policies for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to aesthetics and are applicable to the proposed project.

Policy/Program	Description
Policy L-3.1	Ensure that new or remodeled structures are compatible with the neighborhood and adjacent structures.
Policy L-6.1	Promote high-quality design and site planning that is compatible with surrounding development and public spaces.
Policy L-6.2	Use the Zoning Ordinance, design review process, design guidelines and Coordinated Area Plans to ensure high quality residential and commercial design and architectural compatibility.
Policy L-6.6	Design buildings to complement streets and public spaces; to promote personal safety, public health and wellbeing; and to enhance a sense of community safety.
Policy L-9.2	Encourage development that creatively integrates parking into the project, including by locating it behind buildings or underground wherever possible, or by providing for shared use of parking areas. Encourage other alternatives to surface parking lots that minimize the amount of land devoted to parking while still maintaining safe streets, street trees, a vibrant local economy and sufficient parking to meet demand.

4.1.1.2 *Existing Conditions*

The City of Palo Alto is located in the northwest corner of the Santa Clara Valley. Palo Alto is a highly urbanized area. The project site is currently occupied by a surface parking lot and approximately 40 trees. There are also 10 street trees along El Camino Real adjacent to the project site and 20 trees along the shared parcel line with 611 Hansen Way, to the south of the project site.

The project site is approximately 1,355 feet east of Page Mill Road, a locally designated scenic route. There are several primary gateways along El Camino Real, as designated by the Comprehensive Plan. The nearest primary gateway is located at the intersection of El Camino Real and Page Mill Road. The project vicinity is characterized by commercial buildings of varying designs and uses. Buildings in the project vicinity are generally one to two stories tall.

4.1.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
1) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? ³ If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

The project involves the construction of a new two-story commercial building with rooftop open space as well as underground parking garage and associated landscaping. The project would increase the massing and intensity of development on the project site, which is currently undeveloped aside from a surface parking lot. As such, the project would represent a change in the visual character of the project site. However, surrounding development includes primarily two-story structures. The Parmani Hotel across Hansen Way has been approved to be redeveloped as a three-story building. Therefore, the proposed height is consistent with surround development in the area.

The project site is not considered a scenic vista. Development of the proposed office building would not obstruct any existing views of the foothills or Peninsula hills, nor would it adversely affect any views from a scenic vista. Therefore, the project would not have a substantial adverse effect on scenic vista. **(No Impact)**

³ Public views are those that are experienced from publicly accessible vantage points.

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

The nearest state scenic highway is Interstate-280 (I-280), approximately 2.5 miles southwest of the project site. At this distance, the project site is not visible from I-280. Therefore, the project would not substantially damage scenic resources within a state scenic highway. **(No Impact)**

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

The proposed office building is an allowable use within the RP(L) zoning district. The building would comply with the zoning district's development standards regulating building height, setbacks, lot coverage, FAR, and site size. The project would be subject to review by the Architectural Review Board to ensure its compatibility with the surrounding vicinity, pursuant to General Plan policies L-3.1, L-6.1, L-6.2, and L-6.6. Consistent with General Plan policy L-9.2, the project proposes to locate the majority of the new parking spaces underground.

As previously noted, the project site is approximately 1,355 feet from Page Mill Road, a City-designated scenic route. Additionally, there are several primary gateways along El Camino Real, including the intersection of El Camino Real and Page Mill Road. Given the existing conditions of the project site, only the trees could potentially be considered scenic resources within view of Page Mill Road and El Camino Real. While 21 trees would be removed during construction, the project would result in a net increase of trees on-site. The proposed office building would feature a rooftop terrace and landscaping throughout the project site. Therefore, the project would not take away scenic resources from view of Page Mill Road. The exterior would consist primarily of mass timber and framing, matte wood finishes and soffits, large windows, and stone tile exterior walkways. A conceptual rendering of the proposed office building can be seen in Figure 4.1-1. Therefore, the project would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

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

As shown in Figure 4.1-1, the exterior of the proposed office building would largely consist of glass windows. These windows could be a potential new source of glare during the day. The proposed exterior building materials would be reviewed as part of the City's Architectural Review Board process. The Architectural Review Board would evaluate the project's potential to create new sources of glare and would provide recommendations to reduce glare, if necessary. The potential for glare to be produced by the project is typical of office buildings along El Camino Real. Nothing about the proposed design is unusual with respect to windows producing glare and nothing about the site's location or circumstance is unique with respect to glare.

All lighting proposed by the project would be consistent with the policies, guidelines, and controls in the Palo Alto Municipal Code (PAMC). Specifically, Section 16.14.170 requires outdoor lighting systems to be designed to reduce light pollution and 18.23.030 limits light visible beyond the property line. Outdoor lighting proposed by the project would be similar to the lighting of the surrounding development and would incrementally add to the existing background light levels that are already present. Therefore, the project would not create a new substantial source of light or glare which would adversely affect day or nighttime views in the area. **(Less than Significant Impact)**



Source: SHP; Form⁴ Architecture, December 18, 2020.

CONCEPTUAL RENDERING

FIGURE 4.1-1

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.⁴

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.⁵

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.⁶ 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.⁷

4.2.1.2 *Existing Conditions*

There are no agricultural resources on-site. The project site is classified as Urban and Built-Up Land by the FMMP.⁸ The project site does not contain any forest or timber land.

⁴ California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed April 29, 2021. <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>.

⁵ California Department of Conservation. "Williamson Act." <http://www.conservation.ca.gov/dlrp/lca>.

⁶ 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)).

⁷ California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed April 29, 2021. <http://frap.fire.ca.gov/>.

⁸ California Department of Conservation. "California Important Farmland Finder." Accessed April 30, 2021. [DLRP Important Farmland Finder \(ca.gov\)](http://www.conservation.ca.gov/dlrp/important-farmland-finder)

4.2.2 Impact Discussion

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

Impact AG-1: The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. **(No Impact)**

The FMMP has classified the project site as Urban and Built-Up Land.⁹ The project site is not classified as farmland. Therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. **(No Impact)**

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

The project site is currently zoned RP which does not provide for agricultural uses. The project site is not under a Williamson Act contract. **(No Impact)**

⁹ Ibid.

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

The project site is not designated or zoned as timberland or forest land. For this reason, the project would have not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

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

The project site does not contain any forest land. The project would not result in a loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

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

The project would not involve any changes in the existing environment which could result in conversion of Farmland to non-agricultural use or conversion or forest land to non-forest use. **(No Impact)**

4.3 AIR QUALITY

The following discussion is based, in part, on a construction community risk assessment prepared by Illingworth & Rodkin, Inc., dated July 2021. A copy of this report is included in Appendix A of this Initial Study.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O₃), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.¹⁰ Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 4.3-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.3-1: Health Effects of Air Pollutants		
Pollutants	Sources	Primary Effects
Ozone (O ₃)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	<ul style="list-style-type: none">• Aggravation of respiratory and cardiovascular diseases• Irritation of eyes• Cardiopulmonary function impairment
Nitrogen Dioxide (NO ₂)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	<ul style="list-style-type: none">• Aggravation of respiratory illness• Reduced visibility
Fine Particulate Matter (PM _{2.5}) and Coarse Particulate Matter (PM ₁₀)	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	<ul style="list-style-type: none">• Reduced lung function, especially in children• Aggravation of respiratory and cardiorespiratory diseases• Increased cough and chest discomfort• Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	<ul style="list-style-type: none">• Cancer• Chronic eye, lung, or skin irritation• Neurological and reproductive disorders

High O₃ levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O₃ levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to

¹⁰ The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

reduce O₃ levels. The highest O₃ levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM₁₀) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM_{2.5}). Elevated concentrations of PM₁₀ and PM_{2.5} are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).¹¹ Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

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

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O₃, CO, SO_x, NO_x, and lead.

¹¹ California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed April 30, 2021. <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>.

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

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in addition 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 state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.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.

¹² BAAQMD. *Final 2017 Clean Air Plan*. April 19, 2017. <http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans>.

4.3.1.3 Existing Conditions

The Bay Area is considered a non-attainment area for ground-level O₃ and PM_{2.5} under both the federal Clean Air Act and state Clean Air Act. The area is also considered nonattainment for PM₁₀ under the state act, but not the federal act. The area has attained both state and federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards for O₃ and PM₁₀, BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O₃ precursor pollutants (ROG and NO_x), PM₁₀, and PM_{2.5}, and apply to both construction period and operational period impacts.

Palo Alto 2030 Comprehensive Plan

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

Policy/Program	Description
Program N-5.1.2	Implement BAAQMD recommended standards for the design of buildings near heavily traveled roads, in order to minimize exposure to auto-related emissions.
Policy N-5.3	Reduce emissions of particulates from, manufacturing, dry cleaning, construction activity, grading, wood burning, landscape maintenance, including leaf blowers and other sources.
Policy N-5.4	All potential sources of odor and/or toxic air contaminants shall be adequately buffered, or mechanically or otherwise mitigated to avoid odor and toxic impacts that violate relevant human health standards.
Policy N-5.5	Support the BAAQMD in its efforts to achieve compliance with existing air quality regulations by continuing to require development applicants to comply with BAAQMD construction emissions control measures and health risk assessment requirements.

4.3.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.3.2.1 *Thresholds of Significance*

Impacts from the Project

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

Table 4.3-2: BAAQMD Air Quality Significance Thresholds			
Pollutant	Construction Thresholds	Operation Thresholds	
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Annual Average Emissions (tons/year)
Criteria Air Pollutants			
ROG, NO _x	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust Control Measures/Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	Single Source	Combined Cumulative Sources	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental Annual PM _{2.5}	0.3 µg/m ³	0.8 µg/m ³ (average)	

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

The proposed project would not conflict with the 2017 CAP because it would be smaller than the BAAQMD CEQA Air Quality Guidelines Operational and Construction-Related Criteria Pollutant Screening Sizes, is considered urban infill, and would be located near bike paths and transit with regional connections. The BAAQMD Operational Pollutant Screening Size is 346,000 sf for general office buildings and the BAAQMD Construction-Related Criteria Pollutant Screening Size is 277,000 sf for general office buildings. The proposed office building, at 52,872 sf, would fall below both the Operational and Construction-Related Criteria Pollutant Screening Sizes. Because the project would not exceed the BAAQMD screening criteria, it would not result in the generation of operational-related criteria air pollutants and/or precursors that exceed the thresholds shown in Table 4.3-2. Thus, the project is not required to incorporate project-specific control measures listed in the 2017 CAP. Further, implementation of the project would not inhibit BAAQMD or partner agencies from continuing progress toward attaining state and federal air quality standards and eliminating health-risk disparities from exposure to air pollution among Bay Area communities, as described within the 2017 CAP. **(Less than Significant Impact)**

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

Construction

Criteria Pollutants

The project proposes to construct a 52,872 sf office building. This is below the BAAQMD CEQA Air Quality Guidelines 277,000-square-foot office construction emissions screening threshold for construction-related regional criteria pollutants.¹³ Because the project is below the BAAQMD screening threshold, project construction would not result in a significant impact as it relates to criteria pollutants.

Fugitive Dust

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soil. The amount of dust generated would be highly variable and would be dependent on the size of the area disturbed at any given time, the amount of construction activity, soil type and moisture, and meteorological conditions. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant if best management practices (BMPs) are employed to reduce these emissions. The proposed project would be required to incorporate the following BAAQMD BMPs to reduce fugitive dust during construction, these BMPs would be included as standard measures as part of the planning approval.

¹³ BAAQMD. CEQA *Air Quality Guidelines*. May 2017. Table 3-1 Criteria Air Pollutants and Precursors and GHG Screening Level Sizes.

These BMPs shall be implemented during all demolition, grading, and construction activities to reduce construction-related particulate emissions:

- Exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day or covered.
- Haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 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.
- Vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- Roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Chapter 13, Section 2485 of California Code of Regulations [CCR]). Clear signage explaining this rule shall be provided for construction workers at all access points.
- Construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. Equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

A publicly visible sign shall be posted with the telephone number and name of an individual working for the construction contractor who can be contacted regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Implementation of these BAAQMD-recommended BMPs during construction are standard measures that are required for all projects. Implementation of these measures would ensure that the project's fugitive dust impacts are less than significant.

Project Operation

For operational impacts, the BAAQMD Air Quality Guidelines state that the screening project size for an office building is 346,000 square feet. General office building projects of smaller size would have less-than-significant impacts with respect to operational-period emissions. Since the project proposes a 52,872 sf office building, emissions would be below the BAAQMD significance thresholds for operational impacts and the impact is less than significant. **(Less than Significant Impact)**

Impact AIR-3:	The project would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant Impact)
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Project Construction

Sensitive receptors in the project vicinity include residences to the southeast and northeast of the project site, the closest of which is approximately 240 feet southeast of the project site, and Building Kidz of Palo Alto, a day care center located at 415 Lambert Avenue, approximately 470 feet

northeast of the project site. The maximally exposed individual (MEI) was identified on the first floor at the closest single-family residence southeast of the project site (see Figure 4.3-1). These receptors would be exposed to TAC emissions associated with project construction (i.e., on-site construction and truck hauling emissions). Dispersion modeling was used to identify on-site and off-site concentrations of particulate matter and evaluate the health risks associated with the construction TAC emissions.

Community risk impacts are addressed by predicting increased lifetime cancer risk, the increase in annual $PM_{2.5}$ concentrations, and computing the Hazard Index (HI) for non-cancer health risks. Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. The results of the health risk assessment for the MEI and the Building Kids of Palo Alto day care center are summarized below in Table 4.3-3. To provide the most conservative analysis, the MEI was assumed to be an infant, since infants breathe a more rapid rate than adults and therefore inhale more pollutants over a given time period.



LOCATIONS OF SENSITIVE RECEPTORS AND THE MEI

FIGURE 4.3-1

Table 4.3-3: Construction Risk Impacts			
Source	Cancer Risk (per million)	Annual PM_{2.5} (µg/m³)	Hazard Index
BAAQMD Single-Source Threshold	>10.0	>0.3	>1.0
MEI (Nearby residence)			
Project construction – unmitigated	8.32 (infant)	0.05	0.01
Exceed Threshold? (unmitigated)	No	No	No
Building Kids of Palo Alto			
Project construction - unmitigated	0.46 (infant)	<0.01	<0.01
Exceed Threshold? (unmitigated)	No	No	No

As shown in Table 4.3-3 above, project construction emissions would fall below the BAAQMD single-source threshold for community health risks without mitigation. Therefore, project construction would not expose sensitive receptors to substantial pollutant concentrations.

Project Operation

Project Traffic

Diesel powered vehicles are the primary concern with local traffic-generated TAC impacts. This project would generate approximately 515 total daily trips (see Section 4.17 Transportation) with most of the trips being from light-duty gasoline-powered vehicles (i.e., passenger cars). Per BAAQMD recommended risks and methodology, a road with less than 10,000 total vehicle per day is considered a low-impact source of TACs.¹⁴ Therefore, project-generated traffic is considered negligible in this analysis.

Project Stand-By Diesel Generator

The project proposes to include one stand-by 500-kilowatt (kW) generator powered by a 670-horsepower (HP) diesel engine in the southwest corner of the underground garage. Operation of a diesel generator would be a source of TAC emissions. The generator would be operated for testing and maintenance purposes, with a maximum of 50 hours per year of non-emergency operation under normal conditions. During testing periods, the engine would typically be run for less than one hour under light engine loads. The generator engine would be required to meet U.S. EPA emission standards and consume commercially available California low sulfur diesel fuel.

The generator's diesel engine would be subject to CARB's Stationary Diesel Airborne Toxics Control Measure (ATCM) and require permits from the BAAQMD, since it will be equipped with an engine larger than 50-HP. As part of the BAAQMD permit requirements for toxics screening analysis, the engine emissions will have to meet Best Available Control Technology for Toxics (TBACT) and pass the toxic risk screening level of less than ten in a million. The risk assessment

¹⁴ Bay Area Air Quality Management District, 2012, Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0. May 2011. <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/baaqmd-modeling-approach.pdf>

would be prepared by BAAQMD. Depending on results, BAAQMD would set limits for DPM emissions (e.g., more restricted engine operation periods). Sources of air pollutant emissions complying with all applicable BAAQMD regulations generally will not be considered to have a significant air quality community risk impact.

Cumulative Community Health Risks of all TAC Sources

The cumulative risk impacts from a project are the combination of construction and operation sources. In this case, these sources include on-site construction activity and operation of the project generator. The combined impacts of the project's construction and operation health risk impacts are summarized below in Table 4.3-4.

Table 4.3-4 Construction and Operation Risk Impacts			
Source	Cancer Risk (per million)	Annual PM_{2.5} (µg/m³)	Hazard Index
BAAQMD Single-Source Threshold	>10.0	>0.3	>1.0
MEI (Nearby residence)			
Project construction	8.32 (infant)	0.05	0.01
Project Generator Operation	0.96 (infant)	<0.01	<0.01
Total/Maximum Project Impact	9.28 (infant)	0.05	0.01
Exceed Threshold?	No	No	No
Building Kids of Palo Alto			
Project construction	0.46 (infant)	<0.01	<0.01
Project Generator Operation	0.13 (infant)	<0.01	<0.01
Total/Maximum Project Impact	0.59 (infant)	<0.01	<0.01
Exceed Threshold?	No	No	No

As shown in Table 4.3-4 above, with operation of the proposed stand-by generator, the project would still not exceed the BAAQMD single-source community health risk threshold at the MEI or the existing nearby day care center.

Existing TAC Sources

Existing substantial sources of TACs within the project vicinity that could contribute to a cumulative health risk impact include traffic along El Camino Real, a diesel generator, a gas station, a diesel turbine, and an auto body coating shop. A summary of the combined community health risk impacts of these existing sources and the proposed project at the MEI is provided in Table 4.3-5.

Table 4.3-5: Cumulative Community Risk Impacts at the MEI			
Source	Cancer Risk (per million)	Annual PM_{2.5} (µg/m³)	Hazard Index
Total/Maximum Project Impact	9.28 (infant)	0.05	0.01
El Camino Real (average daily traffic)	3.72	0.14	<0.01
Arts Bodycraft, Inc. (auto body coating shop) at >1,000 feet	--	--	<0.01
Pacific Bell (emergency diesel turbine) at >1,000 feet	0.07	<0.01	<0.01
Barron Park Shell (gas station), at 900 feet	0.14	--	<0.01
Combined Sources	13.21	<0.20	<0.05
BAAQMD Cumulative Source Threshold	100	0.8	10.0
Exceed Threshold?	No	No	No

As shown in Table 4.3-5, the project would not exceed the BAAQMD Cumulative Source Threshold when combined with existing TAC sources within the project vicinity. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations as a single source emitter or as a contributor to a cumulative impact. **(Less than Significant Impact)**

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

The project does not include any odor-causing operations, and any odors emitted during construction would be temporary and localized. **(Less than Significant Impact)**

4.4 BIOLOGICAL RESOURCES

The following discussion is based, in part, on an arborist report and tree protection plan prepared by Davey Resources Group, Inc. in December 2020. A copy of this report can be seen in Appendix B.

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

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

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

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds.¹⁵ Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

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

¹⁵ United States Department of the Interior. “Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take.” Accessed April 30, 2021. <https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf>.

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

Fish and Game Code Section 1602

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

Regional and Local

Stanford University Habitat Conservation Plan

The property is within the area covered by the Stanford University Habitat Conservation Plan (SUHCP). Stanford University prepared a habitat conservation plan (HCP) to address protection and management of four federally listed, and one special-status, species that occur/potentially occur on Stanford lands. These species are the California tiger salamander, California red-legged frog, San Francisco garter snake, steelhead, and western pond turtle, which are also known as Covered Species. The SUHCP includes measures to minimize the impacts of University activities on federally protected species and protect and enhance habitat on Stanford lands. The HCP was a required element for the University's application to the USFWS and National Ocean and Atmospheric Administration (NOAA) Fisheries for Incidental Take Permits (ITPs) under the FESA. The ITPs authorize take of federally listed species caused by otherwise lawful activities, such as those associated with normal operation of the University. These are also known as the Covered Activities, and they are specifically described in the HCP.

The Plan Area identified in the SUHCP includes some lands that fall within the City of Palo Alto limits (e.g., Page Mill Road west of El Camino Real, lands along San Francisquito Creek), and lands that fall within the City of Palo Alto's Sphere of Influence (e.g., lands west of Junipero Serra Boulevard).

Palo Alto 2030 Comprehensive Plan

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

Policy/Program	Description
Policy N-1.4	Protect special-status species and plant communities, including those listed by State and federal agencies and recognized organizations from the impacts of development and incompatible activities.
Policy N-2.8	Require new commercial, multi-unit and single-family housing projects to provide street trees and related irrigation systems.
Policy N-2.9	Minimize removal of, and damage to, trees due to construction-related activities such as trenching, excavation, soil compacting and release of toxins.
Policy N-2.10	Preserve and protect Regulated Trees, such as native oaks and other significant trees, on public and private property, including landscape trees approved as part

of a development review process and consider strategies for expanding tree protection in Palo Alto.

Program N-2.10.1 Continue to require replacement of trees, including street trees lost to new development.

City of Palo Alto Municipal Code

Section 8.10 of the PAMC, “Tree Preservation and Management Regulations,” (Tree Preservation Ordinance), protects categories of trees on public or private property from removal or disfigurement. These categories of regulated trees include:

- **Protected Trees.** Includes all coast live oak (*Quercus agrifolia*) and valley oak (*Quercus lobata*) trees 11.5 inches or greater in diameter measured at a height of 54 inches above grade, coast redwood (*Sequoia sempervirens*) trees 18 inches or greater in diameter, and heritage trees designated by the City Council according to any of the following provisions: it is an outstanding specimen of a desirable species; it is one of the largest or oldest trees in Palo Alto; or it possesses distinctive form, size, age, location, and/or historical significance.
- **Street Trees.** Also protected under Section 8.04 of the PAMC “Street Trees, Shrubs and Plants) are City-owned street trees (all trees growing within the street right-of-way, outside of private property). A permit is required for work that would in any way damage, destroy, injure, or mutilate a street tree. The excavation of any ditch or tunnel or placement of concrete or other pavement within ten feet from the center of any street tree trunk also requires a permit. Street trees require special protection by a fenced enclosure, according to the Standard Tree Protection Instructions, before demolition, grading or construction.
- **Designated Trees.** Designated trees are established by the City when a project is subject to discretionary design review process by the Architecture Review Board that under Municipal Code Chapter 18.76.020(d)(11) includes as part of the findings of review, “whether natural features are appropriately preserved and integrated with the project.” Outstanding tree specimens or groups of trees function as a screening buffer or other value may contribute to an existing site, neighborhood or community, and may have a rating of “High” suitability for preservation.

Palo Alto Tree Preservation Guidelines

For all development projects within the City of Palo Alto, discretionary or ministerial, a *Tree Disclosure Statement* (TDS) is part of the submittal checklist to establish and verify trees that exist on the site, trees that overhang the site originating on an adjacent property, and trees that are growing in a City easement, parkway, or publicly owned land. The TDS stipulates that a Tree Survey is required (for multiple trees), when a Tree Preservation Report is required (development within the dripline of a Regulated Tree), and who may prepare these documents. The City of Palo Alto Tree Technical Manual (Tree Technical Manual) describes acceptable procedures and standards to preserve Regulated Trees, including:

- The protection of trees during construction;
- If allowed to be removed, the acceptable replacement strategy;
- Maintenance of protected trees (such as pruning guidelines);

- Format and procedures for tree reports; and
- Criteria for determining whether a tree is a hazard.

4.4.1.2 *Existing Conditions*

The project site is within Zone 4 (areas with low or no habitat value for covered species) of the Stanford Habitat Conservation Plan. The project site is currently occupied by a parking lot and associated landscape trees. The project site does not contain suitable habitat to support special-status wildlife or plant species. The project site does not contain any biologically sensitive habitats.

The project site currently contains 40 trees. There are also 10 street trees along El Camino Real adjacent to the project site and 20 trees along the shared parcel line with 611 Hansen Way, to the south of the project site. A summary of the species and protected status of the trees on-site, including the street trees and those along the shared parcel line, is given below in Table 4.4-1.

Table 4.4-1: Summary of Trees On-Site		
Name	Number of Trees	Number of Protected Trees
American elm (<i>Ulmus americana</i>)	1	--
Coast live oak (<i>Quercus agrifolia</i>)	9	6
Deodar cedar (<i>Cedrus deodara</i>)	13	--
Green ash (<i>Fraxinus pennsylvanica</i>)	32	--
London plane (<i>Platanus hybridia</i>)	10	10 (street trees)
Mexican fan palm (<i>Washingtonia filifera</i>)	1	--
Plum (<i>Prunus spp.</i>)	1	--
Silver wattle (<i>Acacia dealbata</i>)	2	--
Valley oak (<i>Quercus lobata</i>)	1	1
Total	70	17

As shown in Table 4.4-1, the predominant species on-site are the green ash, deodar cedar, and the London plane trees. 17 of the trees are protected under Section 8.10 of the PAMC. 10 out of the 17 protected trees are street trees, six are coast live oaks, and one is a valley oak.

4.4.2

Impact Discussion

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

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

The project would remove 21 trees on-site, including one tree along the shared parcel line. The trees could provide nesting habitat for special status bird species, including migratory birds and raptors. Construction of the project during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes abandonment

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

Impact BIO-1: Construction and demolition activities, including the removal of trees from the project site, could impact nesting migratory birds.

Implementation of MM BIO-1.1, described below, would reduce impacts to nesting migratory birds during construction to a less than significant level.

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

If it is not possible to schedule demolition and construction between September 1st and January 31st to avoid the nesting season, pre-construction surveys for nesting raptors and other migratory nesting birds shall be conducted by a qualified ornithologist, as approved by the City of Palo Alto, to identify active nests that may be disturbed during project implementation on-site and within 250 feet of the site. Projects that commence demolition and/or construction activities between February 1st and August 31st shall conduct a pre-construction survey for nesting birds no more than 14 days prior to initiation of construction, demolition activities, or tree removal.

If an active nest is found in or close enough to the project area to be disturbed by construction activities, a qualified ornithologist shall determine the extent of a construction-free buffer zone (typically 250 feet for raptors and 100 feet for other birds) around the nest, to ensure that raptor or migratory bird nests would not be disturbed during ground disturbing activities. The California Department of Fish and Wildlife (CDFW) will be notified, as appropriate. The construction-free buffer zones shall be maintained until after the nesting season has ended and/or the ornithologist has determined that the nest is no longer active.

The ornithologist shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the City of Palo Alto prior to any grading, demolition, and/or building permit.

With the implementation of the measures contained within MM-BIO-1.1, impacts to migratory birds would be less than significant. The project site does not provide suitable habitat for any other special status species. Therefore, the project would not have a substantial adverse effect on special status species. **(Less than Significant Impact with Mitigation Incorporated)**

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

The project site does not contain any riparian habitat or sensitive natural communities. **(No Impact)**

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

The project site does not contain any protected wetlands. **(No Impact)**

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

The project site is located within an urban area of Palo Alto. The project site is not located within a known regional wildlife movement corridor or any other sensitive biological area. As previously stated, tree removal during development could disturb nesting habitat for migratory birds. With the implementation of the measures contained within MM-BIO-1.1, impacts to migratory birds would be less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

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

The project would remove one of the 17 protected trees on-site. Four other non-protected trees would also be removed. The project would include 72 new trees spread throughout the site, resulting in a total of 121 trees on-site. This would be a net increase of 51 trees compared to existing conditions, including the street trees and trees along the shared parcel line.

In accordance with the City's Tree Technical Manual, the applicant would be required to obtain a permit for the removal of the protected coast live oak tree and would be required to provide a replacement tree(s) or pay a fee in lieu of replacement upon the approval of the Director of Planning & Community Environment. Additionally, the project would protect the trees to be retained on-site in accordance with the standards set forth by the Tree Technical Manual. Therefore, the project would not conflict with any local policies or ordinances protecting biological resources. **(Less than Significant Impact)**

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

The project site is within Zone 4 (areas with low or no habitat value for covered species) of the Stanford Habitat Conservation Plan. The project would not require ITP coverage for species under the plan because none would be present in the project area; therefore, there would be no conflict and no impact. **(No Impact)**

4.5 CULTURAL RESOURCES

The following discussion is based, in part, on a cultural resources sensitivity assessment prepared for the project by Archaeological/Historical Consultants, dated August 2021. A copy of this report is included in Appendix C of this Initial Study.

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

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

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.¹⁶

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

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

¹⁶ California Office of Historic Preservation. “CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6.” Accessed August 9, 2021.
<http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf>.

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.

Palo Alto 2030 Comprehensive Plan

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

Policy/Program	Description
Policy L-7.15	Protect Palo Alto's archaeological resources, including natural land formations, sacred sites, the historical landscape, historic habitats and remains of settlements here before the founding of Palo Alto in the 19th century
Policy L-7.17	Assess the need for archaeological surveys and mitigation plans on a project-by-project basis, consistent with the California Environmental Quality Act and the National Historic Preservation Act.
Policy L-7.18	Require project proponents to meet State codes and regulations regarding the identification and protection of archaeological and paleontological deposits, and unique geologic features.

4.5.1.2 *Existing Conditions*

Archaeological Context

A record search for previously recorded cultural resources in the project area was completed at the Northwest Information Center (NWIC). The record search found that one prehistoric resource site is located approximately 470 feet south of the project site. The resources, recorded in 1991, included typical features of the San Francisco Bay area such as shells, fire-affected rocks, mammal and bird

bones, ash features, and lithic artifacts. This resource site has since been disturbed by residential development. No other records of cultural resource were found within the project area.

The project area is flat, and Matadero Creek is located adjacent to eastern boundary of the project site. Native soils in the project area are alluvial fan deposits. These factors, combined with the proximity of a recorded prehistoric resource site, makes the project site highly sensitive for archaeological resources.

Historical Context

A review of historic USGS maps and aerial photos indicate that the project vicinity was undeveloped before the early 1940s, when a Southern Pacific railroad line to Los Altos was constructed about 500 feet northwest of the project site. The adjacent building to the south, 607 Hansen Way, was constructed circa 1955, and by 1965 the project site was paved to serve as a parking lot. The building at 607 Hansen Way is not an identified historic resource listed by the City, County of Santa Clara, or the state.

4.5.2 Impact Discussion

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

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

The project site is currently occupied by a parking lot and associated landscaping. There are no historic buildings or structures on-site or adjacent to the site. Therefore, the project would not impact historic resources. **(No Impact)**

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

The project site is highly sensitive to archaeological resources due to its flat topography, proximity to fresh water, soil type, and proximity to a recorded prehistoric resource site. The project would include excavation for a below-grade parking structure. As a result, there is the possibility of encountering undisturbed subsurface archaeological resources. If archaeological resources are identified, as defined by Section 21083.2 of the Public Resources Code, the site would be required to be treated in accordance with the provisions of Section 21083.2 of the Public Resources Code as appropriate. If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98.

Impact CUL-2: Unknown subsurface archaeological resources could be present on the site in underlying native soils and could be disturbed during project construction.

With implementation of the following mitigation measures, potential impacts to subsurface cultural resources would be reduced to a less than significant level.

MM CUL-2.1: A Qualified Archeological monitor as well as a Native American monitor shall be present to monitor ground-disturbing activities. The Archaeologist and Native American monitor shall have the authority to halt construction activities in the event any cultural materials are encountered during ground-disturbing construction activities.

MM CUL-2.2: In the event any significant cultural materials are encountered during construction grading or excavation, construction within a radius of 50 feet of the find would be halted, the Director of Planning shall be notified, and the on-site qualified archaeologist shall examine the find and make appropriate recommendations regarding the significance of the find and the appropriate treatment of the resource. Recommendations could include, but is not limited to, preservation in place or collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovered during monitoring shall be submitted to the Director of Planning. If the discovery is determined to be Native American in nature, the on-site Native American monitor shall be consulted to determine the appropriate treatment of the resource.

MM CUL-2.3: Prior to commencement of any project-related construction activities, a qualified Archeologist and tribal cultural monitor shall provide a worker environmental awareness training to all site personnel that addresses cultural and tribal cultural resources. The training shall discuss the appearance of resources that may be encountered during construction as well as the procedures and notification process in the event of discovery.

With implementation of MM CUL-2.1, MM CUL-2.2, and MM CUL-2.3, impacts to any incidental discoveries of archaeological resources would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation)**.

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

The project site is highly sensitive to archaeological resources, which could include human remains. The project includes excavation for a below-grade parking structure. In the event any archaeological or human remains are discovered on the site, impacts would be potentially significant.

Implementation of the following mitigation measure, in addition to MM CUL-2.1 which requires monitoring by an archaeologist, as a condition of approval would reduce this impact to a less than significant level.

MM CUL-3.1: Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission (NAHC) who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this state law, then the landowner shall reinter the human remains, and items associated with Native American burials on the property in a location not subject to further subsurface disturbance. If the Director of Planning, in consultation with the archaeologist and Native American monitor, finds that the archaeological find is not a significant resource, work would resume only after the submittal of a preliminary archaeological report and after provisions for reburial and ongoing monitoring are accepted by the Director of Planning.

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

4.6 ENERGY

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

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

Renewables Portfolio Standard Program

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

Executive Order B-55-18 To Achieve Carbon Neutrality

In September 2018, Governor Brown issued an executive order, EO-B-55-18 To Achieve Carbon Neutrality, setting a statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." The executive order requires CARB to "ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal." EO-B-55-18 supplements EO S-3-05 by requiring not only emissions reductions, but also that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO₂ 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.¹⁷ Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.¹⁸

¹⁷ California Building Standards Commission. "California Building Standards Code." Accessed May 7, 2021. <https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo>.

¹⁸ California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed May 7, 2021. <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency>.

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CALGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.¹⁹

Local

Palo Alto 2030 Comprehensive Plan

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

Policy/Program	Description
Policy N-7.1	Continue to procure carbon neutral energy for both long-term and short-term energy supplies, including renewable and hydroelectric resources, while investing in cost-effective energy efficiency and energy conservation programs.
Policy N-7.4	Maximize the conservation and efficient use of energy in new and existing residences and other buildings in Palo Alto.
Policy N-7.5	Encourage energy efficient lighting that protects dark skies and promotes energy conservation by minimizing light and glare from development while ensuring public health and safety.
Program N-7.6.3	Promote solar energy in individual private projects.

4.6.1.2 Existing Conditions

Total energy usage in California was approximately 7,802 trillion British thermal units (Btu) in the year 2019, the most recent year for which this data was available.²⁰ Out of the 50 states, California is ranked second in total energy consumption and 46th in energy consumption per capita. The breakdown by sector was approximately 19 percent (1,456 trillion Btu) for residential uses, 19 percent (1,468 trillion Btu) for commercial uses, 23 percent (1,805 trillion Btu) for industrial uses,

¹⁹ California Air Resources Board. "The Advanced Clean Cars Program." Accessed May 7, 2021. <https://www.arb.ca.gov/msprog/acc/acc.htm>.

²⁰ United States Energy Information Administration. "State Profile and Energy Estimates, 2019." Accessed August 20, 2021. <https://www.eia.gov/state/?sid=CA#tabs-2>.

and 39 percent (3,073 trillion Btu) for transportation.²¹ This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electricity in Santa Clara County in 2019 was consumed primarily by the commercial sector (76 percent), followed by the residential sector consuming 24 percent. In 2019, a total of approximately 16,664 gigawatt hours (GWh) of electricity was consumed in Santa Clara County.²²

The City of Palo Alto Utilities (CPAU) owns and operates its own utility systems, including electric, fiber optic, natural gas, water, and wastewater services.

Natural Gas

City of Palo Alto Utilities, Waste, Gas, Water Division provides natural gas services within the City of Palo Alto. In 2019, approximately one percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.²³ In 2019 residential and commercial customers in California used 33 percent of the state's natural gas, power plants used 26 percent, the industrial sector used 35 percent, and other uses used six percent.²⁴ Transportation accounted for one percent of natural gas use in California. In 2019, Santa Clara County used approximately two percent of the state's total consumption of natural gas.²⁵

Fuel for Motor Vehicles

In 2019, 15.4 billion gallons of gasoline were sold in California.²⁶ The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 24.9 mpg in 2019.²⁷ Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was updated in March 2020 to require all cars and light duty trucks achieve an overall industry average fuel economy of 40.4 mpg by model year 2026.^{28,29}

²¹ Ibid.

²² California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed May 7, 2021. <http://ecdms.energy.ca.gov/elecbycounty.aspx>.

²³ California Gas and Electric Utilities. 2020 *California Gas Report*. Accessed August 20, 2021.

https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf.

²⁴ United States Energy Information Administration. "State Profile and Energy Estimates, 2019." Accessed August 20, 2021. <https://www.eia.gov/state/?sid=CA#tabs-2>.

²⁵ California Energy Commission. "Natural Gas Consumption by County." Accessed August 20, 2021. <http://ecdms.energy.ca.gov/gasbycounty.aspx>.

²⁶ California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed May 7, 2021. <https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist>.

²⁷ United States Environmental Protection Agency. "The 2020 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." January 2021. <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1010U68.pdf>

²⁸ United States Department of Energy. *Energy Independence & Security Act of 2007*. Accessed May 7, 2021. <http://www.afdc.energy.gov/laws/eisa>.

²⁹ Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007*. Accessed May 7, 2021. <http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf>.

4.6.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Impact EN-1: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. (Less than Significant Impact)				

Construction

The anticipated construction schedule assumes the project would be built over a period of approximately 15 months. The project would require site preparation, grading, trenching, building construction, paving, and the building interior. The overall construction schedule and process is designed to be efficient in order to avoid excess monetary costs. That is, equipment and fuel would not be used wastefully on the site because of the added expense associated with renting, maintaining, and fueling equipment. Energy is consumed during construction because the use of fuels and building materials are fundamental to construction of new buildings; however, energy would not be wasted or used inefficiently by project construction equipment. Therefore, construction of the proposed project would not consume energy in a manner that is wasteful, inefficient, or unnecessary.

Operation

Electricity and Natural Gas

The proposed office building and associated subsurface parking and surface parking lot would increase electricity use at the project site by approximately 1,126,572 kilowatt-hours per year according to CalEEMod.³⁰ The project would be 100 percent electric and would not use any natural gas energy.

The energy use increase is likely overstated, however, because the estimates for energy use do not take into account the efficiency measures which would be incorporated into the project. The project would be subject to energy conservation requirements in the CBC (Title 24, Part 6, of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings) and CALGreen (Title 24, Part 11 of the California Code of Regulations). In addition to CBC requirements, the City of Palo Alto has adopted more stringent green building regulations. In

³⁰ Illingworth & Rodkin, Inc. 3300 El Camino Real Construction Community Risk Assessment. July 2, 2021.

accordance with the City's Green Building Ordinance, the proposed project would satisfy requirements for CALGreen Tier 2. Adherence to Title 24 and the City's Green Building Ordinance requirements would ensure that the project would not result in wasteful and inefficient use of non-renewable resources due to building operation.

Vehicle Usage

The proposed office building would increase vehicle miles traveled (VMT) by approximately 931,533 VMT annually³¹ and 42,342 gallons of vehicle fuel would be consumed annually as a result of the project (assuming the EPA average fuel economy estimate of 22.0 miles per gallon). The annual VMT estimate is conservative because the CalEEMod assumptions do not take into account alternative commuter options. The project site is located within Stanford Research Park, which has an extensive commute alternatives program. Services include shuttle services, carpooling connections, commuter buses, vanpooling, a bicycling group, bicycle tuning services, and a discounted carshare program. The site is also located on El Camino Real, which is served by regular bus transit routes. As a result, energy in the form of gasoline would not be used wastefully, inefficiently, or unnecessarily. **(Less than Significant Impact)**

Impact EN-2:	The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Less than Significant Impact)
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The project would be required to meet the building energy efficiency standards set forth in Title 24 and the CALGreen Code, thereby satisfying General Plan policies regarding waste reduction and energy and water efficiency. The project would not create a demand for energy resources beyond what is expected upon General Plan buildout. For these reasons, the proposed project would not conflict with or obstruct the implementation of General Plan energy policies. **(Less than Significant Impact)**

³¹ Ibid.

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 CBC prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

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

Palo Alto 2030 Comprehensive Plan

The Comprehensive Plan includes policies for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to hazards geology and soils resources including paleontological resources, and are applicable to the proposed project.

Policy/Program	Description
Policy L-7.18	Require project proponents to meet State codes and regulations regarding the identification and protection of archaeological and paleontological deposits, and unique geologic features
Policy S-2.5	Minimize exposure of people and structures to geologic hazards, including slope stability, subsidence and expansive soils, and to seismic hazards including groundshaking, fault rupture, liquefaction and landslides.
Program S-2.7.1	As part of the construction permitting process for proposed new and redeveloped buildings in areas of identified hazard shown on Map S-2, require submittal to the City of a geotechnical/seismic report that identifies specific risks and appropriate mitigation measures.

4.7.1.2 *Existing Conditions*

Seismicity and Seismic-Related Hazards

The nearest faults to the project area include the San Andreas, Hayward, and Calaveras faults. The San Andreas fault is located approximately 5.8 miles west of the site. The Hayward and Calaveras faults are approximately 13.1 and 17.5 miles east from the project site, respectively. In addition, the potentially active Monte Vista-Shannon fault zone is located approximately 3.1 miles southwest of the site. The project site is not, however, located within a State of California Earthquake Fault Zone and no known active faults cross the site.³²

³² California Department of Conservation. Earthquake Zones of Required Investigation. Accessed April 30, 2021. <https://maps.conservation.ca.gov/cgs/eqzapp/app/>

Liquefaction

Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. According to the Comprehensive Plan, the project site is in an area of moderate liquefaction susceptibility.

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 a steep bank of a stream channel. Matadero Creek is located adjacent to the eastern border of the project site. However, according to the Comprehensive Plan Update Environmental Impact Report (EIR), geologic units prone to lateral spreading are not known to be present in the City of Palo Alto.

Landslides

The project site is located in a flat area and would not be exposed to substantial slope instability, erosion, or landslide-related hazards. According to the Comprehensive Plan, the project site is not located within an area with high potential for landslides.

Paleontological Resources

Paleontological resources or fossils are the remains of prehistoric plant and animal life. Paleontological resources do not include human remains or artifacts. Most of the paleontological remains in the Palo Alto Area are small marine fossils such as clams and snails. The area also contains old quarries, creek beds, cut slopes and rock outcroppings, which are of geological interest and educational value. Arastradero Road contains good examples of exposed rock formations. The Berkeley Museum has documented four paleontological sites in the area surrounding Stanford University.³³

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
– Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

³³ City of Palo Alto. Comprehensive Plan Update Draft EIR. SCH# 2014052101.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
– Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact GEO-1: The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides. **(Less than Significant Impact)**

The project site is not located within a State of California Earthquake Fault Zone and there are no known active faults cross the site. The potential for surface rupture from displacement or fault movement directly beneath the proposed project would be low. Liquefaction risk would also be low. The project site is not within an area susceptible to landslides. To address potential seismic hazards in the area, the proposed project would be built and maintained in accordance with a design-specific geotechnical report and applicable regulations including the most recent CBC, which contains the regulations that govern the construction of structures in California. Adherence to the CBC would reduce seismic-related impacts and ensure adjacent development would not be endangered by structural failure nor would geologic hazards be exacerbated. **(Less than Significant Impact)**

Impact GEO-2: The project would not result in substantial soil erosion or the loss of topsoil. **(Less than Significant Impact)**

The project site is located in a flat area and would not be exposed to substantial slope instability, erosion, or landslide-related hazards. However, ground-disturbing activities could result in temporary erosion during project construction. The project is required to comply with Chapter 16.28.120 of the PAMC, which states that an estimate of the cost of implementing and maintaining all interim erosion and sediment control measures must be submitted in a form acceptable to the city engineer. The applicant may propose the use of any erosion and sediment control techniques in the interim plan, provided such techniques are proven to be as or more effective than the equivalent BMPs contained in the Manual of Standards.

In addition, the project would be required to comply with erosion control standards administered by the RWQCB through the National Pollutant Discharge Elimination System (NPDES) permit process, which requires implementation of nonpoint source control of stormwater runoff. **(Less than Significant Impact)**

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

As previously discussed, the project site is not located on a geologic unit prone to landslide, lateral spreading, subsidence, liquefaction, or collapse. Any soil instability would be lessened with City-required adherence to the recommendations contained within the CBC site-specific geotechnical report. **(Less than Significant Impact)**

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

The project site is not in an area known to have expansive soil, according to the Comprehensive Plan. Additionally, the proposed project would be built and maintained in accordance with the design-specific geotechnical report submitted to the satisfaction of the Director of Public Works Engineering, as well as applicable structural regulations (including those contained within the CBC). Adherence to the recommendations within the site-specific geotechnical report and adherence to requirements in the CBC would reduce impacts and ensure adjacent development would not be endangered by structural failure of new development proposed within areas of geologic hazards. Thus, any impact would be less than significant. **(Less than Significant Impact)**

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

The proposed project would be connected to the local wastewater treatment system. Septic systems would not be used. **(No Impact)**

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

Because the proposed project would not excavate into bedrock, the likelihood of discovery of significant fossils is very low. There is, however, always a possibility that unknown resources could be discovered during project activities.

Mitigation Measures: The following mitigation measure would ensure that the proper precautions are taken during an inadvertent paleontological discovery.

MM GEO-6.1: *Unique Paleontological and/or Geologic Features and Reporting.* Should a unique paleontological resource or site or unique geological feature be identified at the project site during any phase of construction, all ground disturbing activities within 25 feet shall cease and the City's Planning Director notified immediately. A qualified paleontologist shall evaluate the find, prescribe recommendations for proper treatment of the resource, and, depending on the nature of the discovery, document their findings in a paleontological report. Treatment may include protection in-place or recovery of the resource and placement in a repository. The paleontological report shall be submitted to the City. If paleontological materials are recovered, they shall be cataloged and donated to a paleontological repository, such as the University of California Museum of Paleontology. **(Less than Significant Impact with Mitigation Incorporated)**

4.8 GREENHOUSE GAS EMISSIONS

4.8.1 Environmental Setting

4.8.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. In GHG emission inventories, the weight of each gas is multiplied by its global warming potential (GWP) and is measured in units of CO₂ equivalents (CO₂e). The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO₂ and N₂O are byproducts of fossil fuel combustion.
- N₂O is associated with agricultural operations such as fertilization of crops.
- CH₄ 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 SF₆ emissions are commonly created by industries such as aluminum production and semiconductor manufacturing.

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

4.8.1.2 *Regulatory Framework*

State

Assembly Bill 32

Under the California Global Warming Solutions Act, also known as AB 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of CO₂e (MMTCO₂e). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MMTCO₂e.

Senate Bill 375

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

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area 2040. Plan Bay Area 2040 establishes a course for reducing per capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).

Regional and Local

2017 Clean Air Plan

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

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Palo Alto Sustainability and Climate Action Plan

The City of Palo Alto's Climate Protection Plan was adopted in December 2007, and updated goals were adopted in 2010. This plan addresses measures that the City's municipal operations and residents should implement to reduce GHG emissions. By 2014, the City of Palo Alto cut its GHG emissions by approximately 32 percent from 2005 levels and 37 percent from 1990 levels. A combination of actions led to these reductions, including use of entirely carbon-neutral electricity sources by the municipal utility.

In November of 2016, the Palo Alto City Council adopted a framework for its Sustainability and Climate Action Plan (S/CAP). The goal of the S/CAP is to achieve an 80 percent reduction in GHG emissions below 1990 levels by 2030, as well as address broader issues of sustainability. The City subsequently adopted a 2018-2020 Sustainability Implementation Plan in December of 2017. The Implementation Plan focuses on two key S/CAP concerns, Greenhouse Gases and Water, and four action areas: Energy, Mobility, Electric Vehicles, and Water.

Palo Alto 2030 Comprehensive Plan

The Comprehensive Plan includes policies for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to greenhouse gas emissions and are applicable to the proposed project.

Policy/Program	Description
Policy T-1.3	Reduce GHG and pollutant emissions associated with transportation by reducing VMT and per-mile emissions through increasing transit options, supporting biking and walking, and the use of zero-emission vehicle technologies to meet City and State goals for GHG reductions by 2030.
Policy T-1.4	Ensure that electric vehicle charging infrastructure, including infrastructure for charging e-bikes, is available citywide.

4.8.1.3 ***Existing Conditions***

Unlike emissions of criteria and toxic air pollutants, which have regional and local impacts, emissions of GHGs have a broader, global impact. Global warming is a process whereby GHGs accumulating in the upper atmosphere contribute to an increase in the temperature of the earth and changes in weather patterns. The site in its current condition generates minimal GHGs for maintenance of landscaping.

4.8.2 **Impact Discussion**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.8.2.1 ***Significance Thresholds***

The City of Palo Alto's S/CAP has not been fully developed or adopted. Therefore, BAAQMD's CEQA Air Quality Guideline's thresholds were used in this Initial Study.

For quantified emissions, BAAQMD’s CEQA Air Quality Guidelines recommended a GHG threshold of 1,100 metric tons or 4.6 metric tons (MT) per capita. These thresholds were developed based on meeting the 2020 GHG targets set in the scoping plan that addressed AB 32. Development of the project would occur beyond 2020, so a threshold that addresses a future target is appropriate. Although BAAQMD has not published a quantified threshold for 2030 yet, this assessment uses a “Substantial Progress” efficiency metric of 2.8 MT CO₂e/year/service population and a bright-line threshold of 660 MT CO₂e/year based on the GHG reduction goals of SB32 and EO B-30-15. The service population metric of 2.8 is calculated for 2030 based projections from BAAQMD.³⁴ The 2030 bright-line threshold of 660 MT CO₂e/year is a 40 percent reduction of the 1,100 MT CO₂e/year threshold for 2020. Only projects exceeding both the bright-line and service population thresholds are considered to have a significant GHG emissions impact.

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

Construction Emissions

The CalEEMod model used in Illingworth & Rodkin’s construction community risk assessment (see Appendix A) included an estimate of the project’s GHG emissions. GHG emissions associated with project construction were estimated to be 74 MT of CO₂e per year of construction.³⁵ The GHG emissions generated during construction would come from operation of construction equipment, vendor and hauling truck trips, and worker trips. Neither the City nor BAAQMD have an adopted threshold of significance for construction related GHG emissions. As previously discussed in the Energy section, the overall construction schedule and process is designed to be efficient in order to avoid excess monetary costs. That is, equipment and fuel would not be used wastefully on the site because of the added expense associated with renting, maintaining, and fueling equipment. Additionally, equipment idling would be limited per the required BAAQMD construction BMPs as described in Section 4.3 Air Quality.

Operational Emissions

The annual emissions resulting from operation of the proposed office building are predicted to be 399 MT of CO₂e per year.³⁶ The bright-line threshold for 2030 would be 660 MT CO₂e/year. Therefore, the project would fall below the 2030 bright-line threshold and would not generate a significant amount of GHG emissions because only projects exceeding both the bright-line and service population thresholds are considered to have a significant GHG emissions impact. **(Less than Significant Impact)**

³⁴ Bay Area Air Quality Management District, 2016. *CLE International 12th Annual Super-Conference CEQA Guidelines, Case Law and Policy Update*. December.

³⁵ Illingworth & Rodkin, Inc. *3300 El Camino Real Construction Community Risk Assessment. Attachment 2: CalEEMOD Modeling Inputs and Outputs*. July 2, 2021.

³⁶ Ibid.

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

In November 2016, the City of Palo adopted a framework for its S/CAP, which is aimed at promoting sustainable development and lowering greenhouse gas emissions. Included in the S/CAP are strategies and goals that the City has designed in order to achieve an 80 percent reduction in GHG emissions below 1990 levels by 2030. Consistent with Goal 2.1 of the S/CAP, the project includes green building measures as required by the City of Palo Alto's green building program. The proposed office building would be all-electric, consistent with Goal 2.3 and Strategy 2.3.2. Consistent with Goal 4.1 and Strategies 4.5.6 and 4.5.8, the project would include sustainable water-management measures such as 20 percent water savings over the "water use baseline", water-efficient interior fixtures, and installation of a recycled water irrigation system for exterior vegetation. Given that the proposed office building is consistent with the relevant goals and strategies for new buildings in the City's adopted S/CAP framework, it can be concluded that the operation of the proposed office building would not generate a substantial level of GHGs.

In addition, the project would recycle or reuse construction waste and demolition material, consistent with Goal 3.1 of the S/CAP. Given that demolition and construction materials would be salvaged or recycled in conformance with City of Palo Alto requirements, and the project would meet the City's Green Building Ordinance and CALGreen requirements to reduce energy usage. Therefore, construction and operation of the project would not conflict with the plans, policies, or regulations adopted for the purpose of reducing GHG emissions. **(Less than Significant Impact)**

4.9 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based, in part, on an environmental summary letter prepared by Cornerstone Earth Group, Inc. (Cornerstone) in June 2021. In the environmental summary letter Cornerstone summarized the findings of a Phase I and Phase II Environmental Site Assessment (ESA) prepared for the project site. The Phase I and Phase II ESAs were prepared by WSP Services, Inc. in March 2014 and April 2014, respectively. Copies of these reports can be found in Appendix D1 and D2.

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

Overview

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

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

Federal and State

Federal Aviation Regulations Part 77

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

Comprehensive Environmental Response, Compensation, and Liability Act

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

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

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

The law authorizes two kinds of response actions:

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

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.³⁷

Resource Conservation and Recovery Act

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

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization, phasing out land disposal of hazardous waste, and corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.³⁸

³⁷ United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed May 11, 2020. <https://www.epa.gov/superfund/superfund-cercla-overview>.

³⁸ United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed May 11, 2020. <https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act>.

Government Code Section 65962.5

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).³⁹

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 Palo Alto Fire Department (PAFD) reviews CalARP risk management plans as the CUPA.

Asbestos-Containing Materials

Friable asbestos is any asbestos-containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA phased out use of friable asbestos products between 1973 and 1978. National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

CCR Title 8, Section 1532.1

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

³⁹ California Environmental Protection Agency. "Cortese List Data Resources." Accessed June 2, 2021. <https://calepa.ca.gov/sitecleanup/corteselist/>.

Local

Palo Alto 2030 Comprehensive Plan

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

Policy/Program	Description
Program S-3.1.1	Continue City permitting procedures for commercial and industrial storage, use and handling of hazardous materials and regulate the commercial use of hazardous materials that may present a risk of off-site health or safety effects.
Program S-3.1.3	Strengthen development review requirements and construction standards for projects on sites with groundwater contamination.
Policy S-3.2	Continue working with appropriate agencies to identify and clean up hazardous waste sites and contaminated groundwater.
Policy S-3.3	Support public health by requiring as part of development review, property owners and private entities to disclose the presence of contaminated soil or groundwater, identify potential health impacts, prevent vapor intrusion and remediate contamination.

4.9.1.2 *Existing Conditions*

Site History

Prior to its current use as a surface parking lot, the project site was used for cattle grazing since at least 1939 to the early 1950s. The project site has been used as parking area since at least 1956 and has been paved with asphalt since at least 1968.

History of Surrounding Properties

The surrounding properties were also used as cattle grazing land from approximately 1939 to the late 1940s. Commercial developments significantly increased on the surrounding properties and in the project vicinity between 1956 and 1968. Light industrial, commercial, and residential developments were fully constructed in 1974. Notably, Varian Medical Systems, Inc. (Varian) has used the adjacent site at 611 Hansen Way for research and light manufacturing since 1952. The Hewlett-Packard Company (HP) manufactured electronic equipment from the 1960s until 1986 on a 10-acre site located at 620-640 Page Mill Road, approximately 0.3 miles west of the project site.

Current Site Conditions

The project site is located within an area of known groundwater contamination, known as the 611 Hansen Way General Study Area (Varian Study Area) and is within the vicinity of a second area known as the California Olive Emerson (COE) Study Area. Groundwater below the project site and in the general vicinity have been contaminated with volatile organic compounds (VOCs). The VOC releases within the Varian Study Area and the COE Study Area are primarily associated with the Varian operations at 611 Hansen Way and HP facilities on Page Mill Road. The DTSC has overseen

ongoing remediation and monitoring activities within the Varian Study Area since 1997. The San Francisco Bay RWQCB has been regulating cleanup of the COE Study Area since 1994.

In 2014, 12 soil samples were collected across the project site to be tested for VOCs and other hazardous materials. No VOCs were detected in the soil samples collected from the project site. Organochlorine pesticides (OCPs), total petroleum hydrocarbon diesel range organics (TPHd), motor oil (TPHmo), and total petroleum hydrocarbon gasoline range (TPHg) were detected at concentrations below regulatory screening levels. Metals were also detected in the on-site soils at concentrations representative of background levels.

Soil vapor samples were also collected on-site and analyzed for VOCs. Analyses revealed the presence of isopropyl alcohol, 1,2-dibromo-3-chloropropane (DBCP), diisopropyl ether (DIPE), and toluene. However, it was determined that significant ambient air breakthrough occurred during sampling and the soil vapor data collected in 2014 cannot be relied upon as an accurate representation of the VOC concentrations in soil vapor on-site. Given the presence of VOC impacted groundwater from the Varian Study Area, it is assumed that VOCs are also in soil vapor.

Other Hazards

Airports

The nearest airport is the Palo Alto Airport, which is approximately 2.6 miles northeast of the project site. The project site is not within the Airport Influence Area (AIA) or airport safety zones and is outside of the airport's 55 Community Noise Equivalent Level (CNEL) noise contour.⁴⁰

Wildfire

The project site is not located within an identified Very High Fire Hazard Severity Zone in a State Responsibility Area (SRA) or a Local Responsibility (LRA)^{41,42}. The project site is not adjacent to any wildlands that could present a fire hazard.

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

⁴⁰ Santa Clara County Airport Land Use Commission. Palo Alto Airport Comprehensive Land Use Plan. November 19, 2008.

⁴¹ CAL FIRE. Fire Hazard Severity Zones in State Responsibility Areas. November 2007.

⁴² CAL FIRE. Santa Clara County Fire Hazard Severity Zone Map – Local Responsibility Area. November 2007.

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

Construction activities may include the temporary transport, storage, use, or disposal of potentially hazardous materials including fuels, lubricating fluids, cleaners, solvents, or contaminated soils. If spilled, these substances could pose a risk to the environment and to human health. The transport, storage, use, or disposal of hazardous materials would be subject to federal, state, and local regulations pertaining to the transport, use, storage, and disposal of hazardous materials, which would assure that risks associated with hazardous materials are minimized.

Hazardous materials commonly found in office buildings include cleaning products, pesticides, paint, oil and batteries. The proposed project would routinely use limited amounts of cleaning and landscape maintenance materials and would not generate substantial hazardous emissions from hazardous materials use. The proposed office building would not use acutely or extremely hazardous materials. For these reasons, the proposed project would not create a significant hazard to the public

or the environment through the routine transport, use, or disposal of hazardous materials. **(Less than Significant Impact)**

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

Project Construction

The measured depth to groundwater at the project site is generally between 11 to 19 feet below ground surface (bgs). The project garage would extend 11 feet below grade. Therefore, construction workers may encounter contaminated groundwater, i.e., VOCs from the Varian Study Area, as well as contaminated soils and soil vapor during project excavation and grading. Additionally, two groundwater extraction wells and associated conveyance piping and six groundwater monitoring wells remain on-site from prior remediation and monitoring activities.

Impact HAZ-2: Project construction may expose workers and the environment to contaminated groundwater, soils, and soil vapor.

Implementation of MM HAZ-2.1, MM HAZ-2.2, and MM HAZ-2.3, described below, would reduce the risk of exposing construction workers and the environment to hazardous materials to a less than significant level and would ensure that contaminated soils and existing monitoring structures on-site are properly disposed of.

MM HAZ-2.1: Prior to conducting earthwork activities at the project site, a Site Management Plan (SMP) and Health and Safety Plan (HSP) shall be prepared. The purpose of these documents will be to establish appropriate management practices for handling impacted soil, soil vapor and groundwater that may be encountered during construction activities. Based on the history of the project vicinity, areas of impacted soil, soil vapor and/or groundwater likely will be encountered during construction activities, which may require special monitoring, handling and/or disposal. The SMP shall be submitted to the Department of Toxic Substances Control (DTSC) for review, and DTSC approval shall be obtained prior to commencing earthwork activities at the project site.

MM HAZ-2.2: Prior to excavation of the proposed below grade parking garage, additional soil sampling will be required to profile the soil for landfill disposal and/or reuse at another construction project. Soil profiling shall be performed in accordance with the acceptance criteria of the selected receiving facilities and/or the DTSC's October 2001 Clean Fill Advisory. Prior to soil transfer, written approval shall be obtained from the selected receiving facility and a copy shall be provided to the Director of Planning upon request.

MM HAZ-2.3: The existing groundwater extraction and monitoring wells and associated piping shall be properly removed in coordination with the DTSC, Varian, and, if warranted, other affected responsible parties within the Varian Study Area. Any well deconstruction activities shall be conducted under permit from the Santa Clara Valley Water District (Valley Water).

With implementation of MM HAZ-2.1 and MM HAZ-2.2, the project would reduce the risk of exposing construction workers and soil receiving facility workers to hazardous materials. Implementation of MM HAZ-2.3 would ensure that existing extraction and monitoring wells on-site, which may contain contaminated groundwater, are avoided or properly removed from the project site.

Project Operation

As described under Impact HAZ-1, project operation would not involve the routine use of hazardous materials outside of typical cleaning and landscape maintenance materials. All hazardous materials would be properly stored on-site and would not pose a significant risk of releasing hazardous materials into the environment during upset and accident conditions. **(Less than Significant Impact with Mitigation Incorporated).**

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

The nearest school to the project site is Building Kidz of Palo Alto, a day care center located at 415 Lambert Avenue, approximately 470 feet northeast of the project site. However, as previously discussed, project operation would not involve the use of uncommon hazardous materials and would keep all hazardous materials properly stored. Project construction would be subject to the provisions of a DTSC-approved SMP and HSP. Therefore, the project would not have a significant impact on schools due to the handling of hazardous materials. **(Less than Significant Impact)**

Impact HAZ-4: The project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, however the project incorporates mitigation to address existing conditions, and, as a result, the project would not create a significant hazard to the public or the environment. **(Less than Significant Impact with Mitigation Incorporated)**

The Varian Study Area, including the project site, is listed as a State Response DTSC Cleanup Site. As previously discussed, the DTSC has overseen ongoing remediation and monitoring activities within the Varian Study Area since 1997. The project's potential to expose construction workers to hazardous materials within the on-site groundwater, soils, and soil vapor is discussed under Impact HAZ-2. Despite the fact that the project site is included on the Cortese List, the project would not create a significant hazard to the public or the environment with implementation of MM HAZ-2.1 through MM HAZ-2.3. **(Less than Significant Impact with Mitigation Incorporated)**

Impact HAZ-5: The project would not be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The project would not result in a safety hazard or excessive noise for people residing or working in the project area. **(Less than Significant Impact)**

The project site is located approximately 2.6 miles from the Palo Alto Airport, outside of the AIA, safety zones, and noise contours. Therefore, the project would not result in a safety hazard or excessive noise for people working in the project area. **(Less than Significant Impact)**

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

The proposed project would not impair or interfere with the City's Emergency Operations Plan. The project would not result in roadway changes and would not substantially increase traffic or roadway congestion such that use of the evacuation route would be hindered. Therefore, impacts would be less than significant. **(Less than Significant Impact)**

Impact HAZ-7: The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. **(No Impact)**

The project site is located in an urbanized area of Palo Alto. There are no areas susceptible to wildfire in the project vicinity. Therefore, the project would not expose people or structures to substantial risk as a result of potential wildfires. **(No Impact)**

4.9.3 Non-CEQA Effects

Per *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (*BIA v. BAAQMD*), effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes because the City of Palo Alto has policies that address existing hazards and hazardous materials conditions affecting a proposed project (see Comprehensive Plan Program S-3.1.3 and Policy S-3.3).

Vapor Intrusion

Vapor intrusion occurs when volatile compounds migrate from contaminated groundwater or subsurface soils into the indoor air of an overlying structure. As previously discussed, VOCs were detected in on-site soil vapor. However, it was determined that significant ambient air breakthrough occurred during sampling and the soil vapor data collected in 2014 cannot be relied upon as an accurate representation of the VOC concentrations in soil vapor on-site. Therefore, the level of risk associated with the soil vapors on-site is currently unknown, although it is assumed soil vapor is present on the site due to the presence of VOCs in groundwater from the Variant Study Area. Vapor

intrusion of VOCs could expose future workers and visitors of the proposed office building to potentially unacceptable health risks.

Conditions of Approval: The City would require the following conditions of approval for the project to ensure that health risks due to vapor intrusion are reduced to acceptable levels.

- Since the planned subterranean garage will extend below the design groundwater elevation, waterproofing for hydrostatic conditions will be required. A dual-purpose waterproofing and vapor membrane system shall be selected that is designed for installation in VOC-impacted groundwater and protective against VOC vapor intrusion.
- Soil vapor sampling shall be performed to help evaluate if other vapor intrusion conditions of approval are required for the planned development, that is in addition to a dual-purpose waterproofing and VOC vapor membrane system. The soil vapor sampling will also assist in establishing construction air monitoring protocols that shall be incorporated into the SMP and HSP. A soil vapor sampling work plan shall be provided to DTSC for review and approval.
- If required by DTSC based on the soil vapor data, a Vapor Intrusion Mitigation Plan shall be prepared that describes the conditions of approval to be implemented to prevent exposure of Site occupants to VOCs as a result of vapor intrusion. The Vapor Intrusion Mitigation Plan shall require that the proposed development be designed with appropriate structural and engineering features to reduce risk of vapor intrusion into buildings. At a minimum, this design shall include passive sub-slab ventilation with an underslab membrane system that is protective against vapor intrusion, and the ability to convert the system from passive to active ventilation if warranted. The Vapor Intrusion Mitigation Plan shall also describe the performance monitoring that will be performed to help demonstrate the passive or active system is operating as designed. The Vapor Intrusion Mitigation Plan must be prepared by an Environmental Professional and submitted to the DTSC for review and approval prior to issuance of a building permit. A completion report shall be submitted to the DTSC upon completion of construction of the mitigation system including final as-built design drawings. A Long-Term Operations, Maintenance, and Monitoring Plan (OMMP) also shall be submitted for DTSC approval that presents the actions to be taken following construction to maintain and monitor the vapor intrusion mitigation system, and a contingency plan should the vapor mitigation system fail. A financial assurance mechanism shall additionally be established (i.e., proof that adequate funds are available for long-term maintenance and monitoring of the vapor intrusion mitigation system) and described in the OMMP.

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Federal and State

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

National Flood Insurance Program

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

Statewide Construction General Permit

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

Regional and Local

San Francisco Bay Basin Plan

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

Municipal Regional Permit Provision C.3

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in 2015 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara Counties, and the cities of Fairfield, Suisun City, and Vallejo.⁴³ Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g., rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

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

Water Resources Protection Ordinance and District Well Ordinance

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

Dam Safety

Since August 14, 1929, the State of California has regulated dams to prevent failure, safeguard life, and protect property. The California Water Code entrusts dam safety regulatory power to California Department of Water Resources, Division of Safety of Dams (DSOD). The DSOD provide oversight to the design, construction, and maintenance of over 1,200 jurisdictional sized dams in California.⁴⁴

As part of its comprehensive dam safety program, Valley Water routinely monitors and studies the condition of each of its 10 dams. Valley Water also has its own Emergency Operations Center and a

⁴³ MRP Number CAS612008

⁴⁴ California Department of Water Resources, Division of Safety of Dams. [https://water.ca.gov/Programs/All-Programs/Division-of-Safety-of-Dams#:~:text=Since%20August%2014%2C%201929%2C%20the,Safety%20of%20Dams%20\(DSOD\).](https://water.ca.gov/Programs/All-Programs/Division-of-Safety-of-Dams#:~:text=Since%20August%2014%2C%201929%2C%20the,Safety%20of%20Dams%20(DSOD).) Accessed June 9, 2020.

response team that inspects dams after significant earthquakes. These regulatory inspection programs reduce the potential for dam failure.

Construction Dewatering Waste Discharge Requirements

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

Chapter 16.28 of the PAMC (Dewatering)

Chapter 16.28 of the PAMC to Require Testing, Monitoring and Protective Measures for Temporary Construction-related Groundwater Pumping (Dewatering) was adopted in 2017. The City Council also adopted seven components for the City's Construction Dewatering Guidelines. The guidelines address the timing and amount of pumping and discharge of groundwater from basements or below-ground garages during construction, with a goal of minimizing discharge. The code provisions and guidelines also address settlement at adjacent properties and require development and monitoring plan by project applicants to assess dewatering effects on surrounding vegetation, trees, structures, and infrastructure. These dewatering provisions will be reviewed by the City as part of the Grading Permit process. The Grading Permit for a project will not be issued until all required submittals related to dewatering have been submitted, reviewed and approved by Public Works.

Palo Alto 2030 Comprehensive Plan

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

Policy/Program	Description
Policy N-4.6	Retain and utilize rainwater on site to the extent possible.
Program N-4.8.1	Research and promote new construction techniques and recharge strategies developed to reduce subsurface and surface water impacts and comply with City dewatering policies.
Program N-4.8.2	Explore appropriate ways to monitor dewatering for all dewatering and excavation projects to encourage maintaining groundwater levels and recharging of the aquifer where needed.
Policy N-4.10	Reduce pollution in urban runoff from residential, commercial, industrial, municipal, and transportation land uses and activities.
Program N-10.1	Monitor and implement practices for reducing water pollution. Examples include state-of-the-art best management practices, land use planning approaches and construction of modern stormwater management facilities.
Policy N-4.12	Promote sustainable low water and pesticide landscaping practices on both public and private property.
Policy N-4.13	Encourage LID measures to limit the amount of pavement and impervious surface in new development and increase the retention, treatment and infiltration of urban stormwater runoff. Include LID measures in major remodels, public projects and recreation projects where practical.

- | | |
|------------------|--|
| Program N-4.13.1 | Promote the use of permeable paving materials or other design solutions that allow for natural percolation and site drainage through a Stormwater Rebate Program and other incentives. |
| Program N-4.13.3 | Mitigate flooding through improved surface permeability or paved areas, and stormwater capture and storage. |
-

4.10.1.2 *Existing Conditions*

Flood Zones

The project site is located within Flood Zone X, which is defined as having a 0.2 percent annual change of flood with areas that have a one percent annual chance with an average depth less than one foot or with drainage areas of less than one square mile.⁴⁵ No specific requirements apply in Zone X. The project site is adjacent to Matadero Creek, which is located within Flood Zone A. Flood Zone A is defined as a special flood hazard area that will be inundated by the one percent annual chance flood.⁴⁶ The FEMA map notes that the one percent annual discharge would be contained in the concrete structure surrounding Matadero Creek.

Stormwater and Water Quality

The project site currently consists of approximately 92,480 sf (73 percent) impervious surface area and approximately 33,392 sf (27 percent) pervious surface area. Stormwater runoff water quality is regulated by the federal NPDES program to control and reduce pollutants to water bodies from surface water discharge. Locally, the NPDES program is administered by the Bay Area RWQCB. The RWQCB worked with cities and counties throughout the region to prepare and adopt a Regional Municipal Stormwater Permit (Regional Permit). This Regional Permit identifies minimum standards and provisions that the City of Palo Alto, as a permittee, must require of new development and redevelopment projects within the City limits. Compliance with the NPDES Regional Permit is mandated by state and federal statutes.

Other Hazards

There are no landlocked bodies of water near the project site that in the event of a seiche would affect the site. The project site does not lie within a tsunami inundation hazard area.⁴⁷ The project site is also not susceptible to mudflows.⁴⁸

⁴⁵ FEMA. Flood Insurance Rate Map, Map Number. 06085C0017H. Effective Date: May 18, 2009.

⁴⁶ Ibid.

⁴⁷ MTC/ABAG. Hazard Viewer Map. Accessed May 3, 2021.

<https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8>

⁴⁸ Ibid.

4.10.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– 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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
– impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Construction Activities

Construction activities could result in a temporary increase in stormwater pollutants during ground disturbing activities. Construction of the proposed project would disturb more than one acre; therefore, the project applicant would be required to obtain a NPDES General Permit for Construction Activities, which requires elimination or reduction of non-stormwater discharges to

waters of the U.S., development and implementation of a SWPPP for the project construction activities, and performance of inspections of the stormwater pollution prevention measures and control practices to ensure conformance with the site-specific SWPPP.

Post-Construction

After project construction is completed, the project site would consist of approximately 92,419 sf (73 percent) impervious surface area and approximately 33,453 sf (27 percent) pervious surface area. Thus, the project would result in a net increase of pervious surface area on-site and would result in incrementally increased stormwater retention and treatment on-site. The project would replace over 10,000 sf of impervious surface area and therefore would be required to comply with Provision C.3 of the MRP. Accordingly, the project would include nine bioretention areas located in the landscaping throughout the project site.

Dewatering

The measured depth to groundwater at the project site is generally between 11 to 19 feet bgs.⁴⁹ The project garage would extend 11 feet below grade. Therefore, dewatering may be needed during construction. As discussed in Section 4.9, Hazards and Hazardous Materials, groundwater contamination is known to exist beneath the project site. Dewatering may involve removal of contaminated groundwater. Runoff of contaminated water during dewatering could introduce pollutants to the stormwater system. However, dewatering is regulated by the City during the permitting process. According to the City's Construction Dewatering System Policy and Plan Preparation Guidelines, excavation activities that encounter groundwater are required to submit a Construction Dewatering Plan to the City's Public Works Department.

The Public Works Department would review and approve the dewatering permitting package prior to commencement of dewatering consistent with the City's regulations for groundwater dewatering during construction (PAMC 16.28.155-6). In the case of controlled groundwater pumping, a street work permit application, a dewatering plan and a groundwater use plan will be prepared and submitted to the City Engineer. The Groundwater Use Plan must show how the groundwater will be used to the maximum extent practicable. The Dewatering Plan shall identify avoidance measures to minimize the flow rate and duration of the pumping, even when off-site effects are not specifically identified. Prior to commencement of dewatering, the applicant will notify occupants of neighboring properties and install a groundwater monitoring well. The applicant will also contact the City's Watershed Protection Group for guidance on sampling, treatment, and disposal requirements for temporary construction-related groundwater. With adherence to the City's policies regarding dewatering, contaminated groundwater would not enter the stormwater system. It is not anticipated that operational dewatering of the underground parking garage (once complete) would be required.

With adherence to requirements listed above, the project would not violate water quality standards, waste discharge requirements, or degrade water quality. **(Less than Significant Impact)**

⁴⁹ WSP Services, Inc. Phase I Environmental Site Assessment. March 11, 2014. Page 4.

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

As previously discussed, dewatering may be required during project construction. The project would only pump out enough groundwater to allow for adequate excavation during project construction. The project would not substantially decrease groundwater supplies.

The project site is not located near any designated groundwater recharge areas.⁵⁰ Additionally, the project would result in a net increase of pervious surface area, allowing more water to infiltrate soil on-site. Therefore, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge **(Less than Significant Impact)**

Impact HYD-3: The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. **(Less than Significant Impact)**

As previously stated, the project would result in a net increase in pervious surface area and would construct bioretention basins throughout the project site. Thus, the project would result in a decrease in runoff on-site. The project would not alter the course of Matadero Creek or any other creek in the project vicinity. Therefore, the project would not result in substantial erosion or siltation, result in runoff or flooding which would exceed the capacity of stormwater drainage systems, provide substantial additional sources of polluted runoff, or impede or redirect flood flows. **(Less than Significant Impact)**

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

As previously discussed, the project site is not subject to tsunamis or seiches and is in a zone of minimal flood hazard. Therefore, the project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(Less than Significant Impact)**

⁵⁰ Valley Water. Groundwater Management Plan. 2016. Figure 1-3.

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

As previously discussed, the project would obtain a NPDES General Permit for Construction Activities, develop and implement a SWPPP, comply with Provision C.3 of the MRP, and would comply with the City's regulations on dewatering during construction. Therefore, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(Less than Significant Impact)**

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Local

City of Palo Alto Comprehensive Plan

The City of Palo Alto Comprehensive Plan guides future development within the City. The Comprehensive Plan includes goals, policies, and programs related to land use, the natural environment, business and economics, and community services. The Comprehensive Plan land use map identifies land use designations for properties within the City. The type of development and uses allowed within each land use designation is described in the Land Use and Community Design Element. The Comprehensive Plan land uses are further detailed and implemented through the city's Municipal Code and Zoning Ordinance.

The following policies are contained within the Comprehensive Plan and are relevant to the proposed project.

Policy/Program	Description
Policy L-1.3	Infill development in the urban service area should be compatible with its surroundings and the overall scale and character of the city to ensure a compact, efficient development pattern.
Policy L-1.11	Hold new development to the highest development standards in order to maintain Palo Alto's livability and achieve the highest quality development with the least impacts.
Policy L-4.15	Recognize El Camino Real as both a local serving and regional serving corridor, defined by a mix of commercial uses and housing.
Policy L-6.1	Promote high-quality design and site planning that is compatible with surrounding development and public spaces.

4.11.1.2 *Existing Conditions*

The project site has a land use designation of RP and is zoned RP. The RP district provides for a limited group of research and manufacturing uses that may have unusual requirements for space, light, and air, and desire sites in a research park environment. Surrounding adjacent land uses include offices, hotels, and restaurants.

4.11.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
2) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Examples of projects that have the potential to physically divide an established community include new freeways and highways, major arterial streets, and railroad lines. The project would not include any such infrastructure. Additionally, the proposed office building would be similar and compatible with the other surrounding land uses. Therefore, the project would not divide an established community. **(Less than Significant Impact)**

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

As previously stated, the project site has a land use designation of RP and is zoned RP. The proposed office building is a permitted use in the RP(L) zoning district and is consistent with the land use policies for the designation RP(L). The project would be consistent with the development standards of the RP(L) zoning district, as detailed below in Table 4.11-1.

Table 4.11-1: Zoning District Consistency		
Development Specification	RP(L) Zoning District Standard	Proposed
Site Area	1 acre	2.89 acres
Site Width	100 feet	180 feet
Site Depth	150 feet	705 feet
Front Setback	20 feet	347.5 feet
Rear Setback	20 feet	25 feet
Interior Side Setback	50 feet ¹	50 feet
Street Side Setback	20 feet	28 feet
Maximum Site Coverage	30%	28.8%
Maximum FAR	0.4	0.4

Table 4.11-1: Zoning District Consistency		
Development Specification	RP(L) Zoning District Standard	Proposed
Maximum Height	35 feet	35 feet
Vehicle Parking Required	168 spaces ²	173 vehicle spaces
Bicycle Parking Required	17 spaces ³	17 spaces
Notes: ¹ The RP zoning standard is 20 feet, but 50 feet is required for the project site due to the landscape, utility, and drainage easement on the eastern side. ² One vehicle parking space is required per 300 sf of gross floor area for office uses. ³ One bicycle parking space is required per 3,000 sf of gross floor area for office uses.		

As shown in Table 4.11-1, the project would be consistent with all the development standards of the RP(L) zoning district. Therefore, the project would be consistent with the City of Palo Alto's Comprehensive Plan and zoning designation for the site and would not conflict with any applicable land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect. **(Less than Significant Impact)**

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

State

Surface Mining and Reclamation Act

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

4.12.1.2 *Existing Conditions*

According to the Comprehensive Plan, the City of Palo Alto does not contain any mineral deposits of regional significance.

4.12.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<hr/>				
Impact MIN-1:	The project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. (No Impact)			

As previously stated, the City of Palo Alto does not contain any mineral deposits of regional significance. Therefore, the project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **(No Impact)**

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

The City's Comprehensive Plan does not contain any policies relating to mineral resources. Therefore, the project would not result in the loss 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 memo prepared for the project by Illingworth & Rodkin, Inc., dated June 2021. A copy of this report 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.⁵¹ 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.

⁵¹ L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 PM and 10:00 PM. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq} .

4.13.1.2 Regulatory Framework

Federal

Federal Transit Administration Vibration Limits

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

Table 4.13-1: Groundborne Vibration Impact Criteria			
Land Use Category	Groundborne Vibration Impact Levels (VdB inch/sec)		
	Frequent Event	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83
Source: Federal Transit Administration. <i>Transit Noise and Vibration Assessment Manual</i> . September 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 $L_{eq(1-hr)}$ or less during hours of operation at a proposed commercial use.

2030 Comprehensive Plan

The Comprehensive Plan includes the following policies that are specific to noise and vibration and that are applicable to the proposed project:

Policies/Programs	Description
Policy N-6.1	Encourage the location of land uses in areas with compatible noise environments. Use the guidelines in Table N-1 to evaluate the compatibility of proposed land

uses with existing noise environments when preparing, revising, or reviewing development proposals. Acceptable exterior, interior and ways to discern noise exposure include:

- The guideline for maximum outdoor noise levels in residential areas is a Ldn of 60 dB. This level is a guideline for the design and location of future development and a goal for the reduction of noise in existing development. However, 60 Ldn is a guideline which cannot necessarily be reached in all residential areas within the constraints of economic or aesthetic feasibility. This guideline will be primarily applied where outdoor use is a major consideration (e.g., backyards in single-family housing developments, and recreational areas in multiple family housing projects). Where the City determines that providing a Ldn of 60 dB or lower outdoors is not feasible, the noise level in outdoor areas intended for recreational use should be reduced to as close to the standard as feasible through project design.
- Interior noise, per the requirements of the State of California Building Standards Code (Title 24) and Noise Insulation Standards (Title 25), must not exceed a Ldn of 45 dB in all habitable rooms of all new dwelling units.

Policy N-6.3 Protect the overall community and especially sensitive noise receptors, including schools, hospitals, convalescent homes, senior and childcare facilities and public conservation land from unacceptable noise levels from both existing and future noise sources, including construction noise.

Policy N-6.6 Apply site planning and architectural design techniques that reduce overall noise pollution and reduce noise impacts on proposed and existing projects within Palo Alto and surrounding communities.




Policy N-6.8 The City may require measures to reduce noise impacts of new development on adjacent properties through appropriate means including, but not limited to, the following:

- Orient buildings to shield noise sensitive outdoor spaces from sources of noise.
- Construct noise walls when other methods to reduce noise are not practical and when these walls will not shift similar noise impacts to another adjacent property.
- Screen and control noise sources such as parking lots, outdoor activities and mechanical equipment, including HVAC equipment.
- Increase setbacks to serve as a buffer between noise sources and adjacent dwellings.
- Whenever possible, retain fences, walls or landscaping that serve as noise buffer while considering design, safety and other impacts.
- Use soundproofing materials, noise reduction construction techniques, and/or acoustically rated windows/doors.
- Include auxiliary power sources at loading docks to minimize truck engine idling.
- Control hours of operation, including deliveries and trash pickup, to minimize noise impacts.

Policy N-6.9

Continue to require applicants for new projects or new mechanical equipment in the Multifamily, Commercial, Manufacturing or Planned Community districts to submit an acoustical analysis demonstrating compliance with the Noise Ordinance prior to receiving a building permit.

As shown in Table 4.13-2, the Comprehensive Plan defines acceptable, conditionally acceptable, and unacceptable noise levels for uses in the City.

Table 4.13-2: Land Use Compatibility Guidelines for Noise						
Land Use Category	Exterior DNL Value in Decibels					
	55	60	65	70	75	80
Residential, Hotels and Motels,						
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds						
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, and Churches						
Office Buildings, Business Commercial, and Professional						
Auditoriums, Concert Halls, and Amphitheaters						
Industrial, Manufacturing, Utilities, and Agriculture						
<p>Normally Acceptable:  Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.</p> <p>Conditionally Acceptable:  Specified land use may be permitted only after detailed analysis of the noise reduction requirements and noise mitigation features included in the design.</p> <p>Unacceptable:  New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.</p>						

Municipal Code

The PAMC regulates noise primarily through the Noise Ordinance, which comprises Chapter 9.10 of the Code. On residential properties, Section 9.10.040 of the PAMC prohibits the generation of onsite operational noise that exceeds 8 dB above ambient noise outside the property lines. The Noise Ordinance also regulates noise associated with construction activities. Portions of the noise code that are applicable to the proposed project follow:

9.10.040 Commercial and Industrial Property Noise Limits: No person shall produce, suffer, or allow to be produced by any machine or device, or any combination of same, on commercial or industrial property, a noise level more than eight dB above the local ambient at any point outside of the property plane.

9.10.060 Special Provisions: The special exceptions listed in this section shall apply, only to the extent and during the hours specified in each of the following enumerated exceptions.⁵²

- a. **General Daytime Exception.** Any noise source which does not produce a noise level exceeding seventy dBA at a distance of twenty-five feet under its most noisy condition of use shall be exempt from the provisions of Sections 9.10.030(a), 9.10.040, and 9.10.050(a) between the hours of eight a.m. and eight p.m. Monday through Friday, nine a.m. and eight p.m. on Saturday, except Sundays and holidays, when the exemption herein shall apply between ten a.m. and six p.m.
- b. **Construction.** Except for construction on residential property as described in subsection (c) of this section, construction, alteration, and repair activities which are authorized by valid city building permit shall be prohibited on Sundays and holidays and shall be prohibited except between the hours of eight a.m. and six p.m. Monday through Friday, [and] nine a.m. and six p.m. on Saturday provided that the construction, demolition, or repair activities during those hours meet the following standards:
 1. No individual piece of equipment shall produce a noise level exceeding 110 dBA at a distance of twenty-five feet. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to twenty-five feet from the equipment as possible.
 2. The noise level at any point outside of the property plane of the project shall not exceed 110 dBA.
 3. The holder of a valid construction permit for a construction project in a non-residential zone shall post a sign at all entrances to the construction site upon commencement of construction for the purpose of informing all contractors and subcontractors, their employees, agents, material [personnel], and all other persons at the construction site, of the basic requirements of this chapter.
- j. **Emergencies.** Emergencies are exempt from this chapter

4.13.1.3 *Existing Conditions*

The primary noise source affecting the project is local vehicular traffic along El Camino Real. According to the Comprehensive Plan, ambient noise at the project site generally ranges from 60 to 65 dBA CNEL.⁵³

⁵² Exceptions c through i, k, and l are not applicable to the proposed project.

⁵³ City of Palo Alto. Comprehensive Plan 2030. Map N-5 and Map N-6.

4.13.2 Impact Discussion

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

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

Construction Noise

The maximum noise levels generated during project construction could reach up to 110 dBA at the boundaries of the project site when construction equipment is used within five feet. However, operation of construction equipment within five feet of the project site boundaries would only occur for short durations and would be temporary. These occurrences would not represent the noise that would be generated on a daily basis over the course of project construction. To estimate noise levels on a daily basis for the assessment, standard methods for acoustical analysis of construction sites are based on the distance from the “acoustical center” or construction activity center of the site to the nearest noise-sensitive receptor, rather than at the project boundary. Construction equipment would likely be spread throughout the site, but for purposes of modeling the worst-case scenario, all equipment was assumed to be operating in relatively the same area, with the geometrical center of construction equipment being the center of the construction sites. Project-specific construction noise levels, based on a construction equipment list provided by the applicant and calculated using the Federal Highway Administration’s Roadway Construction Noise Model, are shown in Table 4.13-2. F.

Table 4.13-2: Total Calculated Project Construction Noise Levels at a Distance of 25 Feet				
Phase	Equipment	Quantity	Total Calculated (dBA)	
			L_{max}*	L_{eq}
Demolition	Excavators	2	87	86
Grading/Excavation	Excavators	2	91	91
	Graders	1		
	Tractors/Loaders/Backhoes	1		
Trenching/Foundation	Tractors/Loaders/Backhoes	1	90	86
Building - Exterior	Cranes	1	90	87
	Forklifts	1		
	Tractors/Loaders/Backhoes	1		
Building - Interior	Air Compressors	1	84	83
	Aerial Lift	4		
Paving	Pavers	1	86	86
*Total L _{max} is the value for the loudest piece of equipment				

As shown in Table 4.13-2, noise levels for the proposed construction would range from 84 to 91 dBA L_{max} and from 83 to 91 dBA L_{eq} at 25 feet from the center of the construction activities. The nearest commercial property is approximately 150 feet away, which would result in noise levels that typically range from 69 to 76 dBA L_{max} and 68 to 76 dBA L_{eq}. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain can provide an additional five to 10 dBA noise reduction at distant receptors. The nearest existing residences are located approximately 400 feet to the southeast. At this distance, maximum noise levels generated by project construction would typically range from about 60 to 67 dBA L_{max}, and hourly average noise levels would typically range from about 59 to 67 dBA L_{eq}.

Noise levels due to construction would not exceed 110 dBA at a distance of 25 feet. Also, noise levels would range from a maximum level of 92 to 99 dBA L_{max} and from 91 to 99 dBA L_{eq} at a distance of 10 feet from the edge of the property plane. In other words, no individual piece of equipment would exceed 110 dBA at a distance of 25 feet. Further, 110 dBA would also not be exceeded at any point beyond the property plane of the construction site during allowable hours.

Therefore, the project would not result in a substantial temporary noise increase during project construction. Additionally, the project would be required to implement the following construction BMPs as standard conditions of approval that would further decrease the project's noise impacts during construction:

- Construction will be limited to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday and between 9:00 a.m. and 6:00 p.m. on Saturdays.
- The contractor shall use “new technology” power construction equipment with state-of-the-art noise shielding and muffling devices. All internal combustion engines used on the project site shall be equipped with adequate mufflers and shall be in good mechanical condition to minimize noise created by faulty or poorly maintained engines or other components.
- Temporary noise barriers shall be constructed, where feasible, to screen adjoining land uses. Temporary noise barrier fences would provide a 5 dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receptor and if the barrier is constructed in a manner that eliminates any cracks or gaps. The unnecessary idling of internal combustion engines shall be prohibited.
- Staging areas and stationary noise-generating equipment shall be located as far as possible from noise-sensitive receptors, such as residential uses (a minimum of 200 feet).
- Generators, compressors, and pumps shall be housed in acoustical enclosures.
- Cranes shall be located as far from adjoining noise-sensitive receptors as possible.
- During final grading, graders shall be substituted for bulldozers, where feasible. Wheeled heavy equipment are quieter than track equipment and should be used where feasible.
- Nail guns shall be substituted for manual hammering, where feasible.
- Electrically powered tools shall be substituted for noisier pneumatic tools, where feasible.
- The surrounding neighborhood shall be notified early and frequently of the construction activities.
- A “noise disturbance coordinator” shall be designated to respond to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaints (e.g., beginning work too early, bad muffler, etc.) and institute reasonable measures warranted to correct the problem. A telephone number for the disturbance coordinator would be conspicuously posted at the construction site.

Project Operation

Onsite noise generation would be typical noise from office use and would be consistent with nearby commercial and office land uses. Permanent noise from the project would be generated by mechanical equipment or an increase in traffic noise and could increase noise levels at nearby residences. In accordance with state requirements, City of Palo Alto Comprehensive Plan Policies N-6.2 and N-6.7.1, thresholds identified in the Comprehensive Plan EIR, and City of Palo Alto Municipal Code 9.10.030(a), onsite operational noise would be significant if it would cause the following:

- Cause interior noise levels at nearby residential development to exceed 45 dBA Ldn (Uniform Building Code; City of Palo Alto Comprehensive Plan Policy N-6.1)
- Cause the average 24-hour noise level (Ldn) to increase by five decibels (dB) or more in an existing residential area, even if the Ldn would remain below 60 dB (City of Palo Alto Comprehensive Plan EIR)

- Cause the Ldn to increase by three dB or more in an existing residential area, thereby causing the Ldn in the area to exceed 60dB (City of Palo Alto Comprehensive Plan EIR)
- Cause an increase of three dB or more in an existing residential area where the Ldn currently exceeds 60dB (City of Palo Alto Comprehensive Plan EIR)
- Produce, suffer or allow to be produced by any machine, animal or device, or any combination of same, on commercial property, a noise level more than eight dB above the local ambient at any point outside of the property plane (PAMC Section 9.10.030[a])

A significant impact would occur if the project would increase the existing noise environment of existing noise-sensitive receptors (in this case, nearby residential uses) by three dBA Ldn. For reference, a three dBA Ldn noise increase would be expected if the project would double existing traffic volumes along a roadway. The project would not double the existing traffic along the surrounding roadways (see Appendix F, Transportation Analysis). The proposed office building would include mechanical rooftop equipment for heating, ventilation, and air conditioning (HVAC), as well as rooftop solar panels. While solar power equipment would be audible within a few feet, the noise is typically a low hum, and would not be audible from the ground level of the building, let alone at the nearest residential receptor approximately 400 feet away. The rooftop HVAC equipment would be comparable to the existing rooftop equipment of neighboring buildings. Additionally, in compliance with PAMC Section 18.23.060, the applicant would submit an acoustical analysis by an acoustical engineer demonstrating the equipment's compliance with the Noise Ordinance standards. Therefore, the project would not result in the generation of a substantial permanent noise increase. **(Less than Significant Impact)**

Impact NOI-2: The project would not result in generation of excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact)**

Proposed construction phases would include demolition, grading/excavation, trenching/foundation, paving, and new building framing and finishing. Perceptible vibration may occur when heavy equipment or impact tools are used. However, the proposed project would not require pile driving, which can cause excessive vibration.

The City of Palo Alto does not specify a construction vibration limit. For structural damage, CalTrans recommends a vibration limit of 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards, 0.3 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern, and a conservative limit of 0.25 in/sec PPV for historic and some old buildings. The nearest structure of historical significance is at 686 Matadero Avenue, approximately 900 feet from the project site. Therefore, the 0.3 in/sec PPV vibration limit would be applicable to properties in the immediate vicinity of the project site.

Project construction would reach a maximum vibration level of 0.21 in/sec PPV at a distance of 25 feet when vibratory rollers are in use during project paving. The closest surrounding buildings are located at least 25 feet from the project site. Construction vibration levels would be smaller at greater distances from the project site. The largest vibration level that would reach the historic structure at 686 Matadero Avenue would be 0.004 in/sec PPV. Therefore, all vibrations generated by project

construction would be below the 0.3 in/sec PPV threshold for surrounding buildings and below the 0.25 in/sec PPV threshold for applicable historic structures.

While vibrations generated by project construction would not cause any structural damage to existing buildings, vibrations may still be perceptible to nearby receptors. However, as with any type of construction, this would be anticipated and would not be considered significant, given the intermittent and short duration of the phases that have the highest potential of producing vibration. By use of administrative controls, such as notifying neighbors of scheduled construction activities and scheduling construction activities with the highest potential to produce perceptible vibration during hours with the least potential to affect nearby residences and businesses, perceptible vibration can be kept to a minimum. Therefore, the project would not result in generation of excessive groundborne vibration or groundborne noise levels. **(Less than Significant Impact)**

Impact NOI-3: The project would not be 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. The project would not expose people residing or working in the project area to excessive noise levels. **(Less than Significant Impact)**

The project site is located approximately 2.6 miles from the Palo Alto Airport, outside of the AIA, safety zones, and noise contours. Therefore, the project would not expose people working in the project area to excessive noise levels. **(Less than Significant Impact)**

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

State

Housing-Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing-element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.⁵⁴ The City of Palo Alto Housing Element and related land use policies were last updated in 2014.

Regional and Local

Plan Bay Area 2040

Plan Bay Area 2040 is a long-range transportation, land-use, and housing plan intended support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area 2040 promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified PDAs.⁵⁵

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

Palo Alto 2030 Comprehensive Plan

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

⁵⁴ California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed May 4, 2021. <http://hcd.ca.gov/community-development/housing-element/index.shtml>.

⁵⁵ Association of Bay Area Governments and Metropolitan Transportation Commission. "Project Mapper." <http://projectmapper.planbayarea.org/>. Accessed May 4, 2021.

Policy/Program	Description
Policy B-4.4	Recognize that Stanford Research Park contains a concentration of some of the City's largest employers, and seek to maintain a mix of office and research and development uses.
Policy B-7.3	Encourage investment and activity along El Camino Real and within Stanford Research Park that complements the Research Park and adjacent neighborhoods and enhances their physical appearance.

4.14.1.2 *Existing Conditions*

According to a May 2020 estimate by the California Department of Finance, Palo Alto has a total population of approximately 69,226 people.⁵⁶ According to ABAG projections, Palo Alto's population is expected to grow to a total of approximately 86,510 people by 2040.⁵⁷ According to ABAG projections, Palo Alto had approximately 121,740 jobs in 2020 and is expected to have a total of 126,510 jobs by 2040.⁵⁸

As discussed in the City's Comprehensive Plan 2015-2023 Housing Element (adopted November 2014), the City has a jobs/housing imbalance skewed to the jobs side of the ratio. Recent estimates put the current jobs/housing balance at 3.05 jobs per employed resident (City of Palo Alto 2014b). This trend requires the City to import most of its workers to meet the needs of business and industry, indicating an unmet need for housing in the City.

The project site is located within the Stanford Research Park, a business community supporting a diverse range of research and development (R&D) facilities. According to the Comprehensive Plan, one-third of all jobs in Palo Alto are located within the Stanford Research Park. The project site is currently occupied by a parking lot supporting the adjacent office building at 607 Hansen Way.

4.14.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

⁵⁶ California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State 2011-2020 with 2010 Census Benchmark*. Accessed May 4, 2021. Available at: <http://dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

⁵⁷ Association of Bay Area Governments. "Projections 2040." Accessed May 4, 2021. Available at: <http://projections.planbayarea.org/>.

⁵⁸ Ibid.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Create a substantial imbalance between employed residents and jobs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact POP-1: The project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
(Less than Significant Impact)

Operation of the project would generate approximately 151 employees. The addition of another office building to the Stanford Research Park is consistent with Comprehensive Plan policies B-4.4 and B-7.3. This increase of jobs in the Stanford Research Park would not be unplanned, as the City has anticipated that the Stanford Research Park will continue to grow and remain a major employment center.⁵⁹ Therefore, population growth associated with the project would not be unplanned and would be consistent with the City's projected growth. **(Less than Significant Impact)**

Impact POP-2: The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

The project site is currently occupied by a parking lot. The project would not result in demolition of any housing or employment uses. Therefore, the project would not displace existing people or housing **(No Impact)**

Impact POP-3: Create a substantial imbalance between employed residents and jobs **(Less than Significant Impact)**

As discussed in the City's Comprehensive Plan 2015-2023 Housing Element (adopted November 2014), the City has a jobs/housing imbalance skewed to the jobs side of the ratio. Recent estimates put the current jobs/housing balance at 3.05 jobs per employed resident (City of Palo Alto 2014b). This trend requires the City to import most of its workers to meet the needs of business and industry, indicating an unmet need for housing in the City. The proposed project includes new office development, which would further the jobs/housing imbalance. However, development within the Research Park area is intended for office and Research & Development use; therefore, increases in jobs within this zone district are planned. **(Less than Significant Impact)**

⁵⁹ City of Palo Alto. Comprehensive Plan 2030. Page 194.

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

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

Government Code Section 65995 through 65998

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

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

Regional and Local

Countywide Trails Master Plan

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

City of Palo Alto Municipal Code

Section 16.58 of the PAMC states that Impact Fees are to be borne by new development to pay proportionately for Parks, Community Centers, Libraries, Public Safety Facilities, Schools, General Government Facilities, Housing, Traffic and Public Art. The project would be subject to payment of these fees prior to issuance of a building permit.

Palo Alto 2030 Comprehensive Plan

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

Policy/Program	Description
Policy S-1.3	Deter criminal behavior in Palo Alto through a multidisciplinary approach that includes a safe built environment, effective social services, functional administrative processes and PAPD review of site plans for major development proposals, as needed.
Policy S-2.15	Provide emergency fire and medical services consistent with the response time standards set forth in the Fire Department's annual budget.

4.15.1.2 *Existing Conditions*

Public facility services are provided to the community as a whole, usually from a central location or from a defined set of nodes. The resources base for delivery of the services, including the physical service delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery agency can be a city, county, service or other special district. Agencies serving the site are summarized below.

Fire Services

The PAFD is located at City Hall at 250 Hamilton Avenue. The nearest fire station to the project site is the Mayfield Station, Fire Station #2, located in the Stanford Research Park at 2675 Hanover Street, approximately 1.2 miles from the project site.

Police Services

The Palo Alto Police Department (PAPD) provides law enforcement services within the City limits. The offices for the PAPD are located adjacent to City Hall at 275 Forest Avenue, approximately 2.7 miles from the project site.

Public Schools

All public schools in Palo Alto are operated by the Palo Alto Unified School District. The nearest public school to the project site is Barron Park Elementary, located at 800 Barron Avenue, approximately 0.8 miles southeast of the project site.

Parks

The City of Palo Alto has almost 4,000 acres of open space, including 162 acres of developed urban parks throughout the City.⁶⁰ The nearest park to the project site is Boulware Park. Located at 390

⁶⁰ City of Palo Alto. Open Space & Parks. Accessed May 4, 2021.
<https://www.cityofpaloalto.org/Departments/Community-Services/Open-Space-Parks>

Fernando Road, approximately 0.3 miles northeast of the project site. Boulware Park is a 1.5-acre neighborhood park that features basketball courts, playgrounds, walking trails, barbecue grills, and picnic tables.⁶¹

4.15.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
1) Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5) Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact PS-1:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services. (Less than Significant Impact)
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The proposed project would be required to adhere to the conditions of approval set forth by the PAFD based on their review of the project plans. The project would be constructed in accordance with building codes and would be required to be maintained in accordance with applicable City policies identified in the Comprehensive Plan to avoid unsafe building conditions and promote public safety. The site is already served by the PAFD, the project would not result in significant impacts to fire protection services, nor would the project alone require the construction of additional fire protection facilities. **(Less than Significant Impact)**

⁶¹ City of Palo Alto. Boulware Park. Accessed May 4, 2021.
<https://www.cityofpaloalto.org/Departments/Community-Services/Open-Space-and-Parks-Home/Neighborhood-Parks/Boulware-Park>

Impact PS-2: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services. **(Less than Significant Impact)**

The project would not cause a substantial increase in population or employment that would demand additional services. The site is already served by the PAPD, it is not anticipated the development of the proposed project would result in significant impacts to police protection services; nor would the project alone require the construction of additional police protection facilities. **(Less than Significant Impact)**

Impact PS-3: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools. **(Less than Significant Impact)**

The proposed use is an office use and does not include any new residences. Therefore, the project would not result in new students within the school district that could require the construction of new school facilities. **(No Impact)**

Impact PS-4: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks. **(Less than Significant Impact)**

The project would not generate students, or residents that would be regular park users. Employees of the proposed office building may use park facilities in the project vicinity. However, this would be an incremental increase in demand on these facilities and would not require the construction of new or expanded park facilities. **(Less than Significant Impact)**

Impact PS-5: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities. **(Less than Significant Impact)**

Employees of the proposed office building may use other public facilities in the project vicinity, such as libraries or community centers. However, this would be an incremental increase in demand on these facilities and would not require the construction of new facilities. **(Less than Significant Impact)**

4.16 RECREATION

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Government Code Section 66477

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

4.16.1.2 *Existing Conditions*

The City of Palo Alto has almost 4,000 acres of open space, including 162 acres of developed urban parks throughout the City.⁶² The nearest park to the project site is Boulware Park. Located at 390 Fernando Road, approximately 0.3 miles northeast of the project site. Boulware Park is a 1.5-acre neighborhood park that features basketball courts, playgrounds, walking trails, barbecue grills, and picnic tables.⁶³

4.16.2 Impact Discussion

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

⁶² City of Palo Alto. Open Space & Parks. Accessed May 4, 2021.

<https://www.cityofpaloalto.org/Departments/Community-Services/Open-Space-Parks>

⁶³ City of Palo Alto. Boulware Park. Accessed May 4, 2021.

<https://www.cityofpaloalto.org/Departments/Community-Services/Open-Space-and-Parks-Home/Neighborhood-Parks/Boulware-Park>

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

The project would not generate students, or residents that would be regular park users. Employees of the proposed office building may use parks or other recreational facilities in the project vicinity. However, this would be an incremental increase in demand on these facilities and would not result in substantial deterioration of recreational facilities. **(Less than Significant Impact)**

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

The project does not include the construction or expansion of any public recreational facilities. The second story would include a rooftop terrace for employees to use. The rooftop terrace would include landscaped areas, walkways, gathering areas, and canopies. The environmental impact of the construction of this rooftop terrace has been included in the analysis of this Initial Study. Therefore, the project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. **(Less than Significant Impact)**

4.17 TRANSPORTATION

The following discussion is based, in part, on a Transportation Analysis prepared by Hexagon Transportation Consultants, Inc. (Hexagon), dated April 2022. A copy of this report can be seen in Appendix F.

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2040.

Senate Bill 743

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

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

Regional and Local

Congestion Management Program

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

Palo Alto Transportation Analysis Policy

The Palo Alto VMT Policy establishes screening criteria for projects that are expected to cause a less-than-significant transportation impact under CEQA based on the land use and/or location. Projects that meet the screening criteria are not required to prepare further VMT analysis. The proximity to major transit stop screening criterion applies to projects that are located within a half mile of an existing or planned high-quality transit corridor or major transit stations and meet the following additional criteria for office projects: (1) is high density (minimum FAR of 0.75), (2) does not exceed parking requirements, and (3) is consistent with Plan Bay Area 2040. A high-quality transit corridor means a corridor with fixed-route bus service with service intervals no longer than 15 minutes during peak commute hours.

For a project that does not meet the screening criteria, a project's VMT impact is determined by comparing the project VMT to the appropriate thresholds of significance based on the type of development. For office developments, the threshold of significance is the regional average VMT per worker minus 15 percent. If a project is found to have a significant impact on VMT, the impact must be reduced by modifying the project to reduce its VMT to an acceptable level (below the established thresholds of significance applicable to the project) and/or mitigating the impact through multimodal transportation improvements or establishing a trip cap.

The City's Transportation Analysis Policy also continues to require projects to prepare a Local Transportation Analysis (LTA) to analyze non-CEQA transportation issues, including local transportation operations and intersection LOS.

Palo Alto Bicycle & Pedestrian Transportation Plan

The Palo Alto Bicycle & Pedestrian Transportation Plan (adopted in July 2012) identifies objectives for the expansion of bicycle and pedestrian access within the City. The plan was developed through collaboration with the City, Palo Alto Bicycle Advisory Committee, City/School Traffic Safety Committee, and the community. It identifies a network for bicycle travel and recommends improvements to make bicycling and walking a viable option for more people, with a goal of accommodating new growth, maintaining mobility, and reducing overall environmental impacts.

Palo Alto 2030 Comprehensive Plan

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

Policy/Program	Description
Program T-1.2.3	Formalize TDM requirements by ordinance and require new developments above a certain size threshold to prepare and implement a TDM Plan to meet specific performance standards. Require regular monitoring/reporting and provide for enforcement with meaningful penalties for non-compliance. The ordinance should also: <ul style="list-style-type: none">• Establish a list of effective TDM measures that include transit promotion, prepaid transit

	<ul style="list-style-type: none"> • passes, commuter checks, car sharing, carpooling, parking cash-out, bicycle lockers and showers, shuttles to Caltrain, requiring TMA membership and education and outreach to support the use of these modes. • Allow property owners to achieve reductions by contributing to citywide or employment district shuttles or other proven transportation programs that are not directly under the property owner's control. • Provide a system for incorporating alternative measures as new ideas for TDM are developed. • Establish a mechanism to monitor the success of TDM measures and track the cumulative reduction of peak hour motor vehicle trips. TDM measures should at a minimum achieve the following reduction in peak hour motor vehicle trips, with a focus on single-occupant vehicle trips. Reductions should be based on the rates included in the Institute of Transportation Engineers' Trip Generation Manual for the appropriate land use category and size: <ul style="list-style-type: none"> ○ 45 percent reduction in the Downtown district ○ 35 percent reduction in the California Avenue area ○ 30 percent reduction in the Stanford Research Park ○ 30 percent reduction in the El Camino Real Corridor ○ 20 percent reduction in other areas of the city • Require new development projects to pay a Transportation Impact Fee for all those peak-hour motor vehicle trips that cannot be reduced via TDM measures. Fees collected would be used for capital improvements aimed at reducing vehicle trips and traffic congestion. • Ensure a stable, sustained funding source to support implementation of TDM measures.
Policy T-1.3	Reduce GHG and pollutant emissions associated with transportation by reducing VMT and per-mile emissions through increasing transit options, supporting biking and walking, and the use of zero-emission vehicle technologies to meet City and State goals for GHG reductions by 2030.
Policy T-1.17	Require new office, commercial and multi-family residential developments to provide improvements that improve bicycle and pedestrian connectivity as called for in the 2012 Palo Alto Bicycle & Pedestrian Transportation Plan.
Policy T-2.3	Use motor vehicle LOS at signalized intersections to evaluate the potential impact of proposed projects, including contributions to cumulative congestion. Use signal warrants and other metrics to evaluate impacts at unsignalized intersections.
Policy T-5.1	All new development projects should manage parking demand generated by the project, without the use of on-street parking, consistent with the established parking regulations. As demonstrated parking demand decreases over time, parking requirements for new construction should decrease.
Policy T-5.6	Strongly encourage the use of below-grade or structured parking, and explore mechanized parking instead of surface parking for new developments of all types while minimizing negative impacts including on groundwater and landscaping where feasible.
Policy T-5.7	Require new or redesigned parking lots to optimize pedestrian and bicycle safety.

Policy T-5.8	Promote vehicle parking areas designed to reduce stormwater runoff, increase compatibility with street trees and add visual interest to streets and other public locations. Encourage the use of photovoltaic panel or tree canopies in parking lots or on top of parking structures to provide cover, consistent with the Urban Forest Master Plan.
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4.17.1.2 *Existing Conditions*

Roadways

Regional access to the project site is provided by US 101 and I-280. Local access to the project site is provided via El Camino Real (SR 82), Page Mill Road/Oregon Expressway and Hansen Way. For the purposes of this analysis, US 101, I-280, El Camino Real, and all parallel streets are considered to run north-south, and cross streets, such as Page Mill Road, are considered to run east-west.

Pedestrian Facilities

Continuous pedestrian facilities exist between the project site and the surrounding land uses. Pedestrian facilities in the project area consist of sidewalk and crosswalks present along all roadways and intersections in the project vicinity.

Bicycle Facilities

The bicycle facilities in the project vicinity include a multi-use trail (Class I bikeway), striped bike lanes (Class II bikeway), and shared bike routes (Class III bikeway). Bike paths or multi-use trails, Class I bikeways, are shared between pedestrians and bicyclists and separated from motor vehicle traffic. Bike lanes, Class II bikeways, are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes, Class III bikeways are signed bike routes where bicyclists share a travel lane with motorists. Bike facilities within the project vicinity are shown in Figure 4.17-1.

Transit Services

Transit service is provided to the project area by the VTA. One frequent bus route (Route 22) and three express routes (101, 102, and 103) serve the project area. The nearest bus stops to the project site are located along Hansen Way and along the project frontage on El Camino Real. The bus stop along El Camino Real is served by Route 22 and the stops along Hansen Way are served by Routes 101, 102, and 103. The bus routes are described in further detail in Table 4.17-1 and are shown in Figure 4.17-2.

The nearest CalTrain station, the California Avenue Station, is located at 101 California Avenue, approximately one mile northwest of the project site. CalTrain users can ride northward to San Francisco and southward to Gilroy, as well as several stops between both ends of the service line.



Source: Hexagon Transportation Consultants, Inc., May 26, 2021.

EXISTING BICYCLE FACILITIES

FIGURE 4.17-1



EXISTING TRANSIT FACILITIES

FIGURE 4.17-2

Table 4.17-1: Summary of Existing Transit Services					
Route	Route Description	Weekday Hours of Operation	Headways* (minutes)	Nearest Bus Stop	Walking Distance to Project Site (feet)
Frequent Route 22	Palo Alto Transit Center - Eastridge Transit Center	4:30 AM – 2:00 AM	15-20	El Camino Real, south of Hansen Way	265
Express Route 101	Camden & Highway 85 - Stanford Research Park	6:15 AM – 8:25 AM, 4:10 PM – 6:35 PM	60	Hansen Way, west of El Camino Real	310
Express Route 102	South San José - Stanford Research Park	5:50 AM – 9:05 AM, 3:20 PM – 6:45 PM	60	Hansen Way, west of El Camino Real	310
Express Route 103	Eastridge - Stanford Research Park	5:00 AM – 8:25 AM, 2:40 PM – 7:20 PM	60	Hansen Way, west of El Camino Real	310
Notes: Based on transit services as of April 2021 *Headways during weekday peak periods in the project area.					

4.17.2 Impact Discussion

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

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

Circulation System

The VMT analysis and LTA were conducted for the project, consistent with the City's Transportation Analysis Policy. These analyses are discussed in further detail under Impact TRN-2 and the non-CEQA discussion found below TRN-4, respectively. As discussed under Impact TRN-3 and TRN-4, the project would be consistent with the City's Zoning Code and other policies that pertain to on-site circulation.

Vehicle Parking

The Zoning Code requires one vehicle parking space per 300 sf of gross floor area of office space. The project would be required to provide 168 parking spaces. The project proposes to provide 173 vehicle parking spaces, meeting the City's requirement. It should also be noted that while the project site currently provides parking for the adjacent office building at 611 Hansen Way, the project is not expected to result in insufficient parking for the adjacent property given that there are multiple existing surface parking lots surrounding the building that would remain.

Transit

The project site is served by VTA Routes 22, 101, 102, and 103 with bus stops located along the project frontages on El Camino Real and along Hansen Way. VTA Route 22 along El Camino Real has a headway of approximately 10 to 15 minutes. VTA Routes 101, 102, and 103 along Hansen Way have headways of approximately 20 minutes. It is expected that the project would generate some transit trips to residential areas and other nearby commercial destinations. However, the project would not generate a substantial amount of new transit users so as to result in the deterioration of existing transit facilities.

Bicycle Facilities

The Zoning Code requires one secure bicycle parking space per 3,000 sf of office space. Of the total number of bicycle parking spaces, 80 percent must be long-term spaces and 20 percent of the spaces are required to be short-term spaces. The project would be required to provide a minimum of 17 bicycle spaces consisting of 14 long-term spaces and three short-term spaces. The project proposes to provide the required minimum number of bicycle parking spaces. Thus, the project would be consistent with the City's bicycle parking requirements.

Pedestrian Facilities

A complete network of sidewalks exists along all of the streets surrounding the project site. The project would provide a new 6.5-foot sidewalk with an additional five feet of landscaping between the sidewalk and the street along the project frontage on El Camino Real and a six-foot sidewalk with an additional six feet of landscaping between the sidewalk and the street along the project frontage on Hansen Way. This would be an improvement over the existing eight and six-foot sidewalks along

El Camino Real and Hansen Way, respectively, that currently do not provide additional landscaping space between the sidewalk and the street. Pedestrian walkways would also be provided throughout the site to give access to the office building, parking areas, amenities, and courtyards on-site. Therefore, consistent with Comprehensive Plan Policies T-1.17 and T-5.7, the project would improve pedestrian facilities on-site.

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

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

CEQA Guidelines Section 15064.3 sets forth criteria for analyzing transportation impacts using the VMT metric. While the project is located along El Camino Real, which is considered a high-quality transit corridor, the project cannot be screened out from a VMT analysis based on the City's Transportation Analysis because it does not meet the minimum FAR requirement of 0.75. The project proposes a FAR of 0.4. Therefore, a VMT analysis is required for the project.

For a project that does not meet the screening criteria, a project's VMT impact is determined by comparing the project VMT to the appropriate thresholds of significance based on the type of development. For office developments, the threshold of significance is the regional average VMT per worker minus 15 percent, which calculates to 13.03 daily VMT per worker. Using the VTA's VMT evaluation tool, Hexagon calculated the VMT of the proposed project to be 17.44 daily VMT per worker.

Impact TRN-2: The project would result in 17.44 daily VMT per worker, exceeding the applicable significance threshold of 13.03 daily VMT per worker.

Implementation of MM TRN-1.1, described below, would reduce the project's VMT to below the 13.03 daily VMT per worker threshold.

MM TRN-2.1: Consistent with Comprehensive Plan Program T-1.2.3, the project applicant shall be required to implement a Transportation Demand Management (TDM) plan to reduce peak-hour vehicle trips by at least 30 percent, given that the project is along El Camino Real and is within the Stanford Research Park. The TDM plan shall include measures such as transit promotion, prepaid transit passes, commuter checks, car sharing, carpooling, employee shuttles, and parking cash-out, bicycle lockers and showers. The TDM plan shall be submitted to the City of Palo Alto's Office of Transportation for review and approval prior to approval of a planning entitlement. The project applicant shall be required to pay a Transportation Impact Fee for all the peak-hour vehicle trips that cannot be reduced via TDM measures. Fees collected by the City shall be used for capital improvements aimed at reducing vehicle trips.

A preliminary TDM Plan was submitted to the City in October of 2021. The BAAQMD TDM Tool was used to estimate the VMT reductions that could be achieved by the preliminary TDM Plan. The BAAQMD TDM Tool found that the preliminary TDM Plan would reduce the project's VMT by 34.6 percent, exceeding the required 30 percent reduction. Therefore, the project's VMT impact would be less than significant with implementation of the required TDM plan. **(Less than Significant Impact with Mitigation Incorporated)**

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

Project Driveways

Vehicle access would be provided via one relocated right-turn only driveway on El Camino Real and one existing full access driveway on Hansen Way. Both driveways would provide access to the surface parking lot and the underground garage. The El Camino Real driveway would be relocated approximately 90 feet north of its existing location and would be approximately 26 feet wide. The Hansen Way driveway is approximately 25 feet wide. The ramp to the proposed below-grade parking garage would be approximately 24 feet wide. All project driveways would meet the City's minimum width requirement of 20 feet (Zoning Ordinance Section 36.32.80[e]).

Sight Distance at Project Driveways

The posted speed limit on Hansen Way is 30 miles per hour (mph). The CalTrans stopping sight distance is 250 feet, based on a design speed of 35 mph. Thus, a driver must be able to see 250 feet in both directions of Hansen Way to locate a sufficient gap to turn out of the driveway. The Hansen Way driveway is approximately 150 feet from west of El Camino Real. Given that vehicles turning from El Camino Real onto Hansen Way are likely to be traveling at a decreased speed of approximately 10 mph, the sight distance of 150 feet for traffic turning from El Camino Real would be adequate. The existing line of sight from the Hansen Way driveway is clear of obstructions and the trees to be added along Hansen Way would have a high canopy so as to not obstruct the line of sight.

The posted speed limit on El Camino Real is 35 mph, therefore, the CalTrans stopping sight distance is 300 feet, based on a design speed of 40 mph. The driveway would be located approximately 310 feet south of Hansen Way, an adequate distance for seeing traffic turning from Hansen Way. However, on-street parking is allowed on El Camino Real near the proposed relocated driveway and could obstruct the vision of exiting drivers if there are cars parked next to the driveway.

Impact TRN-3: On-street parking along El Camino Real could limit stopping sight distance of the proposed driveway for vehicles turning from Hansen Way to less than 300 feet.

Implementation of MM TRN-2.1, described below, would ensure that vehicles turning from Hansen Way onto El Camino Real have a minimum sight distance of 300 feet from the proposed driveway.

MM TRN-3.1: Prior to issuance of any building permits the project shall provide at least 15 feet of red curb west of the proposed driveway to prohibit parking and provide adequate sight distance along El Camino Real.

Vehicle Circulation

The project would provide 90-degree uniform parking stalls throughout the surface lot and garage. The project proposes an internal drive aisle of 25 feet width within the surface lot and 24 feet width within the garage, which are adequate to allow vehicles to maneuver in and out of 90-degree parking spaces. The project would not include any undesirable dead-end drive aisles.

Parking Stall Dimensions

Parking spaces are shown to be 18 feet long by 8.5 feet wide in the surface lot and 18 feet long by nine feet wide in the garage. According to the Zoning Code all standard parking stalls should be at least 8.5 feet in width by 17.5 feet in length. The proposed parking space dimensions would meet the City requirements.

Truck Access and Circulation

Emergency response vehicles, garbage collection trucks, delivery trucks, and other trucks would access the site from the project driveways along El Camino Real and Hansen Way. Based on the Zoning Code, Section 18.52.040, the project is required to provide one loading space. The site plan indicates one loading zone along the drive aisle from the El Camino Real driveway, in front of the building. The loading zone could be accessed by both project driveways.

The project would provide one trash and recycle enclosure in the southwest corner of the surface parking lot. It is expected that trash bins would be towed from the trash enclosures to the loading area, which would be used as trash staging on garbage collection days. Thus, trash collection would occur on-site.

The project would meet CalTrans and City requirements for driveways, parking dimensions, and on-site circulation. With implementation of MM TRN-2.1, the project would not create or exacerbate any safety hazards associated with project transportation. The project does not propose any incompatible uses with the surrounding vicinity. Therefore, the project would not substantially increase hazards due to a geometric design feature or incompatible uses. **(Less than Significant Impact)**

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

The project would be required to conform to the City's traffic and safety regulations that specify adequate emergency access measures. In addition, the project site would be required to meet the standards set forth by the Palo Alto Fire Department. Adherence to existing state and federal regulations and City of Palo Alto requirements would reduce impacts. As a result, the proposed project would not create an operational safety hazard or impede emergency access. **(Less than Significant Impact)**

4.17.3 Non-CEQA Effects

While the evaluation of project CEQA impacts on the transportation system is based on VMT, in accordance with City of Palo Alto's Transportation Policy, the following discussion is included for informational purposes because Comprehensive Plan Policy T-2.3 requires preparation of a LTA to analyze non-CEQA transportation issues, including local transportation operations and intersection LOS.

Trip Generation

The number of vehicle trips expected to be generated by the project was calculated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition. The Trip Generation Manual does not specify a land use for the amenities portion of the project, so the 2,517 sf amenity space was included as part of the office use for the trip estimates, as it was assumed to be used only by employees on-site. The project is estimated to generate 515 daily trips, with 61 gross trips in the AM peak hour and 61 gross trips in the PM peak hour. This trip generation estimate is conservative as it does not account for the required 30 percent TDM trip reduction, as described under Impact TRN-2. The project trip generation estimates are summarized in detail below in Table 4.17-2.

Table 4.17-2: Project Trip Generation Estimates											
Land Use	Size	Daily		AM Peak Hour				PM Peak Hour			
		Trip Rate	Trips	Trip Rate	Trips			Trip Rate	Trips		
					In	Out	Total		In	Out	Total
Office*	52,872 sf	9.74	515	1.16	52	9	61	1.15	10	51	61
Notes: All trip rates (in trips per 1,000 sf) are from the ITE Trip Generation Manual, 10 th Edition, 2017. *General Office (ITE Land Use 710): average trip rates were used.											

Intersection Levels of Service

The following four intersections were analyzed as part of the LTA: 1) El Camino Real and Page Mill Road; 2) El Camino Real and Hansen Way; 3) Hansen Way and Page Mill Road; 4) El Camino Real and Fernando Avenue. Existing peak-hour traffic volumes were based on available traffic counts conducted for nearby studies and new traffic counts at the study intersection where no traffic counts were available. Turning count data from 2017 and 2018 was available for the El Camino Real/Page Mill Road, El Camino Real/Hansen Way, and Hansen Way/Page Mill Road intersections. These counts were taken prior to Covid-19 and shelter-in-place orders and are therefore representative of normal conditions. These traffic counts were increased by one percent per year to provide an estimate for traffic numbers in 2021. New traffic counts were conducted for the El Camino Real/Fernando Avenue intersection in May 2021 and adjusted to account for the lower traffic volumes due to Covid-19.

Background traffic volumes include approved developments in the project vicinity and cumulative traffic volumes include the expected growth in the region and approved developments in the project vicinity. A summary of the project's impacts to the intersections' levels of service is provided in Table 4.17-3.

Table 4.17-3: Intersection LOS Summary														
Intersection	Peak Hour	Count Date	Existing				Background				Cumulative (2030)			
			No Project		With Project		No Project		With Project		No Project		With Project	
			Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
El Camino Real and Page Mill Road (Signalized)	AM	10/31/17	46.1	D	46.3	D	49.9	D	50.0	D	50.5	D	50.7	D
	PM	10/30/18	47.1	D	49.0	D	48.8	D	49.0	D	49.5	D	49.8	D
El Camino Real and Hansen Way (Signalized)	AM	1/10/19	13.7	B	13.9	B	13.5	B	13.9	B	13.5	B	13.9	B
	PM	1/10/19	18.4	B-	18.4	B-	18.0	B-	18.4	B-	18.0	B-	18.3	B-
Hansen Way and Page Mill Road (Signalized)	AM	1/10/19	16.5	B	16.5	B	16.3	B	16.5	B	16.3	B	16.5	B
	PM	1/10/19	13.8	B	14.4	B	13.5	B	14.4	B	13.4	B	14.4	B
El Camino Real and Fernando Avenue (One-Way Stop Control)	AM	5/5/21	31.0	D	35.9	D	35.1	E	35.9	E	35.6	E	36.3	E
	PM	5/5/21	27.9	D	32.7	D	31.7	D	32.7	D	32.4	D	33.4	D

According to the City of Palo Alto and CMP level of service standards, a development is said to create an adverse operations effect on traffic conditions at a signalized intersection if for either peak hour, either of the following conditions occurs:

- 1) The LOS at the intersection drops below its respective LOS standard (LOS D or better for local intersections and LOS E or better for CMP intersections) when project traffic is added, or;
- 2) An intersection that operates below its level of service standard under no-project conditions experiences an increase in critical-movement delay of four (4) or more seconds, and an increase in critical volume-to-capacity ratio (v/c) of one percent (0.01) or more when project traffic is added.

As seen in Table 4.17-3, while the El Camino Real/Fernando Drive intersection dropped below LOS D, it was due to added traffic from other sources in background conditions. The project would not cause any of the studied intersections to drop below LOS D. The project would cause a maximum of 1.2 seconds in critical movement delay at the Hansen Way/Page Mill Road intersection. Therefore, the project would not cause an adverse effect on traffic conditions.

4.18 TRIBAL CULTURAL RESOURCES

The following discussion is based, in part, on a cultural resources sensitivity assessment prepared for the project by Archaeological/Historical Consultants (A/H/C), dated August 2021. A copy of this report is included in Appendix C of this Initial Study.

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill 52

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

Under AB 52, TCRs are defined as follows:

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

Palo Alto 2030 Comprehensive Plan

The Comprehensive Plan includes policies for the purpose of avoiding or mitigating impacts resulting from development projects within the City. The following policies are specific to tribal cultural resources and are applicable to the proposed project.

Policy/Program	Description
Policy L-7.16	Continue to consult with tribes as required by California Government Code Section 65352.3. In doing so, use appropriate procedures to accommodate tribal concerns when a tribe has a religious prohibition against revealing precise information about the location or previous practice at a particular sacred site.

4.18.1.2 *Existing Conditions*

In May of 2021, A/H/C sent a Sacred Lands File search request to the Native American Heritage Commission (NAHC). The Sacred Lands File search was negative, indicating that the project site is not considered a sacred land to local Native Americans tribes.

4.18.2 Impact Discussion

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

Impact TCR-1: 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)**

There are no known TCRs within the project site. However, as described in Section 4.5 Cultural Resources, the project site is considered highly sensitive to archaeological resources, which could include TCRs.

In May 2016 the City of Palo received a single request from a tribe to be contacted in accordance with AB 52. However, through subsequent correspondence with the tribe, it was concluded that the tribe had contacted the City of Palo Alto in error and did not wish to be contacted regarding future projects within the City's jurisdiction. The tribe, the Torres Martinez Desert Cahuilla Indians, is not traditionally or culturally affiliated with the geographic area within the City of Palo Alto. In June 2021 the Tamien Nation contacted the City of Palo Alto and requested to be notified in accordance with AB 52 for projects within the City's jurisdiction. The Tamien Nation is culturally affiliated with the City's geographic area.

On August 4, 2021, the City sent letters to tribes listed by the Native American Heritage Commission (NAHC) as having a potential affiliation to the project area. The City received responses from the following three groups: 1) the Indian Canyon Mutsun Band of Costanoan; 2) the Ohlone Indian Tribe/Eshom Valley Band; and 3) the Tamien Nation. The Indian Canyon Mutsun Band of Costanoan requested that an archaeological monitor and Native American monitor be present on-site during ground disturbing activities. The Ohlone Indian Tribe/Eshom Valley Band also requested that an archaeological monitor and Native American monitor be present on-site during ground disturbing activities. The Tamien Nation requested further consultation. The City met with the Tamien Nation on September 14, 2021. At that meeting, the representative from Tamien Nation requested that a Native American monitor be present on-site during any ground disturbing activities and further requested that their tribe perform the on-site monitoring. The Tamien Nation also requested that on-site employees be provided with a worker awareness training for cultural and Native American resources prior to ground-disturbing activities. Staff reached out to the other tribes that responded to the City's notice to confirm that they would accept the Tamien Nation's request to provide monitoring services for the project. The Indian Canyon Mutsun Band of Costanoan affirmed that they would accept Tamien Nation as the on-site monitor. Staff reached out to the Ohlone Indian Tribe via email (November 2, 2021 & December 20, 2021) and phone (December 20, 2021) and received no response. Therefore, it is anticipated that the Tamien Nation will provide tribal cultural monitoring for the project. However, if a Tamien Nation monitor is not available, cultural monitoring may be provided by a different tribe that is culturally affiliated with the project's geographic area.

Impact TCR-1: Unknown subsurface tribal cultural resources could be present on the site in underlying native soils and could be disturbed during project construction.

Consistent with the tribes' requests, implementation of the following mitigation measures, as previously described in Section 4.5 Cultural Resources, potential impacts to subsurface tribal resources would also be reduced to a less than significant level.

MM CUL-2.1: A Qualified Archeological monitor as well as a Native American monitor shall be present to monitor ground-disturbing activities. The Archaeologist and Native American monitor shall have the authority to halt construction activities in the event any cultural materials are encountered during ground-disturbing construction activities.

MM CUL-2.2: In the event any significant cultural materials are encountered during construction grading or excavation, construction within a radius of 50 feet of the find would be halted, the Director of Planning shall be notified, and the on-site qualified archaeologist shall examine the find and make appropriate recommendations regarding the significance of the find and the appropriate treatment of the resource. Recommendations could include, but is not limited to, preservation in place or collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovered during monitoring shall be submitted to the Director of Planning. If the discovery is determined to be Native American in nature, the on-site Native American monitor shall be consulted to determine the appropriate treatment of the resource.

MM CUL-2.3: Prior to commencement of any project-related construction activities, a qualified archeologist meeting the Secretary of the Interior Standards for Archeology shall provide a worker environmental awareness training to all site personnel. The training shall discuss the appearance of resources that may be encountered during construction as well as the procedures and notification process in the event of discovery.

With implementation of MM CUL-2.1, MM CUL-2.2, and MM Cul-2.3, impacts to any incidental discoveries of tribal cultural resources would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation).**

Impact TCR-2: The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. **(Less than Significant Impact with Mitigation Incorporated)**

Please see response to TCR-1, above **(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 Palo Alto adopted its most recent UWMP in May 2016.

Assembly Bill 939

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

Assembly Bill 341

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

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025.

California Green Building Standards Code

In January 2010, the State of California adopted the California Green Building Standards Code, establishing mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and indoor environmental quality. These standards include the

following mandatory set of measures, as well as more rigorous voluntary guidelines, for new construction projects to achieve specific green building performance levels:

Reducing indoor water use by 20 percent;

Reducing wastewater by 20 percent;

Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris; and

Providing readily accessible areas for recycling by occupants.

Local

Palo Alto 2030 Comprehensive Plan

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

Policy/Program	Description
Policy N-4.1	Maintain a safe, clean and reliable long-term supply of water for Palo Alto.
Policy N-4.2	Maintain cost-effective citywide water conservation and efficiency programs for all customers, including low income customers, through education, rebates, assistance programs and building requirements.
Policy N-4.6	Retain and utilize rainwater on site to the extent possible.
Policy N-4.7	Ensure regulation of groundwater use to protect it as a natural resource and to preserve it as a potential water supply in the event of water scarcity.
Program N-4.14.1	Establish a standardized process for evaluating the impacts of development on the storm drainage system, including point source discharge, base flow and peak flow.
Policy L-9.11	Provide utilities and service systems to serve all urbanized areas of Palo Alto and plan infrastructure maintenance and improvements to adequately serve existing and planned development.
Policy S-3.8	Strive for 95 percent landfill diversion by 2030, and ultimately zero waste, by enhancing policies and programs for waste reduction, recycling, composting and reuse.

Palo Alto Urban Water Management Plan (2015)

The UWMP includes an assessment of the reliability of the City's water sources, an analysis of water demand, identification of alternative water supply sources, a description of water conservation efforts, and a water shortage contingency plan. Every five years, a UWMP is prepared and submitted as required to the California Department of Water Resources (DWR), per the Urban Water Management Planning Act.

Palo Alto Zero Waste Plan (2018)

The City of Palo Alto has a Zero Waste goal of virtually eliminating waste from being burned or buried, and to protect the environment and public health in a cost-effective manner by safely, legally, and sustainably managing Palo Alto's solid and hazardous waste. Zero Waste Palo Alto seeks to

eliminate waste wherever possible first and foremost, and then managing the remaining discards through recycling and composting. The 2018 update to Palo Alto's Zero Waste Plan adopted a goal of 95 percent diversion of materials from landfills by 2030.

4.19.1.2 *Existing Conditions*

Water Supply

The City of Palo Alto obtains one hundred percent of its potable water supply from the San Francisco Public Utilities Commission (SFPUC). The City is projected to have a water supply of 19,118 acre-feet per year (AFY) through 2035 and water demand was projected to peak at 11,883 AFY in 2020.⁶⁴ On average, the City would have a surplus of 7,791 AFY, annually.

Groundwater

Valley Water is the groundwater management agency in Santa Clara County. The City of Palo Alto has not pumped groundwater since 1991.⁶⁵ While the groundwater quality of the City's wells is considered fair to good quality, it is less desirable than the SFPUC's supplies due to higher levels of dissolved solids and hardness. Although groundwater is not a planned future water supply source, it is an available alternative that is evaluated and reviewed on a regular basis.

Storm Drainage

The City owns and maintains a municipal storm drain system consisting of approximately 107 miles of pipeline and 2,750 catch basins, 800 manholes, and six pump stations. The storm drain system is located within the Palo Alto road right-of-way. Storm drain systems within private streets or private development are privately maintained but are permitted to drain into the public system. The storm drain system is separated into four watershed areas and ultimately drains to San Francisco Bay via one of four local creeks: San Francisquito, Matadero, Barron, and Adobe Creek. Matadero, Barron, and Adobe Creeks are owned and maintained by various agencies. The project site is located within the Matadero Creek subwatershed.⁶⁶

Wastewater/Sanitary Sewer System

The City of Palo Alto Utilities (CPAU) oversees a wastewater collection system consisting of over 208 miles of sewer lines. The City operates the Regional Water Quality Control Plant (RWQCP), which has primary treatment (bar screening and primary sedimentation), secondary treatment (fixed film reactors, conventional activated sludge, clarification and filtration), and tertiary treatment (filtration through a sand and coal filter and UV disinfection). Wastewater is routed to RWQCP, where it is treated prior to discharge into the San Francisco Bay. While the CPAU is responsible for the wastewater collection system, the Palo Alto Public Works Department is responsible for the collection/conveyance of sewage collected and delivered to the RWQCP.

⁶⁴ City of Palo Alto. 2015 Urban Water Management Plan. June 2016. Page 88.

⁶⁵ City of Palo Alto Utilities. 2015 Urban Water Management Plan. June 2016. Page 23.

⁶⁶ Valley Water. Santa Clara Basin Stormwater Resource Plan. August 2019. Figure 2-6.

Solid Waste

The City of Palo Alto contracts with GreenWaste of Palo Alto for collection of garbage, recycling, and composting services in the City and with Zanker Road Resource Management, Ltd. All municipal solid waste is processed at the Sunnyvale Materials Recovery and Transfer Station located in Sunnyvale, where approximately 18 percent of material that would otherwise be landfilled is recovered. Any remaining trash is landfilled primarily at the Kirby Canyon Landfill owned by Waste Management, Inc. in San José, which has 15,738,540 Cubic Yards of capacity and an estimated closure date of 2071.⁶⁷

Dry Utilities

Electricity

The CPAU purchases electric power from hydroelectric resources, including those managed by the Western Area Power Administration (WAPA) and the Calaveras Hydroelectric Project, owned and operated by the Northern California Power Agency (NCPA).⁶⁸ Power from these hydroelectric suppliers is supplemented with energy from other renewable suppliers and supplies from the market in order to meet the customer demand. Electricity demand within Palo Alto fluctuates throughout the year, depending on the season.

Natural Gas

Palo Alto's natural gas distribution system is owned and operated by the City of Palo Alto. The City's annual natural gas load is about three million Btu (3 MMBtu; or about 30 million therms).⁶⁹

Telecommunications

The City of Palo Alto operates its own fiber optic utility. CPAU has the day-to-day responsibility for operating, maintaining, and marketing the dark fiber optic backbone system ("fiber system").⁷⁰ By connecting to the City's fiber system, customers gain access to their Internet Service Provider of choice.

⁶⁷ Azavedo, Becky. Email to Wang, Amy. Subject: Kirby Canyon Landfill - remaining capacity and est. closure date. March 7, 2019.

⁶⁸ City of Palo Alto. Comprehensive Plan Environmental Impact Report. SCH #2014052101. February 2016. Page 4.14-86.

⁶⁹ City of Palo Alto. Comprehensive Plan Environmental Impact Report. SCH #2014052101. February 2016. Page 4.14-88 – 4.14-8.9.

⁷⁰ City of Palo Alto. Comprehensive Plan Environmental Impact Report. SCH #2014052101. February 2016. Page 4.14-91.

4.19.2 Impact Discussion

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

The project would connect to the existing utility lines located in the El Camino Real right-of-way.

Water

The proposed project would demand approximately 15.2 million gallons⁷¹ (or approximately 46.6 acre-feet) of water per year. Water would be used during project operation for landscape irrigation and employee restrooms and kitchens. The project would include several water-efficiency measures such as water-efficient interior fixtures, installation of a recycled water irrigation system for exterior

⁷¹Illingworth & Rodkin, Inc. 3300 El Camino Real Construction Community Risk Assessment. Attachment 2: CalEEMOD Modeling Inputs and Outputs. July 2, 2021.

vegetation, and 20 percent water savings over the “water use baseline”. The project would not generate water flow demands exceeding the capacity of the existing water system and thus, would not require substantial water facility construction or relocation. The project is well below the threshold definition (i.e., 250,000 square feet) of a ‘water demand project’ for a commercial office use under CEQA Guidelines section 15155.

Storm Drainage

As described in Section 4.10 Hydrology and Water Quality, the project would create a net increase of pervious surfaces on-site and would include installation of bioretention basins to treat stormwater on-site. Therefore, the project would result in a net decrease of stormwater runoff on-site and would not exceed existing stormwater collection and treatment facilities. The project would not require substantial stormwater facility construction or relocation.

Wastewater

The project would generate wastewater (refer to UTL-3 for specific forecast daily amounts and available capacity) from employee restrooms and kitchens. The project would not generate a substantial amount of wastewater and would not require substantial wastewater facility construction or relocation.

Electric Power

The proposed office building and associated parking garage and surface parking lot would use approximately 1,126,572 kilowatt-hours of electricity per year according to CalEEMod.⁷² The project proposes to include one stand-by 500-kW generator powered by a 670-HP diesel engine in the southwest corner of the underground garage. The generator would be operated for testing and maintenance purposes, with a maximum of 50 hours per year of non-emergency operation under normal conditions. The project would include rooftop solar panels to generate electricity on-site. The project would not require substantial construction or relocation of existing electric power facilities.

Natural Gas

The project would be 100 percent electric and would not use any natural gas.

Telecommunication Facilities

The project would result in an increase of telecommunications on-site. However, the project would not require substantial construction or relocation of telecommunication facilities. **(Less than Significant Impact)**

⁷² Ibid.

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

The proposed project would demand approximately 15.2 million gallons⁷³ (or approximately 46.6 acre-feet) of water per year. The City is projected to have a water supply of 19,118 AFY through 2035 and water demand was project to peak at 11,883 AFY in 2020.⁷⁴ On average, the City would have a surplus of 7,791 AFY, annually. In the event of drought, the City would enact its Water Shortage Contingency Plan and could use local groundwater as a supplemental source of supply. There would be sufficient water supplies available to serve the project during normal, dry, and multiple-dry years. **(Less than Significant Impact)**

Impact UTL-3: The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. **(Less than Significant Impact)**

The RWQCP is designed to have an average dry weather flow (ADWF) capacity of 39 million gallons per day (MGD) with full tertiary treatment, and a peak wet weather flow capacity of 80 MGD with full secondary treatment.⁷⁵ Current average flows are approximately 22 MGD. Therefore, the current unused capacity of the RWQCP is 17 MGD. The amount of wastewater generated by the proposed office building would be approximately 0.04 MGD⁷⁶, a small amount in comparison to the unused capacity of RWQCP. Therefore, there would be sufficient wastewater treatment capacity to serve the project site. **(Less than Significant Impact)**

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

The project would generate approximately 50 tons of solid waste per year.⁷⁷ The proposed project would be required to comply with PAMC Chapter 16.14, Section A4.408.1, which requires a minimum of 80 percent of non-hazardous construction debris to be recycled or salvaged. In addition, the project would be required to prepare a Waste Management Plan for on-site sorting of construction debris to ensure that the project meets the diversion requirement for reused or recycled construction and demolition debris. With implementation of Comprehensive Plan policies, the PAMC, and the Zero Waste Plan, the Comprehensive Plan Update EIR concluded that solid waste generated by future development under the Comprehensive Plan would not exceed the permitted or actual capacity

⁷³ Ibid.

⁷⁴ City of Palo Alto. 2015 Urban Water Management Plan. June 2016. Page 88.

⁷⁵ San Francisco Bay Regional Water Quality Control Board. Order No. R2-2019-0015. NPDES No. CA0037834. Accessed May 6, 2021. <https://www.cityofpaloalto.org/files/assets/public/public-works/water-quality-control-plant/npdes-permit-ca0037834-palo-alto-final-r2-2019-0015.pdf>

⁷⁶ Wastewater is conservatively estimate at 85 percent of potable water demand

⁷⁷ Illingworth & Rodkin, Inc. 3300 El Camino Real Construction Community Risk Assessment. July 2, 2021.

of existing landfills. For these reasons, the incremental increase in solid waste generated by the proposed project would be accommodated by a landfill with sufficient permitted capacity. **(Less than Significant Impact)**

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

See response to Impact UTL-4. **(Less than Significant Impact)**

4.20 WILDFIRE

4.20.1 Environmental Setting

4.20.1.1 *Existing Conditions*

Cal Fire is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZ), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. The project site is located in an area of low fire risk and is not in a FHSZ.⁷⁸

4.20.2 Impact Discussion

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

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)**

⁷⁸ City of Palo Alto. Comprehensive Plan 2030. Map S-8.

4.21

MANDATORY FINDINGS OF SIGNIFICANCE

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

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

The project could result in impacts to nesting migratory birds if they are present in trees located on or immediately adjacent to the project site. The project could also result in impacts to buried cultural resources, should they be discovered on site. However, with the implementation of MM BIO-1.1, MM CUL-2.1, MM CUL-2.2, MM CUL-2.3, and MM CUL-3.1 as well as compliance with City ordinance requirements included in the project and described in Section 4 Environmental Setting, Checklist, and Discussion of Impacts, the proposed project would not result in significant environmental impacts to biological and cultural resources. **(Less than Significant Impact with Mitigation Incorporated)**

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

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

The project would not impact agricultural, forestry, or mineral resources. Therefore, the project would not contribute to cumulative impacts to these resources.

The project’s geology and soils and hazardous materials impacts are specific to the project site and would not contribute to cumulative impacts elsewhere. Given the nature of the proposed commercial building, the project would have a minimal impact on population and housing, public services, and recreational facilities and would not make a considerable contribution towards a cumulative impact.

The project would have the potential to result in cumulative hydrology and water quality impacts and noise impacts. As noted in Hydrology and Water Quality, the project would slightly decrease impervious surfaces on site and provide stormwater retention facilities, which together would reduce the site’s contribution to cumulative water quality and urban runoff volume impacts. With implementation of BMPs and compliance with City policies pertaining to stormwater and drainage as well as noise-related conditions of approval, the project would have less than significant impacts and not contribute to significant cumulative impact for those resource areas.

The project would increase tree planting on the site but would remove existing trees and has the potential to impact avian nesting activity. Other projects in Palo Alto and surrounding jurisdictions would be required to comply with state and federal requirements (and MM BIO-1.1) for the protection of nesting birds. Thus, a cumulative impact would not occur.

The project would be expected to increase VMT compared to established City thresholds; however, the project would generate VMT below the threshold with implementation of MM TRN-1.1, which is the basis for evaluating a project’s contribution to citywide cumulative VMT. Other projects in the project vicinity would also have access to the bicycle, pedestrian, and transit facilities available in the area and could thus, also reduce VMT. As a result, the project would not contribute to significant cumulative impacts.

As previously described in Section 4,19 Utilities and Service Systems, the City would have sufficient water supply, wastewater treatment capacity, and landfill capacity to accommodate the project and further anticipated growth within the City. Any construction, relocation, or modifications of utility lines by cumulative projects would be subject to standard construction-related conditions of approval

and would not result in a significant environmental effect. Therefore, the project would not contribute to significant utility and service systems impacts.

The project would emit criteria air pollutants and GHG emissions and contribute to the overall regional and global emissions of such pollutants. By its very nature, air pollution and GHG emissions are largely a cumulative impact. The project-level air quality thresholds identified by BAAQMD (which the project's impacts were compared to in Section 4.3) are the basis for determining whether a project's individual impact is cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. As discussed in Section 4.3, the project would have a less than significant impact on air quality. For this reason, the project would have a less than significant cumulative impact on air quality overall. As discussed in Section 4.8, the project would have a less than significant impact on greenhouse gas emissions and climate change. For this reason, the project would have a less than significant cumulative impact on climate change overall. **(Less than Significant Impact with Mitigation Incorporated)**

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

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include construction air quality, hazardous materials (groundwater and soil vapor with VOCs that could be released into the environment due to earth-disturbing activities) and noise. Implementation of mitigation measures and City policies would, however, 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 Palo Alto

Planning and Development Services

Jodie Gerhardt, Manager of Current Planning

Garrett Sauls, Associate Planner

6.2 CONSULTANTS

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Environmental Consultants and Planners

Akoni Danielsen, President and Principal Project Manager

Connor Tutino, Associate Project Manager

Ryan Osako, Graphic Artist

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Air Quality and Noise Consultants

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Adwait Ambaskar, Acoustical Consultant

Casey Divine, Air Quality Consultant

Zachary Palm, Air Quality Consultant

Archaeological/Historical Consultants

Archaeological and Native American Consultation Consultants

Daniel Shoup, Principal

Cornerstone Earth Group, Inc.

Hazardous Materials Consultant

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Hexagon Transportation Consultants, Inc.

Transportation Consultants

Kai-ling Kuo, P.E., Senior Associate

Jocelyn Lee, EIT, Engineer

SECTION 7.0 ACRONYMS AND ABBREVIATIONS

ABAG	Association of Bay Area Governments
ACM	Asbestos-containing material
ADWF	Average dry weather flow
AFY	Acre-feet per year
AIA	Airport Influence Area
ATCM	Airborne Toxics Control Measure
BAAQMD	Bay Area Air Quality Management District
Bgs	Below ground surface
BMPs	Best Management Practices
Btu	British thermal units
CalARP	California Accidental Release Program
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
CalTrans	California Department of Transportation
CAP	Clean Air Plan
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQA	California Environmental Quality Act
CFCs	Chlorofluorocarbons
CGS	California Geological Survey
CH ₄	Methane
CMP	Congestion Management Plan
CNEL	Community noise level equivalent
CO	Carbon monoxide

COE	California-Olive-Emerson
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
CPAU	City of Palo Alto Utilities
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
DBCP	1,2-dibromo-3-chloropropane
DIPE	Diisopropyl ether
DNL	Day-night level
DPM	Diesel particulate matter
DSOD	Department of Water Resource, Division of Safety of Dams
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
EV	Electric vehicle
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FAR	Floor area ratio
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zones
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHGs	Greenhouse gases
GWh	Gigawatt hours
GWP	Global warming potential
HCP	Habitat Conservation Plan
HFCs	Hydrofluorocarbons
HI	Hazard Index
HP	horsepower

HP	Hewlett-Packard
HSWA	Federal Hazardous and Solid Waste Amendments
HSP	Health and Safety Plan
HVAC	Heating, ventilation, and air conditioning
I-280	Interstate 280
In./sec	Inches/second
ITE	Institute of Transportation Engineers
ITP	Incidental Take Permit
kW	kilowatt
LID	Low-impact development
LOS	Level of service
LRA	Local Responsibility Area
LTA	Local transportation analysis
MBTA	Migratory Bird Treaty Act
MEI	Maximally exposed individual
MGD	Million gallons per day
MMTCO ₂ e	Million metric tons of CO ₂ E
MND	Mitigated Negative Declaration
Mpg	Miles per gallon
Mph	Miles per hour
MRP	Municipal Regional Stormwater NPDES Permit
MTC	Metropolitan Transportation Commission
NAHC	Native American Heritage Commission
NCPA	Northern California Power Agency
NCP	National Contingency Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
N ₂ O	Nitrous oxide
NOAA	National Ocean and Atmospheric Administration
NOD	Notice of Determination
NOI	Notice of Intent
NO ₂	Nitrogen dioxide

NO _x	Nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O ₃	Ground-level ozone
OCP	Organochlorine pesticides
OMMP	Operations, Maintenance, and Monitoring Plan
OPR	Office of Planning and Research
PAFD	Palo Alto Fire Department
PAMC	Palo Alto Municipal Code
PAPD	Palo Alto Police Department
PCBs	Polychlorinated biphenyls
PDA	Priority Development Areas
PFCs	Perfluorocarbons
PM	Particulate matter
PPV	Peak particle velocity
RCRA	Resource Conservation and Recovery Act
R&D	Research and development
RHNA	Regional Housing Need Allocation
RP	Research Park
RWQCB	Regional Water Quality Control Board
RWQCP	Regional Water Quality Control Plant
SB	Senate Bill
S/CAP	Sustainability and Climate Action Plan
SCS	Sustainable Communities Strategy
Sf	Square feet
SF ₆	Sulfur hexafluoride
SFHA	Special Flood Hazard Area
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 oxide

SR	State Route
SRA	State Responsibility Area
SUHCP	Stanford University Habitat Conservation Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic air contaminant
TBACT	Best Available Control Technology for Toxics
TCRs	Tribal Cultural Resources
TDM	Transportation Demand Management
TDS	Tree Disclosure Statement
TPHd	Total petroleum hydrocarbon diesel range organics
TPHg	Total petroleum hydrocarbon gasoline range
TPHmo	Total petroleum hydrocarbon motor oil organics
TSCA	Toxic Substances Control Act
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
UWMP	Urban water management plan
VMT	Vehicle miles traveled
VOC	Volatile organic compound
WAPA	Western Area Power Administration