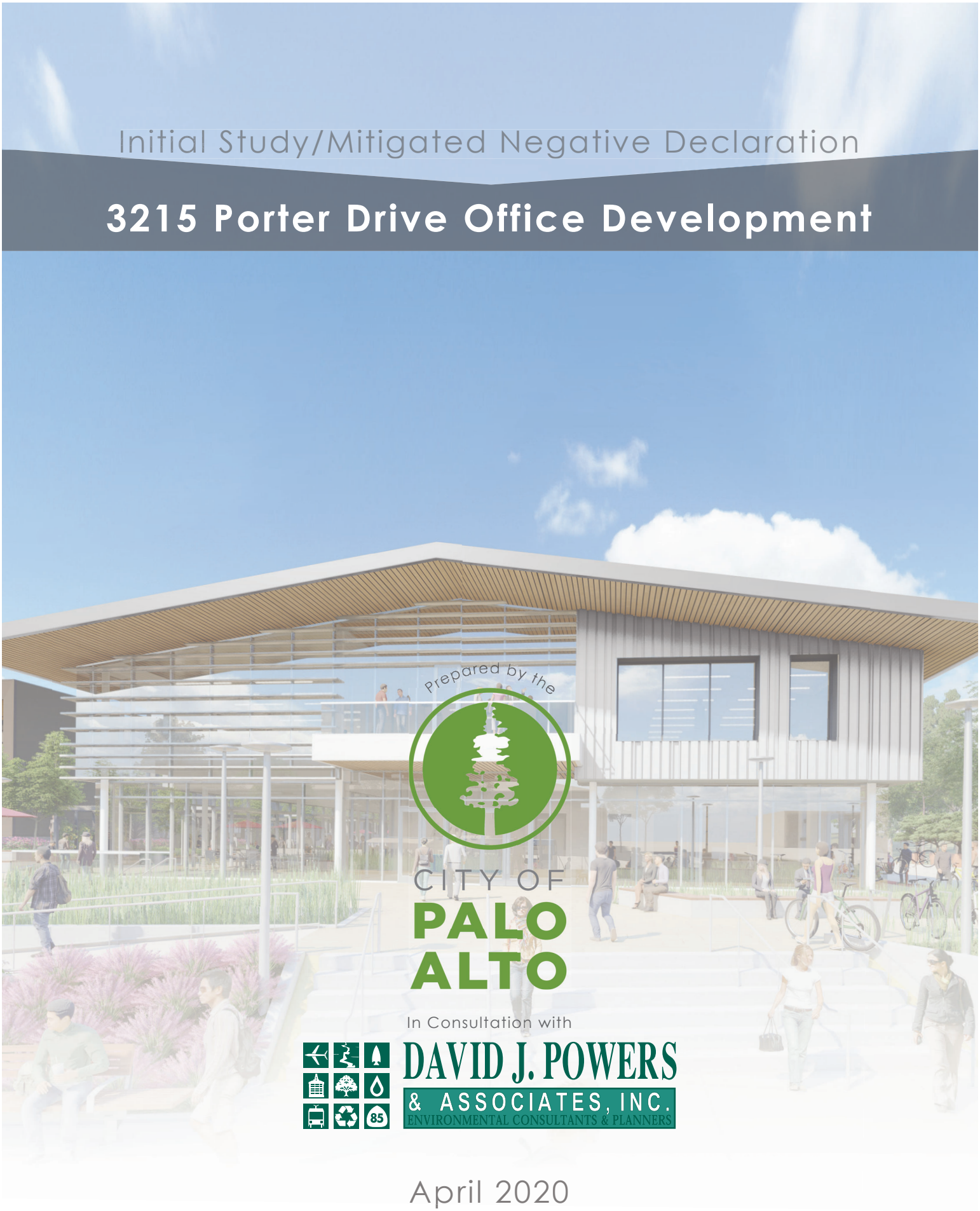
Initial Study/Mitigated Negative Declaration

3215 Porter Drive Office Development



Prepared by the

CITY OF PALO ALTO

In Consultation with

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

April 2020

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CITY OF PALO ALTO

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

Pursuant to Section 21092 and 21092.3 of the Public Resources Code and CEQA Guidelines Section 15072, as amended to date, this notice is to advise you that the City of Palo Alto has prepared an Initial Study on the following project to evaluate the environmental impacts of the project identified below. The Initial Study concludes that the project described below would not have a significant effect on the environment, and therefore, the City proposes to adopt a Mitigated Negative Declaration (MND). The purpose of this notice is to inform the public of the City's intent to adopt a MND for the project, and to provide an opportunity for public comments on the draft MND/Initial Study.

TO: AGENCIES, ORGANIZATION, + INTERESTED PARTIES	The City of Palo Alto requests comments and concerns from agencies, organizations and interested parties regarding the environmental issues associated with construction and operation of the proposed project.
PROJECT TITLE	3215 Porter Drive
PROJECT APPLICANT	The Board of Trustees of the Leland Stanford Junior University
PROJECT LOCATION	The project site is located at 3215 Porter Drive, in the City of Palo Alto. The site is located at the southwest corner of Porter Drive/Hanover Street and Hillview Avenue.

PROJECT DESCRIPTION

The project proposes to construct a two-story office building with an underground garage parking area. The building would be 40 feet high at its tallest point. In addition to office space, the first floor would contain a 1,100-square-foot amenity space that would likely include a café or other accessory use. The total square footage of the proposed building would be 21,933 square feet. The overall floor area ratio (FAR) for the site would be 0.30 and the lot coverage would be approximately 16.2 percent. The project proposes a 50-foot setback from Porter Drive.

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PUBLIC REVIEW PERIOD

This NOI and the Draft Initial Study and Mitigated Negative Declaration are available for public review and comment pursuant to Section 21092 and 21092.3 of the Public Resources Code and CEQA Guidelines Section 15072. The comment period begins on Friday, April 10, 2020 and ends on Monday, May 11, 2020. This NOI and the Draft Initial Study and Mitigated Negative Declaration may be reviewed at the Planning and Community Environment office at 250 Hamilton Avenue in Palo Alto or online at https://bit.ly/2wOygJc.

PUBLIC HEARING

The Architectural Review Board is anticipated to consider the project as part of its regularly scheduled meeting on May 7, 2020. The meeting will start at 8:30 AM and will be held at the City of Palo Alto Council Chambers, located in City Hall at 250 Hamilton Avenue. The meeting agenda will be posted to the ARB's website. Interested parties should check the ARB agenda on the City's website to confirm the meeting time, date, and location: https://www.cityofpaloalto.org/gov/boards/architectural/default.asp.

COMMENTS

Please send comments by mail or email, before 5:00 PM on May 11, 2020, to:

Garrett Sauls, Associate Planner
City of Palo Alto
250 Hamilton Avenue
Palo Alto, CA 94301
Garrett.Sauls@CityofPaloAlto.org
If you require additional project information, please contact Garrett Sauls at 650-329-2471

DocuSigned by:
Garrett Sauls
5307CC6EABDF4E4...

Signature (Public Agency)	*Title*	*Date*
	Associate Planner	4/1/2020

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CITY OF PALO ALTO

MITIGATED NEGATIVE DECLARATION

CIRCULATION PERIOD	4/10/2020 to 5/11/2020
PROJECT NAME	3215 Porter Drive
PROJECT LOCATION	The project site is located at 3215 Porter Drive, in the City of Palo Alto. The site is located at the southwest corner of Porter Drive/Hanover Street and Hillview Avenue.
PROJECT PROPONENT	City of Palo Alto Planning and Development Services
CITY CONTACT	Garrett Sauls, Associate Planner City of Palo Alto, 250 Hamilton Avenue, Fifth Floor Palo Alto, CA 94301 Fax: 650.329.2240, Email: planner@cityofpaloalto.org

PROJECT DESCRIPTION

The project proposes to construct a two-story office building with an underground garage parking area. The building would be 40 feet high at its tallest point. In addition to office space, the first floor would contain a 1,100-square-foot amenity space that would likely include a café or other accessory use. The total square footage of the proposed building would be 21,933 square feet. The overall floor area ratio for the site would be 0.30 and the lot coverage would be approximately 16.2 percent. The project proposes a 50-foot setback from Porter Drive.

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:

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Biological Resources

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. California Department of Fish and Wildlife 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.

Cultural Resources

MM CUL-1.1 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 a 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 collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data

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recovered during monitoring shall be submitted to the Director of Planning.

MM CUL-1.2 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 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.

Geology and Soils

MM GEO-1.1 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 and prescribe mitigation measures to reduce impacts to a less than significant level. Work may proceed on other parts of the project site while mitigation for paleontological resources or geologic features is implemented. Upon completion of the paleontological assessment, a report shall be submitted to the City and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology.

Hazardous Materials

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MM HAZ-1.1: Prior to conducting earthwork activities at the 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 and disposal of impacted soil, soil vapor and groundwater that may be encountered during construction activities. Based on the history of the site, 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 also outline the specific plan for the on-site groundwater treatment system, including monitoring wells and associated conveyance piping. These features shall be protected during project activities or properly removed with a permit from the Santa Clara Valley Water District.

The SMP and HSP shall be submitted to the Planning Director and DTSC for review. DTSC approval shall be obtained prior to commencing ground disturbing activities at the site.

DocuSigned by: Garrett Sauls 5307CC8EABDF4E4...	Associate Planner	4/7/2020
Signature (Project Planner)	*Title*	*Date*

Adopted by Director of Planning + Development Services (signed after MND has been approved)	*Title*	*Date*

WE, THE UNDERSIGNED, HEREBY ATTEST THAT WE HAVE REVIEWED THE MITIGATION MEASURES LISTED ABOVE AND AGREE TO IMPLEMENT SAID MEASURES.

DocuSigned by: Tiffany Griego 86CBEB8E912A432...	Tiffany Griego	4/8/2020
Signature (Project Applicant)	*Printed Name*	*Date*

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Appendices

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 3215 Porter Drive Office Development in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of Palo Alto, California.

The project proposes to develop the 1.67-acre site with a two-story office building. 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 meeting. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City of 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

3215 Porter Drive Office Development

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

The Board of Trustees of the Leland Stanford Junior University

2.4 PROJECT LOCATION

The 1.67-acre (72,790-square-foot) project site is located at 3215 Porter Drive, in the City of Palo Alto. The site is located at the southwest corner of Porter Drive/Hanover Street and Hillview Avenue.

2.5 ASSESSOR'S PARCEL NUMBER

142-18-052

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 Development (RD). The Zoning district for the site is Research Park (RP).

2.7 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

Major Architectural Review

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The project site is located at 3215 Porter Drive and consists of one parcel (Assessor's Parcel Number 142-18-052). The project site is located on the corner of Porter Drive/Hanover Street and Hillview Avenue, as shown in Figure 3.1-1, Figure 3.1-2, and Figure 3.1-3: Aerial Photograph. The approximately 1.67-acre project site is currently undeveloped and contains landscaping.

3.1.1 General Plan and Zoning

The project site has a land use designation of Research Development (RD) and is zoned Research Park (RP). The RP district is intended to accommodate establishments whose operations may need to be buffered from neighborhood areas. The proposed office building use is a permitted use in the RP zoning district.

3.2 PROPOSED PROJECT

3.2.1 Office Building

The proposed project involves the construction of a two-story office building with an underground garage parking area. The building would be 40 feet high at its tallest point. In addition to office space, the first floor would contain a 1,100-square-foot amenity space that would likely include a café or other accessory use. Figure 3.2-1 shows the project site plan. Figure 3.2-2 depicts ground floor building access. Conceptual building elevations are shown on Figure 3.2-3.

The total square footage of the proposed building would be 21,933 square feet. The overall floor area ratio (FAR) for the site would be 0.30 and the lot coverage would be approximately 16.2 percent. The project proposes a 50-foot setback from Porter Drive.

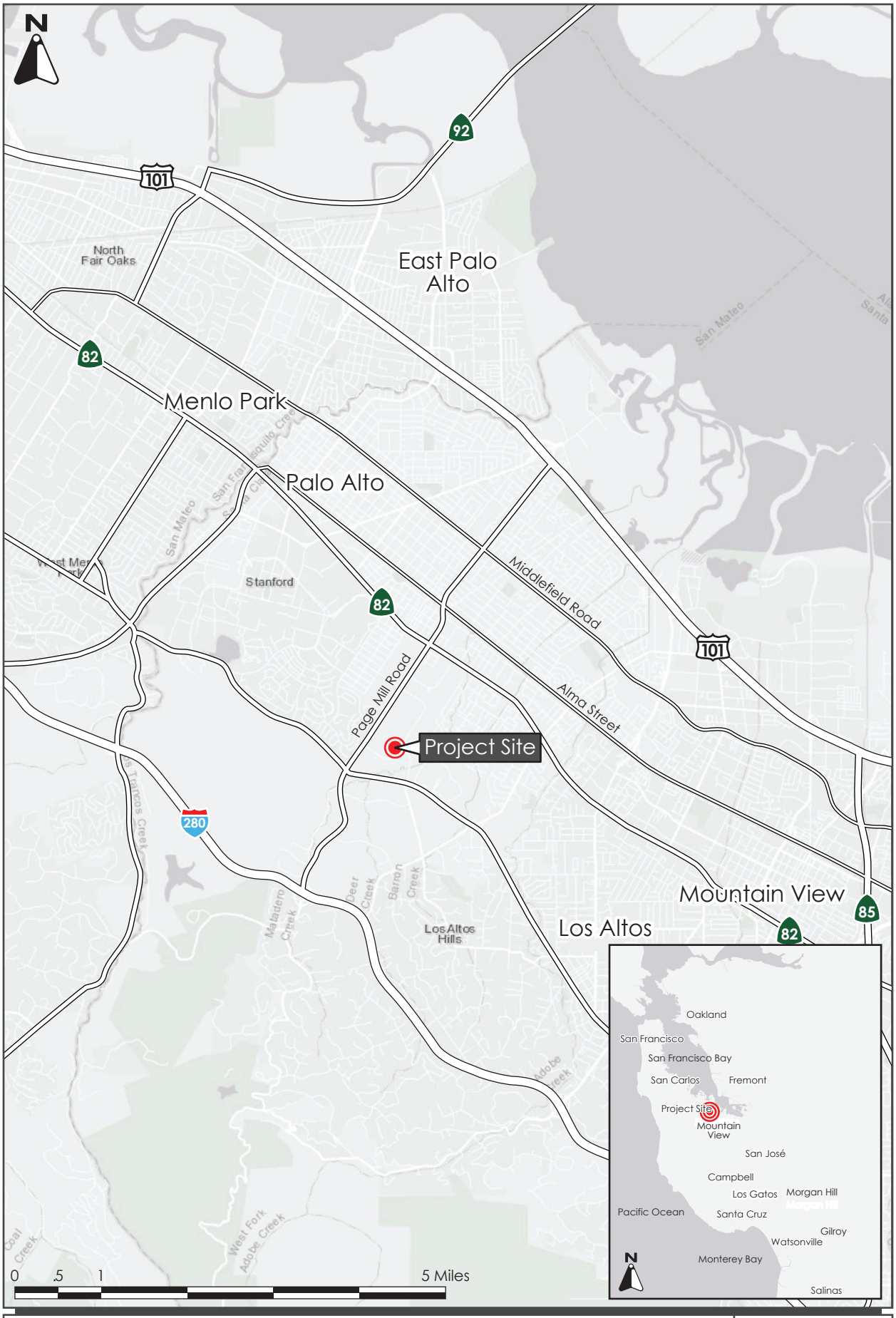
3.2.2 Site Access and Parking

Access to the site would be provided via a driveway at the intersection of Porter Drive/Hanover Street and Hillview Avenue, which would serve vehicles exiting and entering both the surface parking lot and underground garage. The project includes the construction of a pedestrian path along the north edge of the property (refer to Figure 3.2-4), as well as the addition of crosswalks across at all four legs of the adjacent intersection to provide pedestrian access to the site.

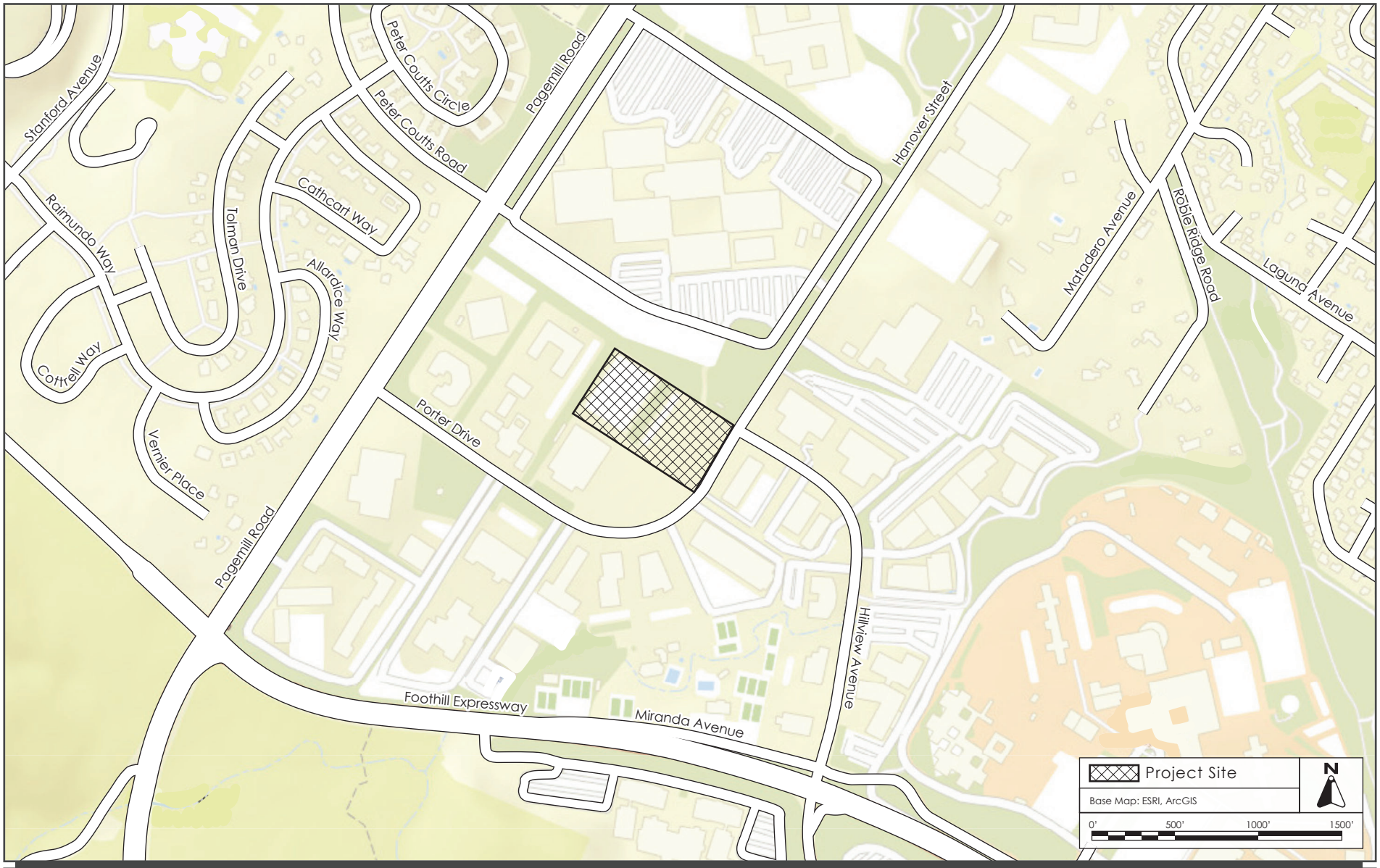
The project proposes to provide a total of 70 parking spaces. The garage would be one level, extending 12 feet below grade, and would provide 38 parking spaces. The surface parking lot would provide 32 parking spaces. The project would provide 52 bicycle storage spaces.

3.2.3 Off-site Improvements

The proposed project would include a pedestrian path along the north edge of the site connecting Porter Drive and Page Mill Road. This path is intended to eventually become a high-quality bicycle track.

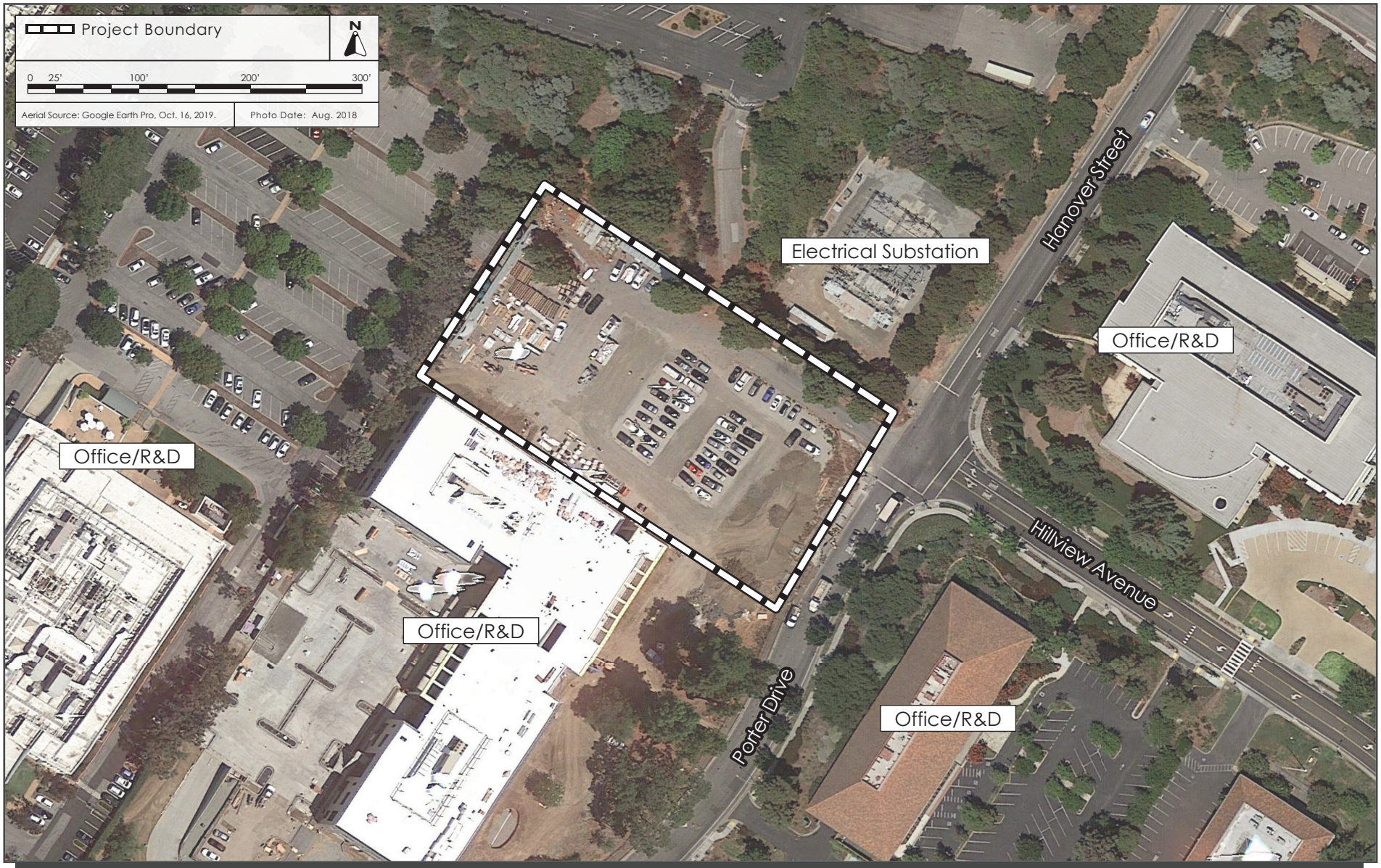


REGIONAL MAP | FIGURE 3.1-1

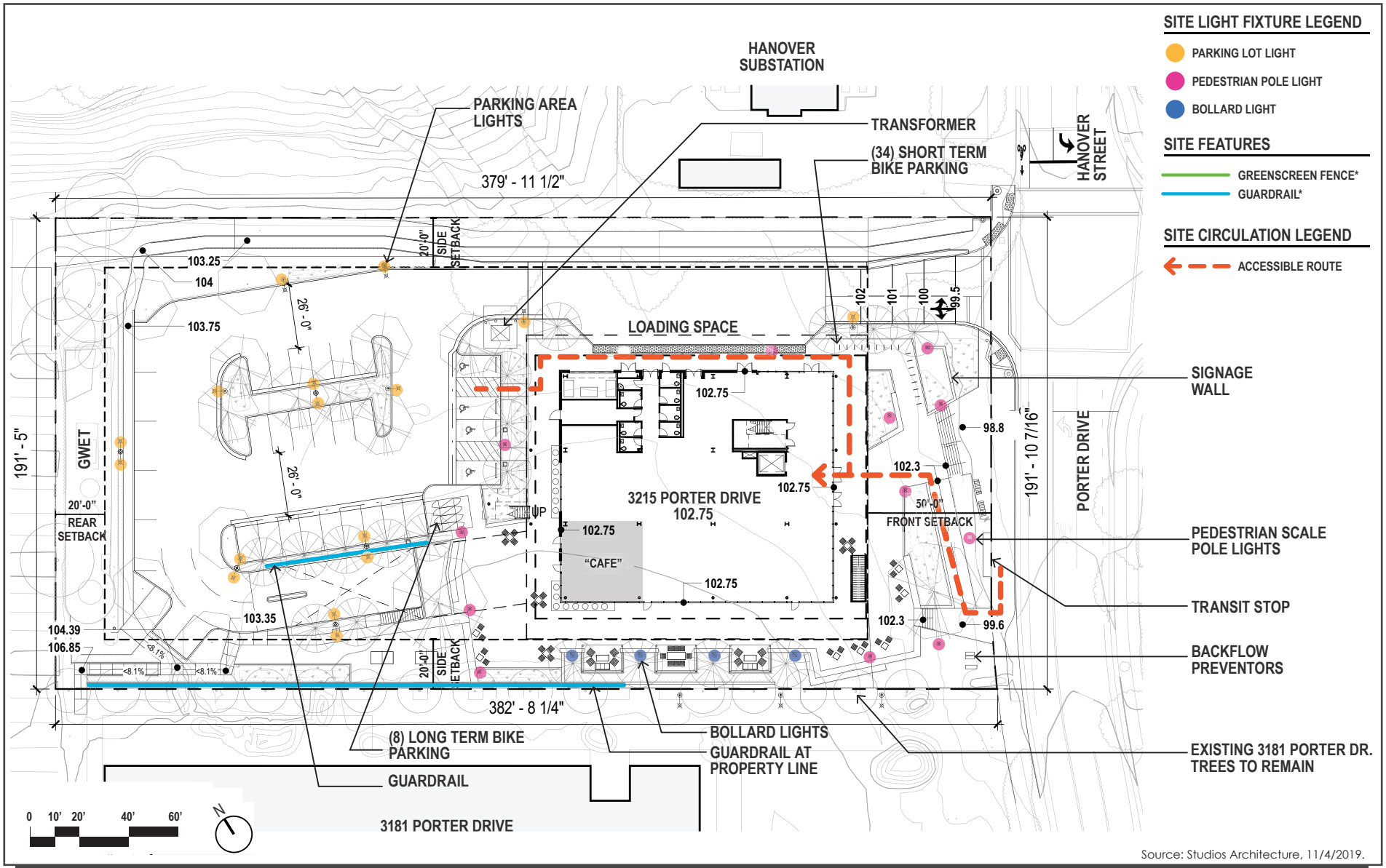


VICINITY MAP

FIGURE 3.1-2



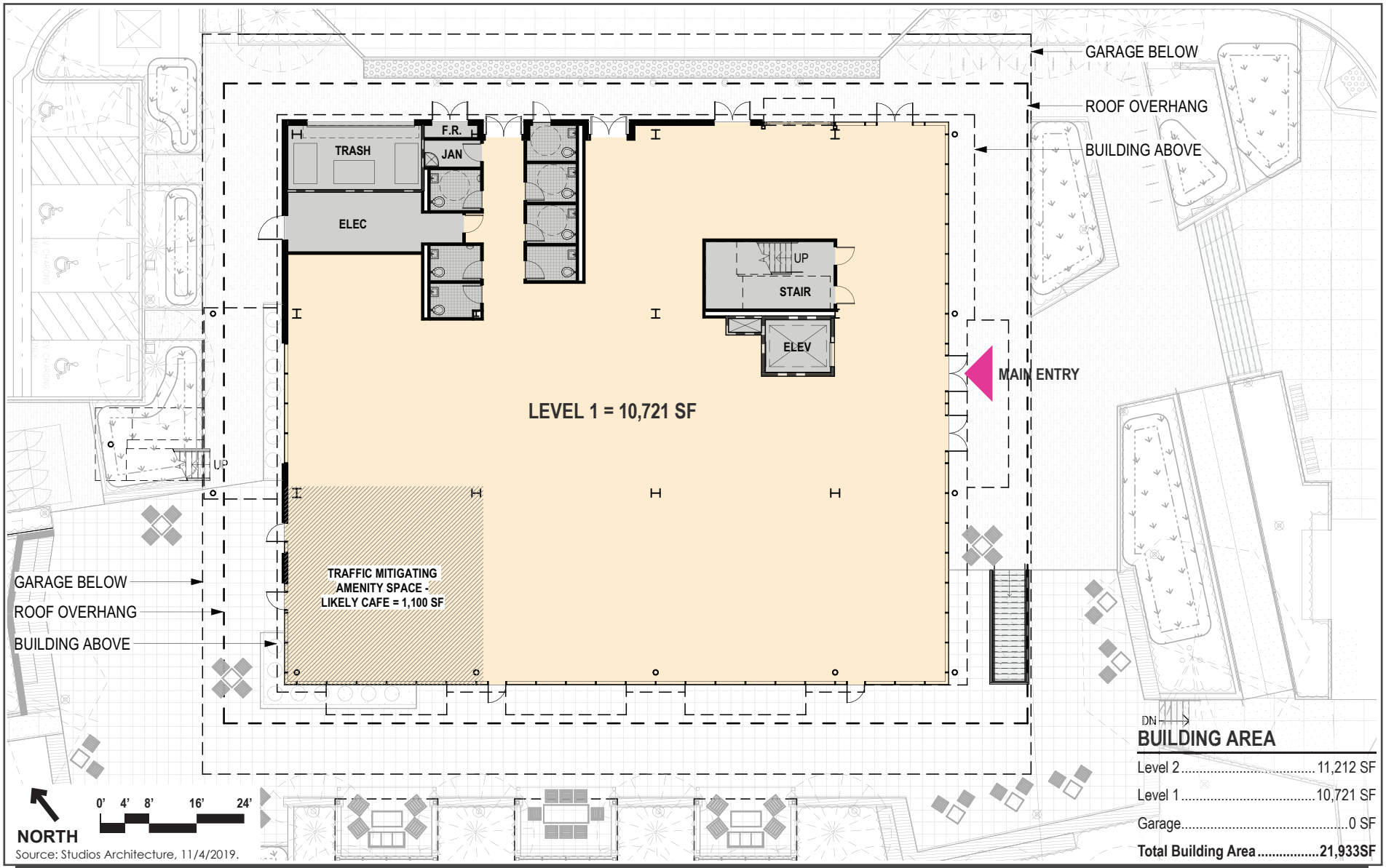
AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 3.1-3



Source: Studios Architecture, 11/4/2019.

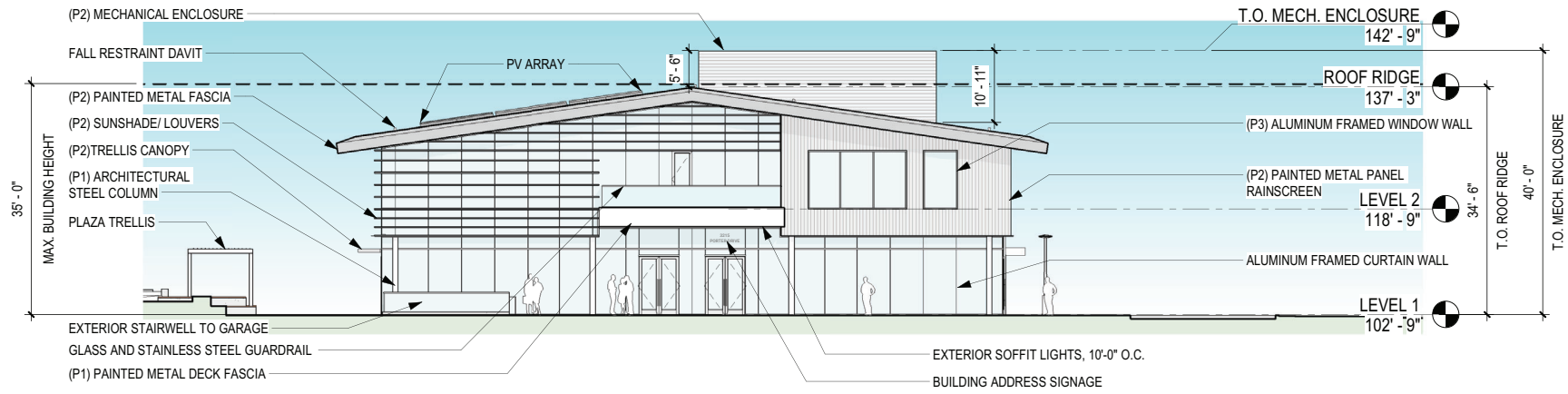
SITE PLAN

FIGURE 3.2-1

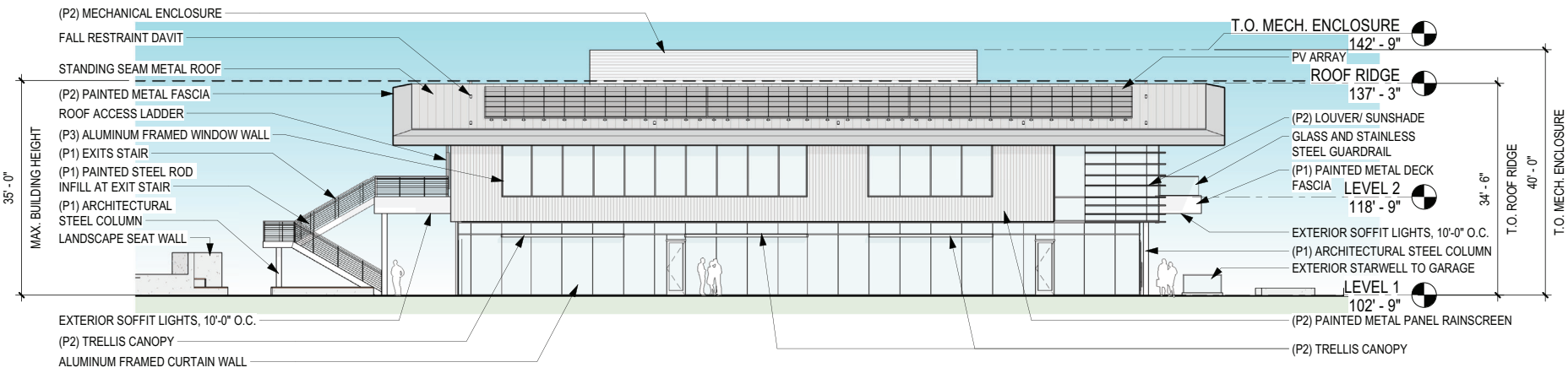


GROUND FLOOR PLAN

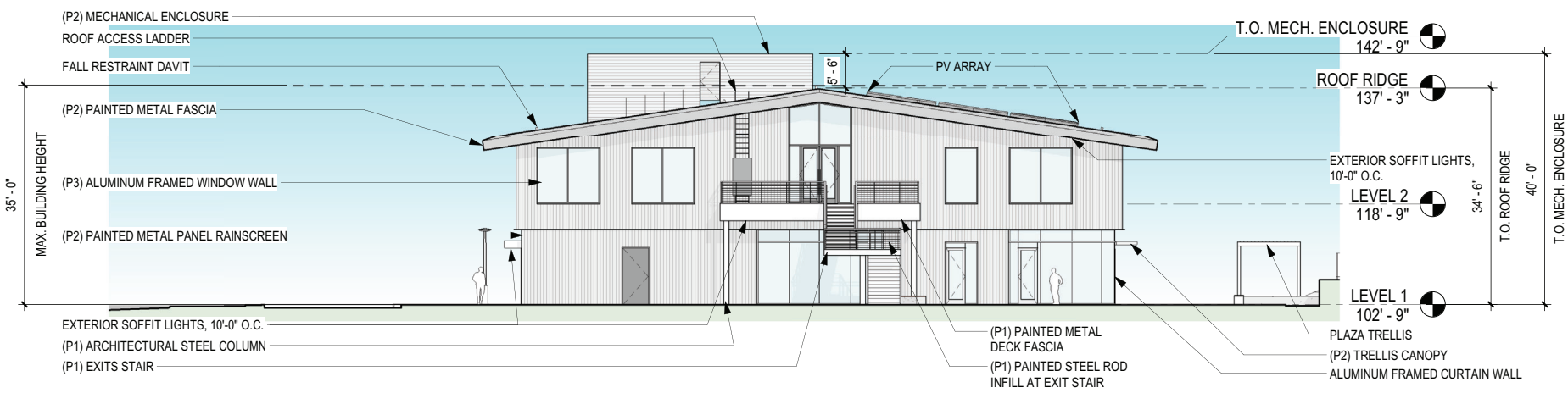
FIGURE 3.2-2



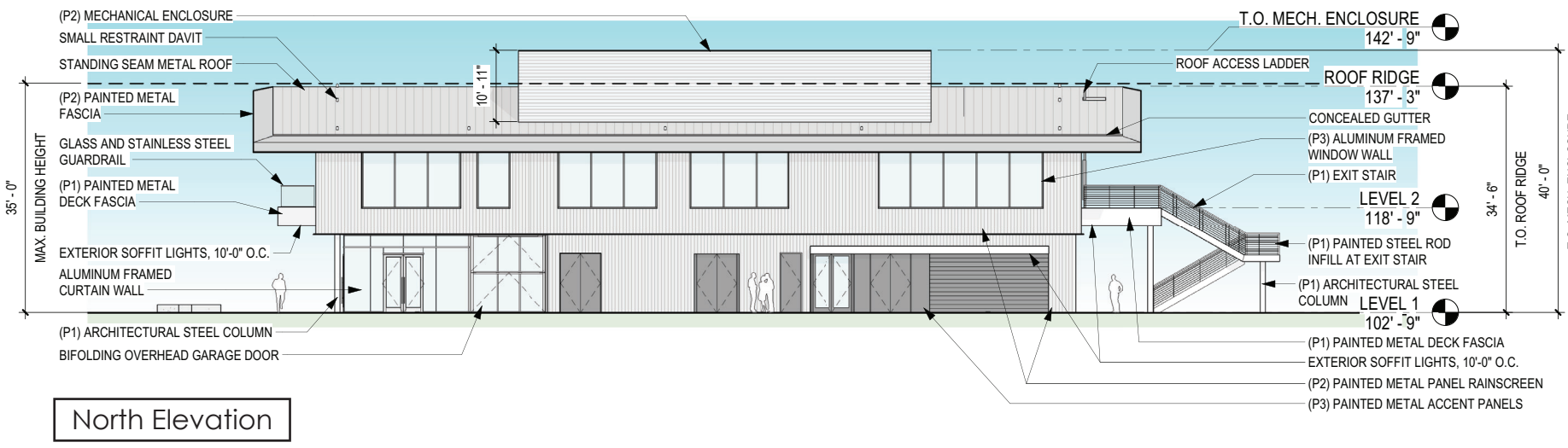
East Elevation



South Elevation



West Elevation



North Elevation

Source: Studios Architecture, 11/4/2019.

BUILDING ELEVATIONS

FIGURE 3.2-3

The project includes modifications to the intersection of Porter Drive/Hanover Street/Hillview Avenue to create crosswalks across all four legs of the intersection and to accommodate bus movements to and from the site. Modifications include larger curb radii and signal modifications.

3.2.4 Landscaping and Trees

The project site would be landscaped with various trees distributed throughout the site, including a tree screen along the southern property line. Landscaping would be provided in planter boxes and stormwater treatment planters around the perimeter of the building. The conceptual landscape plan is shown on Figure 3.2-4.

There are 15 trees on-site and 9 off-site, directly adjacent to the project site. None of the trees are considered Protected Trees by the City of Palo Alto Municipal Code (PAMC) Section 8.10 Tree Preservation and Management Regulations. Five on-site trees will be preserved and ten on-site trees will be removed prior to construction.

The nine off-site trees at the Hanover Substation located immediately to the north will be removed as a result of a separate application by the City of Palo Alto to provide greater security to the electric substation.[1]

3.2.5 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:

- 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 graywater irrigation system for exterior vegetation

3.2.6 Construction

It is anticipated that the project would be constructed over an approximate 14-month period, beginning August 2020. It is estimated that construction of the project would require the export of approximately 12,500 cubic yards of cut 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

[1] The substation improvements and the adjacent tree removal are not included as part of this project. They are only discussed here for informational purposes.

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. The proposed project may require construction activities starting four hours before and after the City's regular construction hours.

3.2.7 Required Discretionary Permits

Major Architectural Review

Note: Bike lockers are located in underground garage.
See Sheet A1.7 for Quantites and A2.1 for Plan

Tree Protection Fencing
Parking Lot Trees with Structural Soil
Parking Lot Lights, E2
Electrical Transformer
Removable Bollards at Transformer
Stormwater Treatment Planter
Vehicular Pavers, PV2
Property Line
SUBSTATION
Provide hinge slab at structure paving interfaces.
Pedestrian Walkway
Bollards, F8
HANOVER STREET
HILLVIEW AVE
Signage Wall, W1
Intersection View Triangle
Pole Lights, E2
Bike Stairway Channel
Porter Transit Plaza Steps
Bike Stairway Channel
Sloped Walkway (<5%), PV 1–1
Bench Seating, F3
Existing Transit Stop to Remain
Specimen Oak Tree 60" box
Water Service Utility and Backflow Preventer Area with Landscape Screening
Tree Protection Fencing
PORTER DRIVE
Existing Trees to Remain
GWET
Pedestrian Paver, PV1–3
Trash Room (In Building)
Visitor & Bikeshare Parking, F1
Stormwater Treatment Planters
Seatwall, W3
Decorative Gravel, PV4
3215 PORTER BUILDING
Planter Pots, F6
Seatwall, W3
Bike Locker, F2
Garage Stairwell
Pedestrian Tile, PV1–2
Bollard Lights, E1
Edge of Garage Slab
Pedestrian Paver, PV1–3
Raised Planter at Top of Garage Ramp
Vehicular Barrier Rail at Garage Ramp (Garage Wall)
Garage Ramp
Pedestrian Walkway, PV 1–1
Pedestrian Walkway, PV 1–1
Tree Protection Fencing
GWET Service Drive
Pedestrian Connection to 3181 Porter Site
Property Line
Community Table, F8
Existing Lights
Terraced Seating, W3
Existing Trees on 3181 Porter to Remain
Trellis, F5
Seatwall, W3
Concrete Wall, W2
Sofa and Coffee Table, F9
Pedestrian Ramp, PV 1–1
Flex Game/Activity Area 22'x45' Synthetic Turf, PV5
Specimen Oak Tree, 60" box
7' High Accent Wall, W4
Terraced Seating, W3
Seatwall, W3
Stormwater Treatment Planter
Guardrail at Property Line, F9
3181 PORTER
Existing Bike Lockers and Trees at 3181 Porter Site
Tree Protection Fencing
N
0′ 15′ 30′ 60′

Source: Studios Architecture, 11/4/2019.

LANDSCAPE PLAN

FIGURE 3.2-4

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 AREAS OF NO MEASURABLE IMPACT

The Porter Drive Office Development Project involves the construction of a two-story office building with an underground garage parking area. Because a project's impacts under CEQA are measured against a baseline that consists of the existing physical conditions, impacts in certain resource areas typically evaluated within an Initial Study will not occur.

As described below, measurable impacts to agricultural, forest, and mineral resources are not anticipated, because none are located in the project area.[2,3] Additionally, impacts to population and housing and recreation are not anticipated because the project would not generate demand for housing, nor would it displace existing housing or people. Further, development of an office building would not substantially increase the use of existing neighborhood or regional recreational facilities (i.e. no new residents) such that deterioration of existing facilities or construction of new facilities would be required, nor would it be located within a very high fire hazard zone.[4] Thus, these subject/resource areas are not further analyzed, consistent with Appendix G of the CEQA Guidelines, which states that a No Impact response is adequately supported if the References, and project information show that the impact does not apply. No further discussion is required for these resource areas.

[2] California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed December 19, 2019. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.
[3] United States Geological Survey. Mineral Resources Online Spatial Data: Interactive maps and downloadable data for regional and global Geology, Geochemistry, Geophysics, and Mineral Resources. Accessed December 19, 2019. Available at https://mrdata.usgs.gov/
[4] California Board of Forestry and Fire Protection. Fire Hazard Severity Zones Maps. Accessed December 19, 2019. https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/

4.1.1 Agricultural and Forestry Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land[5], timberland[6], or timberland zoned Timberland Production[7]	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒
f) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

4.1.2 Mineral Resources

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

[5] As defined in Public Resources Code section 12220(g)
[6] As defined by Public Resources Code section 4526
[7] As defined by Government Code section 51104(g)

4.1.3 Recreation

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

4.1.4 Wildfire

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

4.2 AESTHETICS

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

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 Scenic Highways[8] in Palo Alto.

Local

City of Palo Alto Comprehensive Plan

According to Policy Program L-9.1 from the Land Use and Community Design Chapter 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 (west of Foothill Expressway), Junipero Serra Boulevard/Foothill Expressway, and Skyline Boulevard. These roads are to be maintained as local scenic routes.

4.2.1.2 *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, and Stanford Research Park is composed of one to three story commercial office structures with large setbacks and surrounding surface parking lots. The project site itself does not contain any designated scenic resources. The property is currently undeveloped, bare ground. The projects site is located less than one-third of a mile from Page Mill Road, a designated local scenic route. The project site is approximately three miles north of Foothills Park.

The area immediately surrounding the project is characterized by office buildings and research institutions. The project site is located in a developed area of Palo Alto and is surrounded by a mix of research institutes and office development. The surrounding developments include Ford Greenfield Labs and Jazz Pharmaceuticals. Jazz Pharmaceuticals is a two-story R&D building (approximately 100,000 square feet) located at 3181 Porter Drive. The Jazz Pharmaceuticals building is composed of concrete, large windows, and metal railings. Ford Greenfield Labs is a two-story R&D building located at 3251 Hillview Avenue. The Ford Greenfield Labs building is made up of large windows and stucco. The Hanover electrical substation is also adjacent to the project site and is located at 3350 Hanover Drive.

[8] California Department of Transportation. ”Scenic Highways.” Accessed April 26, 2019. http://www.dot.ca.gov/design/lap/livability/scenic-highways/index.html.

4.2.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
3) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista. **(Less than Significant Impact)**

There are no scenic vistas on the site or adjacent to the site. The immediate surrounding area is primarily urban with no elevated open spaces. The closest vista point is Foothills Park, located approximately three miles south of the project site. Any views from this point would not be interrupted by the proposed two-story building because it is consistent with the visual characteristics of the adjacent land uses. Therefore, the project would not have a substantial adverse effect on a scenic vista. **(Less than Significant Impact)**

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

The project is not along or visible from a state scenic highway; therefore, it would not substantially damage scenic resources. **(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 will feature a modern design characterized by large windows, silver metal panels, and wood slat soffits. The project site would be landscaped with various trees throughout the site and tree screenings along the north and south property lines. Landscaping would be provided in planters and planter pots around the perimeter of the building and along the property line adjacent to Porter Drive. A conceptual rendering of the proposed office building can be seen in Figure 4.2-1. The proposed office building is consistent with the general plan and zoning

designations for the site. The project would be reviewed by the City's Architectural Review Board for consistency with Section 18.16.090 of the PAMC, which calls for architectural compatibility in terms of scale and mass, pedestrian oriented design, and linkages with the overall pattern of buildings so that the visual unity of the street is maintained. The project would implement a 50-foot front setback, consistent with other buildings in the vicinity of the project to maintain visual unity. The project proposes pedestrian paths, bicycle racks, landscape, visible ground-level front entrances, and patio areas to activate the frontage at the pedestrian level. Proposed colors and materials are similar to the tones on buildings in the vicinity of the project. These features will also be specifically reviewed by the Architectural Review Board as part of the development review process for consistency with PAMC Section 18.16.090. For these reasons, any impact would be less than significant. **(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)**

Existing development in the surrounding area is a source of light and glare (e.g., windows, signs, headlights, streetlights, parking lot lights, and security lights). The light and glare created by the proposed project would be similar to that created by the existing development in the project area. The proposed project would incorporate exterior lighting in the form of pedestrian walkway lighting and other safety related lighting. These light sources would not have a significant impact on the night sky, as they would only incrementally add to the existing background light levels already present as a result of the surrounding street lighting and urban development.

All lighting proposed by the project would be consistent with the policies, guidelines, and controls in the PAMC, specifically PAMC Section 16.14.170 which requires outdoor lighting systems to be designed to reduce light pollution. The proposed exterior materials would be reviewed as part of the City of Palo Alto Architectural Review Board process and would not result in glare. 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)**

Source: Studios Architecture, 9/20/2019.

CONCEPTUAL RENDERING | FIGURE 4.2-1

4.3 AIR QUALITY

The following discussion is based in part by an Air Quality Assessment prepared by Illingworth & Rodkin in November 2019. A copy of this report is included in Appendix A of this Initial Study.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.[9] 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
O_3	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O_3 levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce O_3 levels. The highest O_3 levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

[9] 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.

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

Toxic Air Contaminants

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

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).[10] Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

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

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O_3, CO, SO_x, NO_x, and lead.

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.

[10] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed June 16, 2018. https://www.arb.ca.gov/research/diesel/diesel-health.htm.

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.

Regional and Local

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.[11]

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.

City of Palo Alto Comprehensive Plan

The City of Palo Alto Comprehensive Plan has an air-quality related policy that is relevant to the project.

Program	Description
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.
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.

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

4.3.2 Impact Discussion

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

4.3.2.1 *Thresholds of Significance*

Impacts from the Project

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of 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 below.

Figure 4.3-1: BAAQMD Air Quality Significance Thresholds			
Pollutant	**Construction Thresholds**	**Operation Thresholds**	
	Average Daily Emissions (pounds/day)	**Annual Daily Emissions (pounds/year)**	**Annual Average Emissions (tons/year)**
Criteria Air Pollutants			
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust Control Measures/Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	**Single Source**	**Combined Cumulative Sources**	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental Annual $PM_{2.5}$	0.3 $\mu g/m^3$	0.8 $\mu g/m^3$ (average)	

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

The proposed project will not conflict with the 2017 CAP. The project's operational emissions would be below the BAAQMD thresholds of significance for air pollutants as discussed below in Impact AIR-2, and development of the project site would be considered urban infill. For these reasons, it would not conflict with 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

Fugitive Dust

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of 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. 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 Chapter13, 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 would reduce impacts to nearby sensitive receptors from fugitive dust to less than significant levels. **(Less than Significant Impact)**

Criteria Pollutants

The project proposes to construct a 21,933-square-foot office. This is below the BAAQMD CEQA Air Quality Guidelines 277,000-square-foot office construction emissions screening threshold for construction-related regional criteria pollutants.[12] Because the project is below the BAAQMD screening threshold (see Table 4.3-2 below), the project would not result in a significant impact as it relates to criteria pollutants. **(Less than Significant Impact)**

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

Table 4.3-2: Construction Period Emissions				
Scenario	**ROG**	**NOx**	**PM_{10}**	**$PM_{2.5}$**
Total construction emissions (tons)	0.38 tons	2.11 tons	0.11 tons	0.10 tons
Average daily emissions (pounds)[1]	3 lbs./day	16 lbs./day	1 lbs./day	1 lbs./day
BAAQMD Thresholds (pounds per day)	*54* lbs./day	*54* lbs./day	*82* lbs./day	*54* lbs./day
Exceed Threshold?	**No**	**No**	**No**	**No**
Notes: [1]Assumes 255 workdays.				

Operational Period Emissions

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 21,933-square-foot 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**. (No Impact)**

There are no existing sensitive receptors within 1,000 feet of the project site. The project would not introduce any new sensitive receptors or substantial toxic air contaminants to the project vicinity. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations. **(No 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 by an Arborist Report prepared by HortScience in November 2019. A copy of this report is included in Appendix B of this Initial Study.

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in 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.

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.[13] 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.

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

[13] United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed March 28, 2019. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

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).

City of Palo Alto Comprehensive Plan

The City of Palo Alto Comprehensive Plan 2030 was adopted on November 13, 2017 and defines certain goals and policies for the conservation of sensitive natural resources. The Natural Environment Chapter includes the following vision statement:

> Palo Alto will meet today's needs without compromising the needs of future generations. Palo Alto will respect and manage natural resources in a way that sustains the natural environment and protects our foothills, baylands, creeks, parks, urban forest, wildlife and open space legacy. A substantial portion of the City will remain as open space. Even in built-up areas, the network of parks will provide access to nature and an urban forest will provide ecological and health benefits and a source of beauty for residents. Palo Alto will strive for clean air and clean water. Policies and programs will foster energy and water conservation. Finally, the City will maintain a sustainable water supply for the future and will facilitate the implementation of climate change adaptation strategies.
>
> Policies N-2.1 through N-2.14 of the Comprehensive Plan provide protection measures for the City's urban forest and understory.

City of Palo Alto Municipal Code

Section 8.10 of the Palo Alto Municipal Code (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 Palo Alto Municipal Code "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. According to the CNDDB, there are 14 federal and state listed threatened and/or endangered wildlife species, and State Species of Special Concern that have been recorded to occur within the Palo Alto topographic quadrangle. All 14 of these species are unlikely to occur on-site due to lack of suitable habitat. The site is located in an office park environment that has been highly altered by building development. Landscaping on the project site is sparse and does not serve as wildlife habitat. The property does not contain a wildlife nursery site, sensitive habitats, or waters/wetlands, nor is it suitable as a wildlife corridor or any other sensitive biological area.[14]

According to the California Natural Diversity Database (CNDDB), there are four special-status plant species that have been recorded to occur within the Palo Alto topographic quadrangle. However, all special-status plant species are unlikely to occur on-site, primarily based on the absence of suitable habitat, lack of quality soil, and high level of activity and disturbance within project boundaries.

[14] U.S. Fish and Wildlife Service. IPaC Information for Planning and Consultation. Accessed October 18, 2019. https://ecos.fws.gov/ipac/

The project site contains 24 trees with three various species of mature trees, as shown below in Table 4.4-1.

Table 4.4-1: Tree Survey Summary		
Name	**Number of Trees (s)**	**Protected Trees**
Blue gum	9	--
Red ironbark	1	--
Canary Island pine	14	--

As shown in Table 4.4-1, the project area is populated primarily by Canary Island pine trees (at 58 percent). Blue gum is the second most populous tree (at 38 percent). None of these trees are considered protected trees by the City of Palo Alto.

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 CDFW or USFWS?	☐	☒	☐	☐
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	☐	☐	☐	☒
3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☒	☐	☐
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐

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

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

There are ten on-site trees that would be removed as part of the project. 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. CDFW will 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. **(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 riparian habitat or sensitive natural communities.[15] **(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 federally protected wetlands.[15] **(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 not located within a known regional wildlife movement corridor or any other sensitive biological area.[16] 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)**

[15] Ibid.
[16] USFWS. IPaC Information for Planning and Consultation. Accessed October 18, 2019. https://ecos.fws.gov/ipac/

There are 15 existing trees on the project site and none are considered Protected Trees, per Section 8.10 of the PAMC. Ten trees would be removed as part of the project, while the remaining trees would be protected per the City's Tree Technical Manual during construction. The project includes planting 33 new trees, including native Blue oak and Valley oak trees. Therefore, the project would not conflict with any local ordinances or policies protecting biological resources. **(Less than Significant Impact)**

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

The project site is 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

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

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

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.[17]

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

[17] California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." March 14, 2006.

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.

4.5.1.2 *Existing Conditions*

Archaeological Resources

Portions of the City of Palo Alto have been occupied by humans for thousands of years; beginning with occupation by the Ohlone peoples, through Spanish settlement, to the incorporation of the City in 1894. Buried cultural resources have been found throughout the City of Palo Alto as part of past archaeological surveys. The site is located in western Palo Alto, and was previously disturbed by prior development. The site is located in an area of "moderate sensitivity" for archaeological resources, based on the Palo Alto Comprehensive Plan Update, Existing Conditions Report (2014).[18]

Historic Resources

The project site is vacant and surrounded by recent commercial construction (within the last 20 years). No designated historic properties are located near the project site on neighboring properties.

4.5.2 Impact Discussion

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

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

The project site is currently undeveloped. No historic buildings or structures are located on or adjacent to the project site. Therefore, the project would not result in impacts to historic resources. **(No Impact)**

[18] City of Palo Alto. *Comprehensive Plan Update, Cultural Resources*. August 29, 2014.

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)**

As previously discussed, the project site is located in an area of moderate cultural sensitivity. The proposed project would include excavation for a below-grade parking structure. As a result, there is the possibility of encountering undisturbed subsurface archaeological resources. In the unlikely event that such resources are unearthed during construction, applicable regulatory requirements pertaining to the handling and treatment of such resources would apply. 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: 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 a 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 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.

With implementation of mitigation measure MM CUL-2.1 the project would have a less than significant impact. **(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)**

Although past development has altered the project site, there is always the potential to discover unknown cultural resources during site excavation. The proposed project involves construction of a below-grade garage. In the event any archaeological or human remains are discovered on the site, impacts would be potentially significant. Implementation of the following mitigation measure 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 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.

With implementation of mitigation measure MM CUL-3.1 the project would have a less than significant impact. **(Less than Significant Impact with Mitigation)**.

4.6 ENERGY

The discussion within this section is based on CalEEMod calculations included within Appendix A.

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

State

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. In 2008, Executive Order 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.

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. Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.

California Green Building Standards Code

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

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.

4.6.1.2 *Existing Conditions*

Total energy usage in California was approximately 7,881 trillion British thermal units (Btu) in the year 2017, the most recent year for which this data was available.[19] Out of the 50 states, California is ranked second in total energy consumption and 48th in energy consumption per capita. The breakdown by sector was approximately 18 percent (1,416 trillion Btu) for residential uses, 19 percent (1,473 trillion Btu) for commercial uses, 23 percent (1,818 trillion Btu) for industrial uses, and 40 percent (3,175 trillion Btu) for transportation.[20] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity and Natural Gas

Electricity in Santa Clara County in 2018 was consumed primarily by the commercial sector (77 percent), followed by the residential sector consuming 23 percent. In 2018, a total of approximately 16,668 gigawatt hours (GWh) of electricity was consumed in Santa Clara County.[21]

The City of Palo Alto Utilities (CPAU) owns and operates its own utility systems, including electric, fiber optic, natural gas, water, and wastewater services. In 2017, CPAU purchased 948 GWh of electricity entirely from carbon-neutral sources for use within its service area.[22]

Fuel for Motor Vehicles

In 2018, 15 billion gallons of gasoline were sold in California.[23] 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 2018.[24] 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 subsequently revised to apply to cars and light trucks model years 2011 through 2020.[25,26]

On-Site Energy Use

The project site is currently vacant. No energy is currently being used on-site.

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[19] United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed December 11, 2019. https://www.eia.gov/state/?sid=CA#tabs-2.
[20] United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed December 11, 2019. https://www.eia.gov/state/?sid=CA#tabs-2.
[21] California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed December 11, 2019. http://ecdms.energy.ca.gov/elecbycounty.aspx.
[22] City of Palo Alto. Annual Report to the California Energy Commission. Accessed December 11, 2019. https://www.cityofpaloalto.org/civicax/filebank/documents/63776.
[23] California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed December 11, 2019. http://www.cdtfa.ca.gov/taxes-and-fees/MVF_10_Year_Report.pdf.
[24] United States Environmental Protection Agency. "The 2018 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." March 2019.
[25]United States Department of Energy. Energy Independence & Security Act of 2007. Accessed December 11, 2019. http://www.afdc.energy.gov/laws/eisa.
[26] Public Law 110–140—December 19, 2007. Energy Independence & Security Act of 2007. Accessed December 11, 2019. 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?	☐	☐	☒	☐
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

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

Construction

The anticipated construction schedule assumes the project would be built over a period of approximately 14 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 parking garage and surface would increase electricity use at the project site by approximately 484,617 kilowatt-hours per year according to CalEEMod. The proposed office building would increase natural gas use at the project site by approximately 359,043 kBtu per year.[27]

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 accordance with the City's Green Building Ordinance, the proposed project would satisfy

[27] Illingworth & Rodkin, Inc. *3215 Porter Drive Air Quality and Greenhouse Gas Assessment*. November 26, 2019.

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 434,007 VMT annually and 17,430 gallons of vehicle fuel would be consumed annually as a result of the project. The annual VMT estimate is conservative because the CalEEMod assumptions (refer to Appendix A) 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. As a result, energy in the form of gasoline would not be wasted and any impact would be less than significant. **(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)**

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)**

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.

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 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.

4.7.1.2 *Existing Conditions*

Seismicity and Seismic-Related Hazards

These nearest faults to the project area include the San Andreas, Hayward, and Calaveras faults. The San Andreas fault is located approximately 4.3 miles southwest of the site. The Hayward and Calaveras faults are both more than 10 miles from the project site. In addition, the potentially active Monte Vista-Shannon fault zone is located approximately 2.2 miles southwest of the site. In addition, a concealed trace of the potentially active Hanover fault is located approximately 2,500 feet northwest 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.[28]

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 State of California Official Seismic Hazard Zones Map for the Palo Alto Quadrangle, the site is not located in an area potentially susceptible to earthquake-induced liquefaction.

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 approximately 1,000 feet west of the project site. The potential for lateral spreading at the site during a seismic event is considered low.

Landslides

The project site is located in a flat area and would not be exposed to substantial slope instability, erosion, or landslide-related hazards. The project site is not located within an area susceptible to earthquake-induced landslides or Landslide Hazard Zone according to the Santa Clara County Geologic Hazard Zone Map.[29]

Paleontological Resources

Paleontological resources or fossils are the remains of prehistoric plant and animal life. The geologic units in the Palo Alto area are part of an alluvial deposit found along the perimeter of the Santa Clara Valley. These units consist of 12 to 15 feet of moderately well-sorted, unconsolidated, fine sandy silt and clayey silt overlying at least six feet of silty clay. Below this, the Santa Clara formation is an older alluvium made up of partially consolidated clay, silt, sand, and gravel deposited more than 11,000 years ago.[18]

[28] California Department of Conservation. CGS Information Warehouse: Regulatory Maps. Accessed July 2, 2018. http://maps.conservation.ca.gov/cgs/informationwarehouse/.
[29] Santa Clara County. Geological Hazard Zones. Accessed July 2, 2018. https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=5ef8100336234fbdafc5769494cfe373.

4.7.2 Impact Discussion

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

Impact GEO-1: 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)**

Earthquake Faults

The project site is not located within a State of California Earthquake Fault Zone and no known active faults cross the site.[30] **(Less than Significant Impact)**

Strong Seismic Ground Shaking and Seismic-Related Ground Failure

There are no known active faults traversing the project site and the potential for surface rupture from displacement or fault movement directly beneath the proposed project would be low. Liquefaction risk would also be low. 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)**

Landslides

The project site is not located within an area susceptible to earthquake-induced landslides or Landslide Hazard Zone according to the Santa Clara County Geologic Hazard Zone Map.[31] **(No Impact)**

Impact GEO-2:	The project would not result in substantial 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 Regional Water Quality Control Board (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)**

[30] California Department of Conservation. CGS Information Warehouse: Regulatory Maps. Accessed July 2, 2018. Ahttp://maps.conservation.ca.gov/cgs/informationwarehouse/.
[31] Santa Clara County. Geological Hazard Zones. Accessed July 2, 2018. https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=5ef8100336234fbdafc5769494cfe373.

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 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)**

It is unknown whether expansive soils are present at the site. These soils can result in damage at the project site and adjacent site if the structure is not properly constructed to deal with such soil conditions. To ensure that the future building is designed properly to account for expansive soils (if present), the project applicant will submit a geotechnical report as a part of the building permit submittal. 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 sign-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 waste water disposal systems where sewers are not available for the disposal of waste water. **(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 and prescribe mitigation measures to reduce impacts to a less than significant level. Work may proceed on other parts of the project site while mitigation for paleontological resources or geologic features is implemented. Upon completion of the paleontological assessment, a report shall be submitted to the City and, if paleontological materials are recovered, a paleontological repository, such as the University of California Museum of Paleontology. **(Less than Significant Impact with Mitigation Incorporated)**

4.8 GREENHOUSE GAS EMISSIONS

The following discussion is based in part by a Greenhouse Gas Assessment prepared by Illingworth & Rodkin in November 2019. A copy of this report is included in Appendix A of this Initial Study.

4.8.1 Environmental Setting

4.8.1.1 *Regulatory Framework*

State

Assembly Bill 32

Under the California Global Warming Solutions Act, also known as Assembly Bill (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 greenhouse gas (GHG) sources.

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of CO_2E ($MMTCO_2e$). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 $MMTCO_2e$.

Senate Bill 375

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

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.

4.8.1.2 *Existing Conditions*

The project site is currently undeveloped and thus no GHGs are currently being generated on-site.

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 GHG emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
2) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☐	☒

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

Construction Emissions

Based on the CalEEMod model for the project, GHG emissions associated with construction were computed to be approximately 289 MT of CO_2e for the total construction period. 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.

Operational Emissions

The BAAQMD's 2017 CEQA Air Quality Guidelines include screening criteria to provide a conservative indication of whether the proposed project could result in potentially significant air quality impacts. Table 3-1 in the document lists the operational-related GHG emissions screening level sizes for various land uses. The operational GHG screening size for a general office building that is operational before the end of 2020 is 53,000 square feet, and for projects such as the subject project that would be operational after 2020, the adjusted screening level for year 2030 thresholds is 31,800 square feet. The proposed project totals 21,933 square feet. The GHG emissions would, therefore, be below the 2030 BAAQMD significance threshold for GHG emissions. It should be noted that the BAAQMD Table does not account for the GHG-emission free energy provided by Palo Alto Utilities. Further, vehicle-related GHG emissions would decrease over time due to improvements in vehicle standards, as well as employee participation in SRPGo, Stanford Research Park's commuter program. **(Less than Significant Impact)**

Impact GHG-2:	The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. **(No Impact)**

In November 2016, the City of Palo adopted its S/CAP which is aimed at promoting sustainable development and lowering greenhouse gas emissions. Included in the CAP are strategies and goals that the City has designed in order to reach their target of a 40 percent greenhouse gas emission reduction. 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. 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, construction and operation of the project would not conflict with the plans, policies, or regulations adopted for the purpose of reducing GHG emissions. . **(No Impact)**

4.9 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based in part on an environmental summary letter prepared by Cornerstone Earth Group in December 2019. A copy of this report is included in Appendix C of this Initial Study.

4.9.1 Environmental Setting

4.9.1.1 *Background Information*

Hazardous materials are commonly used by large institutions and commercial and industrial businesses. Hazardous materials include a broad range of common substances such as motor oil and fuel, pesticides, detergents, paint, and solvents. A substance may be considered hazardous if, due to its chemical and/or physical properties, it poses a substantial hazard when it is improperly treated, stored, transported, disposed of, or released into the atmosphere in the event of an accident.

4.9.1.2 *Regulatory Framework*

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. Federal regulations and policies related to development include the Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund, and the Resource Conservation and Recovery Act. 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.

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).

4.9.1.3 *Existing Conditions*

The project site is currently vacant and is located within the Hillview-Porter Region of the Stanford Research Park. Chemical releases from nine facilities in the Hillview-Porter Region along Hillview Avenue and Porter Drive are suspected of contributing to an area of groundwater that is impacted predominantly by volatile organic compounds (VOCs), mainly trichloroethene (TCE).

Site History

The 3215 Porter Drive site was formerly part of a larger parcel that was previously developed with a commercial building, occupied by Hewlett-Packard (HP), known as Building 15. HP occupied Building 15 starting in 1964. The building was used for circuit board and small transformer manufacturing purposes. Acids, metals, and solvents were used on-site. Manufacturing activities ceased in December 1987. Chemicals were stored in a storage shed from 1965 to 1973, and in a chemical storage bunker from 1974 to 1987. Wastes were treated in a chemical dilution pit inside the building from 1965 to1973, and in a waste treatment facility from 1974 to 1987. The waste treatment facility and the chemical storage bunker were demolished in October 1988. In 2017, Building 15 and two commercial buildings located on adjacent parcels to the southwest (3181 and 3221 Porter Drive) were demolished.

Prior to demolition, HP was issued a Remedial Action Order (Docket # HSA 88/89-024 [amended July 1995]) by DTSC. Several remedial actions were conducted and included excavation of impacted soil, soil vapor extraction, groundwater extraction and treatment, and in-situ treatment technologies (e.g., chemical oxidation using potassium permanganate [$KMnO_4$]). In 2009, the on-site groundwater treatment system was upgraded to remove hexavalent chromium, which was identified at elevated concentrations in groundwater at the site. The hexavalent chromium was reported to be a by-product of the implemented in-situ groundwater treatment measures.

Two groundwater treatment systems (GTS) were located on the 3215 Porter Drive parcel that were housed in separate compound structures situated side-by-side along the northwestern parcel boundary. One GTS was owned and operated by HP and treated groundwater extracted from the HP Building 15 parcel and a second GTS, referred to as the Hillview-Porter GTS, treated groundwater on a more regional level. These two systems were combined into a single GTS that is located on the northwestern portion of the site. Associated conveyance piping also remains.

Current Site Status

The project site is listed on the Cortese List as a hazardous waste and substance site[32]. The contaminants of concern include 1,1,1-Trichloroethane (TCA), 1,1-Dichloroethylene, 1,2-Dichloroethylene (CIS), and Trichloroethylene (TCE). The groundwater at the project site has been impacted from hazardous material releases. The groundwater is contaminated with volatile organic compounds (VOCs), primarily TCE. Following the demolition of Building 15, a vapor intrusion evaluation was completed that included collection of soil vapor samples at the project site and adjacent sites. TCE was detected in on-site soil vapor at up to 120,000 micrograms per cubic meter ($\mu g/m^3$). For comparison, the Water Board's Tier 1 Environmental Screening Level (ESL2) for TCE in soil vapor is 16 $\mu g/m^3$. As previously mentioned, the project site is under DTSC oversight for ongoing operation and maintenance activities, which include continued groundwater extraction and treatment, groundwater monitoring and reporting.

School Safety

The closest school to the project site is Barron Park Elementary School. Barron Park is located at 800 Barron Avenue, approximately 0.5 mile from the project site.

Airport Safety

The proposed project site is approximately 5.3 miles west of the Moffett Federal Airfield and approximately 3.8 miles southwest of the Palo Alto Airport. The project is not within the Airport Influence Area or safety zones for either airport.

Wildland Fires

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)[33,34]. 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?	☐	☐	☒	☐

[32] CalEPA. "Cortese List Data Resources." Accessed December 10, 2019. https://calepa.ca.gov/sitecleanup/corteselist.
[33] CAL FIRE. *Fire Hazard Severity Zones in State Responsibility Areas.* November 2007.
[34] 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?	☐	☐	☒	☐
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?	☐	☒	☐	☐
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
6) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

Impact HAZ-1: The project would not create a significant hazard to the public or the environment through 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)**

As discussed in Impact HAZ-1, the proposed office building would not use acutely or extremely hazardous materials. Any hazardous materials on-site would include commonly used products for cleaning and maintenance. Therefore, 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)**

Impact HAZ-3:	The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. **(Less than Significant Impact)**

Barron Park Elementary School is approximately 0.5 mile from the project site. Therefore, the project would not have a significant impact on existing schools due to hazardous emissions or hazardous waste handling. **(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 but, with mitigation, would not create a significant hazard to the public or the environment. **(Less than Significant Impact with Mitigation Incorporated)**

Construction

The project site is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Groundwater and soil vapor at the site and the surrounding vicinity is contaminated with VOCs. As the project includes excavation across the site for a subterranean parking garage, construction workers and the public may be exposed to contamination during on-site activities, including removal of groundwater. Therefore, construction activities could expose construction workers to potentially unacceptable health risks from contaminated groundwater and soil vapor.

MM HAZ-4.1: Prior to conducting earthwork activities at the 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 and disposal of impacted soil, soil vapor and groundwater that may be encountered during construction activities. Based on the history of the site, 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 also outline the specific plan for the on-site groundwater

treatment system, including monitoring wells and associated conveyance piping. These features shall be protected during project activities or properly removed with a permit from the Santa Clara Valley Water District.

The SMP and HSP shall be submitted to the Planning Director and DTSC for review. DTSC approval shall be obtained prior to commencing ground disturbing activities at the site.

With implementation of the mitigation measures contained within MM HAZ-4.1, impacts to construction workers and the environment would be less than significant. **(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. **(No Impact)**

The proposed project site is approximately 5.3 miles west of the Moffett Federal Airfield and approximately 3.8 miles southwest of the Palo Alto Airport. The project is not within the Airport Influence Area or safety zones for either airport; therefore, there would be no impact. **(No 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.

Vapor Intrusion

As previously discussed, certain contaminants are present in the groundwater and soil vapor at the project site. Vapor intrusion occurs when volatile compounds migrate from contaminated groundwater or subsurface soils into the indoor air of an overlying structure. Vapor intrusion of volatile compounds could expose future workers and visitors 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.

- A Vapor Intrusion Mitigation Plan shall be prepared that describes the measures 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 occupied spaces 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 and Director of Planning for review. DTSC approval shall be obtained prior to commencing construction activities.
- 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 to the Director of Planning for review and DTSC for approval. The OMMP shall present actions to be taken following construction to maintain and monitor the vapor intrusion mitigation system, and a contingency plan in case of the vapor mitigation system failing. 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. Proof of approval of the OMMP shall be submitted to the Director of Planning.

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Overview

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 National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the Regional Water Quality Control Boards (RWQCBs). The project site is within the jurisdiction of the San Francisco Bay RWQCB.

Federal and State

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) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. 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

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.[35] Under Provision C.3 of the MRP, new and redevelopment

[35] MRP Number CAS612008

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.

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.

4.10.1.2 *Existing Conditions*

Flood Zones

The project site is approximately one mile west of Matadero Creek. It is located within Flood Zone X, which is defined as having a 0.2 percent annual chance 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.[36] No specific requirements apply in Zone X.

Stormwater and Water Quality

Stormwater runoff water quality is regulated by the federal National Pollutant Discharge Elimination System (NPDES) program to control and reduce pollutants to water bodies from surface water discharge. Locally, the NPDES program is administered by the Bay Area Regional Water Quality Control Board (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.

[36] Federal Emergency Management Agency. *Flood Insurance Rate Map*, *Community Panel No. 060850017H*. Map. Effective Date: May 18, 2009.

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. [37] The project site is also not susceptible to mudflows.[38]

4.10.2 Impact Discussion

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

[37] Association of Bay Area Governments. *Tsunami Inundation Map for Emergency Planning San Francisco Bay Area*. Site accessed October 22, 2019. http://gis.abag.ca.gov/website/Hazards/?hlyr=femaZones.
[38] Association of Bay Area Governments. *Rainfall-Induced Landslides.* Accessed April 10, 2018. http://gis.abag.ca.gov/website/Hazards/?hlyr=existingLndsld#nogo1.

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

The project would result in 56,528 square feet of new impervious surfaces on the project site. Under Provision C.3 of the RWQCB's Municipal Regional Stormwater NPDES Permit (MRP), redevelopment projects that add and/or replace more than 10,000 square feet of impervious surface are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff. Amendments to the MRP require that all post-construction runoff be treated by using Low Impact Development (LID) treatment controls (e.g., biotreatment facilities).

The proposed project would result in the replacement of more than 10,000 square feet of impervious surfaces. Therefore, the project would be required to comply with Provision C.3 of the MRP to reduce potential post-construction water quality impacts. The project proposes to install 10 bioretention areas throughout the project site, creating 15,372 square feet of pervious area. These biorention areas would be treating 55,400 square feet of impervious area. The project will also include a 2,018 square foot self-retaining pond. With implementation of a stormwater control plan consistent with RWQCB requirements and compliance with City policies pertaining to stormwater and drainage, the project would have a less than significant water quality impact. **(Less than Significant Impact)**

Dewatering

Groundwater below the site exists in two separate aquifer zones. The first aquifer is at a depth of approximately 15 to 25 feet. The second aquifer is at a depth of approximately 40 feet.[39] The project would involve excavation up to approximately 24 feet below ground surface. The project garage would extend 12 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. Therefore, 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,

[39] California Department of Health Services-Toxic Substances Control Division. *Remedial Action Order Docket #HSA 88/89-024*.

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)**

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)**

The proposed project would not include installation of new groundwater wells or use of groundwater from existing wells. The project site is located within the Santa Clara Plain Recharge area of the Santa Clara Valley Basin where groundwater occurs under unconfined conditions. The proposed project would be required to treat post-construction runoff using LID treatment controls (e.g., bioretention facilities) in compliance with Provision C.3 of the RWQCB's MRP. While the proposed project would result in an increase in impervious surface on the site, the project's design would allow for runoff to be directed toward areas that support groundwater recharge and reduce impacts related to groundwater recharge. Thus, the impact would be less than significant. **(Less than Significant Impact)**

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

The project is not in the floodplain of the creek and does not propose any alterations or impacts to the creek. The proposed project would not significantly alter the existing drainage pattern of the site or area and does not include any alterations to a waterway. Implementation of Construction BMPs and LID treatment controls (e.g., bioretention facilities) in compliance with Provision C.3 of the RWQCB's MRP would reduce surface runoff impacts during construction and project operation to a less than significant level.

New storm drains would be installed such that stormwater flows from the project would flow to stormwater treatment areas throughout the site. Stormwater would flow downhill (to the southeast) to existing City stormwater lines. These improvements would not result in a significant impact due to their construction, and no other stormwater facilities would be required for project implementation. The project would not create runoff that has the potential to exceed the capacity of existing stormwater drainage systems. **(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. **(No Impact)**

The project would not use or store pollutants such that inundation would cause release; therefore, there would be no impact. **(No Impact)**

Impact HYD-5:	The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(No Impact)**

The project site is not located within any designated groundwater recharge areas and would have less than significant impact on groundwater supplies. The project would therefore not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. **(No Impact)**

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

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	Description
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.
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.
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.
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 is located at the corner of Porter Drive/Hanover Street and Hillview Avenue. The site is located within an existing research park, adjacent to similar two-story contemporary office/R&D buildings surrounded by surface parking lots. The City of Palo Alto Comprehensive Plan Land Use Element designates the land use at the site as Research Development (RD). The Zoning district for the site is Research Park (RP).

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?	☐	☐	☐	☒

	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?	☐	☐	☒	☐

Impact LU-1:	The project would not physically divide an established community. **(No Impact)**

The project would not separate connected neighborhoods or land uses from each other as it proposes an office building in an existing office park. No new roads, linear infrastructure, or other development features are proposed that would divide an established community; therefore, no impacts would occur. **(No 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 Research Development (RD) and is zoned Research Park (RP). The RP district is intended to accommodate establishments whose operations may need to be buffered from neighborhood areas. The proposed office building use is a permitted use in the RP zoning district and is consistent with the land use policies for the designation RD. 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 NOISE

The following discussion is based in part on a noise and vibration assessment prepared by Illingworth & Rodkin, Inc. in December 2019. A copy of this report is included in Appendix D of this Initial Study.

4.12.1 Environmental Setting

4.12.1.1 *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 4.12-1below. These criteria can be applied to development projects in jurisdictions that lack vibration impact standards.

Table 4.12-1: Groundborne Vibration Impact Criteria

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

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

State and Local

California Building Standards Code

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

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	Description
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.
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.
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.
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.

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 4.12-2, the Comprehensive Plan defines acceptable, conditionally acceptable, and unacceptable noise levels for uses in the City.

Table 4.12-2: 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						

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.

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.

Unacceptable:
New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

Municipal Code

Title 9, Chapter 9.10, Noise, of the PAMC addresses noise levels from stationary sources, as well as construction noise for adjacent residential properties. Portions of the noise code that are applicable to the proposed project follow:

> **9.10.030 Residential Property Noise Limits:** (a) No person shall produce, suffer or allow to be produced by any machine, animal or device, or any combination of same, on residential property, a noise level more than six dB above the local ambient at any point outside of the property plane. (b) No person shall produce, suffer or allow to be produced by any machine, animal, or device, or any combination of same, on multi-family residential property, a noise level more than six dB above the local ambient three feet from any wall, floor, or ceiling inside any dwelling unit on the same property, when the windows and doors of the dwelling

unit are closed, except within the dwelling unit in which the noise source or sources may be located.

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.[40]

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:

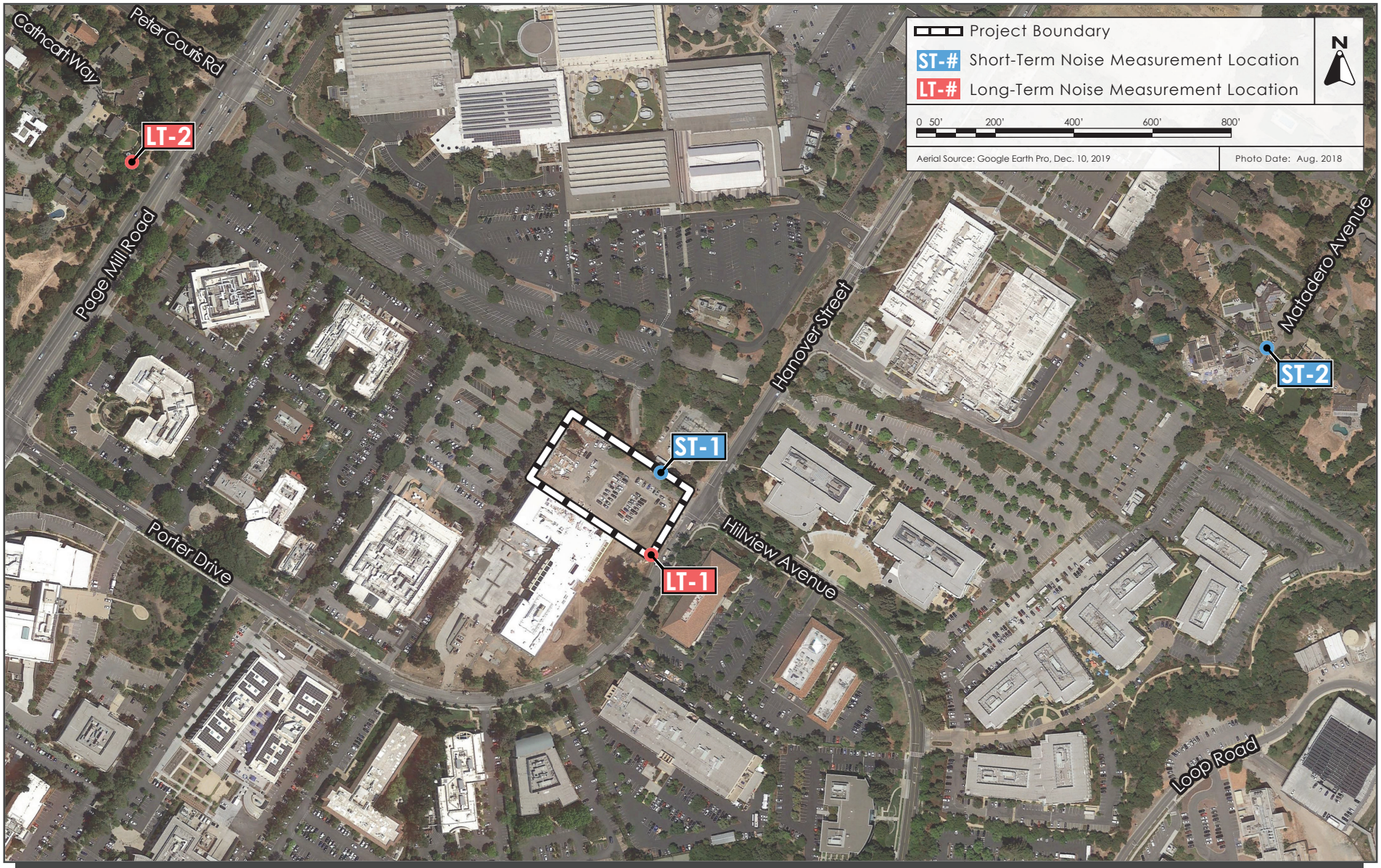
    1. No individual piece of equipment shall produce a noise level exceeding one hundred ten dBA at a distance of twenty-five feet. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to twenty-five feet from the equipment as possible.
    2. The noise level at any point outside of the property plane of the project shall not exceed one hundred ten 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

4.12.1.2 *Existing Conditions*

The major noise source affecting the project site is local vehicular traffic. Aircraft associated with operations from the Palo Alto Airport and the Moffett Federal Airfield also affect the noise environment. To quantify existing noise levels at the project site a noise monitoring survey was performed that consisted of two long-term noise measurements and two short-term noise measurements. All measurement locations are shown in Figure 4.12-1.

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



NOISE MEASUREMENT LOCATIONS | FIGURE 4.12-1

Hourly average noise levels at LT-1 typically ranged from 53 to 68 dBA Leq during the day and from 46 to 61 dBA Leq at night. Hourly average noise levels at LT02 typically ranged from 61 to 68 dBA Leq during the day and from 51 to 65 dBA Leq at night.

The 10-minute average noise level measured at ST-1 was 53 dBA Leq(10-min). Sources of noise included a constant electrical hum produced by the substation, roadway traffic, and a leaf blower. The 10-minute average noise level measured at ST-2 was 49 dBA Leq(10-min). Sources of noise included vehicular traffic and overhead jets.

The nearest receptors are commercial properties. The closest receptor being Jazz Pharmaceuticals, located at 3181 Porter Drive, approximately 80 feet south of the project site. The nearest residential receptor is approximately 1,225 feet northeast of the project site.

4.12.2 Impact Discussion

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

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

Temporary Construction Noise

The proposed project may require construction activities starting four hours before and after the City's regular construction hours (described above). For activities outside of the above hours, Section 9.10.040 of the Municipal Code states that any noise generated on commercial property shall not exceed ambient levels at residential properties by 6 dBA or at commercial properties by 8 dBA.

Given the distances to sensitive receptors (nearest receptor as approximately 1,120 feet away), the following analysis focuses on this work outside of normal construction hours.

The existing land uses surrounding the project site consist of commercial land uses, which have ambient noise levels ranging from 53 to 68 dBA Leq during daytime hours and from 46 to 61 dBA Leq during nighttime hours. The nearest existing residences are located approximately 1,240 feet to the west of the project site and approximately 1,120 feet to the northeast of the project site. The ambient noise environment at the residences to the west are represented by measurements made at LT-2, which documented hourly average noise levels ranging from 61 to 68 dBA Leq during daytime hours and from 51 to 65 dBA Leq during nighttime hours. ST-2 was made at the residences to the northeast, with a daytime ambient noise level of 49 dBA Leq. While nighttime noise levels were not measured at this location, nighttime noise levels are typically 10 dBA lower than daytime noise levels when traffic noise is the main noise source. Therefore, a nighttime noise level of 39 dBA Leq is assumed for these residences.

The highest maximum noise levels generated by project construction would typically range from about 80 to 90 dBA Lmax at a distance of 50 feet from the noise source, and would not exceed the 110 dBA threshold for individual pieces of equipment during allowable construction hours. Typical hourly average construction-generated noise levels for office buildings are about 78 to 89 dBA Leq measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc.). 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 5 to 10 dBA noise reduction at distant receptors.

Temporary construction occurring at night between 6:00 p.m. and 8:00 a.m. on weekdays and between 6:00 p.m. and 9:00 a.m. on weekends would potentially expose the nearest residences to construction noise levels exceeding 50 dBA Leq and to noise levels 6 dBA or more above ambient conditions. Temporary construction would also potentially expose commercial uses to construction noise levels 8 dBA or more above ambient conditions. However, typical construction work occurring during nighttime hours would include minimal equipment, which limits excessive nighttime noise levels, in accordance with standard conditions of approval. Further, most commercial uses surrounding the site would only be occupied during daytime hours of operation. It is assumed that the surrounding commercial buildings would be vacant during nighttime construction hours, however, the following City conditions of approval would still be implemented to ensure that noise impacts at adjacent receptors are less than significant.

- Limit nighttime construction work to interior finishing work only. During nighttime construction hours, windows and doors shall be closed to minimize noise. Examples of allowable interior finishing work includes drywall, finish carpentry, painting, plumbing, electrical, etc.
- 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.
- The unnecessary idling of internal combustion engines shall be prohibited.

- 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.
- Utilize ‘quiet’ models of air compressors and other stationary noise sources where technology exists.
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.

With incorporation of the City’s standard noise-related conditions of approval noise impacts during construction would be less than significant. **(Less than Significant Impact)**

Permanent On-Site Operational Noise

A significant impact would occur if the project would increase the existing noise environment of existing noise-sensitive receptors 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 traffic study prepared for the proposed project included existing plus project traffic volumes. When these volumes were compared to the existing traffic volumes, a noise level increase due to project-generated traffic was estimated to be less than one dBA Ldn along the roadway segments in the project vicinity. Therefore, the traffic expected as a result of the proposed project would not result in a permanent noise increase at the existing noise-sensitive receptors in the project vicinity.

The project proposes a 4,300-square foot rooftop photovoltaic array for solar power. 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. HVAC and air conditioning equipment is also proposed. Based on typical noise levels generated and distance to receptors (1,120 feet for residences and 80 feet for commercial uses), equipment on the rooftop of the proposed building would not exceed the ambient noise levels at residential uses by six dBA and would not exceed ambient noise levels at commercial uses by eight dBA. 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. Thus, impacts from rooftop mechanical equipment would not be significant. **(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)**

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

Construction vibration levels would vary depending on soil conditions, construction methods, and equipment used. Table 4.12-3 presents typical vibration levels from construction equipment at the reference distance of 25 feet. Calculations were also made to estimate vibration levels at the nearest residential and commercial structures surrounding the site.

Table 4.12-3: Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft. (in/sec)	Vibration Levels at Nearest Surrounding Building Façades (in/sec PPV)				
			South Comm. (25ft)	East Comm. (120ft)	West Comm. (250ft)	West Res. (1,315ft)	NE Res. (1,185ft)
Clam shovel drop		0.202	0.202	0.036	0.016	0.003	0.003
Hydromill (slurry wall)	in soil	0.008	0.008	0.001	0.001	0.000	0.000
	in rock	0.017	0.017	0.003	0.001	0.000	0.000
Vibratory Roller		0.210	0.210	0.037	0.017	0.003	0.003
Hoe Ram		0.089	0.089	0.016	0.007	0.001	0.001
Large bulldozer		0.089	0.089	0.016	0.007	0.001	0.001
Caisson drilling		0.089	0.089	0.016	0.007	0.001	0.001
Loaded trucks		0.076	0.076	0.014	0.006	0.001	0.001
Jackhammer		0.035	0.035	0.006	0.003	0.000	0.001
Small bulldozer		0.003	0.003	0.001	0.000	0.000	0.000

Construction-related vibration levels resulting from activities would not exceed 0.3 in/sec PPV at the surrounding structures and any impact would be less than significant. **(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 3.7 miles northeast from the closest airport, the Palo Alto Airport. The project site lies well-outside the 55 dBA CNEL 2022 noise contour for the airport, according to the Palo Alto Airport Comprehensive Land Use Plan.[41] This means that future exterior noise levels due to aircraft from Palo Alto Airport would be below 55 dBA CNEL/Ldn at the project site. Therefore, the project would not expose people working in the project area to excessive noise levels from airports. **(Less than Significant Impact)**

[41] Santa Clara County Airport Land Use Commission, "Palo Alto Airport Comprehensive Land Use Plan Santa Clara County," prepared by Walter B. Windus, PE, amended November 16, 2016.

4.13 POPULATION AND HOUSING

4.13.1.1 *Environmental Setting*

4.13.1.2 *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.[42] The City of Palo Alto Housing Element and related land use policies were last updated in 2014.

4.13.1.3 *Existing Conditions*

Of the estimated 28,500 housing units in the City, approximately 62 percent are single family residential units.[43]

4.13.1.4 *Impact Discussion*

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

[42] California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed January 17, 2020. http://hcd.ca.gov/community-development/housing-element/index.shtml

[43] City of Palo Alto. *2015-2023 Housing Element*. November 10, 2014.

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

The project would not induce substantial growth in the project area. The project proposes to construct an office building. Due to the relatively small nature of the project is can be anticipated that the project would not result in a significant population growth in the area. **(Less than Significant Impact)**

Impact PH-2:	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? **(No Impact)**

The project site is currently undeveloped and is located within Stanford Research Park, a non-residential area. Therefore, the project would not displace any existing housing or people. **(No Impact)**

Impact PH-3:	The project would not create a substantial imbalance between employed residents and jobs. **(Less than Significant Impact)**

The project would generate new jobs, adding to Palo Alto's jobs/housing imbalance. However, the increase in jobs would be incremental due to the small size of the project and the project applicant would be required to pay a commercial housing impact fee to help offset the imbalance. **(Less than Significant Impact)**

4.14 PUBLIC SERVICES

4.14.1 Environmental Setting

4.14.1.1 *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.

4.14.1.2 *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 City of Palo Alto Fire Department 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 0.8 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 3.3 miles from the project site.

Public Schools

All public schools in Palo Alto are operated by the Palo Alto Unified School District. Barron Park Elementary is located approximately 0.5 mile northeast of the project site.

Parks

The City of Palo Alto has 29 neighborhood and district parks that total approximately 190 acres. Bol Park is the closest park to the project site, approximately 2,600 feet to the east.

4.14.2 Impact Discussion

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

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Impact PS-1:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services. **(Less than Significant Impact)**			

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 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)**

Impact PS-2:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for 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, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools. **(No 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, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. **(No Impact)**

The project would not generate students, or residents that would be regular park users. Therefore, the project would not impact park facilities in Palo Alto. **(No 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, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities. **(No Impact)**

The project would not generate students, or residents that would be regular users of other public facilities. Therefore, the project would not impact other public facilities in Palo Alto. **(No Impact)**

4.15 TRANSPORTATION

The following discussion is based, in part, upon a Traffic Study completed for the proposed project by Fehr & Peers and is included as Appendix E of this Initial Study.

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (VMT) metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires the replacement of automobile delay—described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion—with VMT as the recommended metric for determining the significance of transportation impacts. The Governor's Office of Planning and Research (OPR) approved the CEQA Guidelines implementing SB 743 on December 28, 2018. Local jurisdictions are required to implement a VMT policy by July 1, 2020.

Regional and Local

Santa Clara County Valley Transportation Authority (VTA)

The proposed project is located within the City of Palo Alto, in Santa Clara County. The Santa Clara County Valley Transportation Authority (VTA) is the Congestion Management Agency (CMA) for the County and has policies and regulations that are relevant to the project. The VTA is responsible for ensuring local government conformance with the Congestion Management Program (CMP), a program aimed at reducing regional traffic congestion. The CMP requires that each jurisdiction identify existing and future transportation facilities that will operate at an acceptable service level and provide mitigation where future growth degrades that service level. The VTA has review responsibility for proposed development projects that are expected to generate 100 or more additional peak-hour trips.

Santa Clara Countywide Bicycle Plan

The Santa Clara Countywide Bicycle Plan synthesizes other local and County plans into a comprehensive 20-year cross-county bicycle corridor network and expenditure plan (May 2008). The long-range countywide transportation plan and the means by which projects compete for funding and prioritization are documented in the Valley Transportation Plan 2035 (adopted in January 2009). VTA has adopted the Santa Clara Countywide Bicycle Plan, which is a planned bicycle network of 24 routes of countywide or intercity significance.

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 Comprehensive Plan Policies

The following transportation-related policies from the Comprehensive Plan apply to the proposed project.

Policy	Description
T-1.15	Encourage employers to develop shared shuttle services to connect employment areas with the multi-modal transit stations and City amenities, and to offer employees education and information on how to use shuttles.
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.
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
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.

4.15.1.2 *Existing Conditions*

Roadway Network

Regional access to the project site is provided via U.S. 101 and Interstate 280, while local access is provided by Oregon Expressway/Page Mill Road, Porter Drive, Hanover Street, and Hillview Avenue.

Transit Facilities

Existing transit services near the project site are provided by the Alameda-Contra Costa Transit District, VTA, the City of Palo Alto, and Stanford University. The project area is served directly by the Dumbarton Express route, which is an all-day, limited stop bus service. The study area is served directly by one local VTA bus route (Route 89) and four express VTA routes (Route 101, Route 102, Route 103, and Route 104). Additional transit services (VTA bus services & Caltrain) are provided at the Palo Alto Transit Center. Bus stops for all five local and the Dumbarton Express bus routes are located along Hanover Street, within 2,000 feet of the project site.

Marguerite is Stanford's free public shuttle service, which travels around campus and connects to nearby transit, shopping, dining, and entertainment. The nearest shuttle stop is located adjacent to the project site (less than 100 feet) at the Hanover Street/Hillview Avenue intersection.

Pedestrian and Bicycle Facilities

In the vicinity of the site, sidewalks are currently provided along the east side of Porter Drive and Hanover Street and on both sides of Hillview Avenue. New sidewalks on the west side of Porter Drive are being added as part of the 3181 Porter Drive construction adjacent to the project site. At the intersection of Hillview Avenue and Hanover Street/Porter Drive, crosswalks are provided on the eastern (Hillview Avenue) and southern (Porter Drive) approaches. There is no crosswalk provided on the northern approach to the intersection.

The existing bicycle facilities along Hillview Avenue, Hanover Street, and Porter Drive in the vicinity of the project are all Class II bikeways[44].

4.15.2 Impact Discussion

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

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

The City of Palo Alto does not currently have an adopted VMT policy. The City's adopted transportation policy utilizes level of service (LOS) as the metric by which the City determines the functionality of the roadway system and the effect of new development on the roadway network. The following discussion of LOS is provided as it pertains to consistency with the City's adopted transportation policy. For this analysis, the criteria used to determine significant impacts on signalized intersections are based on the City of Palo Alto and VTA's CMP LOS standards. The

[44] The City of Palo Alto Bicycle & Transportation Plan defines Class II bikeways as striped lanes on roadways for one-way bicycle travel. Class II bike lanes on street segments without parking must be at least four feet wide including any concrete gutter, with at least three feet of asphalt. Bike lanes on streets with parallel parking must be at least five-feet wide, although many communities, including VTA's Bicycle Technical Guidelines, have adopted wider minimum width standards to reduce potential conflict with the "door zone" and to encourage a wider range of bicyclists.

project would result in a significant impact at a signalized intersection if for either the AM or PM peak hour:

- The LOS at the intersection degrades from an acceptable level (LOS D or better for non-CMP intersections and LOS E or better for CMP intersections) under background conditions to an unacceptable level (LOS E or F for non-CMP intersections and LOS F for CMP intersections); or
- The LOS at the intersection is at an unacceptable level (LOS E or F at non-CMP intersections and LOS F at CMP intersections) under background conditions and the addition of project traffic causes both the critical-movement delay at the intersection to increase by four or more seconds and the V/C to increase by one percent or more. An exception to this rule applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e. the change in average delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more.

A significant impact by City of Palo Alto standards would be satisfactorily mitigated when measures are implemented that would restore intersection conditions to its LOS standard or to an average delay that is better than background conditions.

As shown in Table 4.14-1, the study intersection, Porter Drive/Hanover Street/Hillview Avenue, currently operates at LOS A in the AM peak hour and B in the PM peak hour. The Existing With Project conditions are projected to operate at LOS C in both peak hours. These results flow from the additional turning movements to and from the project driveway and the additional time allocated to the higher number of pedestrian and bicycle crossings assumed with the project.

Table 4.14-1: Intersection LOS Operations

Intersection	Peak Hour	Existing		Existing with Project	
		Delay (seconds)	LOS	Delay (seconds)	LOS
Porter Drive/Hanover Street/Hillview Avenue	AM	8.9	A	22.9	C
	PM	10.5	B	23.5	C

The LOS under Existing With Project conditions rates better than LOS D for both peak hours and is therefore considered acceptable by the City of Palo Alto. Therefore, the project will 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). **(No Impact)**

Beginning on July 1, 2020, the CEQA Guidelines update that implements SB 743 will apply statewide. At the time the project transportation assessment was completed, the City of Palo Alto had not defined a methodology for assessing VMT nor revised its policies to require the use of VMT as

its primary transportation analysis methodology. Therefore, a VMT analysis consistent with SB 743 is not required or included. **(No Impact)**

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

Vehicle access to the project site would be provided via a driveway located on Porter Drive/Hanover Street. This driveway would serve vehicles entering and exiting the surface parking area. The driveway does not have any trees or other sidewalk features that would block the line of site for vehicles entering and exiting the site. Vehicles exiting the driveway would have adequate sight distance to turn onto Porter Drive/Hanover Street safely. Access to the underground parking area would be provided via an on-site ramp at the back of the site. The project would be required to conform to the City's traffic and safety regulations. The City will review the proposal for compliance with safety and design regulations and compatible usage. For these reasons, the impact is less than significant. **(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)**

4.16 TRIBAL CULTURAL RESOURCES

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Assembly Bill 52

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

Under AB 52, TCRs are defined as follows:

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

4.16.1.2 *Existing Conditions*

The project is located in a fully developed area within the Stanford Research Park and no tribal cultural resources have been listed or determined eligible for listing in the California Register or a local register of historical resources. To date, no California Native American tribes that are or have been traditionally culturally affiliated with the project vicinity have requested notification from the City of Palo Alto regarding projects in the area and their effects on a tribal cultural resource.

4.16.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				

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

Impact TCR-1:	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). **(No Impact)**

The project site does not contain tribal cultural resources that are listed or eligible for listing in the California Register, or in a local register of historical resources. For this reason, the project would not cause a substantial adverse change to these resources. **(No Impact)**

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. **(No Impact)**

The project site does not contain any recognized tribal cultural resources. Furthermore, no California Native American tribes that are or have been traditionally culturally affiliated with the project vicinity have requested notification from the City of Palo Alto regarding projects in the area and their effects on a tribal cultural resource. Thus, there would be no impact. **(No Impact)**

4.17 UTILITIES AND SERVICE SYSTEMS

4.17.1 Environmental Setting

4.17.1.1 *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 November 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.

4.17.1.2 *Existing Conditions*

4.17.2 Impact Discussion

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

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

The project would not exceed wastewater treatment requirements or require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. As described in Section 4.10 Hydrology and Water Quality, the proposed project would not generate a substantial increase in stormwater runoff and would not require the construction of substantial new storm water drainage facilities or expansion of existing facilities. Thus, the project would not result in the relocation or construction of new utility facilities (as also described under Impact UTL-3), the construction or relocation of which could cause significant environmental effects. **(Less than Significant Impact)**

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

The proposed project would demand approximately 8 acre-feet per year (AFY)[45,46] net new gallons of water. The City of Palo Alto obtains one hundred percent of its potable water supply from the San Francisco Public Utilities Commission. The City is projected to have a water supply of 19,118 AFY through 2035, with demand peaking at 11,883 AFY in 2020.[47] On average, the City would have a surplus of 7,791 AFY, annually. Sufficient water supplies would be available to serve the project from existing entitlements and resources. **(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 City of Palo Alto Utilities Department (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.

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. 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 6.8 acre-feet per year (or 0.006 MGD), a small amount in comparison to the unused capacity of RWQCP. Therefore, there would be sufficient wastewater 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 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

[45] Assuming 300 centum cubic feet (or 0.69 acre-feet) per month
[46] City of Palo Alto Utilities. *Water Use*. 2008. https://www.cityofpaloalto.org/civicax/filebank/documents/15949
[47] City of Palo Alto. 2-15 Urban Water Management Plan. June 2016. Accessed December 11, 2019. https://www.cityofpaloalto.org/civicax/filebank/documents/51985.

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.[48] The City has established a goal of virtually eliminating waste being burned or buried by 2021 and has adopted the Zero Waste Operational Plan.

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 polices, 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 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, and 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)**

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

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

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

Impact MFS-1: 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 buried cultural resources, should they be discovered on site. The project could also 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 expose construction workers to potentially unacceptable health risks from contaminated groundwater and soil vapor. However, with the implementation of **MM BIO-1.1**, **MM CUL-2.1**, and **MM HAZ-4.1** and 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, cultural resources, and hazards and hazardous materials. **(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, mineral, or recreational 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. The project would pay the City's commercial housing impact fee to avoid contributing to a cumulative population and housing impact.

The project would have the potential to result in cumulative hydrology and water quality impacts and noise impacts. With implementation 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. 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 traffic compared to existing conditions; however, the project would generate a relatively low amount of new peak-hour traffic and would have a relatively minimal impact on the existing vehicular traffic on nearby roadways. As a result, the project would not contribute to significant cumulative 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 (vapor intrusion) 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

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

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6.2 CONSULTANTS

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