



DRAFT INITIAL STUDY ♦ MITIGATED NEGATIVE DECLARATION



1700-1730 Embarcadero Road Auto Dealership Project

PREPARED BY

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**PREPARED WITH THE
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REPORT DATE

March 2019

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INITIAL STUDY

1. PROJECT TITLE

1700-1730 Embarcadero Road Auto Dealership Project

2. LEAD AGENCY NAME AND ADDRESS

City of Palo Alto
250 Hamilton Avenue
Palo Alto, California 94301

3. CONTACT PERSON AND PHONE NUMBER

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(408) 340-5642, sahsing@m-group.us

4. PROJECT LOCATION

The project site is located at 1700 and 1730 Embarcadero Road in the City of Palo Alto in Santa Clara County. The project site encompasses 209,888 square feet (4.82 acres) on two parcels (Assessor's Parcel Numbers 008-03-084 and 008-03-066) at the southeast corner of Embarcadero Road and East Bayshore Road.

Figure 1 shows the regional location of the site and Figure 2 shows an aerial view of the project site and its immediate surroundings.

5. PROJECT SPONSOR'S NAME AND ADDRESS

Lyle Hutson
305 North Coast Highway
Laguna Beach, CA 92651

Figure 2 Project Site Location



Imagery provided by Microsoft Bing and its licensors © 2018.

Fig 2 Project Location

6. SURROUNDING LAND USES AND EXISTING SETTING

The project site is located in northeastern Palo Alto in a neighborhood characterized by office park and commercial uses. A Palo Alto Embarcadero Shuttle (line E) is located adjacent to the northeast corner of the project site on Embarcadero Road. The site is bordered by Embarcadero Road to the north, East Bayshore Road to the west, professional offices and the Baylands Nature Preserve (“Baylands”) to the south, and a Honda automobile dealership to the east. Across Embarcadero Road to the north are professional offices and to the west across East Bayshore Road are medical offices. Figure 3 includes photographs of the project site, Figure 4 includes photographs of surrounding development, and Figure 5 includes photographs of the Baylands.

The 1,940-acre Baylands is one of the largest tracts of undisturbed marshland remaining in the San Francisco Bay (City of Palo Alto 2018a). Fifteen miles of multi-use trails provide access to a unique mixture of tidal and fresh water habitats (City of Palo Alto 2018a). The project site is included within the City’s Baylands Master Plan and located within the “Privately Owned Lands.” The area adjacent to the project site to the south is located within the “Former ITT Property.”

The project site is located on two parcels totaling approximately 4.8 acres in size that are currently developed. One of the parcels (APN: 008-03-084) is developed with a one-story, 10,000-square-foot, vacant restaurant building constructed in 1968 (formerly Ming’s Chinese Cuisine and Bar). The second parcel (APN 008-03-066) is developed with a 15,049-square-foot, two-story auto dealership (Audi Palo Alto); surface parking areas; and landscaping. The project would maintain two separate parcels. The restaurant building has been vacant since 2014 and parking areas associated with the restaurant are currently used for vehicle storage by the adjacent Audi dealership. Additional onsite features include an electrical tower near the corner of Embarcadero Road and East Bayshore Road and high voltage transmission lines along East Bayshore Road. The site is accessible to vehicles from two driveways on Embarcadero Road and one driveway on East Bayshore Road. There are 80 existing landscaping trees on or adjacent to the project site consisting of 14 mostly non-native species. Thirteen of these trees are street trees primarily composed of Chinese elm (*Ulmus parvifolia*) along East Bayshore Road.

7. COMPREHENSIVE PLAN DESIGNATION

The project site has a Comprehensive Plan land use designation of Service Commercial (CS). As described in the City of Palo Alto’s Comprehensive Plan, the CS land use designation allows for facilities providing citywide and regional services and relying on customers arriving by car. Typical uses include auto services and dealerships, motels, lumberyards, appliance stores, and restaurants.

Figure 3 Photographs of the Project Site



Photo 1: View looking southeast at Audi Dealership from Embarcadero Road adjacent to project site.



Photo 2: View looking south at existing restaurant building from across Embarcadero Road north of project site.

Figure 4 Photographs of Surrounding Development



Photo 1: Office building across East Bayshore Road west of project site.



Photo 2: Office building south of project site.

Figure 5 Photographs of the Baylands Nature Preserve



Photo 1: View looking north from the Renzel Trail southeast of the project site.



Photo 2: View of Baylands Nature Preserve near the project site from Renzel Trail.

In addition, the Comprehensive Plan identifies the site within the East Bayshore Employment District. According to the Comprehensive Plan Land Use and Community Design Element, Employment Districts are relatively large areas of the City dominated by low-rise office, high technology, light industrial and other job-generating land uses but containing relatively few retail and service uses. The broad land use goal for these areas is to impart a stronger sense of community to those who work or live here and to strengthen the connections between these areas and the rest of the City. Other goals are to improve bicycle and pedestrian circulation, expand the provision of services, and improve visual quality.

8. ZONING

The project site is located on two parcels zoned CS and PC. The parcel at 1700 Embarcadero Road (APN 008-03-084) is zoned Service Commercial (CS) District. The Palo Alto Municipal Code (PAMC), Chapter 18.16 states the intent of the CS District:

“to create and maintain areas accommodating citywide and regional services that may be inappropriate in neighborhood or pedestrian-oriented shopping areas, and which generally require automotive access for customer convenience, servicing of vehicles or equipment, loading or unloading, or parking of commercial service vehicles.”

In addition to this parcel’s primary zoning designation, the 1700 Embarcadero Road parcel is subject to land use restrictions in the Site and Design (D) Review Combining District. Site and Design (D) Review Combining Districts are intended to provide a process for review and approval of development in environmentally and ecologically sensitive areas, including established community areas which may be sensitive to negative aesthetic factors, excessive noise, increased traffic or other disruptions, in order to assure that use and development will be harmonious with other uses in the general vicinity, will be compatible with environmental and ecological objectives, and will be in accord with Palo Alto Comprehensive Plan.

The parcel at 1730 Embarcadero Road (APN: 008-03-066), currently occupied by Audi Palo Alto, is zoned Planned Community District (PC-4846). As described in the PAMC in Chapter 18.16, the PC districts are intended to accommodate developments for residential, commercial, professional, research, administrative, industrial, or other activities, including combinations of uses appropriately requiring flexibility under controlled conditions not otherwise attainable under other districts. Due to the flexibility of this zoning district, any land use may be permitted in this district with Council approval.

9. DESCRIPTION OF PROJECT

The proposed project would involve demolition of two existing commercial buildings and the construction of a new automotive sales and dealership building for use by both Mercedes Benz and Audi car companies as well as associated surface parking and landscaping. In addition, a separate 2,155 square foot car wash building would be constructed at the rear of the project site and would be shared by both auto dealerships.

The project site includes two parcels with the zoning designation of Service Commercial (CS) (APN 008-03-084) and Planned Community (PC), with a Design (D) Review Combining Districts (D) overlay (APN 008-03-066). The proposed project includes a request for a zoning amendment on the parcel zoned PC from PC to CS and to apply the Auto Dealership (AD) overlay to the entire site.

The proposed project would occur in two phases. Phase One would involve demolition of the existing 10,000-square foot single-story, vacant restaurant building and associated surface parking, and the construction of a Mercedes Benz dealership including showroom, customer support, offices, a service and parts center, three detail bays, and vehicle storage and parking areas.

Phase Two of the proposed project would involve moving the existing Audi dealership from its current location at 1730 Embarcadero Road to the new building at 1700 Embarcadero Road (completed in Phase One) and partial demolition of the existing Audi dealership service center. The existing Audi showroom at the northeast portion of the project site would remain and all other structures and surface parking at 1730 Embarcadero would be demolished. In addition, Phase Two of the proposed project would involve the construction of a new Audi dealership with customer support, offices, a service and parts center, two detail bays, a photo booth and associated vehicle storage and parking. The new Audi dealership would be constructed to form one building with the new Mercedes Benz dealership. A separate car wash would also be constructed during Phase Two and would be located at the southeast corner of the parcel.

A portion of the 1700 Embarcadero Road parcel includes an approximately 80-foot wide easement to accommodate overhead high voltage electric transmission lines parallel to East Bayshore Road and a sub-surface storm drain line. Surface improvements such as landscaping, driveways and parking are allowed within the easement. The proposed project would preserve the electric tower currently located at the northwestern corner of the project site.

The proposed Mercedes Benz dealership building would be sited to provide an approximately 45-foot front setback from Embarcadero Road, a 53-foot rear setback and approximately an 80-foot setback from the southern property line at East Bayshore Road.

The existing front setback for the Audi dealership showroom would be retained at 29 feet while the rear setback would be 98 feet to the closest point of the rear property line, and side setbacks would be 31 feet from the northern property line and 53 feet from the southern property line. The car wash would be set back 50 feet from the rear property line and five feet from the eastern property line.

Table 1 summarizes the characteristics of the proposed project. Figure 6 shows the proposed detailed site plan and Figure 7 shows the proposed illustrative site plan.

Table 1 Project Characteristics

Feature	Details
Site/Building Features	
Total Project Site Size	209,888 sf
Total Building Footprint	104,038 sf
Floor area ratio (FAR)	0.5
Building height	43 feet (maximum parapet height) 50 feet (maximum elevator and stair tower height) 14 feet (car wash structure)
Auto Dealership Main Building	
Showroom	29,583 sf
Other occupied space (offices, service and parts, dealership services, photo booth)	74,548 sf
<i>Total</i>	<i>104,131 sf</i>
Car wash	2,155 sf
Landscaping	
Proposed site total	26,680 sf
Proposed tree total	59 new trees
Vehicle Parking	
Surface level	63 spaces
Deck 2 nd Floor Parking	111 spaces
Deck 3 rd Floor Parking	211 spaces
Total	385 spaces
Bicycle Parking	15 spaces
Sf = square feet	

Figure 7 Proposed Illustrative Site Plan



Source: LAI Design Group

SITE ACCESS AND PARKING

Vehicular access would be provided from two existing driveways on Embarcadero Road and one existing driveway on East Bayshore Road. The existing driveways would be retained in their current location and resurfaced during Phase Two of project implementation. Inbound and outbound movements would be allowed at two of the three access points with vehicle access restricted to inbound only access at the western driveway on Embarcadero Road. Primary pedestrian and bicycle access would be from access paths from Embarcadero Road and East Bayshore Road.

The proposed project would include a total of 385 parking spaces for customers and employees throughout the site and within the building. This includes 322 parking spaces on the second and third floor parking decks for use by staff, customer repair vehicles, and overflow inventory and 63 surface parking lots for browsing customers, vehicle inventory display, and repair vehicles.

The site also includes an automated parking system for vehicle inventory storage. The automated vehicle storage system would retrieve vehicles stacked within a two-story volume space, transport them to the showroom floor and return them to an available vehicle storage space via an automated elevator system. Control screens would be installed at various locations throughout the showroom and would allow sales staff and other personnel to retrieve and return vehicles to the inventory spaces. The automated vehicle storage system would include two elevator/ conveying systems and two generators to provide backup power to the parking system as well as the entire building. In addition, ramps would be located within the building to allow for manual transport of vehicles to and from the vehicle storage on the second floor and roof deck parking areas.

LANDSCAPING

According to the Tree Inventory, Assessment, and Protection report prepared by Monarch Consulting Arborists (April 3, 2018), there are a total of 80 existing trees on or adjacent to the project site. Fourteen of these trees are located off-site but with canopies that extend onto the project site. These include various eucalyptus species (*Eucalyptus spp.*). Thirteen street trees are located adjacent to the site along East Bayshore Road, all of which would be removed.

Of the 80 trees on or adjacent to the site, 16 would be preserved. The 16 trees to be preserved include Privet (*Ligustrum lucidum*), Red Ironbark Eucalyptus (*Eucalyptus sideroxylon*), Red gum Eucalyptus (*Eucalyptus camaldulensis*), and Palo verde (*Parkinsonia*). In addition, new trees would be planted on the project site, including 40 shade trees and 19 ornamental trees. Shade trees would be planted along the perimeter of the project site and would include six Western Hackberry (*Celtis reticulata*), three Chinese Flame Tree (*Koelreuteria bipinnata*), nine Chinese Pistache (*Postacia chinesensis*), and 22 Interior Live

INITIAL STUDY

Oak (*Quercus wizlizenii*). Ornamental trees would be planted at the side of the building between the Mercedes Benz vehicle parking ramp and the three Mercedes Benz detail bays facing East Bayshore Road as well as at various points around the perimeter of the project site and would include seven Western Redbush (*Cercis occidentalis*), eleven Dwarf Jack Pear (*Pyrus calleryana 'Jack'*), and one Mexican Palo Verde (*Parkinsonia aculeata*).

Other landscaping includes evergreens and shrubs such as Dwarf Bottlebrush (*Calisternonn "Little John"*), Purple-leafed Hop-bush (*Dodonaea viscosa 'purpurea'*), Nevin Mahonia (*Mahonia nevinii*), Ballerina India Hawthorne (*Rhaphiolepis indica 'Ballerina'*), Eleanor Tabor Indian Hawthorne (*Rhaphiolepis indica 'Conor'*), Winter Jasmine (*Jasminum nudiflorum*),

Ornamental grasses [Foxtail Agave (*Agave attenuate*), Berkeley Sedge (*Carex divulsa*), Dune Sedge (*Carex pansa*), Festival Burgundy Cordalyne (*Cordalyne x 'JURed' Plant*), Fortnight Lilly (*Dietes bicolor*), Pink Muhly Grass (*Mulhengeria capillaris*), Deer Grass (*Mulhenbergia rigens*)] and ground cover [Emerald Carpet Manzanita (*Arctostaphylos 'Emerald Carpet'*), and Angelina Stonecrop (*Sedum rupestre 'Angelina'*)].

PALO ALTO GREEN BUILDING CHECKLIST

In addition to State building code requirements, the City of Palo Alto has adopted more stringent green building regulations. For non-residential projects, the City has adopted CALGreen Tier 1 for tenant improvements and renovations and 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 proposed project would be designed to meet the requirements of the City's Green Building ordinance. All demolition materials would be reused or recycled, including all paving, slabs, concrete walls and footings, which would be ground and reused as base for the new building. Water conserving plumbing fixtures and fitting would be installed throughout the project site and would include low flush volume options as well as touchless and metered faucets to reduce water consumption. Exterior cladding would consist of prefabricated recycled aluminum and plastic panels. Storefronts would feature dual pane insulated glass with integral radiant barrier glazing. All exterior and interior finishes would be low volatile organic compounds (VOC) emitting and all light fixtures would feature energy-efficient LED lamps. Exterior parking lots and drive surfaces would be light colored in accordance with Section 5.106.10 of the PAMC to reduce heat island effect.

The onsite car wash would be designed to minimize water consumption. The proposed car wash would be fully automated and feature a grey water capture and filtration system. The car wash would rely solely on recycled and reused grey water. No potable water would be used in the car wash.

Additional green amenities at the project site would include electric vehicle charging stations, designated vanpool and clean air vehicle parking spaces, and short- and long-term bicycle storage would be provided at the project site.

UTILITY PROVIDERS

The City of Palo Alto Utilities department (CPAU) provides electric, natural gas, refuse, recycled water, storm drain, wastewater collection, treatment and disposal. Water would be provided by the San Francisco Public Utilities Commission (SFPUC). Police and fire protection services would be provided by the City of Palo Alto.

CONSTRUCTION

Development of the proposed project is expected to occur over approximately two years (27 months) and would be broken up into two phases. Phase One, which consists of demolition of the existing commercial building at 1700 Embarcadero and the construction of the Mercedes Benz dealership, would occur over approximately 12 months. Phase Two of the project would begin approximately three months after Phase One is completed and would occur over approximately 12 months. Approximately 5,160 cubic yards of soil would be imported during construction. Excavation for building foundations would require grading to a depth of approximately seven feet; however, piles to support the building foundation would extend up to 80 feet below the foundation.

10. REQUIRED APPROVALS

The following entitlements are required for the proposed development:

- ◆ Site and Design Review
- ◆ Zoning Map Amendment to change the portion of the project site zoned Planned Community (PC) to CS Zoning with a Site Design and Review (D) District Overlay and Auto Dealership Combining (AD) District Overlay
- ◆ A Design Enhancement Exception (DEE) to deviate from the “build-to-line” requirement and Parking lot tree canopy shade requirement

11. OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

The City of Palo Alto is the lead agency with responsibility for approving the proposed project. No other public agency’s discretionary approval is required.

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural and Tribal Resources | <input checked="" type="checkbox"/> Geology and Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Energy Conservation |
| <input checked="" type="checkbox"/> Mandatory Findings of Significance | | |

DETERMINATION

Based on this initial evaluation:

- I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- I find that the proposed project **MAY** have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

- I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Sheldon S. Ah Sing
Signature

17 MAR 2019
Date

Sheldon S. Ah Sing
Printed Name

Principal Planner
Title

ENVIRONMENTAL CHECKLIST

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project have any of the following impacts:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a. Substantially degrade the existing visual character or quality of the site and its surroundings? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Significantly alter public viewsheds or view corridors or scenic resources (such as trees, rocks, outcroppings, or historic buildings) along a scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Substantially shadow public open space (other than public streets and adjacent sidewalks) between 9:00 a.m. and 3:00 p.m. from September 21 to March 21? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

a. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Visually, the area surrounding the project site is characterized by one- to three-story office park and commercial development with a mixture of architectural styles and ornamental landscaping. The visual character of the project site is dominated by the one story-vacant restaurant building, which features a red tile roof and stucco exterior, electrical transmission infrastructure, and the existing Audi dealership which features large open windows displaying vehicles framed by metal siding. The buildings are surrounded by asphalt-paved parking areas. The existing visual quality of the site is moderate.

The proposed project involves the construction of a new three-story auto dealership building and a detached one-story car wash as well as surface parking and landscaping. The proposed project would increase the massing and intensity of development on the project site compared to existing conditions by replacing a one-story building and a two-story building with a three-story building. As such, the proposed project would represent a change in the visual character of the project site.

ENVIRONMENTAL CHECKLIST
AESTHETICS

Although the project would increase the massing and height of development compared to existing conditions, as described in Section 10, *Land Use and Planning*, the proposed project would be consistent with maximum allowable height and FAR requirements set forth in the Palo Alto Municipal Code (PAMC). There are multi-story buildings near the site including a two-story office building bordering the project site to the south and three-story office building across Embarcadero Road to the west; therefore, the project would be generally compatible with the range of building heights in the immediate vicinity.

In addition, the project includes a Design Enhancement Exception request to allow an approximately 45-foot setback from the 10-foot build-to-line from Embarcadero Road. Thus, the proposed project would be set back further from Embarcadero Road than the existing building on site. Though the height of the on-site structures would increase from one to two stories (with a third story deck for vehicle storage), the increased setback would serve to retain elements of the existing visual character – surface parking and landscaping, including trees, fronting Embarcadero Road – and would reduce the perceived scale of the building from motorists and passersby on Embarcadero Road. Furthermore, the project would introduce a building of higher visual quality with a contemporary design and several landscaping elements along the project frontage. The additional landscaping would reduce the visual impact of the project and soften the appearance of the new building.

- a) Lastly, as described above under Required Approvals, the proposed project would be subject to Site and Design Review. This review includes a hearing and recommendation by the Planning and Transportation Commission on whether the project accomplishes the following objectives per PAMC Section 18.30(G).060: To ensure construction and operation of the use in a manner that will be orderly, harmonious, and compatible with existing or potential uses of adjoining or nearby sites.
- b) To ensure the desirability of investment, or the conduct of business, research, or educational activities, or other authorized occupations, in the same or adjacent areas.
- c) To ensure that sound principles of environmental design and ecological balance shall be observed.
- d) To ensure that the use will be in accord with the Palo Alto Comprehensive Plan.

This process helps ensure that the approved projects are consistent with the City's adopted goals, policies and guidelines related to site design.

Based on the discussion above, the proposed project would not significantly degrade the existing visual character or quality of the site and its surroundings. Therefore, impacts related to visual character and quality would be less than significant. The required Planning and Transportation Commission review and approval would further ensure that the project addresses the purpose considerations, and findings for design review identified in PAMC Section 18.30(G).060.

LESS THAN SIGNIFICANT IMPACT

b. Would the project significantly alter public viewsheds or view corridors or scenic resources (such as trees, rocks, outcroppings, or historic buildings) along a scenic highway?

The project site is not located along or in proximity to a California State Officially Designated Scenic Highway (California Department of Transportation [Caltrans] 2011) and does not contain scenic resources such as rock outcroppings or historic buildings (see Section 5, *Cultural Resources*). According to Policy Program L-9.1 from the Land Use and Design Chapter of the City of Palo Alto Comprehensive Plan, roads with high scenic value are Sand Hill Road, University Avenue between Middlefield Road and San Francisquito Creek, Embarcadero Road, Page Mill Road, Oregon Expressway, Interstate 280, Arastradero Road (west of Foothill Expressway), Junipero Serra Boulevard/Foothill Expressway, and Skyline Boulevard. The scenic qualities of these roadways are to be preserved. The project site is on Embarcadero Road which northeast of the project site affords scenic views of the Palo Alto Golf Course and ultimately of the Baylands as well as the south bay and the hills of the East Bay. None of these scenic views are currently available through the project site. Views to the Baylands from Embarcadero Road adjacent to the site are blocked by existing development and mature trees. The project would not block views of the Baylands, bay or distant hills from the roadway. Therefore, it would not affect the scenic quality of the roadway.

Figure 8 shows a visual simulation of the proposed project from the Renzel Trail within the Baylands Nature Preserve. At the closest point, the Renzel trail is located approximately 260 feet from the project site. This trail is part of the larger San Francisco Bay Trail and connects to Embarcadero Road via an additional planned segment on Faber Place. As shown, the proposed project appears to be generally consistent with the size and scale of the adjacent two-story office building bordering the project site to the south and views of the proposed new building would largely be blocked by intervening vegetation. The project site is visible from portions of other nearby trails and bike routes such as the freeway overcrossing portion of the St. Francis Drive-Embarcadero Road Crossing-Baylands connector trail and the segment of the Geng Road bike lane adjacent to the Geng Road/Embarcadero Road intersection. However, the existing views of urban development from these limited segments would not change substantially with the project's redevelopment of the site with an incrementally larger building.

Impact related to public viewsheds, view corridors, and scenic resources along scenic highways would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Figure 8 Visual Simulation of Project Site from Renzel Trail Looking North



- c. *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

The project site is in an urbanized area with relatively high levels of existing lighting. The existing lighting on the site and adjacent commercial and roadway uses generate light and glare along all sides of the property. Primary sources of existing light at the project site and adjacent to the project site include lighting associated with the existing commercial buildings, including building mounted lighting, parking lot lighting, and headlights from vehicles on nearby streets. The primary sources of glare on and adjacent to the project site are the sun's reflection from metallic and glass surfaces on buildings and on vehicles parked in on-site parking areas and in adjacent parking lots. The proposed project would incorporate exterior lighting in the form of sign lighting, building-mounted lighting, parking lot lighting, and other safety related lighting. Additionally, interior lighting would be visible through the proposed building's windows. Exterior lighting would be required to conform to PAMC Sections 16.14.170 and 16.144.295, which require fully shielded fixtures to prevent light pollution and glare in the adjacent Baylands nature preserve.

Photometric plans prepared for the proposed project show lighting levels at the northern (Embarcadero Road) project boundary ranging from 0 to 28.1-foot-candles, the western (East Bayshore Road) project boundary ranging from 0 to 45.2-foot candles, the western boundary ranging from 0 to 13.9 foot candles, and the southern (Baylands) boundary ranging from 0 to 2.3.0 foot candles. PAMC Chapter 18.23.030 requires light sources visible from outside project boundaries not exceed 0.5 foot-candles at the project boundaries abutting residential uses. However, as mentioned above, the project site is located in a commercial area with no existing adjacent residential uses.

In terms of glare, the project would reduce surface level parking compared to existing conditions; therefore, glare from metallic and glass surfaces on parked on-site vehicles would be reduced. Overall, the project would only incrementally add to the existing background light and glare levels already present as a result of the surrounding street lighting and urban development and therefore would not create new sources of substantial light or glare which would adversely affect day or nighttime views in the area. Lighting impacts would be less than significant. (Impacts of project lighting on biological resources are discussed in Section 4, *Biological Resources*.)

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project substantially shadow public open space (other than public streets and adjacent sidewalks) between 9:00 a.m. and 3:00 p.m. from September 21 to March 21?*

The proposed auto dealership structure is up to 50 feet high at the top of the elevator tower; therefore, it may cast shadows in the immediate area. The project site is adjacent to an open space area associated with the Baylands. However, the portion of the proposed new building closest to the Baylands (the rear of the Audi dealership) would be approximately 40 feet in height and would be set back approximately 98 feet from the southern property line adjacent to the Baylands. At this distance, the 40-foot-high structure would not substantially cast shadows onto the open space. Further, the closest public recreational use to the southern boundary of the project site is the Renzel Trail approximately 270 feet away. Therefore, the

ENVIRONMENTAL CHECKLIST
AESTHETICS

building would be approximately 368 feet (98 feet plus 270 feet) from this recreational use and would not cast shadows upon it. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Conflict with existing zoning for agricultural use or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Conflict with existing zoning for or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

-
- a. *Would the project convert Prime Farmland, Unique Farmland, 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. *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*
 - c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
 - d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

ENVIRONMENTAL CHECKLIST
AGRICULTURE AND FORESTRY RESOURCES

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

The project is located on Urban and Built-Up Land, per the Department of Conservation's Important Farmland Finder (DOC 2016). The project site is not identified as any farmland type, it is not enrolled in Williamson Act contracts, and it does not support forest land or resources. The project site is not located on or adjacent to agricultural land or forest land and the proposed project would not involve any development that could result in the conversion of farmland to non-agricultural uses. The project site is currently occupied by commercial buildings and parking areas. For these reasons, the project would have no impact with respect to conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use; conflict with existing agricultural zoning or Williamson Act contracts; result in the loss of forest land or conversion of forest land to non-forest use; or other conversion of farmland to non-agricultural use.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

a. Conflict with or obstruct implementation of the applicable air quality plan (such as the 2010 Clean Air Plan or the 2001 Ozone Attainment Plan)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

AIR QUALITY STANDARDS AND ATTAINMENT

The project site is located within the San Francisco Bay Area Air Basin (the Basin), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). As the local air quality management agency, the BAAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards.

Depending on whether or not the standards are met or exceeded, the Basin is classified as being in “attainment” or “nonattainment.” Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The Basin is in non-attainment for the state and federal ozone standards, the state and federal PM_{2.5} (particulate matter up to 2.5 microns in size) standards and the state PM₁₀ (particulate matter up to 10 microns in size) standards and is required to prepare a plan for improvement (BAAQMD 2017a).

The health effects associated with criteria pollutants for which the Basin is in non-attainment are described in Table 2.

Table 2 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM ₁₀)	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma). ^a
Suspended particulate matter (PM _{2.5})	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma. ^a

^a More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in USEPA 2004
Source: USEPA 2018

AIR QUALITY MANAGEMENT

The Bay Area 2017 Clean Air Plan provides a plan to improve Bay Area air quality and protect public health as well as the climate. The legal impetus for the Plan was to update the most recent ozone plan, the 2010 Clean Air Plan, to comply with state air quality planning requirements as codified in the California Health and Safety Code. Although steady progress in reducing ozone levels in the Bay Area has been made, the region continues to be designated as non-attainment for both the one-hour and eight-hour state ozone standards as noted previously. In addition, emissions of ozone precursors in the Bay Area contribute to air quality problems in neighboring air basins. Under these circumstances, state law requires the CAP to include all feasible measures to reduce emissions of ozone precursors and reduce transport of ozone precursors to neighboring air basins (BAAQMD 2017b).

In 2006, the U.S. Environmental Protection Agency (EPA) tightened the national 24-hour PM_{2.5} standard regarding short-term exposure to fine particulate matter from 65 µg/m³ (micro-grams per cubic meter) to 35 µg/m³. Based on air quality monitoring data for years 2006-2008 showing that the region was slightly above the standard, U.S. EPA designated the Bay Area as non-attainment for the 24-hour national standard in December 2008. This triggered the requirement for the Bay Area to prepare a State Implementation Plan (SIP) submittal to

demonstrate how the region would attain the standard. However, data for both the 2008-2010 and the 2009-2011 cycles showed that Bay Area PM_{2.5} levels currently meet the standard. On October 29 2012, the U.S. EPA issued a proposed rule-making to determine that the Bay Area now attains the 24-hour PM_{2.5} national standard. Based on this, the Bay Area is required to prepare an abbreviated SIP submittal which includes an emission inventory for primary (directly-emitted) PM_{2.5}, as well as precursor pollutants that contribute to formation of secondary PM in the atmosphere; and amendments to the BAAQMD New Source Review (NSR) to address PM_{2.5} (adopted December 2012).¹ However, key SIP requirements to demonstrate how a region will achieve the standard (i.e. the requirement to develop a plan to attain the standard) will be suspended as long as monitoring data continues to show that the Bay Area attains the standard.

In addition to preparing the “abbreviated” SIP submittal, the BAAQMD has prepared a report entitled “Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area” (2012). The report will help to guide the BAAQMD’s on-going efforts to analyze and reduce PM in the Bay Area in order to better protect public health. The Bay Area will continue to be designated as “non-attainment” for the national 24-hour PM_{2.5} standard until such time as the Air District elects to submit a “redesignation request” and a “maintenance plan” to the U.S. EPA, and the U.S. EPA approves the proposed redesignation.

AIR EMISSIONS THRESHOLDS

This analysis uses the BAAQMD’s May 2017 CEQA Air Quality Guidelines to evaluate air quality. The May 2017 Guidelines include revisions made to the 2010 Guidelines, addressing the California Supreme Court’s 2015 opinion in the *Cal. Bldg. Indus. Ass’n vs. Bay Area Air Quality Mgmt. Dist.*, 62 Cal. 4th 369 (BAAQMD 2017c). Therefore, the numeric thresholds in the May 2017 BAAQMD CEQA Air Quality Thresholds were used for this analysis to determine whether the impacts of the project exceed the thresholds identified in Appendix G of the State CEQA Guidelines.

The BAAQMD has developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant air quality impacts. If all of the screening criteria are met by a project, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project’s air pollutant emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration. For projects that are infill, such as the project, emissions would be less than the greenfield-type project on which the screening criteria are based (BAAQMD 2017c). BAAQMD does not have specific screening criteria for auto dealership uses and no sufficient alternative screening criteria is available. Therefore, this analysis quantifies emissions associated with the project and compares them to BAAQMD’s numeric significance thresholds.

¹ PM is made up of particles that are emitted directly, such as soot and fugitive dust, as well as secondary particles that are formed in the atmosphere from chemical reactions involving precursor pollutants such as oxides of nitrogen (NOx), sulfur oxides (SOx), volatile organic compounds (VOC), and ammonia (NH₃).

Table 3 presents the significance thresholds for construction and operational-related criteria air pollutant and precursor emissions being used for the purposes of this analysis. These represent the levels at which a project’s individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the Basin’s existing air quality conditions. For the purposes of this analysis, the proposed project would result in a significant impact if construction or operational emissions would exceed any of the thresholds shown in Table 3.²

Table 3 BAAQMD Air Quality Thresholds of Significance

Pollutant/ Precursor	Construction-Related Thresholds		Operation-Related Thresholds	
	Average Daily Emissions (pounds per day)	Average Daily Emissions (pounds per day)	Average Daily Emissions (pounds per day)	Maximum Annual Emissions (tons per year)
ROG	54	54	54	10
NOX	54	54	54	10
PM ₁₀	82 (exhaust)	82	82	15
PM _{2.5}	54 (exhaust)	54	54	10

ROG = reactive organic gases; NO_x = oxides of nitrogen; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less.

Note the thresholds for PM₁₀ and PM_{2.5} apply to construction exhaust emissions only.

Source: Table 2-1, BAAQMD 2017b.

To ensure safe levels of local carbon monoxide (CO) emissions, California ambient air quality standards (CAAQS) set the following thresholds for CO:

- ◆ 9.0 ppm (8-hour average)
- ◆ 20.0 ppm (1-hour average)

BAAQMD provides a preliminary screening methodology to conservatively determine whether a proposed project would exceed CO thresholds. If the following criteria are met, a project would result in a less than significant impact related to local CO concentrations:

1. Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

² Note the thresholds for PM10 and PM2.5 apply to construction exhaust emissions only.

IMPACT ANALYSIS

- a. *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Vehicle use, energy consumption, and associated air pollutant emissions are directly related to population growth. A project may be inconsistent with the applicable air quality plan if it would result in either population or employment growth that exceeds growth estimates included in the plan. Such growth would generate emissions not accounted for in the applicable air quality plan emissions budget. Therefore, projects need to be evaluated to determine whether they would generate population and employment growth and, if so, whether that growth would exceed the growth rates included in the applicable air quality plan. The most recent and applicable adopted air quality plan is the 2017 Clean Air Plan. Therefore, the proposed project would result in a significant impact if it would conflict with or obstruct with implementation of the 2017 Plan.

Given the commercial nature of the proposed project, it would not induce population growth directly as it does not include or directly facilitate provision of housing. The proposed project would increase employment opportunities in Palo Alto. The proposed auto dealership building would increase employment by an estimated 150 jobs (see Section 13, *Population and Housing*). According to the Palo Alto Comprehensive Plan Update (2017), Palo Alto had approximately 89,370 jobs in 2010 and is expected to have 111,030 jobs in 2030. Thus, the addition of approximately 150 employees would not induce employment growth beyond the forecasts. Impacts related to conflict or obstruction of applicable air quality plans would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?*
- c. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?*

Construction of the project would generate temporary construction emissions (direct emissions) and long-term operational emissions (indirect emissions). Project construction generated temporary air pollutant emissions are associated with fugitive dust (PM₁₀ and PM_{2.5}) and exhaust emissions from heavy construction vehicles, in addition to reactive organic gases (ROG) that would be released during the drying phase following application of architectural coatings. Long-term emissions associated with project operation would include emissions from vehicle trips (mobile sources); natural gas and electricity use (energy sources); and landscape maintenance equipment, consumer products and architectural coating associated with on-site development (area sources).

ENVIRONMENTAL CHECKLIST
AIR QUALITY

Emissions associated with the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. Complete CalEEMod results and assumptions can be viewed in Appendix A.

CONSTRUCTION EMISSIONS

As described in the project description, the overall construction schedule would last approximately 27 months at 5 days per week, including 30 days for demolition, 30 days for site preparation, 30 days for grading/excavation, 360 days for building construction, 30 days for paving, and 30 days for architectural coating.

Table 4 summarizes the estimated maximum daily emissions of pollutants at the site during construction of the project. BAAQMD thresholds for construction are based on the average per day, while this analysis uses a maximum per day. Therefore, this analysis is a conservative estimation. As shown in Table 4, the BAAQMD thresholds would not be exceeded. Therefore, impacts would be less than significant.

Table 4 Construction Emissions

	Emissions (lbs/day)					
	ROG	NO _x	CO	PM ₁₀ (exhaust)	PM _{2.5} (exhaust)	SO _x
Maximum Daily Emissions	26.95	45.62	22.65	2.39	2.20	0.067
BAAQMD Thresholds (average daily emissions)	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

^a See Table 2.0 "Overall Construction-unmitigated" emissions. CalEEMod worksheets in Appendix A.

N/A = not applicable; no BAAQMD threshold for CO or SO_x

OPERATIONAL EMISSIONS

As shown in the Table 5, operational emissions associated with the project would not exceed BAAQMD thresholds for any criteria pollutant. Therefore, the project's operational impacts would be less than significant.

Table 5 Operational Emissions

	Emissions (lbs/day)					
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}	SO _x
Average Daily Emissions						
<i>Area</i>	1.7	<0.1	<0.1	<0.1	<0.1	<0.1
<i>Energy</i>	<0.1	0.4	0.3	<0.1	<0.1	<0.1
<i>Mobile</i>	1.6	6.0	15.2	3.3	0.9	<0.1
Emergency Generator (Stationary)	2.2	7.2	8.0	0.3	0.3	<0.1
Total	5.6	13.7	28.6	3.8	1.4	<0.4
BAAQMD Thresholds	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

See Table 2.2 "Overall Operational – Unmitigated Operational" in CalEEMod worksheets in Appendix A.

N/A = not applicable; no BAAQMD threshold for CO or SO_x

CALIFORNIA AMBIENT AIR QUALITY STANDARDS FOR CARBON MONOXIDE

In terms of CO emissions, analysis of the proposed project's traffic impacts (see Section 16, *Transportation*) indicates that the proposed project meets all three criteria listed above under "Air Emissions Thresholds." The project is consistent with the County Congestion Management Program and would not create substantial traffic congestion at area intersections. As a result, the project would have a less than significant impact on local CO concentrations.

As construction and operational emissions would not exceed BAAQMD thresholds for any criteria pollutant and would comply with BAAQMD criteria pollutant thresholds, and CAAQS CO thresholds, the project would not result in individually or cumulatively significant impacts to air quality.

LESS THAN SIGNIFICANT IMPACT

d. Would the project expose sensitive receptors to substantial pollutant concentrations?

The BAAQMD defined sensitive receptors as "those segments of the population most susceptible to poor air quality: children, the elderly, and those with pre-existing serious health problems affected by air quality" (BAAQMD 2017b). Examples of receptors include residences, schools and school yards, parks and play grounds, daycare centers, nursing homes, and medical facilities. The sensitive receptors nearest to the project site are the Bay Area Christian Church and the Hope Technology School, approximately 370 feet to the south. Although the project site is adjacent to an open space area and approximately 270 feet north of the Renzel Trail, these areas are not considered sensitive receptors per BAAQMD definitions as they do not include play areas or play grounds.

As discussed above in response to questions (b) and (c), the project would not generate criteria pollutant emissions that exceed BAAQMD significance thresholds. In addition, Mitigation

Measure AIR – 2 required in the EIR for the City’s 2030 Comprehensive Plan requires applicants for future development projects to comply with the current BAAQMD basic control measures for reducing construction emissions regardless of if they would exceed BAAQMD thresholds. Therefore, with this required implementation of basic control measures to reduce construction dust emissions, nearby receptors would not be exposed to substantial pollutant concentrations.

The California Air Resources Board (ARB) has identified diesel particulate matter (PM_{2.5}) as the primary airborne carcinogen in the state (ARB 2014). In addition, Toxic Air Contaminants (TACs) are a defined set of air pollutants that may pose a present or potential hazard to human health. Common sources of TACs and PM_{2.5} include gasoline stations, dry cleaners, diesel backup generators, truck distribution centers, freeways, and other major roadways (BAAQMD 2017c). The proposed project does not include construction of new gas stations, dry cleaners, highways, roadways, or other sources that could be considered a new non-permitted source of TAC or PM_{2.5} in proximity to receptors. However, the proposed project would introduce a new stationary source of emissions (two diesel-powered emergency generators) which would require a stationary source permit from BAAQMD. As shown in Table 5 above, operational emissions generated by the proposed project, including emissions generated by the two diesel-powered emergency generators, would not result in particulate matter emissions greater than BAAQMD thresholds. Therefore, this impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project create objectionable odors affecting a substantial number of people?

Table 3-3 in the BAAQMD’s 2017 CEQA Guidelines provides odor screening distances for land uses that have the potential to generate substantial odor complaints. The uses in the table include wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, and chemical plants (BAAQMD 2017c). Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. The proposed auto dealership project involves retail sales and repair service operation with ancillary car wash for internal use. These types of uses would not generate objectionable odors that would affect a substantial number of people. Further, no odor-sensitive uses are located in close proximity to the site. Therefore, impacts related to odor are less than significant.

During construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust and during idling. However, these odors would be temporary and would cease upon completion. Overall, the proposed project would not generate objectionable odors affecting a substantial number of people. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or*

regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

- b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*
- d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The project site is located in an urbanized area of Palo Alto, and has been graded and developed/paved for the existing buildings and surface parking lots. There is ornamental landscaping around the perimeter of the existing building and the site. The project site does not contain open land or native vegetation. The salt marsh harvest mouse and the California clapper rail, both on the federal endangered species list, are permanent Baylands residents. The project site is adjacent to the Baylands Nature Preserve which supports Baylands habitat. However, the project site does not contain native or extensive vegetation or other suitable habitat for sensitive or special status species. In addition, the project site does not contain riparian habitat or sensitive natural communities (U.S. Fish and Wildlife Service [USFWS] 2018a) and is not located in a known regional wildlife movement corridor or other sensitive biological area as indicated by the USFWS Critical Habitat portal (USFWS 2018b). Therefore, no federal-or-state-listed endangered, threatened, rare, or otherwise sensitive flora or fauna are anticipated at the project site.

Nonetheless, the project may affect sensitive species with habitat at the Baylands if it were to impact water quality or introduce lighting or noise that would disrupt species or their habitat. As discussed in Section 8, *Hydrology and Water Quality*, the project would not adversely affect water quality at the Baylands.

The proposed increase in site lighting could have the potential to impact birds, fish, and mammals in the Baylands Nature Preserve if bright enough and directed off site. As described in Section 1, *Aesthetics*, light would be directed onto the site and shielded to prevent light trespass. Per the project lighting plans, light levels at the project boundary closest to the Baylands would reach up to 3.0 foot-candles. At this level, lighting may adversely affect sensitive species; therefore, Mitigation Measure BIO-2 is required.

The proposed project would introduce a car wash structure near the boundary of the project with the Baylands. As discussed in Section 10, *Noise*, the areas of the Baylands south of the project site are within the 65 dBA CNEL noise contour modeled by the City of Palo Alto for Highway 101 (City of Palo Alto 2017b). Therefore, noise levels at the Baylands adjacent to the site are assumed to be approximately 65 dBA.

Noise levels associated the proposed car wash equipment were measured at approximately 85.3 dBA Leq at a distance of 10 feet from the car wash exit (Colia Acoustical Consultants 2010). Using the same noise generation assumptions, this would result in noise levels of approximately 71.3 dBA Leq at the Baylands approximately 50 feet from the car wash. This does not take into

account noise attenuation from intervening structures such as a proposed wall around the property line. Overall, at the project site boundary with the Baylands, noise levels may increase up to 6 dBA from approximately 65 to 71 dBA during daytime hours when the car wash is in operation. However, this increase would only be experienced on the portion of the Baylands nearest the project site. Assuming a 6 dBA noise attenuation per doubling of distance, noise levels would be approximately 65 dBA 50 feet past the project site boundary. Overall, noise associated with the car wash would not adversely affect sensitive species.

A total of 80 trees are located on the site and consist of 14 different species of Chinese elm. Of the 80 trees, 25 would be preserved. On-site trees may support nesting birds protected under the California Fish and Game Code (CFGF) and Migratory Bird Treaty Act (MBTA). The removal of 63 trees and construction adjacent to the remaining trees may affect protected nesting birds. Therefore, Mitigation Measure BIO-2 is required to protect nesting birds.

MITIGATION MEASURES

The following mitigation measures are required to reduce the project's potentially significant impact to sensitive species to a less than significant level.

BIO-1 Light Spillover Minimization. On the project boundaries adjacent to the Baylands Nature Preserve, project light sources shall be shielded, directed downward, and focused on the project site, such that light spillover onto the Baylands does not exceed 1.0 foot candle.

BIO-2 Nesting Bird Surveys and Avoidance. Construction of the project and any other site disturbing activities that would involve vegetation or tree removal, shall be prohibited during the general avian nesting season (February 1 – August 31), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist, as approved by the City of Palo Alto, to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the CFGF, nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation clearance and structure demolition. In the event that active nests are discovered, a suitable buffer (typically a minimum buffer of 50 feet for passerines and a minimum buffer of 250 feet for raptors) shall be established around such active nests and no construction shall be allowed within the buffer areas until a qualified biologist has determined that the nest is no longer active (*i.e.*, the nestlings have fledged and are no longer reliant on the nest). No ground disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Under the MBTA, no nest shall be purposefully removed because of or for the purposes of project activities. Nesting bird surveys are not required for construction activities occurring between August 31 and February 1.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measure BIO-1 would ensure that light spillover would not wildlife species present in the adjacent Baylands. Mitigation Measure BIO-2 would ensure protection of nesting birds that may be present on the site during construction activities. These measures would reduce the potentially significant impact to sensitive species to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The National Wetlands Inventory (NWI) was reviewed to determine if any wetland and/or non-wetland waters had been previously documented and mapped on or adjacent to the proposed project site (USFWS 2018). There are no wetlands or jurisdictional waterways on the project site. A 118-acre fresh water emergent wetland, the Baylands, is adjacent to the project site to the east. The Baylands is one of the most significant areas of native marsh vegetation, endangered species habitat, and habitat for waterfowl and shorebirds in the South Bay. Undisturbed, this area can provide a complete food web. The Baylands has a PEM1CH designation, which signifies the area is an impounded, seasonally flooded wetland dominated by persistent herbaceous vegetation. However, the proposed project would not directly impact the Baylands habitat. The project site is adjacent to the Baylands. Potential indirect effects to the wetland habitat related to lighting are discussed in Section 1, *Aesthetics*, and above under criterion (a, b, d). Other indirect effects include potential water quality impacts (such as from erosion during construction or stormwater runoff from the site). As discussed in Section 6, *Geology and Soils*, with required compliance with existing regulations, impacts associated with soil erosion and the loss of topsoil would be less than significant. As discussed in Section 9, *Hydrology and Water Quality*, compliance with listed requirements would ensure that the proposed project would not increase stormwater pollutants or cause erosion such that the water quality of the Baylands would be impacted. Therefore, the construction and operation of the proposed project would not result in indirect effects to wetland function or habitat. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Section 8.10)?*

The purpose of the City of Palo Alto Tree Preservation Ordinance (PAMC Chapter 8.10) is to promote the health, safety, welfare, and quality property within the city, and the establishment of standards for removal, maintenance, and planting of trees. In establishing these procedures and standards, it is the City's intent to encourage the preservation of trees. Under the Tree Preservation and Management Ordinance, discretionary development approvals for property

containing regulated trees must include appropriate conditions providing for the protection of such trees during construction and for maintenance of the trees thereafter or requires replacement of regulated trees in accordance with the prescribed ratios outlined in the Tree Technical Manual. “Protected tree” is defined as any tree of the species coast live oak (*Quercus agrifolia*) or valley oak (*Quercus lobate*) 11.5 inches in diameter (36 inches in circumference) or more when measured 4.5 feet (54 inches) above natural grade and any Redwood tree (*Sequoia sempervirens*) 18 inches in diameter (57 inches in circumference) or more when measured 4.5 feet (54 inches) above natural grade (PAMC Section 8.10.020). According to Section 1.00 Definitions, of the Tree Technical Manual, “street trees” are defined as any publicly owned tree, shrub or plant growing within the street right-of-way, outside of private property. In some cases, property lines lie several feet behind the sidewalks (City of Palo Alto 2001).

The Arborist Report prepared by Monarch Consulting Associates dated April 3, 2018, recorded 80 trees on or adjacent to the site (two Cherry, 26 Chinese elm, 9 Chinese pistache, 9 Crape myrtle, two Japanese maple, two loquat, one Monterey Pine, one Mugo pine, two Palo verde, three Privet, two purple gum lead plum, two red gum eucalyptus, 11 Red ironbark, and eight Silver dollar gum eucalyptus), none of which considered “protected trees” under the Palo Alto Tree Preservation Ordinance. Therefore, although the project would involve tree removal, it would not involve the removal of “protected trees.”

Thirteen “street trees” are located adjacent to the project site along the East Bayshore Road right of way. All of these trees (one Chinese elm and two privet) are planned for removal. A Tree Removal Permit would be required prior to removal of the street trees. In addition, the trees would need to be replaced in accordance with the requirements of the Tree Technical Manual, which is incorporated by reference in PAMC Section 8.10.030, “Tree Technical Manual.” Section 3.20 of the Tree Technical Manual requires replacement of protected and designated trees and outlines the required species, location, size, and number for replacement if a regulated tree (e.g., a protected tree or street tree) is removed. The required tree replacement is based on the species, size, and canopy of the existing trees that would be removed. Replacement trees would include 40 shade trees and 19 ornamental trees that would be planted at various locations along the perimeter of the project site, as illustrated in Figure 7. Replacement trees would include a mixture of native and non-native species, as described on Page 3.

Compliance with Municipal Code requirements for the replacement of 13 street trees would reduce impacts to regulated trees. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The proposed project would not occur within an approved Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (CDFW 2017). No impact would occur.

NO IMPACT

ENVIRONMENTAL CHECKLIST
BIOLOGICAL RESOURCES

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

a. Adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Eliminate important examples of major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Cause damage to an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Directly or indirectly destroy a local cultural resource that is recognized by City Council resolution?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either:				
1. 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, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. A resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1 (c), and considering the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CULTURAL RESOURCES SETTING

The following analysis is based on information sourced from a Historic Resource Evaluation prepared for the former Ming’s Restaurant building at 1700 Embarcadero Road by M-Group on December 4, 2015, which is included in Appendix B of this Initial Study. M-Group’s evaluation included review of archival information for the subject property and review of records available at the Palo Alto Historical Society and the City of Palo Alto Development Center. To aid in the evaluation, M-Group referenced available historic contexts and literature related to the building and its setting. A field survey was performed by M-Group Preservation Specialist Lilly Bianco on November 12, 2015 to prepare photographic documentation and evaluate the level of integrity. In August 2018, Rincon Consultants, Inc. conducted an updated cultural resources records search.

IMPACT ANALYSIS

- a. *Would the project adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City’s Historic Inventory?*
- b. *Would the project eliminate important examples of major periods of California history or prehistory?*
- f. *Would the project directly or indirectly destroy a local cultural resource that is recognized by City Council resolution?*

The proposed project would involve the demolition of the former Ming’s Restaurant building at 1700 Embarcadero Road and a portion of the existing Audi dealership located at 1730 Embarcadero Road. The Ming’s Restaurant building was constructed in 1968 by architects Philip Choy and David Arnold in a neo-eclectic style with a clay-tiled pagoda style roof. The structure is not currently listed on a National and or California Register nor is it listed on the City’s Historic Inventory (City of Palo Alto 2012). M-Group analyzed the structure based on the criteria for eligibility for listing on the California/ National Register of historic places and determined it to be ineligible for listing (see Appendix B). As such, the building was determined not to be an

important example of major periods of California history or prehistory. Therefore, demolition associated with the proposed project would not adversely affect a historic resource listed or eligible for listing on a National, California or local register nor would the project eliminate important examples of major periods of California history or prehistory. No local cultural resources recognized by City Council resolution have been identified on the project site. No impact would occur.

NO IMPACT

- c. *Would the project cause damage to an archaeological resource as defined in §15064.5?*
- d. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*
- e. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The project site is within a highly urbanized area and is currently developed with a commercial restaurant building, auto dealership, and surface parking and has been previously graded and disturbed during construction. A record search of the California Historical Resources Information System (CHRIS), Northwest Information Center (NWIC) located at Sonoma State University indicated that there were three cultural resources within 0.5 miles of the project site, none of which are within the project site. According to the Archaeologically Sensitive Areas Map in the Cultural Resources Element of the City's Comprehensive Plan, the project site is not within a known cultural resource sensitivity area (City of Palo Alto 2014). However, the proposed project would include construction activities such as grading and excavation to a depth of approximately seven feet which could lead to unanticipated discovery of archaeological, paleontological resources or human remains. Unanticipated discovery of archaeological, paleontological resources or human remains would result in a potentially significant impact to these resources. Therefore, adherence to mitigation measures CR-1 and CR-2 is required to reduce potential impacts related to archaeological, paleontological resources or human remains.

MITIGATION MEASURES

The following mitigation measures would reduce impacts regarding disrupting intact archaeological resources, paleontological resources, and human remains to a less than significant level.

CR-1 Resource Recovery Procedures. In the event that archaeological or paleontological resources are unearthed during project construction, all earth-disturbing work in the vicinity of the find shall be temporarily suspended or redirected until an archaeologist or paleontologist has evaluated the nature and significance of the find. If the discovery proves to be significant under CEQA, additional work such as preservation in place, archaeological data recovery, and/or paleontological salvage shall occur as required by the archeologist or paleontologist in coordination with City staff and descendants and/or stakeholder groups, as warranted. After the find has been appropriately treated, depending on the nature of the discovery, work in the area may resume. A Native

American representative shall be retained to monitor mitigation work associated with Native American cultural material.

CR-2 Human Remains Recovery Procedures. 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 the origin and disposition pursuant to the Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measures CR-1 and CR-2 would ensure that cultural resources are identified properly and preserved in the event they are uncovered during construction. Their implementation would reduce impacts regarding disrupting cultural resources to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- g.1. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 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)?*
- g.2. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is 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 2024.1?*

In May 2016 the City of Palo Alto received a single request from a tribe to be contacted in accordance with AB 52. However, through subsequent correspondence with the tribe, it was concluded that the tribe had contacted the City of Palo Alto in error and did not wish to be contacted regarding future projects within the City's jurisdiction. The tribe, the Torres Martinez Desert Cahuilla Indians, is not traditionally or culturally affiliated with the geographic area within the City of Palo Alto. Because no other tribes have requested to be contacted, no notices in accordance with AB 52 were sent and no further action is required.

Although no tribal cultural resources are expected to be present on-site, new ground disturbance would be below the level of past disturbance. As a result, there is the possibility of encountering undisturbed subsurface tribal cultural resources. The proposed excavation of the project site could potentially result in adverse effects on unanticipated tribal cultural resources. However, impacts from the unanticipated discovery of tribal cultural resources during construction would be less than significant with Mitigation Measure TCR-1.

MITIGATION MEASURE

The following mitigation measure would reduce impacts regarding disrupting tribal cultural resources to a less than significant level.

TCR-1 Unanticipated Discovery of Tribal Cultural Resources. In the event that cultural resources of Native American origin are identified during construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted. If the City determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archeologist and the appropriate Native American tribal representative.

SIGNIFICANCE AFTER MITIGATION

Mitigation Measure TCR-1 would ensure that tribal cultural resources are identified properly and preserved in the event they are uncovered during construction and would reduce impacts regarding disrupting tribal cultural resources to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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6 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

a. Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Expansive Soils?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or that would become unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Cause substantial soil erosion or siltation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

GEOLOGY AND SOILS SETTING

Romig Engineers, Inc. prepared a geotechnical investigation for the 1700 Embarcadero Road portion of the project site in August 2015, included in Appendix C. The discussion below is based on the analysis and conclusions of this study.

IMPACT ANALYSIS

a1. Would the project expose people or structures to 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?

The project site is not located within an area that has been identified as having a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map (California Department of Conservation 2015; Romig Engineers Inc. 2015). No known fault lines are located on the site. The closest active fault is the San Andreas Fault which is approximately 7.5 miles southwest of the project site. As a result, the project site would not be subject to ground rupture. No impact would occur.

NO IMPACT

a2. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

As with any site in the Bay Area region, the project site is susceptible to strong seismic ground shaking in the event of a major earthquake. Nearby active faults include the San Andreas Fault, the Stanford Fault, the Monte Vista Fault, and the Hayward Fault. These faults are capable of producing strong seismic ground shaking at the project site. The Seismic Hazards Identification Program of Chapter 16.42 of the PAMC addresses public safety by identifying those buildings in Palo Alto which exhibit structural deficiencies and by accurately determining the severity and extent of those deficiencies in relation to their potential for causing loss of life or injury (City of Palo Alto 2018e). Such a seismic hazards identification program is consistent with California Health and Safety Code Sections 19160 - 19169 and is necessary to implement the Palo Alto Comprehensive Plan's Safety Policy S2.7.3 (City of Palo Alto 2017a). Additionally, with modern construction and adherence to the geology and soil provisions of the California Building Code (CBC), which sets forth seismic design standards (Ch. 16, 18) and geological hazard study requirements (Ch. 18), impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a3. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Liquefaction is a condition that occurs when unconsolidated, saturated soils change to a near-liquid state during ground shaking. The project site is within a potential liquefaction zone as

identified on the Earthquake Zones of Required Investigation Mountain View Quadrangle map (CGS 2006). According to the Palo Alto Comprehensive Plan Update 2030 (2014), the project site is in an area of high liquefaction susceptibility. The geotechnical investigation prepared for the 1700 Embarcadero Road portion of the project site included a liquefaction evaluation to evaluate the potential for earthquake-induced liquefaction of the soils at the site. The evaluation concluded that the soils found between depths of 15 and 45 feet below ground surface could liquefy and cause ground surface settlement between approximately 2.5 to 3.7 inches at the ground surface (Romig Engineers, Inc., 2015). Although the geotechnical study only examined one portion of the project site, it is assumed the soil content of the adjacent 1730 Embarcadero Road site would be substantially similar to the 1700 Embarcadero Road site. Therefore, the same liquefaction hazard exists at both sites. Therefore, Mitigation Measure GEO-1 is required to reduce potential impacts related to liquefaction.

MITIGATION MEASURE

The following mitigation measure would be required to reduce impacts related to liquefaction.

GEO-1 Geotechnical Design Considerations. The recommendations included in the 2015 Geotechnical Investigation conducted by Romig Engineers, Inc. (Appendix C) related to soil engineering shall be incorporated into the proposed project grading and building plans. The recommendations are related to:

- ◆ Foundation design;
- ◆ Surface improvements;
- ◆ Slabs-on-grade;
- ◆ Retaining walls;
- ◆ Vehicle pavements; and,
- ◆ Earthwork.

SIGNIFICANCE AFTER MITIGATION

With implementation of Mitigation Measure GEO-1, the likelihood of significant damage to the proposed buildings from liquefaction would be reduced and the proposed project would not expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques. Impacts would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

a4. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Earthquakes can trigger landslides that may cause injuries and damage to many types of structures. Landslides are typically a hazard on or near slopes or hillside areas, rather than generally level areas like the project site and vicinity. According to the California Seismic Hazard

Zones map, the project site is not located within an earthquake-induced landslide hazard zone (CGS 2006). This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a5. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving expansive soils?*
- b. Would the project expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques?*
- c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

Per the Comprehensive Plan 2030 Update Safety Element, the project site is not located in area of the city with known risk for expansive soils, or a high potential for earthquake-induced landslides. However, the project site is located in an area of very high susceptibility for earthquake-induced liquefaction. Liquefaction hazards are addressed under threshold a3. With mitigation, liquefaction impacts would be less than significant.

Lateral spreading is the horizontal movement or spreading of soil toward an open face. When soils located on a sloping site liquefy, they tend to flow downhill. The project site is generally flat with slopes ranging from two to five percent. According to the Geotechnical Investigation, since there are no open faces or steep creek banks in the immediate site area, there is a low potential for lateral spreading to occur at the site (Romig Engineers Inc. 2015). In addition, the proposed project would be required to comply with applicable provisions for construction related to potential soils hazards in the most recently adopted version of the CBC and the City's building regulations. Compliance with CBC and PAMC requirements would ensure impacts associated with unstable and expansive soils would be less than significant. The proposed project would not expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques. Therefore, impacts would be less than significant with implementation of Mitigation Measure GEO-1.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- d. Would the project result in substantial soil erosion or siltation?*

The project site is developed and generally level, which limits the potential for substantial soil erosion. The grading and excavation phase when soils are exposed has the highest potential for erosion. Ground-disturbing activities that would occur with implementation of the proposed project would include excavation and grading for foundations, building pads, access roads, and utility trenches. Temporary erosion could occur during project construction. The project is required to comply with PAMC Chapter 16.28.070 which requires all land-disturbing activities be undertaken in a manner designed to minimize surface runoff, erosion, and sedimentation

and PAMC Chapter 16.28.120 which requires the applicant implement interim erosion and sediment control measures.

In addition, the proposed project would be required to comply with erosion control standards administered by the San Francisco Bay 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. Such controls would be included as best management practices (BMPs) identified in Stormwater Pollution Prevention Plans (SWPPP) for future development at the project site.

The California Stormwater Quality Association (CASQA) BMP Handbook for Construction (2015) is typically used for guidance in drafting project-specific BMPs for erosion control, amongst other stormwater issues. For example, CASQA Measure WE-1 (Wind Erosion Control) identifies a variety of BMPs to stabilize exposed surfaces and minimize activities that suspend or track dust particles (CASQA 2015). This is commonly achieved by applying soil binders or water to disturbed surfaces.

In addition, Palo Alto Comprehensive Plan Natural Environment Element Policy N5.1.2 requires compliance with BAAQMD's construction emissions control measures (City of Palo Alto 2017b). These measures are aimed at air quality control but also address the minimization or avoidance of erosion and topsoil lost. The Conservation Element (Section 9.6.3) of the BAAQMD CEQA Guidelines includes the following BMPs relevant to the avoidance of erosion and topsoil degradation:

- ◆ Include PM₁₀ control measures as conditions of approval for subdivision maps, site plans, and grading permits;
- ◆ Require subdivision designs and site planning to minimize grading and use landform grading in hillside areas; and
- ◆ Condition grading permits to require that graded areas be stabilized from the completion of grading to the commencement of construction (BAAQMD, 2017).

Compliance with above listed BAAQMD measures and Palo Alto Comprehensive Plan Policy would insure that impacts of the proposed development associated with soil erosion and the loss of topsoil would be less than significant.

As discussed in Section 9, *Hydrology and Water Quality*, the proposed project would not result in substantial siltation. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The proposed project would be connected to the local wastewater treatment system. Septic systems would not be used. No impact would occur.

NO IMPACT

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7 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with any applicable plan, policy, or regulation adopted to reduce the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

CLIMATE CHANGE AND GREENHOUSE GAS (GHG) EMISSIONS

Climate change is the observed increase in the average temperature of the Earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHGs, gases that trap heat in the atmosphere, analogous to the way in which a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), fluorinated gases, and ozone. GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆) (Cal EPA 2015).

The accumulation of GHGs in the atmosphere regulates the earth’s temperature. Without the natural heat trapping effect of GHGs, Earth’s surface would be about 34° C cooler (Cal EPA 2015). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

THRESHOLDS

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions and analysis of the effects of GHG emissions. The adopted CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

According to the *CEQA Guidelines*, projects can tier off of a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (AEP) in their white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions (2016). Palo Alto does not currently have a qualified GHG reduction plan and thus this approach is not currently feasible.

To evaluate whether a project may generate a quantity of GHG emissions that may have a significant impact on the environment, a number of operational bright-line significance thresholds have been developed by state agencies. Significance thresholds are numeric mass emissions thresholds which identify the level at which additional analysis of project GHG emissions is necessary. Projects that attain the significance target, with or without mitigation, would result in less than significant GHG emissions.

In the 2017 BAAQMD *CEQA Air Quality Guidelines*, the BAAQMD outlines an approach to determine the significance of projects. For residential, commercial, industrial, and public land use development projects, the thresholds of significance for operational-related GHG emissions are:

- ◆ Compliance with a qualified GHG Reduction Strategy
- ◆ Annual emissions less than 1,100 metric tons per year (MT/yr) of CO₂e
- ◆ Service person threshold of 4.6 MT CO₂e/SP/yr (residents + employees)

The annual emissions threshold of 1,100 MT of CO₂e per year applies best to the proposed project as Palo Alto does not have a qualified GHG reduction plan and the project is not a high-density project whose impacts would be more appropriately quantified by a service population threshold to reflect the per-person emission efficiency. The BAAQMD annual emissions threshold was designed to capture 90 percent of all emissions associated with projects in the Basin and require implementation of mitigation so that a considerable reduction in emissions from new projects would be achieved. According to the California Air Pollution Control Officers Association (CAPCOA) white paper, *CEQA & Climate Change (2008)*, a quantitative threshold based on a 90 percent market capture rate is generally consistent with AB 32 (CAPCOA 2008). Because the previously established threshold of 1,100 MT CO₂e was not developed to meet the targets established by SB 32, it must be adjusted to meet the new, more conservative, emission reduction target of 40 percent below the 1990 level by 2030. As such, to be consistent with SB

32, the project would need to emit no more than 1,034 MT CO₂e in the estimated project opening year of 2021 to be on trajectory to meet the 2040 reduction established by SB 32. Therefore, the threshold for this project is 1,034 MT of CO₂e per year.

PALO ALTO SUSTAINABILITY AND CLIMATE ACTION PLAN

The City of Palo Alto launched its Sustainability and Climate Action Plan (S/CAP) in August 2014. In April 2016, the City Council adopted the primary goal of the S/CAP to achieve an 80% reduction in GHG emissions by 2030. In November 2016, the City Council adopted the S/CAP Framework, Principles, Guidelines, & Strategies, which establishes a roadmap towards the more ambitious goal of carbon neutrality (zero net GHG emissions). The proposed project would result in a potentially significant impact if it would obstruct the implementation of the S/CAP (City of Palo Alto 2017a,c). The S/CAP includes goals and strategies intended to reduce overall greenhouse gas emissions by 40 percent. Although the S/CAP does not establish quantitative thresholds, a qualitative analysis is provided to determine if the proposed project would obstruct implementation of S/CAP goals. On December 11, 2017, the Palo Alto City Council accepted a 2018-2020 Sustainability Implementation Plan, which focuses on two key S/CAP concerns, Greenhouse Gases and Water, and four action areas: Energy, Mobility, Electric Vehicles, and Water (City of Palo Alto 2017d).

METHODOLOGY

As discussed under Section 3, *Air Quality*, the BAAQMD developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant GHG impacts. If all of the screening criteria are met by a project, then the lead agency or applicant would not need to perform a detailed GHG assessment of their project's GHG emissions (BAAQMD 2017c). BAAQMD does not provide screening criteria for auto dealership uses and no sufficient alternative screening criteria is available. Therefore, CalEEMod version 2016.3.1 was used to calculate total project emissions, which include construction and operational emissions for informational purposes. This methodology is recommended by the California Air Pollution Control Officers Association (CAPCOA) CEQA and Climate Change white paper (CAPCOA 2008). The analysis focuses on CO₂, N₂O, and CH₄ as these are the GHG emissions that on-site development would generate in the largest quantities. Calculations were based on the methodologies discussed in the CAPCOA white paper and included the use of the California Climate Action Registry (CCAR) General Reporting Protocol (CCAR 2009).

OPERATIONAL EMISSIONS

Operational emissions for the proposed auto dealership building and associated parking facilities were modeled using CalEEMod and compared to BAAQMD thresholds.

CalEEMod provides operational emissions of CO₂, N₂O, and CH₄. Emissions from energy use include electricity and natural gas use. The emissions factors for natural gas combustion are based on EPA's AP-42 (Compilation of Air Pollutant Emissions Factors) and CCAR. Electricity emissions are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt hour (CAPCOA 2016). The default electricity consumption values in CalEEMod include the CEC-sponsored California Commercial End Use Survey (CEUS) and

Residential Appliance Saturation Survey (RASS) studies. CalEEMod incorporates 2016 Title 24 CALGreen Building Standards, which are the most recent and thus apply to the proposed project.

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod and utilize standard emission rates from CARB, U.S. EPA, and emission factor values provided by the local air district (CAPCOA 2016).

Emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CalEEMod User Guide 2016). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for Northern and Southern California.

For mobile sources, CO₂ and CH₄ emissions were quantified in CalEEMod. Because CalEEMod does not calculate N₂O emissions from mobile sources, N₂O emissions were quantified using the California Climate Action Registry General Reporting Protocol (CCAR 2009) direct emissions factors for mobile combustion. Estimates of vehicle trips associated with the proposed development are based on trip generation rates from the project Traffic Impact Study (see Appendix F), which developed trip generation rates based on the Institute of Transportation Engineers 9th Edition Trip Generation Manual. The estimate of total daily trips was calculated and extrapolated to derive total annual mileage in CalEEMod. Emission rates for N₂O emissions were based on the vehicle mix output generated by CalEEMod and the emission factors found in the California Climate Action Registry General Reporting Protocol.

Although the project would comply with 2016 CALGreen Building Standards, the specific sustainability features that would be applied to the project are not known to the level of detail required for applying reductions in CalEEMod. Thus, the analysis excludes these sustainability features and is thus a conservative analysis of operational emissions.

CONSTRUCTION EMISSIONS

Construction of the proposed project would generate temporary GHG emissions primarily due to the operation of construction equipment and truck trips. Site preparation and grading typically generate the greatest amount of emissions due to the use of grading equipment and soil hauling. Although construction activity is addressed in this analysis, CAPCOA does not discuss whether any of the suggested threshold approaches adequately address impacts from temporary construction activity. As stated in the CEQA and Climate Change white paper, "more study is needed to make this assessment or to develop separate thresholds for construction activity" (CAPCOA 2008). Additionally, the BAAQMD does not have specific quantitative thresholds for construction activity. Therefore, although estimated in CalEEMod and provided for informational purposes, construction activity is not included in the total emissions calculations.

IMPACT ANALYSIS

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

The project's proposed construction activities, energy use, daily operational activities, and mobile sources (traffic) would generate GHG emissions. CalEEMod was used to calculate emissions resulting from project construction and long-term operation (see Appendix A for model output).

CONSTRUCTION EMISSIONS

Maximum emissions generated by construction of the proposed project are estimated at 627 MT of CO₂e. However, as mentioned under *Construction Emissions*, the BAAQMD does not have a recommended threshold for construction-related GHG emissions. Therefore, emissions associated with construction are not included in Table 6 and compared to BAAQMD significance thresholds.

OPERATIONAL INDIRECT AND STATIONARY DIRECT EMISSIONS

Long-term emissions relate to area sources, energy use, solid waste, water use, and transportation. Each of the operational sources of emissions is discussed further below.

AREA SOURCE EMISSIONS

CalEEMod was used to calculate direct sources of air emissions associated with the proposed project. These include consumer product use and landscape maintenance equipment. Area emissions are estimated at <0.1 MT of CO₂e per year.

ENERGY USE EMISSIONS

Operation of the proposed auto dealership would consume both electricity and natural gas. The generation of electricity through combustion of fossil fuels emits CO₂, and to a smaller extent, N₂O and CH₄. As discussed above, annual electricity and natural gas emissions can be calculated using default values from the CEC sponsored CEUS and RASS studies that are built into CalEEMod. The proposed project would generate approximately 472 MT of CO₂e per year associated with overall energy use, of which approximately 383 MT of CO₂e per year is due to electricity consumption and approximately 89 MT of CO₂e per year is due to natural gas use.

SOLID WASTE EMISSIONS

Based on the estimate of GHG emissions from project-generated solid waste as it decomposes, solid waste associated with the proposed project would generate approximately 116 MT of CO₂e per year.

WATER USE EMISSIONS

Based on the amount of electricity generated in order to supply and convey water for the project, the proposed project would generate an estimated 17 MT of CO₂e per year.

TRANSPORTATION EMISSIONS

Mobile source GHG emissions were estimated using the trip generation rates from the project Traffic Impact Study. As calculated by CalEEMod based on these trip generation rates, the proposed project would generate an estimated 707,104 annual VMT. As noted above, CalEEMod does not calculate N₂O emissions related to mobile sources. As such, N₂O emissions were calculated based on the project’s VMT using calculation methods provided by the California Climate Action Registry General Reporting Protocol (January 2009). The proposed project would emit an estimated 289 MT of CO₂e per year from mobile sources.

COMBINED STATIONARY AND MOBILE SOURCE EMISSIONS

Table 6 combines the operational and mobile GHG emissions associated with the proposed project. The annual emissions would total approximately 909 MT of CO₂e per year. These emissions do not exceed the 1,034 MT of CO₂e per year threshold for compliance with BAAQMD thresholds as adjusted for SB 32 targets. Since GHG emissions would not exceed the adjusted BAAQMD threshold, the project would not generate a substantial increase in GHG emissions and would not conflict with AB 32 or SB 32. This impact would be less than significant.

Table 6 Operational GHG Emissions

Emissions Source	Annual Emissions (MT of CO ₂ e/year)
Operational	
Area	<1
Energy	472
Waste	117
Water	17
Mobile	
CO ₂ and CH ₄	289
N ₂ O	14
Total	909
BAAQMD Threshold (<i>Adjusted for SB 32</i>)	1,034
Exceeds Threshold?	No

See Table 2.2 “Overall Operational” emissions. CalEEMod worksheets in Appendix A

b. Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

As mentioned above, the City of Palo Alto released a draft Sustainability and Climate Action Plan (S/CAP) in 2016 which is aimed at promoting sustainable development and lowering greenhouse gas emissions. The S/CAP does not contain any quantitative thresholds that apply directly to the proposed project; however, 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. The proposed project has characteristics that are consistent with S/CAP Goal 2.1 to reduce GHG emissions and energy consumption in buildings. Sustainable design measures currently under consideration include energy-efficient LED shielded lamps throughout, electrical vehicle chargers, drought-tolerant landscaping, reduced outdoor water use/irrigation and an automated car wash utilizing recycled water infrastructure. The project would also be required to implement green building requirements in accordance with the City's Green Building Ordinance (Ord. 5393 § 1 (part), 2016).

Furthermore, the project would also include components consistent with S/CAP Goal 3.1 to Divert 95 percent of waste from landfills by 2030, and ultimately achieve Zero Waste to landfills. Specifically, the proposed project would reuse demolition materials such as paving, slabs, concrete walls and footings for base material in the new building and all remaining demolition materials not suitable for use as base will be sorted onsite by the contractor to ensure architectural salvage material is diverted away from landfills.

The proposed project would be infill development that is accessible for pedestrians, bicyclists, and public transit users. Increased access to alternative transportation may reduce vehicle trips compared to projects that are not infill development thereby reducing mobile-related GHG emissions and contributing to achieving AB 32, SB 32, and other GHG-reduction goals.

According to *The Impacts of Sea-Level Rise on the California Coast*, prepared by the California Climate Change Center (CCCC 2009), climate change has the potential to induce sea level rise in the coming century. The rising sea level increases the likelihood and risk of flooding. The project site is located approximately 0.5 mile from the San Francisco Bay and is in a 100-year flood hazard zone according to the FEMA Flood insurance map (Palo Alto 2016). According to the Cal-Adapt website, the project site is at risk for inundation from sea level rise (Cal-Adapt 2016). However, the proposed project itself would not contribute to the effect of sea level rise and would not increase the risk of on-site or off-site flooding.

The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and would be consistent with the objectives of the RTP/SCS, AB 32, SB 32, SB 97 and SB 375. Therefore, impacts related to GHG emissions would be less than significant.

LESS THAN SIGNIFICANT IMPACT

**ENVIRONMENTAL CHECKLIST
GREENHOUSE GAS EMISSIONS**

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8 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project have any of the following impacts:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site or from location on listed hazardous material sites compiled pursuant to Government Code Section 65962.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Result in a safety hazard from a public airport for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

HAZARDS AND HAZARDOUS MATERIALS SETTING

Two separate Phase I Environmental Site Assessments (ESA) were conducted for the project site including one prepared for 1700 Embarcadero Road portion of the project site by Romig Engineers in June 2013 (Romig 2013) and a second prepared for 1730 Embarcadero Road portion of the project site by the EI Group in April 2018 (EI Group 2018) (see Appendix D for both reports). A database search of public lists of sites that generate, store, treat, or dispose of hazardous materials or sites for which a release or incident has occurred for the project site and surrounding areas was conducted during both Phase I ESAs. Federal, state, and county lists were reviewed as part of the research effort. Facilities/ properties identified to be of potential environmental concern within one-half mile of the project site are listed in Table 7.

Table 7 EDR Listing Summary of Selected Sites

Site Address	Distance from Project Site	Database Results
Project Site		
1700 Embarcadero Road	--	No files found, not listed
1730 Embarcadero Road	--	LUST – Case Closed as of 1998
Adjacent Sites		
1766 Embarcadero Road	Eastern adjoining property	LUST, Status: NFA
2480 Faber Place	Eastern adjoining property	Automotive repair facility, no reported violations or non-compliances
2500 Faber Place	Southeastern adjoining property	LUST, Status: NFA

Source: State Water Resources Control Board 2015.
LUST = Leaking Underground Storage Tank
NFA = No Further Action

Based on the Phase I ESA reports and a review of available documents, the property at 1730 Embarcadero Road was listed in the databases searched. The 1730 Embarcadero Road is the portion of the project site currently occupied by Audi Palo Alto. A file review of the property indicated that four underground storage tanks (USTs): one 550-gallon kerosene UST, one 1,000-gallon gasoline waste oil UST, one 1,000-gallon diesel UST, and 10,000-gallon gasoline UST were removed between October 7 and October 10, 1996. During the UST removal, Xylenes, oil and grease impacted soils were encountered beneath two of the USTs and groundwater encountered beneath the 10,000-gallon UST was found to be contaminated with low levels of hydrocarbons (TPH-g, Toluene, Bthylbenzene, Xylenes, Lead and MTBH). Soil samples collected during the UST removal indicated a maximum Xylenes concentration of 0.029 milligrams per kilogram (mg/kg), and 147 milligrams per kilogram (mg/kg) of oil and grease. Water samples contained 21 ug/L of Benzene, 120 ug/L of Toulene, 22 ug/L of Ethylbenzene, 130 ug/L of Xylenes, and 0.2 mg/L Lead in the water sample (HK2, Inc/ SEMCO 1996).

Groundwater monitoring conducted in January 1998 revealed groundwater depths at the project site were five feet below ground surface and indicated a reduction of hydrocarbons in the groundwater beneath the property. At the time of groundwater monitoring, levels of all hydrocarbons previously detected onsite (except for TPH-g) were below laboratory reporting

limits. TDS concentrations ranged from 4,000,000 to 747,000,000 ug/L. According to a letter from the Leaking Underground Storage Tank Oversight program dated January 30, 1998 residual groundwater and soil contamination at the property have attenuated and are below regulatory concern. The property received a regulatory case closure by the Santa Clara Valley Water District on January 30, 1998 as the site does not pose a continued threat to groundwater, human health, or the environment (HK2, Inc./ SEMCO 1998).

IMPACT ANALYSIS

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

CONSTRUCTION ACTIVITIES

Construction of the proposed project would require the use of heavy machinery and construction equipment, such as a grader, front loader, and dump truck. The operation of these vehicles and machinery could result in a spill or accidental release of hazardous materials, including fuel, engine oil, engine coolant, and lubricants. Because the proposed project would disturb a project site that is over one acre in size (4.82), the applicant would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ) to comply with Clean Water Act NPDES requirements. Compliance with these requirements would include preparation of a Storm Water Pollution Prevention Plan, which would specify Best Management Practices to quickly contain and clean up any accidental spills or leaks.

Ground-disturbing activities that would occur with implementation of the proposed project would include site-specific grading for foundations, building pads, access roads, and utility trenches. Excavation for building foundations would require grading to a depth of approximately seven feet and piles to support the building foundation would extend up to 80 feet below the foundation. Groundwater was detected at a level of four feet below ground surface. As discussed under subsection (d) below, the portion of the project site (1730 Embarcadero) is included on a list of hazardous material sites and soil and groundwater on the project site and was found to be contaminated with oil and grease (soil) and low levels of hydrocarbons (groundwater). However, cleanup and remediation has been completed and the site status has been changed to closed- completed.

Construction activities may include the temporary transport, storage, and use of potentially hazardous materials including fuels, lubricating fluids, cleaners, solvents, contaminated groundwater or contaminated soils. The transport of any hazardous materials would be subject to federal, state and local regulations, which would assure that risks associated with the transport hazardous materials are minimized. In addition, construction activities that transport hazardous materials would be required to transport such materials along designated roadways within the County, thereby limiting risk of upset.

Implementation of the proposed project would require demolition of an existing on-site building, which due to its age (approximately 48 years old), may contain asbestos, PCBs, and/or lead-based paint. Structures built before the 1970s (1968) typically contained asbestos containing materials (ACM). Because the building at 1700 Embarcadero Road was constructed before the time of the federal ban on the manufacture of PCBs, it is possible that light ballasts in the onsite building contains PCBs. Demolition of this structure could result in health hazard impacts to workers if not remediated prior to construction activities. However, demolition and construction activities would be required to adhere to BAAQMD Regulation 11, Rule 2, which governs the proper handling and disposal of ACM for demolition, renovation, and manufacturing activities in the Bay Area, and California Occupational Safety and Health Administration (CalOSHA) regulations regarding lead-based materials. The California Code of Regulations, §1532.1, requires testing, monitoring, containment, and disposal of lead-based materials, such that exposure levels do not exceed CalOSHA standards. DTSC has classified PCBs as a hazardous waste when concentrations exceed 50 parts per million in non-liquids, and the DTSC requires that materials containing those concentrations of PCBs be transported and disposed of as hazardous waste. Any light ballast that is removed would be evaluated for the presence of PCBs and managed appropriately. With adherence to BAAQMD, CalOSHA, and DTSC policies regarding ACM, lead-based paint, and PCBs, impacts would be less than significant.

Although a portion of the project site is listed as a LUST cleanup site, the levels of soil and groundwater contamination levels are below levels of regulatory concern. As such, development of the site would not expose the public or the environment to unacceptable health risks from contaminated soil and groundwater. This impact would be less than significant.

OPERATIONAL ACTIVITIES

The proposed project would facilitate the construction of new automotive uses including installation of a car wash building and associated above ground greywater storage tank which could involve the use, storage, disposal or transportation of hazardous materials. These materials would not be substantially different from commercial and industrial chemicals and solvents already in general and wide use throughout the region and project area. The surrounding area is known for automotive uses, and the proposed project would not differ substantially from existing onsite and nearby uses and activities. The project site currently contains an Audi dealership and an auto dealership (Anderson Honda) and an auto body repair shop (Matthews-Carlsen Body Works) is located nearby.

As with any automotive activities that involve the storage and use of hazardous materials, onsite activity involving hazardous substances (such as the petrochemicals, polymers, and basic inorganics), and the transport, storage and handling of these substances must adhere to applicable local, state, and federal safety standards, ordinances, and regulations, including development of a Hazardous Materials Business Plan (HMBP). HMBPs are prepared by operators of businesses storing, transporting or using hazardous materials. HMBPs must include an inventory of hazardous materials at a facility, emergency response plans and procedures in the event of a reportable release or threatened release, employee training information and a

site map that shows hazardous materials handling/ storage areas and emergency exists. Businesses that are engaged in the use, sale, storage, or transport of hazardous substances are monitored by various local (e.g., Santa Clara County DEH and the Palo Alto Fire Department) and State (e.g., Department of Toxic Substance Control) entities. Auto-related uses would be required to store hazardous materials in designated areas designed to prevent accidental release into the environment. Potentially hazardous waste produced during operation would also be collected, stored and disposed of in accordance with applicable laws and regulations. Compliance with existing laws and regulations governing the transport, use, release and storage of hazardous materials and wastes, including the required SWPPP and HMBP, would reduce impacts related to exposure of the public or environment to hazardous materials to less than significant levels.

LESS THAN SIGNIFICANT IMPACT

- c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

Hope Technology School, located approximately 370 feet south on East Bayshore Road, is the closest existing school to the project site. However, as mentioned above (a, b) the proposed project would comply with existing laws and regulations governing the transport, use, release and storage of hazardous materials and wastes, including the required SWPPP and HMBP. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. Would the project create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site or from location on listed hazardous material sites compiled pursuant to Government Code Section 65962.5?*

As discussed above, two Phase I ESAs were conducted for the two parcels comprising the project site (Appendix D). According to these studies, the State and local file review materials revealed that 1730 Embarcadero Road was listed as a LUST site and four leaking underground storage tanks were reported. However, the property received a No Further Action (NFA) status in January 1998 and the case was declared closed due to reduced levels of soil and groundwater contamination below levels of regulatory concern. No engineering controls were required by the State of California as a result of the NFA determination.

LESS THAN SIGNIFICANT IMPACT

- e. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

The project site is in an urban area in Palo Alto. According to the Comprehensive Plan, the project site is not adjacent to or within the vicinity of wildlands. As a result, there would be no

risk of exposing people or structures to a significant risk of loss, injury or death involving wild land fires. No impact would occur.

No IMPACT

- f. Would the project result in a safety hazard from a public airport for people residing or working in the project area?*
- g. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

The project site is located in close proximity to the Palo Alto Airport, a 103-acre facility with a single run way owned and operated by the City of Palo Alto. The airport primarily serves small general aviation aircraft. The project site is approximately 0.3 miles from the airport property line and 0.5 miles from the runway. According to the Comprehensive Land Use Plan for the Palo Alto Airport, the project is located in the Traffic Pattern Zone and in a height restricted area of 79 feet (Santa Clara County 2016). The project involves construction of a structure up to 50 feet in height and would not exceed the height restrictions nor conflict with the airport operations. The Traffic Pattern Zone is a portion of the airport area routinely overflown by aircraft operating in the airport traffic pattern. The potential for aircraft accidents is relatively low in this area and no land use restrictions are in place (Santa Clara County 2008). Therefore, the proposed project would not result in a safety hazard for people residing or working in the project area. The project is not located within the vicinity of a private airstrip. Therefore, a less than significant impact related to airport safety would occur.

LESS THAN SIGNIFICANT IMPACT

- h. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed project does not involve the development of structures that could potentially impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. No streets would be closed, rerouted or substantially altered. The project involves the refurbishment of three existing entryways to the project site, which would be required to be reviewed and approved by the Palo Alto Fire Department to ensure safe emergency access is provided. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

9 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase the rate, volume, or flow duration of stormwater runoff or alter the existing drainage pattern of the site or area, including altering the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site, including increase in-stream erosion?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in stream bank instability?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Significantly increase the rate, volume, or flow duration of stormwater runoff in a manner which would result in new or increased flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Provide substantial additional sources of pollutants associated within urban runoff or otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
h. Place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Place structures in a 100-year flood hazard area that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including that occurring as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k. Result in inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project violate any water quality standards or waste discharge requirements?*
- e. *Would the project significantly increase the rate, volume, or flow duration of stormwater runoff in a manner which would result in new or increased flooding on- or off-site?*
- f. *Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

The project site is located within the San Francisco Bay Hydrologic Region and is subject to the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB). Within the San Francisco Bay Hydrologic Region, the project site is located within the South Bay Hydrologic Planning Area, as defined by the Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin. The Basin Plan defines beneficial uses and water quality objectives (which together are known as water quality standards) for waters in the region. The SFBRWQCB also defines waste discharge requirements for discharges that could affect water quality for waters of the State, including groundwater. No waterbodies cross the project site. However, the Basin Plan defines beneficial uses for several nearby waterbodies (SFBRWQCB, 2015). San Francisquito Creek, which is located approximately 0.2-mile north of the project site, supports beneficial uses for cold and warm freshwater water habitat, fish migration, fish spawning, wildlife habitat, and contact and noncontact water recreation. Matadero Creek and Mayfield Slough are located approximately 0.7 mile south of the project site. Matadero Creek supports beneficial uses for cold Freshwater, fish migration, preservation of rare and endangered species, fish spawning, warm freshwater habitat, wildlife habitat, as well as contact and

noncontact water recreation. Mayfield Slough supports beneficial uses for estuarine habitat (EST), fish migration, preservation of rare and endangered species, wildlife habitat, contact and noncontact water recreation. The three waterbodies listed above all drain to the Palo Alto Harbor and Baylands, which supports beneficial uses for EST, fish migration, preservation of rare or endangered species, wildlife habitat, contact and noncontact recreation. The designated beneficial uses of San Francisquito Creek are impaired by pesticides, sediment, and trash. The beneficial uses of Matadero Creek are impaired by pesticides and trash.

The project site is generally flat and currently developed with approximately 77 percent of the lot area covered by impervious surfaces. The high point in the project vicinity is located near the intersection of East Bayshore Road and Embarcadero Road. On-site runoff occurs as overland flow across the existing pavement and generally flows to the south and east. This overland flow is eventually captured by the City's storm drain system and conveyed to the nearest waterway and eventually to the San Francisco Bay. Off-site runoff is transported beneath the project site via storm drains that eventually convey the stormwater runoff to the San Francisco Bay. The proposed project would increase impervious surfaces from 161,431 square feet to 163,952 square feet which represents a 1.6 percent increase in impervious surfaces and could result in a proportional increase in runoff. However, the proposed project includes 5,271 square feet of low impact development features, such as lined bioretention facilities, flow through planters, and mounted flow-through planter boxes, which would serve to capture, slow, and overall reduce runoff flow. Therefore, the proposed project would not significantly increase the rate, volume, or flow duration of stormwater runoff at the project site and the project would not exceed the capacity of existing stormwater drainage systems.

In addition, the project would be required to comply with Chapter 16.11.030 of the PAMC, which addresses stormwater pollution prevention. These stormwater regulations require new development projects to implement permanent stormwater pollution prevention measures to control the sources of stormwater pollutants. Additionally, as part of Section 402 of the Clean Water Act, the U.S. Environmental Protection Agency has established regulations under the National Pollution Discharge Elimination System (NPDES) program to control both construction and operation (occupancy) storm water discharges. In California, the State Water Quality Control Board administers the NPDES permitting program and is responsible for developing permitting requirements. The project would be required to comply with the NPDES permitting system. Under the conditions of the permit, the project applicant would be required to eliminate or reduce non stormwater discharges to waters of the nation, develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for the project construction activities, and perform inspections of the storm water pollution prevention measures and control practices to ensure conformance with the site SWPPP. The state permit prohibits the discharge of materials other than storm water discharges and prohibits all discharges that contain a hazardous substance in excess of reportable quantities established at 40 Code of Federal Regulations (CFR) 117.3 or 40 CFR 302.4. The state permit also specifies that construction activities must meet all applicable provisions of Sections 301 and 402 of the Clean Water Act (CWA). Conformance with Section 402 of the CWA would ensure that the proposed project does not violate water quality standards or waste discharge requirements, provide a substantial additional source of polluted runoff, or otherwise substantially degrade water quality. With compliance with these requirements and installation of on-site bio-swales,

impacts would be less than significant. The proposed project would not increase stormwater pollutants or cause erosion such that the water quality of the nearby waterbodies would be impacted.

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

As discussed in Section 17, *Utilities and Service Systems*, the proposed project would receive its water from the San Francisco Public Utilities Commission (SFPUC). The Regional Water System collects water from the Tuolumne River in the Sierra Nevada and from protected local watersheds in the East Bay and Peninsula. Development under the proposed project does not include installation of new groundwater wells or use of groundwater from existing wells. Additionally, the project is currently almost entirely impermeable. Implementation of the proposed project would not result in a net deficit in aquifer volume or a lowering of the groundwater table.

LESS THAN SIGNIFICANT IMPACT

c. Would the project substantially increase the rate, volume, or flow duration of storm water runoff or alter the existing drainage pattern of the site or area, including altering the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site, including increase in-stream erosion?

d. Would the project result in stream bank instability?

The proposed project would not alter the course of a stream or river and would not cause stream bank instability. San Francisquito Creek is located 0.2-mile north of the project site and does not flow through or adjacent to the site. Additionally, Matadero Creek and Mayfield Slough are located 0.7 mile south of the project site and do not flow through or adjacent to the site. In addition, the project site is located adjacent to the Baylands which are designated as Freshwater Emergent Wetland by the U.S. Fish and Wildlife Service, Wetland Inventory (USFWS 2018). The area is currently developed, and construction of the proposed project would not alter the course of these waterways or any other stream or river (no other surface water features are identified in the project area). The area is largely paved and covered with impervious surfaces; the project would increase impervious surfaces by approximately two percent. The proposed development would not introduce new paved areas to the extent that the rate of surface runoff would substantially increase.

The City of Palo Alto is a participating agency in the Santa Clara Valley Urban Runoff Pollution Prevention Program ("Program"). The City must meet the provisions of the Municipal Regional Stormwater Permit by ensuring that new development and redevelopment mitigate water quality impacts to stormwater runoff both during the construction and operation of projects.

The Program's Permit Provision C.3 contains requirements for controlling the potential impacts of land development on stormwater quality and flow. Projects that create or replace 10,000 square feet or more of impervious surface must include appropriate site design measures, pollutant source controls and treatment control measures. Projects that produce increases in runoff peak flows, volumes and durations that may cause erosion in downstream receiving water must also include hydromodification control measures to reduce impacts related to stormwater runoff.

The project site is connected to an existing stormwater drainage system located in the City of Palo Alto San Francisco Bay Watershed. Stormwater runoff in the project area is currently flowing directly to the San Francisco Bay. The proposed project would involve replacing more than 10,000 square feet of impervious surfaces and would be subject to the requirements of the City's Municipal Regional Stormwater Permit. The project site is currently developed and nearly entirely covered by impervious surfaces (impervious surfaces make up 77 percent of the total project area).³ The proposed project would increase the amount of impervious surface area from 161,431 square feet to 163,747 square feet, a 1.4 percent increase compared to the existing conditions.

As mentioned in thresholds a, e, and f above, the project would include low impact development features such as bioretention facilities and flow through planters which would collect, filter and reduce runoff flowing from the project site to municipal storm drains. Although the proposed project would increase impervious surfaces which could generate increased runoff, this increase would be minimal, and incorporation of design features required by state and local regulations would reduce potential impacts related to stormwater runoff volumes and flooding on- or off-site to less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project provide substantial additional sources of pollutants associated with urban runoff or otherwise substantially degrade water quality?

The project would involve demolition of an existing vacant commercial building and a portion of an existing auto dealership. The vacant commercial building was built in 1968 and as discussed in Section 8, *Hazards and Hazardous Materials* could contain asbestos and lead paint. In addition, oil, fuels, solvents, paint and other hazardous and potentially hazardous materials commonly used in auto service uses are likely present at the existing auto dealership and could be transported via runoff during demolition. Therefore, project demolition could provide substantial additional sources of pollutants associated with urban runoff.

Operation of the proposed project would expand existing auto service and sales uses to the 1700 Embarcadero Road, which would provide additional sources of pollutants commonly associated with auto service uses. However, this increase in potential pollutants would not be substantial considering the level of existing development and use at the project site. In addition, the project would increase the impervious surfaces at the project site; however, as discussed above, the project would include low impact development features which would

³ 161,431 sf impervious area/ 209,888 sf gross project area = 0.769 or 77 percent

collect, filter, and reduce runoff before it enters the municipal storm drain system and the project would adhere to the applicable state and local regulations.

Excavation for building foundations would require grading to a depth of approximately seven feet and piles to support the building foundation would extend up to 80 feet below the foundation. Groundwater was encountered approximately four feet below ground surface. Therefore, the project may require dewatering if groundwater is exposed during construction activities. If groundwater is encountered, the City's *Construction Dewatering System Policy and Plan Preparation Guidelines* require that excavation activities that encounter groundwater submit a Construction Dewatering Plan to the City's Public Works Department (City of Palo Alto 2013). The Public Works Department would review and permit the dewatering plan prior to commencement of dewatering as part of the Street Work Permit process. The Construction Dewatering Plan must comply with the City's Guidelines that require that water be tested for contaminants prior to initial discharge and at intervals during dewatering. In the dewatering plan, the applicant must include provisions for keeping sediment and contaminated groundwater out of the storm drain system. With adherence to the City's policies regarding dewatering, contaminated groundwater would not enter the stormwater system.

Therefore, with adherence to requirements listed above, the project would not degrade water quality. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- h. Would the project place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?*
- i. Would the project be placed in a 100-year flood hazard area structures that would impede or redirect flood flows?*
- j. Would the project expose people or structures to a significant risk of loss, injury or death involve flooding by placing housing or other development within a 100-year flood hazard area or a levee or dam failure inundation area?*

The project site is located within Flood Zone AE, a Special Flood Hazard Area (SFHA), with a base flood elevation of 11 feet (FEMA Flood Insurance Rate Map No. 06085C0030H effective May 18, 2009). The base flood elevation is the minimum height of the flood waters during a 100-year event and is reported in feet above sea level from the base flood elevation. Flooding in the AE Zone is due to potential overtopping of the Bayfront levees in the event of an extremely high tide. The Flood Insurance Rate Maps were prepared under the assumption that the levees will overtop or fail (City of Palo Alto 2014).

The proposed auto dealership building would have an elevated finished floor slab on a series of piers to establish the required height above sea level per FEMA standards. Since the project site is within the AE zone, the base flood elevation for the project site is 11 feet above mean sea level (MSL). The finished floor elevation for the proposed project would be at 11.5 feet MSL. Therefore, the building would be above the flood elevation. FEMA requires an elevation certificate to confirm that new buildings in all identified SFHAs are properly elevated. This elevation information is needed to show compliance with the floodplain management

ordinance. Communities participating in the Community Rating System (CRS) are required to use the FEMA Elevation Certificate (FEMA 2016). As a community participating in the National Flood Insurance Program, Palo Alto is required to impose the federal rules regarding construction in an SFHH. Pursuant to Chapter 16.52 Flood Hazard Regulations, the proposed project would be required to comply with PAMC Section 16.52.130, Standards of Construction. This ordinance requires buildings located in FEMA flood zones to be constructed with at least two openings in the walls to allow passage of flood waters and submittal of a certified FEMA Evaluation Certificate prepared by a registered professional engineer. Adherence to this policy would reduce impacts associated with locating the proposed project in a 100-year flood zone and levee failure to a less than significant level.

According to Map S-7 in the City's Comprehensive Plan Safety Element, the project site is in a dam inundation area for the Searsville Reservoir. However, compliance with required flood hazard regulations of the PAMC would minimize risks associated with flooding from dam inundation. Overall, impacts would be less than significant with compliance with existing regulations.

LESS THAN SIGNIFICANT IMPACT

k. Would the project result in inundation by seiche, tsunami, or mudflow?

The project site is located approximately 0.5 miles from the San Francisco Bay and approximately 16 miles from the coast of the Pacific Ocean. The risk of a tsunami is negligible due to the distance from the Pacific Ocean. The nearest water of body that could experience a seiche event is the San Francisco Bay, and it is not anticipated that a seiche in the Bay would have potential to affect the project site. The project site is flat and surrounded by commercial development away from crests and very steep ridges. Therefore, the project site is located in a low hazard area for tsunami, seiche, and mudflow. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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10 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the Comprehensive Plan, CAP, or the City’s Zoning Ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with an applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. Would the project physically divide an established community?

The project site is located on Embarcadero Road in a fully urbanized area of Palo Alto. Implementation of the proposed project would continue the existing commercial development pattern in the vicinity and would not cut off connected neighborhoods or land uses from each other. No new roads, linear infrastructure or other development features are proposed that would divide an established community or limit movement, travel or social interaction between established land uses.

NO IMPACT

b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed project’s consistency with the City of Palo Alto Comprehensive Plan and Zoning Ordinance are discussed below.

CITY OF PALO ALTO COMPREHENSIVE PLAN

The project site has a Comprehensive Plan land use designation of Service Commercial. As described in the City’s 2030 Comprehensive Plan Land Use and Community Design Element (2017), typically uses in the Service Commercial designation are “[f]acilities providing citywide and regional services and relying on customers arriving by car... Typical uses include auto

services and dealerships, motels, lumberyards, appliance stores and restaurants, including fact service types.”

The project would involve construction of a three-story auto dealership on two parcels designated Service Commercial (SC) in the 2030 Comprehensive Plan and zoned for Service Commercial and Planned Community. The proposed project and use would be consistent with the land uses envisioned for the Service Commercial areas under the 2030 Comprehensive Plan.

CITY OF PALO ALTO ZONING ORDINANCE

The project site includes two parcels with the zoning designation of Service Commercial (CS) (APN 008-03-084) and Planned Community (PC), with a Design (D) Review Combining Districts (D) overlay (APN 008-03-066). The proposed project includes a request for a zoning amendment on the parcel zoned PC from PC to CS and to apply the Auto Dealership (AD) overlay to the entire site. According to PAMC Chapter 18.30.020, the AD combining district may be combined with a CS district and the CS(AD) combining district permits auto dealerships. Assuming the request to add the AD overlay is approved, the proposed project and use would be consistent with the zoning designation.

Pursuant to PAMC Section 18.16.060, Development Standards, the maximum floor area ratio for auto dealership uses is 0.4 to 1, with an additional 0.2:1 FAR permitted exclusively for auto showroom space, for a total FAR of 0.6:1. The maximum height allowed is 50 feet. The proposed auto dealership building would have a FAR of 0.4:1 and maximum roof height of 47 feet, not including the elevator tower and mechanical screens which would extend up to 50 feet in height. Per PAMC 18.40.090, mechanical screens and elevator towers are allowed to exceed the height standard up to 15 feet. Therefore, the proposed project would be consistent with the FAR and height requirements in the PAMC. The proposed project would also meet parking requirements in accordance with PAMC 18.52 and 18.54.

The applicant is also requesting a Design Enhancement Exception (DEE) per PAMC Section 18.46.050 to deviate from the “build-to-line” requirement with the CS district and from the parking lot tree canopy shade requirement. According to the build-to-line requirement for the CS district, 50 percent of the frontage of the building is required to be built to the front setback of 10 feet from Embarcadero Road. The proposed project would be set back 45 feet from Embarcadero Road. Therefore, none of the building would be built to the front 10-foot setback. However, assuming DEE is granted, the proposed project would not conflict with the build-to-line requirement of 50 percent of the building frontage to be 10-feet from Embarcadero Road. The proposed auto dealership structure would also be set back 80 feet from East Bayshore Road to accommodate the 80-foot utility easement for the high voltage power lines. There are no code requirements preventing this type of setback in the PAMC for the CS district.

BAYLANDS MASTER PLAN

The project site is located in the City’s Baylands Master Plan area. According to the 2008 Baylands Master Plan Elements, the project site is located within the “Privately Owned Lands” designation. Privately owned lands in the Baylands area consist of approximately 90 acres of

industrial research, office, and commercial uses concentrated along Embarcadero Road and East Bayshore Frontage Road. The private lands policies of the Baylands Master Plan are:

1. Be sure any future development is consistent with the Comprehensive Plan and continues to receive extensive design review utilizing the Site and Design Review Process and the Site Assessment and Design Guidelines Palo Alto Nature Preserve.
2. Provide screen planting along the southerly urbanized edge of the private property facing the former ITT property.

The Site Assessment and Design Guidelines for the Palo Alto Baylands Nature Preserve (City of Palo Alto 2005) were prepared to help implement the Baylands Master Plan and the Baylands-related policies and programs in the Comprehensive Plan. The guidelines are intended to be used when designing or reviewing projects located in any part of the Baylands. While the more specific guidelines are primarily applicable to the dedicated parkland, the design principles and concepts should also be applied in the service and commercial areas when designing or reviewing projects for compatibility with the special aesthetic qualities and environmental conditions unique to the Baylands. The Planning and Transportation Commission and City Council would consider this policy context and the site's proximity to the Baylands during their review of the project. Therefore, with ARB review and approval it is anticipated that the final design would be consistent with the first private lands policy in the Baylands Master Plan.

As shown in Figure 8, the proposed project would involve landscaping trees and shrubs along the eastern perimeter of the project site, screening views from the Baylands. The proposed project would thus also be generally consistent with the second policy that calls for screening planting to buffer the Baylands from development.

Based on the discussion above, the proposed project would be generally consistent with the Baylands Master Plan. In addition, the proposed project would not involve the direct removal, filling, hydrological interruption, or other means to the bed, bank, channel or adjacent upland area of the fresh water emergent wetland.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project conflict with an applicable habitat conservation plan or natural community conservation plan?*

The project site is not adjacent or within with a habitat conservation or natural community conservation plan. No impact would occur.

NO IMPACT

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11 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project have any of the following impacts:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The project site and surrounding properties are part of an urbanized area with no current oil or gas extraction. According to the Natural Environment Element of the Comprehensive Plan, there are no policies relating to mineral resources because Palo Alto does not contain any mineral deposits of regional significance (City of Palo Alto 2017a). No mineral resource activities would be altered or displaced by the proposed project. No impact would occur.

NO IMPACT

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12 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in any of the following impacts:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project near a private airstrip, would it expose people residing or working in the project area to excessive noise?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

NOISE SETTING

Noise

Noise is unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most

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sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Because of the logarithmic scale of the decibel unit, sound levels cannot be added or subtracted arithmetically. If the physical intensity of a sound is doubled, the sound level increases by 3 dBA, regardless of the initial sound level. For example, 60 dBA plus 60 dBA equals 63 dBA. Where ambient noise levels are high in comparison to a new noise source, the change in noise level would be less than 3 dBA. For example, when 70 dBA ambient noise levels are combined with a 60 dBA noise source the resulting noise level equals 70.4 dBA.

Noise that is experienced at any receptor can be attenuated by distance or the presence of noise barriers or intervening terrain. Sound from a single source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. For acoustically absorptive, or soft, sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), ground attenuation of about 1.5 dBA per doubling of distance normally occurs. A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receiver, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dBA of noise reduction.

Vibration

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise; e.g., the rattling of windows from passing trucks. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel wheeled trains, and traffic on rough roads.

REGULATORY SETTING

The City's Comprehensive Plan Natural Environment Element includes goals and policies related to noise. This element establishes land use compatibility categories for community noise

exposure (see Table 8). The Comprehensive Plan does not specify an exposure level for automotive sales/ service uses. For the sake of this analysis, the automobile dealership would be considered a business commercial use. For business commercial uses, noise levels up to 70 dBA Ldn are identified as normally acceptable and noise levels between 70 and 80 dBA Ldn are identified as conditionally acceptable.

Table 8 Palo Alto Land Use Compatibility for Community Noise Environments

Land Use Category	Exterior Noise Exposure Ldn or CNEL or dB		
	Normally Acceptable	Conditionally Acceptable	Unacceptable
Residential, Hotel and Motels	50-60	60-75	75+
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds	50-65	65-80	80+
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, Churches	50-60	60-75	75+
Office Buildings, Business Commercial, and Professional	50-70	70-80	80+
Auditoriums, Concert Halls, and Amphitheaters	N/A	50-75	75+
Industrial, Manufacturing, Utilities, and Agriculture	50-70	75+	N/A

Source: City of Palo Alto Comprehensive Plan 2030 Update Noise Natural Environment Element(2017)

The PAMC regulates noise primarily through the Noise Ordinance, which comprises Chapter 9.10 of the Code, under Title 9, Public Peace, Morals and Safety. The Municipal Code contains additional specific and general provisions relating to noise. PAMC Section 9.10.040 states that “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.” PAMC Section 9.10.060 includes a daytime exception to the provisions in Section 9.10.040 stating that any noise source which does not produce a noise level exceeding 70 dBA at a distance of 25 feet under its most noisy condition of use shall be exempt from the provision of Section 9.10.040 between the hours of 8:00 a.m. and 8:00 p.m. Monday through Friday, 9:00 a.m. and 8:00 p.m. on Saturday, and 10:00 AM and 6:00 PM on Sundays and holidays.

The Noise Ordinance also regulates noise associated with construction activities. Section 9.10.060 of the PAMC restricts construction activities to the hours of 8 AM to 6 PM Monday through Friday and 9 AM to 6 PM on Saturday. Construction is prohibited on Sundays and holidays (New Year’s Day, Labor Day, Martin Luther King Day, Columbus Day, Washington’s birthday, Veteran’s Day, Memorial Day, Thanksgiving Day, Independence Day, Christmas Day). Construction, demolition or repair activities during those hours must meet the following standards:

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- ◆ No individual piece of equipment shall produce a noise level exceeding 110 dBA at a distance of 25 feet. If the device is housed within a structure on the property, the measurement shall be made out-side the structure at a distance as close to 25 feet from the equipment as possible.
- ◆ The noise level at any point outside of the property plane of the project shall not exceed 110 dBA.
- ◆ 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

PROJECT SITE NOISE ENVIRONMENT

Like many urban areas, Palo Alto’s noise environment is dominated by transportation-related noise, including car and truck traffic and trains. Highway 101 is the largest source of traffic noise in Palo Alto, with other highways and major roadways contributing as well. These include El Camino Real, the Oregon Expressway, the Foothill Expressway, Highway 280, Embarcadero Road, San Antonio Road, Middlefield Road, University Avenue, Page Mill Road, and Alma Street, among others. Noise along all of these roadways is generated by private cars, trucks, buses, and other types of vehicles. Caltrain also runs through the center of Palo Alto and contributes to the noise environment of the city. Air traffic makes only a modest contribution to the noise environment of Palo Alto.

One noise measurement was taken with an Extech 407780A-NIST sound level meter on September 10, 2018 during morning peak-hour traffic. Figure 9 shows the location of the measurement and Table 9 summarizes the results of this measurement. The primary noise was automobile traffic on Highway 101 as well as area roadways such as Embarcadero Road and East Bayshore Road. Secondary noise sources included car wash activities on-site and vehicle backup alarms in the vicinity of the project site. As shown, noise levels on Embarcadero Road near the project site were measured at 70 dBA Leq.

Table 9 Measured Ambient Noise Levels on the Project Site

#	Location	Primary Noise Source	Time	Leq
1	Project site near intersection of Embarcadero and Geng Road	Embarcadero Road	8:47 AM to 9:02 AM	70.0

Source: Rincon Consultants, Inc. field measurement, September 10, 2018
See Appendix E for noise measurement results.

Figure 9 Noise Measurement Location



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Fig. 9 Noise Measurement Location

Generally speaking, residential, educational, and medical uses are more sensitive to noise than commercial and industrial activities. Noise-sensitive uses (“sensitive receptors”) are defined as those facilities including, but not limited to, areas containing residences, schools, hospitals, rest homes, long-term medical or mental-health care facilities, or any other land use areas deemed noise sensitive by the local jurisdiction. Policy N-6.3 of the City’s Comprehensive Plan Noise Element generally defines sensitive noise receptors as schools, hospitals, convalescent homes, senior and child care facilities, and public conservation land. Although the project site is adjacent to an open space area associated with the Baylands, according to the Comprehensive Plan Land Use Map, the area adjacent to the project site is designated as “Open Space/Controlled Development” not “Public Conservation Land.” Therefore, the Baylands area adjacent to the site is not considered a noise-sensitive receptor. The nearest sensitive receptors are the Hope Technology School, a kindergarten through 8th grade program, and the Bay Area Christian Church, both located on the same site approximately 370 feet south of the project site. Both the project site and these sensitive receptors are within the 65 dBA CNEL noise contour modeled by the City of Palo Alto for Highway 101 (City of Palo Alto 2017b). Noise from vehicles traveling on Highway 101 is a primary noise source at the church and school.

IMPACT ANALYSIS

- a. *Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*
- c. *Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

The following analysis considers permanent operational noise that would result from the project. Operation of the proposed project would generate noise associated with the auto repair uses, HVAC equipment, emergency generators, traffic on adjacent roadways, and the car wash. These are discussed in detail below.

AUTO REPAIR

Primary noise sources associated with auto repair activities typically include: car movements (on and off lifts), pneumatic tools, voices, and general work with hand tools. Noise associated with the proposed auto repair use is assumed to be similar to other auto repair uses. Therefore, Rincon Consultants utilized reference noise level data collected for an approved technical memorandum prepared for an auto service station at an auto dealership in the City of Berkeley. Noise levels associated with auto repair services were measured at 49 to 66 dBA Leq at a distance of 50 feet away from the open garage doors (Rincon Consultants 2018). Using the same noise generation assumptions, this would result in noise levels of 31.6 to 48.6 dBA Leq at the nearest sensitive receptors, located 370 feet from the project site. Therefore, noise from the auto repair area would not approach the City’s modeled ambient noise level of 65 dBA CNEL at the distance of these sensitive receptors from traffic on Highway 101. Furthermore, the auto repair area would be subject to the PAMC noise ordinance requirements, specifically Section 9.10,040, which states that “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.” The on-site auto repair facilities would have a less than significant noise impact.

MECHANICAL EQUIPMENT

Mechanical equipment includes heating, ventilation, and air condition (HVAC) equipment which is typically located on the roof of a building or within an interior mechanical room. Per the project plans, mechanical equipment would be located on the roof, approximately 689 feet from the Hope Technology School. Acoustic engineers have measured rooftop-mounted HVAC equipment at 60 to 70 dBA Leq at a distance of 15 feet from the source (Illingworth and Rodkin 2009). Based on a standard noise attenuation rate of 6 dBA per doubling of distance from stationary equipment, noise from the HVAC system at a distance of 689 feet would be approximately 26.8 to 36.8 dBA Leq. Therefore, HVAC noise would not approach the City’s modeled ambient noise level of 65 dBA CNEL at the distance of the nearest sensitive receptors from traffic on Highway 101. In addition, the project would include two emergency generators which would generate noise temporarily during testing or use. Generators would be located in an enclosed generator room at the back of the Audi dealership and would be approximately 540 feet from the Hope Technology School; therefore, noise from the generators would not be audible at the school. Overall, mechanical equipment associated with project operation would not result in an increase in Ldn at nearby sensitive receptors. On-site mechanical equipment would have a less than significant noise impact.

DELIVERY AND TRASH TRUCKS

Delivery and trash hauling trucks would access the project site via East Bayshore Road. Delivery and trash hauling trucks would periodically idle on-site near the eastern boundary of the project site where the Audi dealership and Mercedes Benz dealerships meet. The average noise level for a single idling truck is estimated at 80 dBA Leq at a distance of 10 feet (BridgeNet 2008). Garbage trucks have been measured at 65 dBA Leq at a distance of 50 feet while idling and up to 80-90 dBA while emptying dumpsters (DSA Engineers 2003). Trucks accessing the project site from East Bayshore Road could idle as close as 370 feet from the Hope Technology School to the south of the site. Based on an attenuation rate of 6 dBA per doubling of distance, the maximum anticipated noise levels at a distance of 370 feet would be 47.6 dBA from idling mail delivery trucks and 62.6 to 72.6 dBA from garbage trucks. Estimated noise from garbage trucks emptying dumpsters would exceed the measured ambient noise level of 70 dBA Leq. However, garbage trucks would not exceed the City’s standard of 95 dBA at a distance of 25 feet for refuse collection activities (PAMC Section 9.10.060(h)). While trucks accessing the project site would contribute to the overall noise environment, trucks regularly utilize the roadways to access other properties, including the adjacent commercial buildings. As such, noise from delivery and trash trucks would be consistent with existing noise sources and would not significantly contribute to the exterior Ldn at the nearby school and church receptors.

TRAFFIC NOISE

The project would replace an existing auto dealership and vacant restaurant building with a new auto dealership and service center. As shown in Table 12 in Section 16, *Transportation*, with the removal of the existing auto dealership and restaurant, the project would result in a

net increase of 471 average daily trips compared to existing conditions. While a doubling of traffic produces a 3 dBA increase in noise, the project would result in a 5.4 percent increase in daily traffic⁴, which would result in a less than 0.162 dBA increase in traffic noise. A change of 3 dBA is barely perceptible by human hearing (FHWA 2017); therefore, the increase in traffic noise would not be perceptible. Therefore, traffic-related noise would result in a less than significant noise impact.

CAR WASH

Operation of the project would involve internal use of an automatic car wash which includes noise-generating mechanisms such as water sprayers, brushes, and dryers. The applicant proposes to use 45 horsepower car dryers from Broadway Car Wash Equipment. Based on a previous acoustical study that assessed car wash noise associated with this type of equipment at another Mercedes Benz location (Colia Acoustical Consultants 2010), the dryer/blower sequence was found to be the loudest level of the car wash cycle. The highest noise generation in the dryer cycle was the blower start-up, and the dryer duration is approximately 60 to 90 seconds. For the proposed project, the car wash exit would be near the southwestern portion of the project site and the dryers would be located in the car wash tunnel approximately 15 feet from the car wash exit. The measured noise level at the similar car wash was found to be 85.3 dBA Leq at approximately 10 feet from the car wash exit.

Using a standard noise attenuation of 6 dBA per doubling of distance, this would result in noise levels of 53.9 dBA Leq at the nearest sensitive receptors, located 370 feet from the project site. This estimate is conservative in that it does not take into account noise attenuation from intervening topography or structures. Therefore, noise from the car wash would not approach the City's modeled ambient noise level of 65 dBA CNEL at the distance of these sensitive receptors from Highway 101.

Although car wash noise would not adversely affect the closest noise-sensitive receptor, noise from car wash operation may be audible at the adjacent office development. The proposed car wash would be adjacent to the property line for the office development and the office building is approximately 100 feet from the property line. At the property line adjacent to the car wash exit, noise levels could reach up to 83.5 dBA (estimated noise level at 10 feet from the car wash exit at a 45 degree angle as shown in Figure 4 of Colia Acoustical Consultants 2010 report). This estimate is conservative as it does not take into account noise attenuation from intervening structures such as a proposed wall around the property line. Office uses are not typically considered noise-sensitive receptors; however, office workers could potentially be disturbed by car wash noise which would occur during normal business hours. Further, noise from the car wash could exceed the PAMC noise ordinance requirements set forth in Section 9.10,040, which states that "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

⁴ Conservatively extrapolating trips that proceeded through the intersection during the p.m. peak hour (the peak hour with the highest project-generated trips; thus project traffic would cause a greater percent increase in the p.m. peak hour than the a.m. peak hour), and multiplying by an industry-standard factor of 10 yields a daily roadway volume of approximately 8,730, or 9,201 with an added 471 daily trips (Appendix F).

eight dB above the local ambient at any point outside of the property plane.” The local ambient noise level is assumed to be 65 dBA, as the project site is within the 65 dBA CNEL noise contour modeled by the City of Palo Alto for Highway 101 (City of Palo Alto 2017b). Therefore, noise levels may exceed 73 dBA (8 dBA above local ambient). In order to ensure compliance with the City’s noise ordinance requirements, mitigation is required.

MITIGATION MEASURE

Mitigation Measure N-1 is required to reduce operational noise associated with the proposed car wash facility.

N-1 Car Wash Noise Reduction. Prior to operation of the car wash, the project applicant shall implement the following noise reduction measures to ensure car wash noise does not exceed 73 dBA at the nearest property line in order to comply with PAMC Section 9.10.040:

- ◆ Housings or silencers shall be installed on the dryers/blower fans.
- ◆ Noise attenuation mats shall be installed on the interior of the car wash tunnel
- ◆ Dryers/blowers shall be installed as far into the tunnel as feasible.

SIGNIFICANCE AFTER MITIGATION

Depending on the type of housings or silencers used, noise reduction from the housings or silencers would be approximately 5 to 10 dBA (Advanced Engineering Acoustics 2017; Proto-Vest, Inc. 2019). Therefore, the City anticipates that implementation of Mitigation Measure N-1 would overall reduce car wash noise by between 10 and 15 dBA, which would ensure that noise levels associated with the car wash would not exceed City of Palo Alto Noise Ordinance requirements. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project expose persons to or generation of excessive groundborne vibration or groundborne noise levels?

The proposed project would involve the use of construction equipment that would generate groundborne vibration, such as bulldozers, loaded trucks, jack hammers, and auger drill rigs. In accordance with the PAMC, noise- and vibration-generating construction activity is limited to the hours of 8 AM to 6 PM Monday through Friday and 9 AM to 6 PM on Saturday. Construction is prohibited on Sundays and holidays (New Year’ Day, Labor Day, Martin Luther King Day, Columbus Day, Washington’s birthday, Veteran’s Day, Memorial Day, Thanksgiving Day, Independence Day, Christmas Day).

The closest building to the project site is the Honda Dealership approximately 45 feet to the east; however, the closest noise-sensitive receptor to the project site is the school (Hope Technology) approximately 370 feet south of the project site. Table 10 estimates the vibration levels from construction equipment at these receptors. The nearest historic structure in the vicinity of the project site is located approximately 0.5 mile east therefore, impacts from project construction are not anticipated (City of Palo Alto 2012). As shown in Table 10, vibration levels could reach approximately 82 Vdb at the Honda Dealership and approximately 64 Vdb at the

ENVIRONMENTAL CHECKLIST
NOISE

Hope Technology School, the closest receptor. Therefore, vibration levels would not exceed the FRA threshold of 75 VdB for institutions and buildings where people normally learn, including schools. Impacts to the nearby school would be less than significant. In addition, vibration levels would not exceed 95 VdB at any fragile historic buildings and therefore would not cause damage to such structures.

Table 10 Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 ft (in/sec)	Estimated VdB		
		At 25 ft	At 45 ft	At 370 ft
Large Bulldozer	0.089	87	82	64
Caisson Drill ¹	0.089	87	82	64
Loaded Truck	0.076	86	81	63
Jack Hammer	0.035	79	74	56

Source: Federal Transit Administration 2006.

¹ Because the Federal Transit Administration's *Transit Noise and Vibration Impact Assessment* does not provide reference vibration levels for auger drill rigs, it is assumed that vibration levels generated by similar equipment (i.e., caisson drills) are representative.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

The project would generate temporary noise increases during construction. Temporary noise increases would result from construction activities such as demolition, asphalt removal, grading, and excavation activities. Noise impacts are a function of the type of activity being undertaken and the distance to the receptor location. The closest building to the project site is the adjacent Honda Dealership building approximately 45 feet east of the site; however, the closest sensitive receptor to the project site is a school (Hope Technology) approximately 370 feet south of the project site. Table 11 identifies various construction equipment noise emission levels for different types of construction equipment at 370 feet from the source.

Table 11 Estimated Maximum Construction Noise – dBA Leq

Construction Phase	Equipment	Estimated Noise at 370 feet (dBA Leq)
Demolition	Excavator (3), dozer (2), concrete saw	69
Site preparation	Tractor/backhoe/loader (4), dozer (3)	69
Grading	Excavator, dozer, grader, tractor/backhoe/loader (3)	68
Building construction	Crane, forklift (3), generator, welder, tractor/backhoe/loader (3), auger drill rig	67
Paving	Paving equipment (2), paver (2), roller (2)	69
Architectural coating	Air compressor	56

See Appendix E for RCNM modeling results.

Section 9.10.060 of the PAMC, restricts construction activities noise associated with construction activities are restricted to the hours of 8 AM to 6 PM Monday through Friday and 9 AM to 6 PM on Saturday. Construction is prohibited on Sundays and holidays (New Year’s Day, Labor Day, Martin Luther King Day, Columbus Day, Washington’s birthday, Veterans Day, Memorial Day, Thanksgiving Day, Independence Day, Christmas Day). Construction, demolition or repair activities during those hours must meet the following standards:

- ◆ No individual piece of equipment shall produce a noise level exceeding 110 dBA at a distance of 25 feet. If the device is housed within a structure on the property, the measurement shall be made out-side the structure at a distance as close to 25 feet from the equipment as possible.
- ◆ The noise level at any point outside of the property plane of the project shall not exceed 110 dBA.
- ◆ 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 sub-contractors, their employees, agents, materialmen and all other persons at the construction site, of the basic requirements of this chapter.

In addition, pursuant to Section 9.10.040 of the PAMC, in commercial and industrial properties, no person shall produce, suffer or allow to be produced by any machine or device a noise levels exceeding more than 8 dBA above the local ambient noise level at any point outside of the property line.

As Table 11 shows project daytime construction noise would approach 69 dBA Leq at a distance of 370 feet which is less than the 110 dBA maximum limit for construction activities. In addition, construction noise levels would be similar to the ambient noise levels at the project site which were observed at 70 dBA Leq. Therefore, construction activities would comply with PAMC construction noise regulations and would not result in a substantial temporary or periodic

ENVIRONMENTAL CHECKLIST
NOISE

increase in ambient noise levels in the project vicinity above levels existing without the project. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. For a project located in 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?*
- f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise?*

As discussed in Section 8, *Hazards and Hazardous Materials*, the project is in proximity to the Palo Alto Airport, a public airport. The airport's Comprehensive Land Use Plan included an analysis of annual aircraft operations and related noise levels to prepare CNEL noise exposure maps for using current and forecast aircraft operations based on the existing runway configuration. The project site is located outside of the mapped Palo Alto airport noise contours according to Figure 5 of the airport's Comprehensive Land Use Plan (Santa Clara County 2016). Thus, the project would not expose people working in the project area to excessive noise levels from aircraft overflights. As a result, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

13 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in any of the following impacts:				
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Create a substantial imbalance between employed residents and jobs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project 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)?*

The proposed project would not involve the development of new residential units and therefore would not directly contribute to population growth. However, the proposed auto dealership building would generate approximately 150 new jobs that could indirectly generate population growth and a greater need for employee housing. In 2014, when the City conducted a study on its jobs-housing balance, there were 95,460 jobs in the City and 31,165 employed residents. The 150 additional jobs associated with the proposed project would represent a less than 0.2 percent increase in jobs. Therefore, the proposed project would not significantly increase jobs within the city and would not result in substantial indirect population growth.

LESS THAN SIGNIFICANT IMPACT

b. *Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

c. *Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

The existing site is currently developed with a vacant commercial building and an occupied auto dealership. Thus, construction of the proposed project would not displace substantial numbers of housing units or otherwise cause substantial human displacement.

NO IMPACT

d. Would the project create a substantial imbalance between employed residents and jobs?

As discussed in the City's Comprehensive Plan 2015-2023 Housing Element (adopted November 2014), the City has a jobs/housing imbalance skewed to the jobs side of the ratio. Recent estimates put the current jobs/housing balance at 3.05 jobs per employed resident (City of Palo Alto 2014). This trend requires the City to import most of its workers to meet the needs of business and industry, indicating an unmet need for housing in the City. The Housing Element, in conjunction with amendments to the City's Zoning Code, have attempted to address the jobs/housing imbalance by allowing greater densities in transit areas, allowing mixed-use residential developments, and providing density bonuses for projects with affordable housing.

Although the proposed project would generate new jobs, as discussed under items b and c above, the project would not substantially increase the City's jobs/ housing ratio. The proposed auto dealership land use is consistent with Palo Alto's Comprehensive Plan land use designation for the project site. Moreover, the CS zone, which includes a portion of the project site at 1700 Embarcadero Road, does not permit residential uses. The project involves infill development on a site that is not currently used for housing and is entirely designated for commercial uses. Lastly, the site is currently developed with a vacant one-story, 10,000-square-foot commercial building which could potentially be re-occupied by a conforming use without discretionary approval. Therefore, although the project would incrementally contribute the city's jobs/housing imbalance, the project's contribution to overall employment in Palo Alto would be minimal. The project's contribution to the imbalance between jobs and employed residents would be adverse, but less than significant.

LESS THAN SIGNIFICANT IMPACT

14 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in any of the following impacts:				
a. Result in an adverse physical impact from the construction of additional school facilities in order to maintain acceptable performance standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in an adverse physical impact from the construction of additional fire protection facilities in order to maintain acceptable performance standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in an adverse physical impact from the construction of additional police protection facilities in order to maintain acceptable performance standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in an adverse physical impact from the construction of additional parks and recreation facilities in order to maintain acceptable performance standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in an adverse physical impact from the construction of additional library facilities in order to maintain acceptable performance standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project result in an adverse physical impact from the construction of additional school facilities in order to maintain acceptable performance standards?*

Historically, the demand for school facilities has increased nearly proportionally to the amount of new housing that is built in the Palo Alto Unified School District (PAUSD) service area (PAUSD n.d.). The proposed project would involve the construction of a new auto dealership building. Since the proposed project would not involve new residential uses, the project would not directly increase the number of school-aged children in the area. As discussed in Section 13, *Population and Housing*, the proposed project would add approximately 150 jobs. The potential indirect increase in school-aged children associated with an increase of approximately 150 jobs would not affect schools such that new facilities would need to be constructed. Further, pursuant to Senate Bill 50 (Section 65995(h)), payment of mandatory fees to the affected

school district would reduce potential school impacts to less than significant level under CEQA. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in an adverse physical impact from the construction of additional fire protection facilities in order to maintain acceptable performance standards?

The City of Palo Alto Fire Department (PAFD) provides fire protection, fire suppression, paramedic ambulance service, search and rescue, fire prevention inspections/permits, public fire education programs, emergency preparedness planning, and other services based on community needs. The closest fire department is Station 2 (Mayfield) at 2675 Hanover Street, located approximately 3.2-miles east of the project site (City of Palo Alto 2018b). The site is within the existing service area of the PAFD and on-site construction would be required to comply with applicable Fire Code requirements. The project would not create excessive demand for emergency services or introduce development to areas outside of normal service range that would necessitate new fire protection facilities. With the continued implementation of existing practices of the City, including compliance with the California Fire Code, the proposed project would not significantly affect community fire protection services and would not result in the need for construction of fire protection facilities. The auto dealership and car wash buildings would be consistent with the land use designation and would be required to meet the requirements of the California Fire Code, and thus would not require the construction of new fire protection facilities.

LESS THAN SIGNIFICANT IMPACT

c. Would the project result in an adverse physical impact from the construction of additional police protection facilities in order to maintain acceptable performance standards?

The Palo Alto Police Department (PAPD) provides police protection for the project vicinity. The closest police station is located at 275 Forest Avenue, approximately 2.5 miles northwest of the project site. The project site is within the PAPD's service area and is currently serviced by the PAPD. The project would not create substantial new demand for police services or introduce development to areas outside of normal service range that would necessitate new police protection facilities. The proposed project would not result in the need for new or expanded police protection facilities and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in an adverse physical impact from the construction of additional parks and recreation facilities in order to maintain acceptable performance standards?

Please refer to Section 15, *Recreation*.

NO IMPACT

e. Would the project result in an adverse physical impact from the construction of additional library facilities in order to maintain acceptable performance standards?

The Palo Alto City Library (PACL) provides library services to the project site. As discussed in Section 13, *Population and Housing*, the proposed project would not directly generate population growth and would only incrementally increase employment in the City. Therefore, the project would not substantially impact the capacity of existing library facilities such that the construction of new facilities would be required.

NO IMPACT

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15 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in any of the following impacts:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The City of Palo Alto owns and operates approximately 36 parks and preserves, comprising about 162 acres of urban parks and 4,000 acres of open space (City of Palo Alto 2018f). There are three parks within a mile radius of the project site, including the Baylands Nature Preserve, Bixby Park, and Greer Park. The project would not involve the construction or expansion of recreational or park facilities. Further, as discussed in Section 13, *Population and Housing*, the proposed auto dealership building would not directly generate population growth or substantially generate employment growth such that the construction of new park or recreational facilities would be required. No impact would occur.

NO IMPACT

ENVIRONMENTAL CHECKLIST
RECREATION

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16 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in any of the following impacts:

- | | | | | |
|---|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a. Cause an intersection to drop below its level of service standard, or if it is already operating at a substandard level of service, deteriorate by more than a specified amount? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Cause a roadway segment to drop below its level of service standard, or deteriorate operations that already operate at a substandard level of service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Cause a freeway segment or ramp to operate at LOS F or contribute traffic in excess of 1 percent of segment capacity to a freeway segment or ramp already operating at LOS F? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Impede the development or function of planned pedestrian or bicycle facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. Increase demand for pedestrian and bicycle facilities that cannot be met by current or planned services. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. Impede the operation of a transit system as a result of congestion or otherwise decrease the performance of safety of such facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g. Create demand for transit services that cannot be met by current or planned services? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h. Create the potential demand for through traffic to use local residential streets? Cause any change in traffic that would increase the Traffic Infusion on Residential Environment (TIRE) index by 0.1 or more? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| i. Create an operational safety hazard? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

ENVIRONMENTAL CHECKLIST
TRANSPORTATION

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
j. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
l. Cause queuing impacts based on a comparative analysis between the design queue length and the available queue storage capacity? Queuing impacts include, but are not limited to, spillback queues at project access locations; queues at intersections that block through traffic; queues at lane drops; queues at one intersection that extend back to impact other intersections, and spillback queues on ramps.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This analysis is based upon the transportation analysis prepared for the project by Hexagon Transportation Consultants, Inc. (Hexagon) in February 21, 2019 (Appendix F to this Initial Study).

TRAFFIC STUDY METHODOLOGY AND THRESHOLDS

LEVEL-OF-SERVICE METHODOLOGY

Traffic conditions at the study intersections were evaluated using level of service (LOS). Level of service is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays.

The Highway Capacity Manual (HCM) is a standard reference published by the Transportation Research Board (TRB), and contains specific criteria and methods for assessing LOS. TRAFFIX software was used in the TIA to calculate LOS per City requirements.

STUDY INTERSECTIONS

The traffic analysis is based on the a.m. and p.m. peak hour LOS for six intersections. In the study area, the a.m. peak hour is typically between 7:00 a.m. and 9:00 a.m., while the p.m. peak hour is typically between 4:00 p.m. and 6:30 p.m. The study intersections were selected in accordance with Santa Clara Valley Transportation Authority (VTA) Transportation Impact Analysis Guidelines (VTA October 2014) and in consultation with City of Palo Alto staff. The

study includes those intersections that provide primary access to the project site and intersections that would experience a traffic increase of 10 or more peak-hour trips per lane. The six study intersections include:

1. Geng Road and Embarcadero Road
2. East Bayshore Road and Embarcadero Road
3. St. Francis Drive and Embarcadero Road
4. West Bayshore Road and Oregon Expressway
5. Middlefield Road and Oregon Expressway
6. Pulgas Avenue and East Bayshore Road

The Middlefield Road/Oregon Expressway intersection is designated as a Congestion Management Program (CMP) intersection by VTA, and the Pulgas Avenue/East Bayshore Road intersection is within the jurisdiction of East Palo Alto. Four other study intersections are within the jurisdiction of Palo Alto.

TRIP GENERATION

Trip generation for the proposed auto dealerships, shown in Table 12, was estimated based on calculating the average trip generation rates for nearby automobile dealerships in Palo Alto and Belmont, based on showroom and office square footage. Driveway counts for Anderson Honda in Palo Alto and Autobahn Motors in Belmont were conducted on June 22 and 23, 2015, and driveway counts for Palo Alto Audi were conducted on July 17, 2018. Using these driveway counts, and the estimated showroom and office sizes, average rates for trips per 1,000 square feet were calculated from the three dealerships. Based on showroom and office size, the nearby automobile dealerships were found to produce 5.26 trips per 1,000 square feet during the a.m. peak hour and 6.74 trips per 1,000 square feet during the p.m. peak hour. No credit was given for the existing restaurant on the site because the restaurant has been closed for several years, and the site is used to store the Audi dealership's vehicles. Using these average rates, both Audi and Mercedes Benz dealerships would produce 204 new trips in the a.m. peak hour and 267 new trips in the p.m. peak hour.

Table 12 Project Trip Generation

Land Use	Size	AM Peak Hour Trips			PM Peak Hour Trips		
		In	Out	Total	In	Out	Total
Proposed Project							
Audi	22,929 ¹	71	50	121	61	94	155
Mercedes Benz	26,188 ¹	81	57	138	70	107	177
<i>Total Gross Project Trips</i>		<i>152</i>	<i>107</i>	<i>259</i>	<i>131</i>	<i>201</i>	<i>332</i>
Existing Uses							
Palo Alto Audi ²	9,764	(35)	(20)	(55)	(26)	(39)	(65)
Net new vehicle trips		117	87	204	105	162	267

() denotes subtraction

¹ Based on a conservative estimate of showroom size

² Existing peak-hour trips at the project site (1700 & 1730 Embarcadero Road) were obtained from the driveway counts conducted on July 17, 2018.

Source: Hexagon 2019, Appendix F

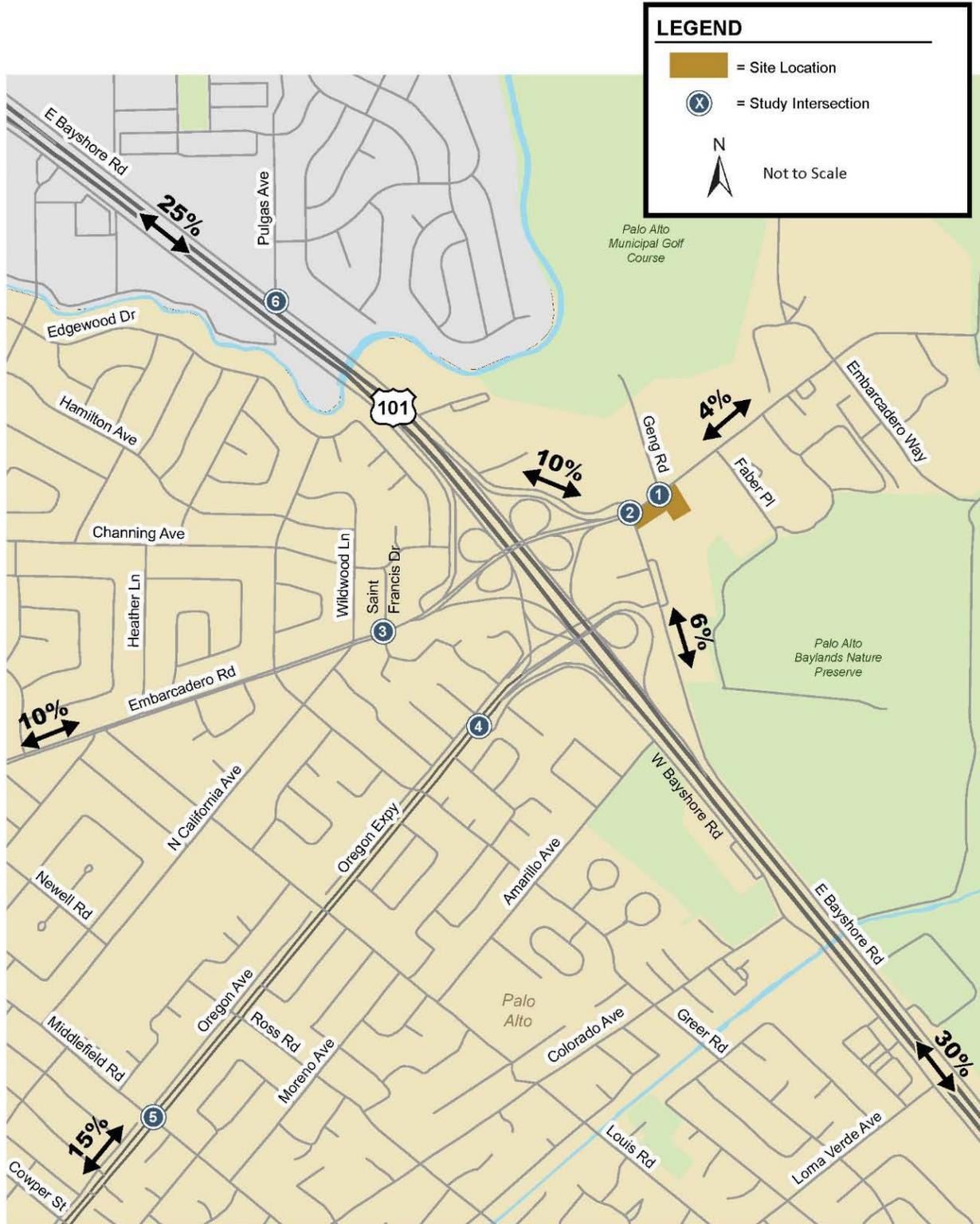
TRIP DISTRIBUTION AND ASSIGNMENT

The trip distribution pattern for the proposed auto dealerships was estimated based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. The peak-hour trips generated by the project were assigned to the roadway system based on the directions of approach and departure, the roadway network connections, and the locations of project driveways. Project trip assignment assumptions are discussed below:

- ◆ The Audi trips would enter and exit the Audi site via the existing full-access driveway on Embarcadero Road.
- ◆ The Mercedes Benz trips would access the Mercedes Benz site via a right-in only driveway on Embarcadero Road and an existing full-access driveway on East Bayshore Road. It was assumed that most Mercedes Benz inbound trips would enter the site via the Embarcadero Road driveway.

Figure 10 shows the estimated trip distribution and assignment for the project.

Figure 10 Trip Distribution and Assignment



Source: HEXAGON, November 2018

ANALYSIS SCENARIOS

Traffic conditions for intersections were evaluated for the following scenarios:

- ◆ *Existing Conditions.* Existing a.m. and p.m. peak-hour traffic volumes were obtained from new turning-movement counts conducted in August 2018. The study intersections were evaluated with a level of service analysis using TRAFFIX software in accordance with the 2000 Highway Capacity Manual methodology.
- ◆ *Existing Plus Project Conditions.* Existing plus project traffic volumes were estimated by adding the additional traffic generated by the project shown in Table 12.
- ◆ *Background Conditions.* Background traffic conditions are defined as conditions just prior to completion of the proposed project. Background traffic volumes were estimated by adding to existing traffic volumes the projected volumes from approved but not yet constructed developments in the vicinity of the project. Lists of approved but not yet constructed developments were provided by the Cities of Palo Alto and East Palo Alto. The roadway network under background conditions would be the same as the existing roadway network because there are no planned and funded transportation improvements at the study intersections that would alter the existing intersection lane configurations.
- ◆ *Background Plus Project Conditions.* Background plus project traffic volumes were estimated by adding the additional traffic generated by the project. Background plus project conditions were evaluated relative to background conditions in order to determine potential project impacts.
- ◆ *Cumulative Conditions.* Cumulative traffic volumes reflect traffic generated by the approved development projects and traffic growth contributed by the pending developments in the study area. The cumulative no project traffic volumes were estimated by applying a compound growth factor of 1.4 percent per year for 5 years to existing traffic volumes and adding trips generated by the approved projects (with compounding, this yields a factor of 1.072). This growth assumption was provided by the City of Palo Alto.
- ◆ *Cumulative Plus Project Conditions.* Cumulative plus project traffic volumes were estimated by adding the new traffic generated by the proposed project. Cumulative plus project conditions

THRESHOLDS

Significance criteria are used to establish what constitutes an impact. For this analysis, the criteria used to determine significant impacts on signalized intersections are based on the City of Palo Alto's level of service standards. Project impacts were also analyzed according to the CMP methodology for the CMP study intersections.

SIGNALIZED INTERSECTIONS

Per City of Palo Alto standards, a project-generated increase in motor vehicle traffic is considered to have significant impact if either of the following is true for either peak hour:

- ◆ If intersection operations degrade from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F)
- ◆ If the critical delay increases by more than four seconds and the volume-to-capacity (V/C) ratio increases by 0.01 or more at intersections with unacceptable operations (LOS E or F)

The City of Palo Alto considers a significant impact to be satisfactorily mitigated when an implemented measure would restore LOS to its acceptable level or to an average delay that is better than no-project conditions.

CMP INTERSECTIONS

Both the City of Palo Alto and the CMP guidelines consider a project to have a significant impact on a CMP intersection if it causes the intersection LOS to fall from an acceptable level (LOS D or better) to unacceptable (LOS E or F), or when, if the intersection is already operating at an unacceptable LOS, it causes both the critical-movement delay at the intersection to increase by four or more seconds and the demand-to-capacity ratio (V/C) to increase by 0.01 or more.

PEDESTRIAN AND BICYCLE IMPACT CRITERIA

The City of Palo Alto Comprehensive Plan describes related policies necessary to ensure that pedestrian and bicycle facilities are safe and effective for City residents. Based on the Comprehensive Plan, significant impacts to these facilities would occur when a project or an element of a project does any of the following:

- ◆ Creates a hazardous condition that currently does not exist for pedestrians and bicyclists, or otherwise interferes with pedestrian or bicycle accessibility to the site and adjoining areas
- ◆ Conflicts with an existing or planned pedestrian or bicycle facility
- ◆ Conflicts with policies related to bicycle and pedestrian activity adopted by the City of Palo Alto, Santa Clara County Valley Transportation Authority (VTA), or California Department of Transportation (Caltrans) for their respective facilities in the study area

TRANSIT IMPACT CRITERIA

Significant impacts to transit service would occur if the project or any part of the project does any of the following:

- ◆ Creates demand for public transit services above the capacity which is provided or planned
- ◆ Disrupts existing transit services or facilities including disruptions caused by proposed project driveways on transit streets, impacts to transits stops/shelters, and impacts to transit operations from traffic improvements proposed or resulting from a project
- ◆ Conflicts with an existing or planned transit facility
- ◆ Conflicts with transit policies adopted by the City of Palo Alto, Santa Clara County, VTA, or Caltrans for their respective facilities in the study area

IMPACT ANALYSIS

- a. *Would the project cause an intersection to drop below its level of service standard, or if it is already operating at a substandard level of service, deteriorate by more than a specified amount?*
- b. *Would the project cause a roadway segment to drop below its level of service standard, or deteriorate operations that already operate at a substandard level of service?*

EXISTING PLUS PROJECT CONDITIONS

The LOS analysis under Existing plus Project Conditions analysis is presented for informational purposes only as the criteria that define a significant project impact at a signalized intersection are based on Background plus Project Conditions. The intersection LOS analysis results for Existing plus Project Conditions are shown in Table 13. Under Existing plus Project Conditions, all intersections are expected to continue operating within applicable jurisdictional standards LOS D/E (City of Palo Alto and VTA CMP) or better during both a.m. and p.m. peak hours with the exception of East Bayshore Road and Embarcadero Road, which currently operates at LOS F and would continue to operate at LOS F under Existing plus Project conditions.

Table 13 Intersection LOS Analysis – Existing Plus Project Conditions

Intersection	Peak Hour ¹	Existing		Existing Plus Project	
		Delay ²	LOS ³	Delay	LOS
Geng Road and Embarcadero Road	AM	7.6	A	7.5	A
	PM	9.8	A	9.1	A
E. Bayshore Road and Embarcadero Road	AM	35.8	D	36.4	D+
	PM	81.5	F	88.1	F
St. Francis Drive and Embarcadero Road	AM	24.1	C	24.1	C
	PM	15.7	B	15.6	B
W. Bayshore Road and Oregon Expressway	AM	14.6	C	14.6	B
	PM	16.8	B	16.7	B
Middlefield Road and Oregon Expressway	AM	55.7	E +	56.1	E+
	PM	59.5	E+	59.9	E+
Plugas Avenue and E. Bayshore Road	AM	34.4	C-	35.0	C-
	PM	41.7	D	43.4	D

¹ AM – morning peak hour, PM – evening peak hour

² Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.

³ LOS – Level of Service

Bold indicates a substandard level of service.

Source: Traffic Impact Study by Hexagon February 2019. Included as Appendix F.

BACKGROUND PLUS PROJECT CONDITIONS

As described above under the analysis scenarios explanation, Background traffic conditions are defined as conditions just prior to completion of the proposed project. Background traffic volumes were estimated by adding to existing traffic volumes the projected volumes from approved but not yet constructed developments in the vicinity of the project. The Background plus Project Conditions analysis forms the basis of the proposed project's LOS analysis significance conclusions because it is a more conservative analysis than Existing plus Project Conditions as it represents the conditions that are anticipated at the time of project operation. The intersection LOS analysis results for Background plus Project Conditions are summarized in Table 14. The results for Background Conditions are included for comparison purposes, along with the projected increases in critical delay and critical V/C ratios. Under this scenario, the intersection of East Bayshore and Embarcadero Road continues to operate at LOS F during the p.m. peak hours, with increases in critical delay and critical V/C above relevant significance thresholds. The intersection of East Bayshore Road and Embarcadero Road would not operate within applicable jurisdictional standards LOS D/E (City of Palo Alto and VTA CMP) during p.m. peak hours. Thus, the project would result in a potentially significant impact under Background Conditions and mitigation is required.

Table 14 Intersection LOS Analysis –Background Plus Project Conditions

Intersection	Peak Hour ¹	Background		Background Plus Project		Change in		Sig. Impact?
		Avg. Delay ²	LOS ³	Avg. Delay ²	LOS ³	Critical V/C ⁴	Critical Delay ⁵	
Geng Road and Embarcadero Road	AM	7.6	A	7.5	A	0.010	-0.2	No
	PM	16.0	B	15.2	B	0.018	-0.2	No
East Bayshore Road and Embarcadero Road	AM	35.9	D+	36.5	D+	0.3	0.3	No
	PM	80.2	F	88.2	F	0.085	12.3	Yes
St. Francis Drive and Embarcadero Road	AM	24.1	C	24.1	C	0.004	0.0	No
	PM	15.7	B	15.3	B	0.003	-0.1	No
W. Bayshore Road and Oregon Expressway	AM	14.6	B	14.5	B	0.005	-0.1	No
	PM	16.7	B	16.7	B	0.004	-0.1	No
Middlefield Road and Oregon Expressway ⁷⁻⁶	AM	56.1	E+	56.5	E+	0.005	0.4	No
	PM	60.3	E	60.7	E	0.005	0.4	No
Plugas Avenue and East Bayshore Road	AM	34.5	C-	35.1	D+	0.007	0.8	No
	PM	45.5	D	47.5	D	0.0012	2.7	No

¹ AM – morning peak hour, PM – evening peak hour

² Average Delay – Overall weighted average control delay (seconds per vehicle) is reported for signalized and roundabout intersections.

³ LOS – Level of Service

⁴ Change in critical volume to capacity ratio between Background and Background plus Project Conditions

⁵ Change in average critical movement delay between Background and Background plus Project Conditions

⁶ CMP intersections with LOS E threshold

Bold indicates a substandard level of service.

Source: Traffic Impact Study by Hexagon February 2019. Included as Appendix F.

CUMULATIVE PLUS PROJECT CONDITIONS

Cumulative traffic volumes reflect traffic generated by the approved development projects and traffic growth contributed by pending developments in the study area. The intersection LOS analysis results for Cumulative plus Project Conditions are summarized in Table 15. Without the proposed project, the intersection of East Bayshore Road and Embarcadero Road would operate at unacceptable LOS levels (LOS F during both p.m. peak hours). As shown in the Table 15, with the proposed project, the intersection of Embarcadero Road and East Bayshore Road would continue to operate at LOS F during the p.m. peak hour, with an increase in critical delay by 18.8 seconds but an increase in critical V/C of only 0.085. This would exceed the thresholds described above. Therefore, impacts at these intersections would be potentially significant and mitigation would be required.

Table 15 Intersection LOS Analysis –Cumulative Plus Project Conditions

Intersection	Peak Hour ¹	Cumulative		Cumulative Plus Project		Change in		Sig. Impact?
		Avg. Delay ²	LOS ³	Avg. Delay ²	LOS ³	Critical V/C ⁴	Critical Delay ⁵	
Geng Road and Embarcadero Road	AM	7.6	A	7.5	A	0.010	-0.2	No
	PM	16.0	B	15.3	B	0.018	-0.2	No
East Bayshore Road and Embarcadero Road	AM	37.2	D+	37.9	D+	0.021	0.3	No
	PM	85.9	F	97.7	F	0.085	18.8	Yes
St. Francis Drive and Embarcadero Road	AM	24.8	C	24.8	C	0.004	0.0	No
	PM	15.7	B	15.6	B	0.003	0.0	No
West Bayshore Road and Oregon Expressway	AM	14.9	B	14.9	B	0.005	0.0	No
	PM	17.4	B	17.3	B	0.004	-0.1	No
Middlefield Road and Oregon Expressway ⁶	AM	59.2	E	59.7	E+	0.005	0.5	No
	PM	62.8	E	63.2	E	0.5	0.005	No
Plugas Avenue and East Bayshore Road	AM	40.5	D	41.4	D	0.007	1.2	No
	PM	60.4	E	62.9	E	0.012	3.3	No

¹ AM – morning peak hour, PM – evening peak hour

² Average Delay – Overall weighted average control delay (seconds per vehicle) is reported for signalized and roundabout intersections.

³ LOS – Level of Service

⁴ Change in critical volume to capacity ratio between Cumulative and Cumulative plus Project Conditions

⁵ Change in average critical movement delay between Cumulative and Cumulative plus Project Conditions

⁶ CMP intersections with LOS E threshold

Bold indicates a substandard level of service.

Source: Traffic Impact Study by Hexagon February 2019. Included as Appendix F.

MITIGATION MEASURES

Mitigation measures TRA-1 and TRA-2 would be required to reduce traffic delays at East Bayshore Road/Embarcadero Road intersection during Background plus Project and Cumulative plus Project conditions:

TRA-1 East Bayshore Road/Embarcadero Road Intersection Improvements. The applicant shall construct the following improvements prior to Certificate of Occupancy for the project: Reconfigure the northbound approach from one left-turn and one through/right-turn lane to one left-turn and one all movement lane. Improvements would include a new crosswalk on the north leg, a right-turn overlap phase (right turn arrow) for the southbound East Bayshore to westbound Embarcadero right turn, and a right-turn overlap phase for the eastbound Embarcadero to southbound East Bayshore right turn. Improvements shall occur prior to occupancy clearance.

TRA-2 Payment of Transportation Impact Fee. The applicant shall pay the Citywide Transportation Impact Fee (as updated in 2019)⁵ which will fund improvements to the East Bayshore Road/Embarcadero Road intersection to address cumulative plus project conditions impacts. The payment shall be calculated by City of Palo Alto transportation division staff and paid prior to occupancy clearance. Payment of the Transportation Impact Fee would represent the project’s fair share contribution to intersection improvements. Intersection improvements would be either widening the intersection and maintaining signal control or building a roundabout, to be determined by the City at the time of implementation, and shall be designed to ensure the intersection operates at acceptable Level of Service levels under cumulative conditions.

SIGNIFICANCE AFTER MITIGATION

As shown in Table 16, with implementation of Mitigation Measure TRA-1 the intersection delay would improve from LOS F to LOS E under Background plus Project Conditions. As shown in Table 17, implementation of Mitigation Measure TRA-2 would reduce delay under Cumulative plus Project conditions compared to Cumulative Conditions without the project. Impacts would be less than significant with implementation of these measures.

Table 16 Intersection LOS Analysis –Mitigated Background Plus Project Conditions

Intersection	Peak Hour	Background		Background + Project		Change in		
		Avg. Delay	LOS	Avg. Delay	LOS	Critical V/C	Critical Delay	Sig. Impact?
East Bayshore Road and Embarcadero Road	AM	35.9	D+	36.5	D+	0.022	0.3	No
	PM	80.2	F	88.2	F	0.085	12.3	Yes
With Implementation of Mitigation Measure TRA-1: NB Lane Configuration modification				78.7	E-			No

Source: Traffic Impact Study by Hexagon February 2019. Included as Appendix F.

⁵ The Citywide Transportation Impact Fee update is currently under consideration by the Palo Alto City Council and adoption is anticipated to occur in April 2019 (prior to the approval of the project). The proposed update to the City’s traffic impact fee program was evaluated in the Final EIR for the Comprehensive Plan (certified and adopted November 13, 2017) and identified as a mitigation measure (Measure TRANS-1b) in the EIR for the Comprehensive Plan.

Table 17 Intersection LOS Analysis – Mitigated Cumulative Plus Project Conditions

Intersection	Peak Hour	Cumulative		Cumulative + Project		Change in		
		Avg. Delay	LOS	Avg. Delay	LOS	Critical V/C	Critical Delay	Sig. Impact?
East Bayshore Road and Embarcadero Road	AM	37.2	D+	37.9	D+	0.021	0.3	No
	PM	85.9	F	97.7	F	0.085	18.8	Yes
With Implementation of Mitigation Measure TRA-2 Options:								
With a Two-Lane Roundabout	PM			62.3	F			
With NB Lane Configuration modification	PM			83.9	F			

Source: Traffic Impact Study by Hexagon February 2019. Included as Appendix F.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Would the project cause a freeway segment or ramp to operate at LOS F or contribute traffic in excess of 1 percent of segment capacity to a freeway segment or ramp already operating at LOS F?*

The Santa Clara Valley Transit Authority’s Congestion Management Program (CMP) Traffic Impact Assessment guidelines require that the CMP freeway segments be evaluated to determine the impact of added traffic for projects that generate trips equal to or greater than one percent of the freeway segment’s capacity. Freeway capacity, as specified by the SCVTA Guidelines, is 2,200 vehicles per hour per lane for freeway segments with up to four total lanes (two per direction), or 2,300 vehicles per hour per lane for freeway segments with six or more lanes (three or more per direction). The project’s contribution to freeway volumes would be less than one percent of the capacity of each of the studied freeway segments (Hexagon 2019). Thus, the project would not have a significant impact on nearby freeway segments.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project impede the development or function of planned pedestrian or bicycle facilities?*
- e. *Would the project increase demand for pedestrian and bicycle facilities that cannot be met by current or planned services?*

PEDESTRIAN FACILITIES

Sidewalks along Embarcadero Road and East Bayshore Road currently serve the project site. The project would maintain these sidewalks and develop a public seating area adjacent to the sidewalk in front of the Mercedes Benz dealership on Embarcadero Road. Pedestrian facilities in the project vicinity include sidewalks on both sides of Embarcadero Road, East Bayshore Road, and Geng Road. Crosswalks with pedestrian signal heads are located the nearby signalized intersections in the study area, with the exception of the US101/ Embarcadero Road interchange.

The proposed project would not impede the development or function of planned pedestrian facilities and would not affect or conflict with the adopted policies, plans, or programs regarding pedestrian facilities, or otherwise substantially reduce the performance or safety of such facilities (Hexagon 2019). Impacts related to pedestrian facilities would be less than significant.

BICYCLE FACILITIES

The bicycle facilities near the site include a Class I multi-use trail, a Class II striped lane bike lane, and Class III shared bike route. The Renzel Trail extends between Faber Place and the Adobe Creek Loop Trail and runs parallel to Bayshore Road. It connects the Adobe Creek Loop Trail with the San Francisquito Creek Trail through bike lanes on Embarcadero Road and Geng Road and bike routes on Faber Place. It is part of the Baylands trail system that traverses through the Baylands open spaces area of Palo Alto.

The proposed project would incrementally increase the demand for bicycle facilities. However, the existing bike lanes would serve the additional users of the site adequately (Hexagon 2019). Additionally, 15 bicycle parking spaces would be located at the northeast corner of the project site adjacent to the vehicle driveway and at the rear of the Audi facilities as well as additional bicycle/ pedestrian access paths from Embarcadero Road and East Bayshore Road to the project site. The proposed project would not impede the development or function of planned bicycle facilities and would not affect or conflict with the adopted policies, plans, or programs regarding bicycle facilities, or otherwise substantially reduce the performance or safety of such facilities. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- f. Would the project impede the operation of a transit system as a result of congestion or otherwise decrease the performance or safety of such facilities?*
- g. Would the project create demand for transit services that cannot be met by current or planned services?*

The Embarcadero Shuttle provides free peak-hour weekday service between the Palo Alto Caltrain Station and the Baylands Business Parks east of US 101. The nearest shuttle stops are located adjacent to the project site at the intersection of Embarcadero Road and Geng Road. Other transit services in the vicinity of the project site include VTA and SamTrans bus services, Stanford University's Marguerite shuttle service and Caltrain which are provided at the Palo Alto Transit Center/ Caltrain Station.

Due to the nature of the proposed project, an auto dealership, it is not expected to generate a significant demand for transit service. Additional increase in demand for transit service would be served by existing facilities.

The proposed project would not result in development or activities that would impede the operation of a transit system. VTA does not have significance thresholds to determine impacts on transit vehicle delay. However, a transit vehicle delay analysis conducted by Hexagon concluded that the project would result in less than 2 percent change in transit travel time for every bus route in the study area. Furthermore, the study determined that delay increases

experienced by bus routes that operate within the study area during project construction and operation would be imperceptible (Hexagon 2019). Therefore, the project would not result in congestion that would decrease the performance of transit operations. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- h. Would the project create the potential demand for through traffic to use local residential streets or cause any change in traffic that would increase the Traffic Infusion on Residential Environment (TIRE) index by 0.1 or more?*

Vehicles travelling to and from the project site would access the site from Embarcadero Road and East Bayshore Road. As described in *Project Description*, the project site is located in a commercial neighborhood. Surrounding land uses include auto dealerships, offices and a medical facility. As shown in Figure 10, project-generated traffic would not use local residential streets or cause change in traffic that would increase the Traffic Infusion on Residential Environment index. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- i. Would the project create an operational safety hazard?*
- j. Would the project result in inadequate emergency access?*
- l. Would the project cause queuing impacts based on a comparative analysis between the design queue length and the available queue storage capacity? Queuing impacts include, but are not limited to, spillback queues at project access locations; queues at turn lanes at intersections that block through traffic; queues at lane drops; queues at one intersection that extend back to impact other intersections, and spillback queues on ramps?*

Inadequate site circulation, site access, queueing spaces, or sight distances from project driveways can result in operational traffic safety hazards. The following is based on information provided in the traffic memorandum prepared by Hexagon in 2019 (Appendix F).

As described in *Project Description*, one driveway on Embarcadero Road and one driveway on East Bayshore Road would provide vehicular access to the project site at the existing Audi and restaurant driveways. An additional driveway would be added on Embarcadero Road opposite Geng Road, providing right-in access only to the Mercedes Benz service center. According to the evaluation conducted by Hexagon, the full access driveways on Embarcadero Road and East Bayshore Road are expected to produce vehicle queues for the inbound and outbound traffic at the project driveways in both AM and PM peak hours. However, these vehicles queues are not expected to create any operational issues related to vehicle queueing on the street or on the project site (Hexagon 2019). The right-in access only driveway to the Mercedes Benz dealership is expected to operate at an acceptable level based on the intersection level of service analysis results for the Geng Road/ Embarcadero Road intersection.

Based on the site plan and field observations, adequate sight distance is available at the project driveways the site plan and field observations, adequate sight distance is available at the

project driveways to ensure that existing vehicles can see pedestrians on the sidewalks, as well as vehicles on the street.

The project would have ample access points, as the project would be served by two driveways onto Embarcadero Road and one driveway on East Bayshore Road. The Transportation Division of the City of Palo Alto and the Palo Alto Fire Department would review the project as part of the plan check process to ensure the project provides adequate emergency access. Adherence to existing state and federal regulations and City of Palo Alto requirements would reduce impacts. The project would not result in inadequate emergency access. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

m. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

PAO is the closest airport to the project site. There are no private airstrips in the vicinity of the site. PAO is a 102-acre facility with one paved runway, an air traffic control tower, and a terminal building, and is located approximately 0.3 miles northeast of the project site. The project consists of construction of a three-story automobile dealership that would not exceed 50 feet in height. The proposed project would not affect airport operations, alter air traffic patterns, or in any way conflict with established Federal Aviation Administration flight protection zones. No impact would occur.

NO IMPACT

ENVIRONMENTAL CHECKLIST
TRANSPORTATION

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17 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in any of the following impacts:				
a. Need new or expanded entitlements to water supply?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in adverse physical impacts from new or expanded utility facilities due to increase use as a result of the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a substantial physical deterioration of a utility facility due to increased use as a result of the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Result in a substantial increase in natural gas and electrical service demands that would require the new construction of energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project need new or expanded entitlements to water supply?*
- b. *Would the project result in adverse physical impacts from new or expanded utility facilities due to increase use as a result of the project?*
- c. *Would the project result in a substantial physical deterioration of a utility facility due to increased use as a result of the project?*

Since 1962, the City of Palo Alto’s potable water supply has come from the SFPUC. In 1992, the City began to prepare a new Water Integration Resources Plan (WIRP). In mid-2003, the WIRP concluded, based on available information, that supplies from the SFPUC are adequate in normal years, but additional supplies are needed in drought years to avoid shortages. The City has completed the Emergency Water Supply and Shortage project, which provides the City the flexibility to rely on groundwater during a drought if necessary. However, groundwater is currently not considered a potential supply source for the City, and City Council has not directed staff to begin using groundwater as a supplemental drought supply (City of Palo Alto 2016). The City is a participating agency on the Bay Area Water Supply and Conservation Agency’s (CAWSCA) Long Term Reliable Water Supply Strategy to meet the projected water needs of its member agencies and their customers through 2035 and to increase their water supply reliability under normal and drought conditions.

Table 17 shows the projected City water supply and demand through the year 2030 according to the City’s Urban Water Management Plan.

Table 18 City of Palo Alto Supply/Demand Balance (AFY)

	2020	2025	2030	2035
Demand	11,883	11,141	11,132	10,879
Supply	19,118	19,118	19,118	19,118
Difference	8,394	7,707	7,986	8,239

Source: City of Palo Alto Urban Water Management Plan, Table 26, June 2016

AFY = acre-feet per year

Development of the proposed project would increase demand for potable water above existing conditions. According to the assumptions for water use in CalEEMod (Appendix A), the project would utilize approximately 10.7 million gallons of water per year, or 29,445 gallons per day which equates to approximately 33 acre-feet per year (AFY). As shown in Table 17, there is an available water supply of 8,239 AFY projected through 2035. Therefore, sufficient water supplies would be available to serve the project from existing entitlements and resources. No new or expanded entitlements would be needed to serve the proposed project. The project would not result in a substantial physical deterioration of public water facilities or result in adverse physical impacts from new or expanded utility facilities due to increased use as a result of the project (see also subsequent responses with regards to other utility facilities wastewater, stormwater, and solid waste facilities). Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*
- e. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

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 (filtration through a sand and coal filter), and UV 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 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 available capacity of the RWQCP is 17 MGD. The plant capacity is sufficient for current dry and wet weather loads and for future load projections. There are no plans for expansion or to "build-out" the plant. The RWQCP does not experience any major treatment system constraints and has no planned capacity expansions. Approximately 220,000 people live in the RWQCP service area. Of the wastewater flow to the RWQCP, about 60 percent is estimated to come from residences, 10 percent from industries, and 30 percent from commercial businesses and institutions. The RWQCP treats 21 million gallons per day of effluent from all the partner cities. All of the wastewater treated at the RWQCP can be recycled. The plant already has some capability to produce recycled water that meets the Title 22 unrestricted use standard (approximately 4.5 MGD of capacity of which 4.5 MGD is presently available) (City of Palo Alto 2016).

The proposed project would involve development of automotive uses, which would generate wastewater. The City of Palo Alto's Urban Water Management Plan (UWMP) does not list wastewater generation factors. As a result, wastewater generation rates from the City of Los Angeles were used to estimate the amount of wastewater that would be generated by the proposed project. The car wash would be automated and use grey water which will be captured filtered and reused on site. No potable water will be used in washing cars.

As discussed above in the response to questions (a, c, d), according to the assumptions for water use in CalEEMod (Appendix A), the project would utilize approximately 10.7 million gallons of water per year, or 29,446 gallons per day. Assuming wastewater generation is approximately 80 percent of water use, the project would generate approximately 23,557 gallons of wastewater per day. This increase would be approximately 0.5 percent of the existing unused capacity of the RWQCP. Therefore, there would be sufficient wastewater capacity to serve the project site. The proposed 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. The proposed project would not result in a

substantial physical deterioration of public wastewater facilities. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- f. Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Palo Alto's storm drainage system contains over 550,000 linear feet of pipelines, ranging in size from 8 to 96 inches. The storm drains collect stormwater and convey it primarily to San Francisquito, Matadero, Barron, and Adobe creeks. These creeks ultimately discharge the stormwater to San Francisco Bay. The Santa Clara Valley Water District (SCVWD) oversees County-wide programs for flood protection and stormwater management. For local lines that connect to the creeks, the City maintains a Storm Drain Master Plan that recommends improvements to be made over a 30-year horizon. As discussed in Section 9, *Hydrology and Water Quality*, the project site is almost entirely paved. Development of the proposed project would increase impervious surfaces at the project site by two percent which would result in a proportional increase in runoff at the project site. However, project low impact development features required by PAMC and compliance with State and federal regulations would reduce stormwater runoff onsite. Thus, the proposed project would not result in the construction of new, or expansion of existing, stormwater drainage facilities. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- g. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*
- h. Would the project comply with federal, state, and local statutes and regulations related to solid waste?*

Currently, the City is contracted with GreenWaste of Palo Alto for collection of garbage, recycling, and composting services in the City and with Waste Management Inc. to use the Kirby Canyon Landfill for waste disposal. As of July 31, 2015 the Kirby Canyon Landfill has a remaining capacity of roughly 22,000,000 tons. The daily permitted capacity of Kirby Canyon Landfill is up to 2,600 tons per day (CalRecycle 2015). According to the latest Disposal Facility Inspection Report in 2010, the peak tonnage is 2,094 tons per day. Therefore, the landfill has a remaining daily capacity of 506 tons per day.

As shown in Table 18, the proposed project would generate approximately 0.38 tons of solid waste per day and assuming a 50 percent diversion rate approximately 0.19 tons per day would be sent to the landfill. Estimated solid waste generated by this project could be accommodated at the Kirby Canyon Landfill and would thus not violate any statute or regulation regarding solid waste capacity. Impacts would be less than significant.

Table 19 Estimated Solid Waste Generation

	Quantity	Generation Factor*	Total (lbs/day)	Total (tons/day)
Existing Uses				
Restaurant	10,000 sf	0.005 lbs/sf/day	(50)	(0.025)
Auto dealer and service station	15,049 sf	0.9 lbs/100 sf/day	(135)	(0.068)
Proposed				
Auto dealer and service station	104,131 sf	0.9 lbs/100 sf/day	937	0.469
Total Net Solid Waste Generation			752	0.38
Total Solid Waste Sent to Landfill (Assuming 50% diversion rate)			376	0.19
Notes: sf = square feet, lbs = pounds, () denotes subtraction, numbers may not add up due to rounding				
*CalRecycle 2018				

LESS THAN SIGNIFICANT IMPACT

- i. *Would the project result in a substantial increase in natural gas and electrical service demands that would require the new construction of energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing facilities?*

Refer to Section 18, *Energy Conservation*.

LESS THAN SIGNIFICANT IMPACT

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18 Energy Conservation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project result in any of the following impacts?

a. Have an energy impact? Energy impacts may include:

1. Impacts resulting from amount and fuel type used for each stage of the project	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Impacts on local and regional energy supplies and on requirements for additional capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Impacts on peak and base period demands for electricity and other forms of energy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Impacts to energy resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Impacts resulting from the project's projected transportation energy use requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a1. *Would the project result in energy impacts regarding the amount and fuel type used during each stage of the project?*

a2. *Would the project result in impacts on local and regional energy supplies and on requirements for additional capacity?*

a3. *Would the project result in impacts on peak and base period demands for electricity and other forms of energy?*

a4. *Would the project result in impacts to energy resources?*

a5. *Would the project have impacts resulting from the project's projected transportation energy use requirements?*

PROPOSED PROJECT ENERGY CONSUMPTION

The proposed auto dealership building, parking lot, and car wash would consume energy from both electricity and natural gas. Implementation of the project would result in the commitment of additional energy resources, including consumption of energy during construction and operation. Energy use during the construction phase would be in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate equipment and light-duty vehicles. Once completed,

the increase in vehicle trips associated with the project would increase fuel consumption within the City. In addition, grid power would be used for interior work. The proposed project would need to be connected to the electrical grid and have natural gas service.

ELECTRICITY AND NATURAL GAS

The project would increase the amount of electricity and natural gas demand needed to serve the project. Estimated electricity and natural gas consumption were estimated using CalEEMod as described in Section 3, *Air Quality* and Section 7, *Greenhouse Gas Emissions* (refer to Appendix A). Based on the modeling assumptions described in those sections, development would utilize approximately 2,363.61 megawatt hours (MWh/year) of electricity and approximately 1.6 million cubic feet of natural gas per year during operation. As shown in Table 19, the project’s total annual electricity and natural gas consumption would represent a small percent of statewide annual demand. This estimate is conservative as it does not take into account energy use from the existing restaurant building that could potentially be re-occupied without discretionary approval and energy use from the existing Audi building which would be replaced with the project.

Table 20 Project Energy Use Relative to Statewide Energy Use

Form of Energy	Units	Annual Project-Related Energy Use	Annual Statewide Energy Use
Electricity	Megawatt hours	2,363.611	295,405,0002
Natural Gas	Millions of cubic feet	1.631	2,313,0003

¹ CalEEMod output (provided in Appendix A)
² California Energy Commission 2017a
³ California Energy Commission 2017b

The project would be subject to energy conservation requirements in the California Energy Code (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), as embodied in enforceable conditions of approval. Furthermore, the project will comply with the City’s Green Building Standards and will include features such energy-efficient lamps, photovoltaic sensors, electrical vehicle chargers, and water recycling system for the car wash.

Further, California’s use of non-renewable electricity and natural gas are expected to continue to decline as a proportion of overall energy demand due to stringent energy efficiency measures and a mandated increase in renewable energy use that would serve to offset any increase in non-renewable energy use resulting from the project. The project would not result in significant impacts on peak loads for electricity.

GASOLINE AND DIESEL FUEL

A large portion of the project’s energy use would result from fuel consumption associated with project-related vehicle trips. However, the project would supply electric vehicle charging stations and involves placing new car dealership uses in an area with transit access, thereby

incrementally reducing vehicle trips and fuel consumption compared to “business as usual” development.

Impacts regarding energy use would be less than significant.

LESS THAN SIGNIFICANT IMPACT

ENVIRONMENTAL CHECKLIST
ENERGY CONSERVATION

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19 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

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

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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- b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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- c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------	--------------------------

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

As noted under Section 4, *Biological Resources*, implementation of the proposed project may have significant impacts on biological resources without the implementation of mitigation. The location of the proposed auto dealership adjacent to the Baylands and removal of approximately 63 trees may affect wildlife and protected nesting birds. Mitigation Measure BIO-1 would reduce these potential impacts to a less than significant level. No known cultural or archeological resources are known to be present on or within the immediate vicinity of the project site. As discussed in Section 5, *Cultural Resources*, the project would not eliminate

important examples of the major periods of California history or prehistory with adherence to mitigation measures CR-1, CR-2, and TCR-1 which would reduce potential impact to unknown resources to less than significant. Overall, impacts would be less than significant with mitigation.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Cumulative impacts are addressed in the individual topical sections above: Air Quality, Greenhouse Gas Emissions, and Transportation (see CEQA Guidelines Section 15064(h)(3)). For these issue areas, cumulative impacts were found to be less than significant (not cumulatively considerable). Some of the other resource areas were determined to have no impact in comparison to existing conditions and therefore would not contribute to cumulative impacts, such as those related to mineral resources and agricultural resources. As such, cumulative impacts in these issue areas would also be less than significant (not cumulatively considerable). The proposed project would incrementally increase traffic compared to existing conditions during AM and PM peak hours. However, with mitigation measures TRA-1 and TRA-2, the proposed project would not result in a significant cumulative impact with respect to traffic. Cumulative traffic impacts would be less than significant (not cumulatively considerable).

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in the preceding responses, the proposed project would not result, either directly or indirectly, in substantial adverse impacts related to air quality or hazards. With implementation of Mitigation Measure N-1, the project would not result in substantial adverse impacts with respect to noise. Impacts to humans would be less than significant with mitigation.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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