

*City of Palo Alto*

# **1700 Embarcadero Road Auto Dealership Project**

*Final*  
**Initial Study -  
Mitigated Negative  
Declaration**



**May 2016**

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**1700 Embarcadero Road  
Auto Dealership Project**

*Final*  
**Initial Study - Mitigated Negative Declaration**

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*May 2016*

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## INITIAL STUDY

This document is the Final Initial Study – Mitigated Negative Declaration (IS-MND) for the 1700 Embarcadero Road Auto Dealership Project. The Draft IS-MND circulated for a public review period that began on April 22, 2016, and concluded on May 12, 2016. Responses to comments on the Draft IS-MND are shown in Appendix G. In certain instances the text of the Final IS-MND has been modified in response to comments received. None of the changes made identify new significant impacts or significant impacts of increased severity as compared to what was identified in the Draft IS-MND. Changes made in the Final IS-MND are shown in ~~striketrough~~ for deleted text and underline for added text.

- 1. Project Title:** 1700 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:** Jodie Gerhardt, Current Planning Manager, (650) 329-2575
- 4. Project Location:** The project site is located at 1700 Embarcadero Road (APN 008-03-084), which is on the southeast corner of Embarcadero Road and East Bayshore Road in the northeastern portion of the City of Palo Alto in Santa Clara County. The project site encompasses 110,642 square feet (2.54 acres). Figure 1 shows the site’s regional location and Figure 2 shows the location in its immediate context.
- 5. Project Sponsor Name and Address:** Deeg Snyder, Gensler  
5420 LBJ Freeway Suite 1100  
Dallas TX, 75240

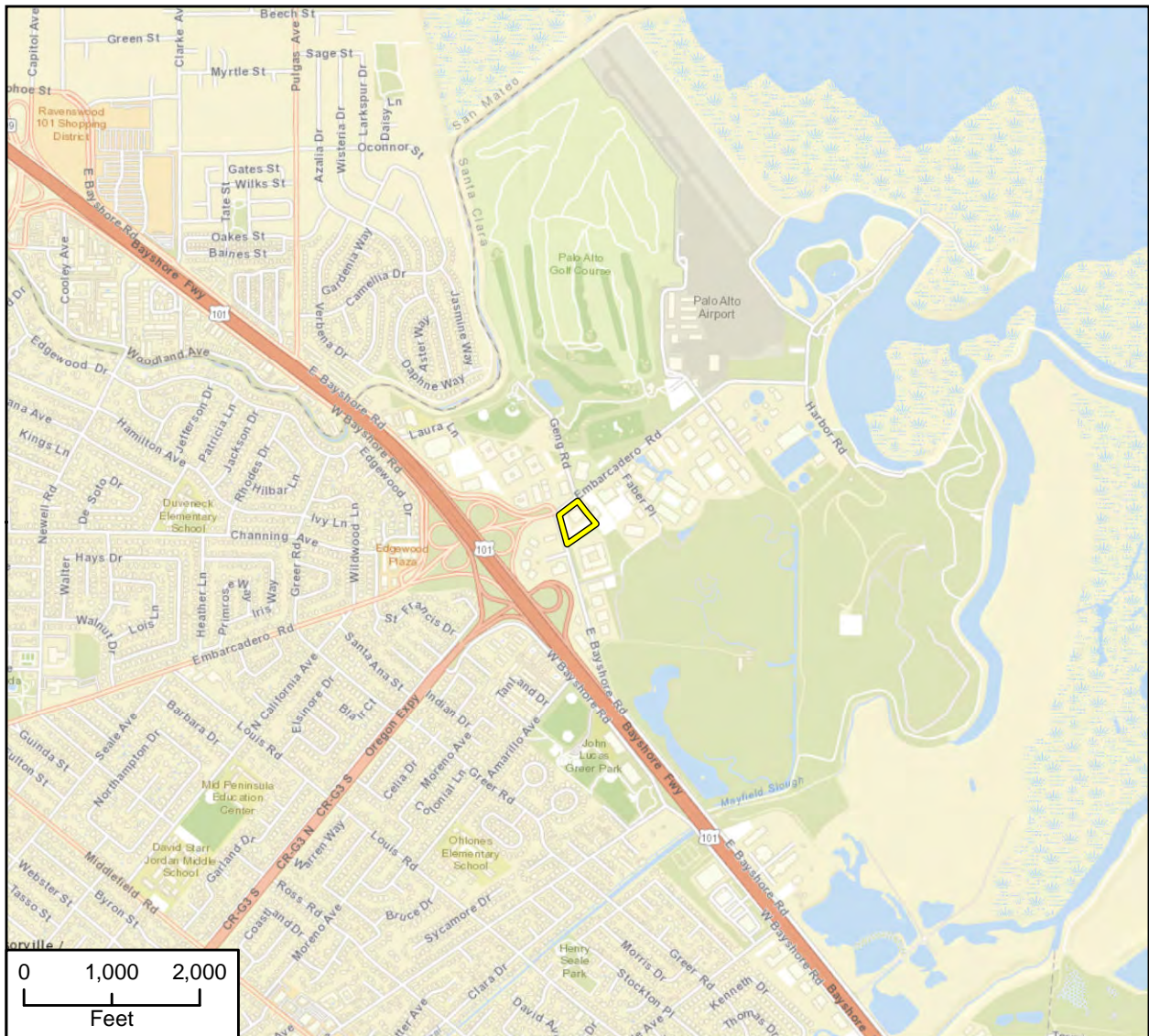
### 6. Comprehensive Plan Designation

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.

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.



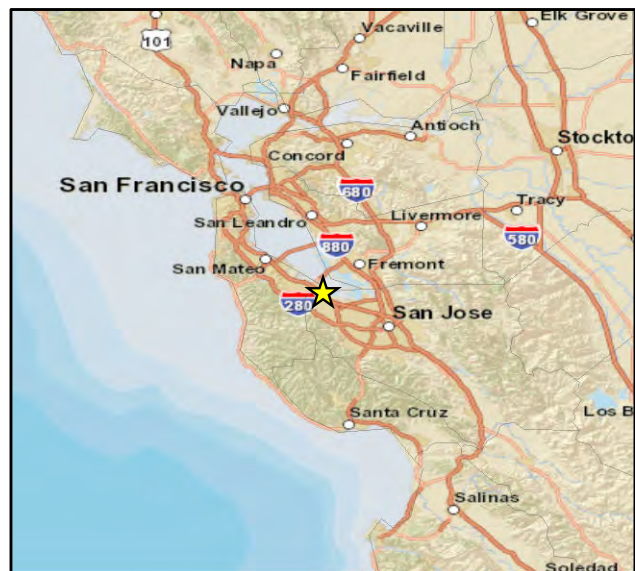
1700 Embarcadero Road Auto Dealership Project  
Initial Study – Mitigated Negative Declaration



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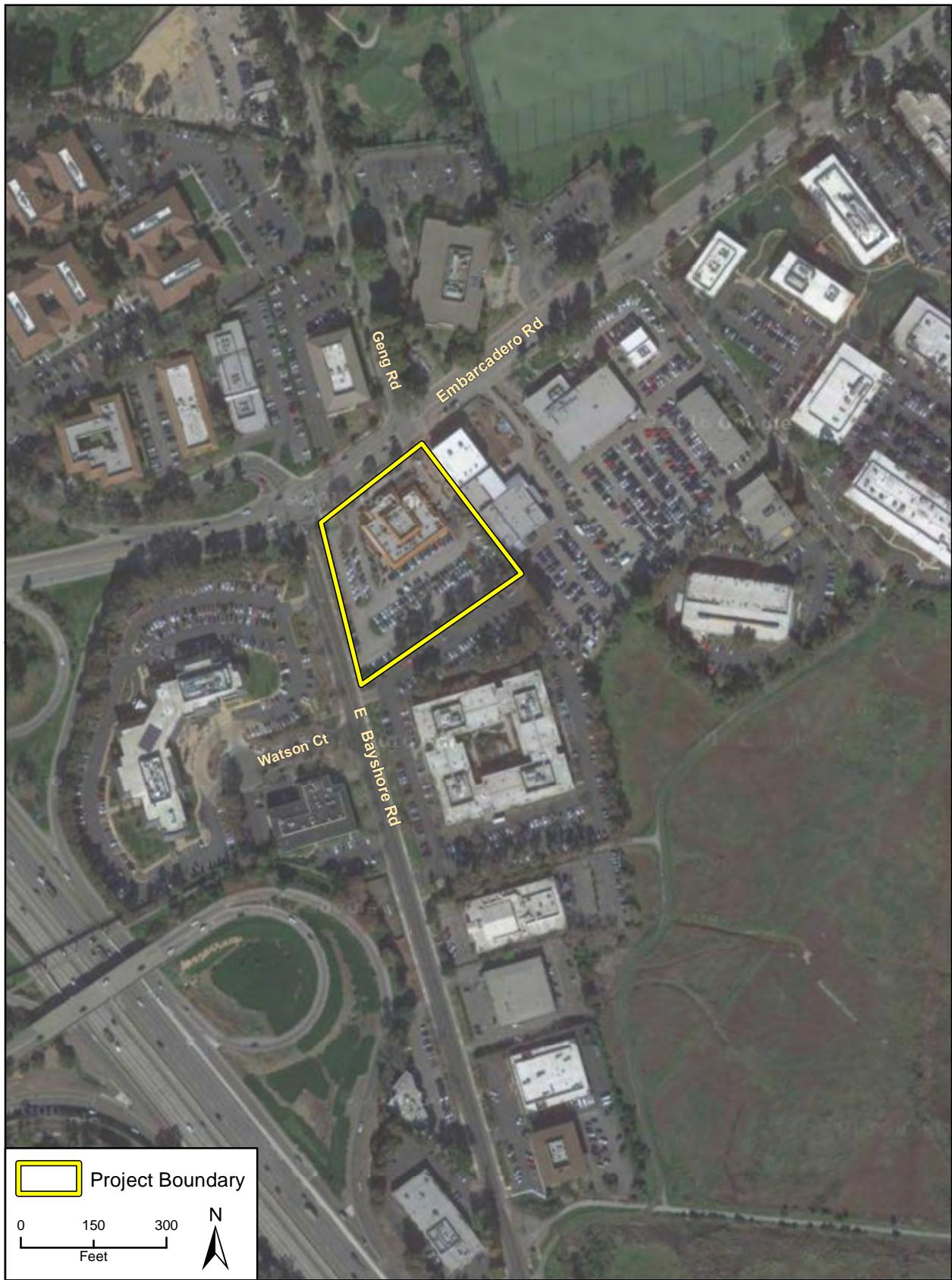
 Project Boundary



Regional Location

Figure 1  
City of Palo Alto





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Project Site Location

Figure 2  
City of Palo Alto





## 7. Zoning

Service Commercial (CS) District. As described in the Palo Alto Municipal Code (PAMC) in Chapter 18.16, the CS District is intended 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.

Site and Design (D) Review Combining District. The property is within the Site and Design Review (D) combining district and adjacent to the Baylands, which requires heightened review due to the sensitive environment. The site and design review combining district is 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 the Palo Alto Comprehensive Plan.

## 8. Other Applicable Policy Documents

Additionally, the site is included within the City's Baylands Master Plan. The Baylands Master Plan, originally adopted in 1978 and last updated in 2008, includes the history, environmental setting, and adopted planning goals and policies for the Baylands area. The project site is located within the area called "Privately Owned Lands" within the Master Plan. 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 Privately Owned Lands chapter of the Master Plan (chapter 13) describes this area and provides private lands policies. Activities in this area must comply with the policies contained in this element and with policies stated in the "Overall," "Flood Control," and "Access and Circulation" chapters of the Master Plan.

## 9. Description of Project

The proposed project would involve demolition of an existing 17,942-square foot single-story commercial building built in 1968 (formerly Ming's Chinese Cuisine and Bar, now vacant) and construction and operation of a new three-story, approximately 61,510 square-foot auto dealership with roof deck parking. The building would integrate sales and administrative offices, customer parking, vehicle merchandise storage, and vehicle service/repair areas on multiple floors. The first floor would include the showroom, sales offices, and vehicle service/repair area. The second floor would include additional offices, an employee break room/training area, and parking. The third floor would include locker rooms, a vehicle service/repair areas, parts and tools storage areas, and parking. The rooftop would include additional parking.

Other on-site features would include a detached car wash facility, customer parking, vehicle merchandise display, solid waste/recycling facilities, and landscaping. The site includes an



approximate 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 auto dealership building would be sited to provide an approximately 47-foot front setback (Embarcadero Road), a 60-foot rear setback (and five feet for the detached vehicle carwash building), a 56-foot interior (east) side setback, and an 80-foot street (west) side setback (East Bayshore Road) accommodating the utility easement.

The applicant is requesting a zoning change to add the Auto Dealership Combining (AD) District Overlay to the project site, and a Design Enhancement Exception (DEE) to deviate from the “build-to-line” requirement.

Table 1 summarizes the characteristics of the proposed project. Figure 3 shows the proposed site plan and Figure 4a-b shows the proposed building elevations.

**Table 1  
 Project Characteristics**

	Existing Use	Proposed Project
<b>Assessor’s Parcel No.</b>	008-03-084	
<b>Project Site Size</b>	110,642 sf (2.54 acres)	
<b>Building Floor Area</b>	17,942 sf	61,510 sf
<b>Parking Spaces</b>	Approximately 200	Site/Ground Floor Parking: 43 Second Floor: 66 Third Floor: 30 Roof: 80 <i>Total Provided Parking: 219</i>
<b>Floor Area Ratio (FAR)</b>	0.137:1	0.555:1
<b>Building Height</b>	Restaurant: One Story	Auto Dealership Building: Three Stories, 50 Feet Max Height  Detached Carwash: One Story, 20 Feet Max Height

**Parking and Site Access**

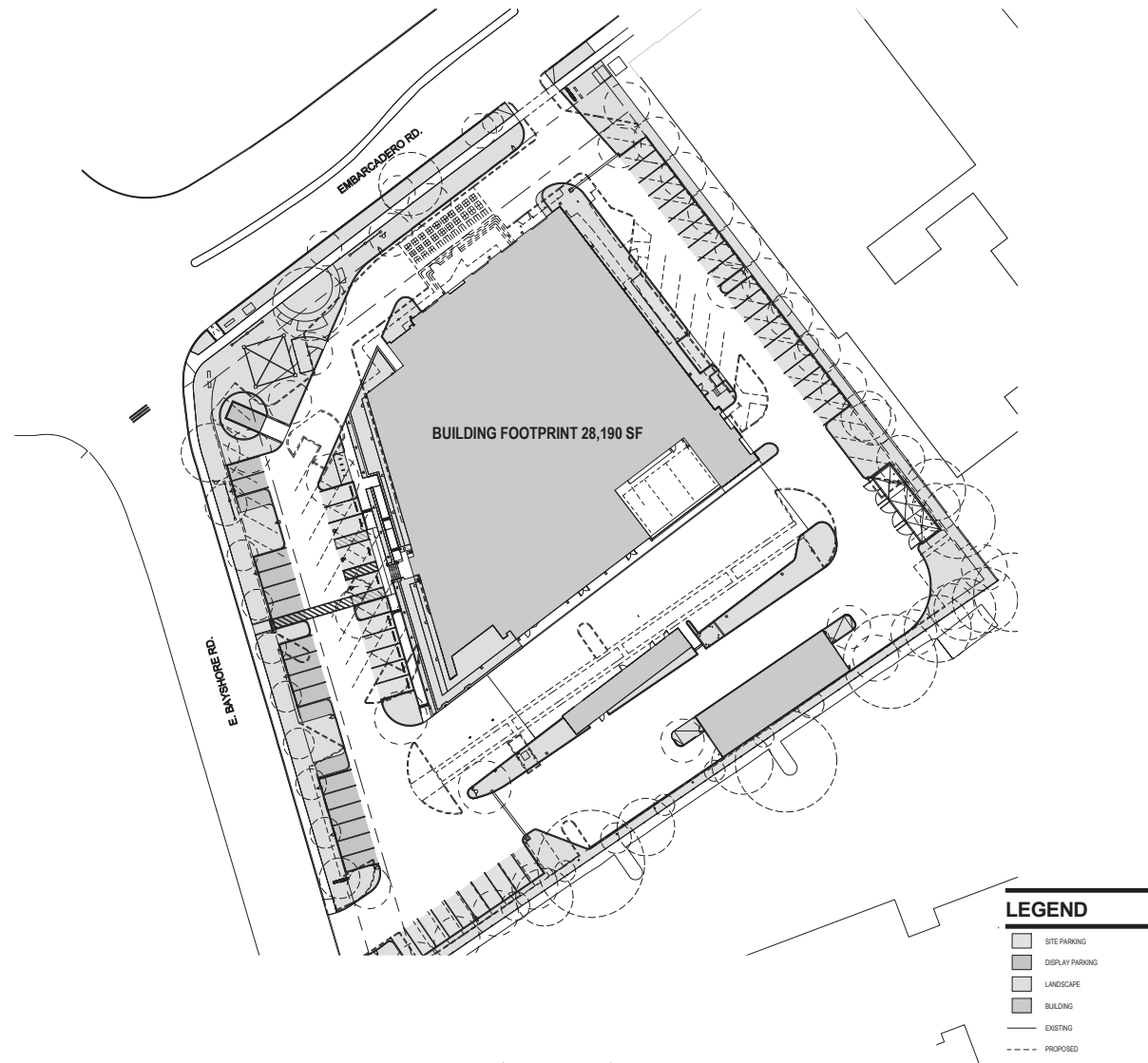
The proposed project would include a total of 219 parking spaces, 43 of which would be surface parking spaces. An additional 66 spaces would be provided on the second floor, 30 on the third floor, and 80 parking spaces on the roof deck. Internally, four elevators would carry vehicles through floors one through three and vehicular ramps would allow access to the rooftop deck parking area.

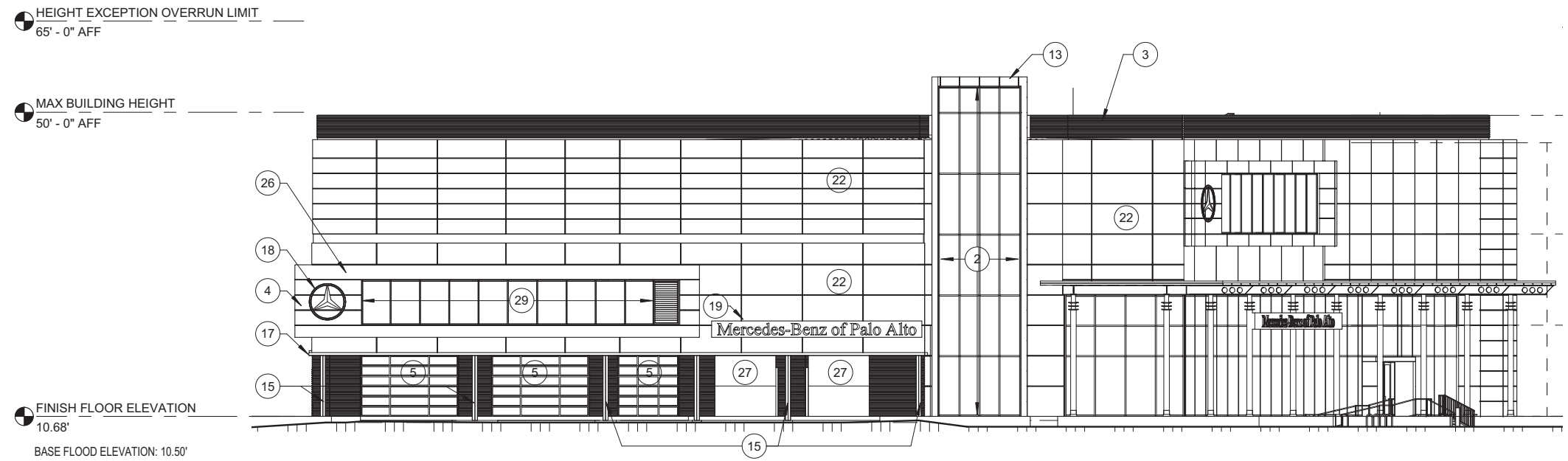
Vehicular access would be provided from an existing driveway on Embarcadero Road and an existing driveway on East Bayshore Road. Inbound and outbound movements would be allowed at both access points and would be controlled by stop-signs. Pedestrians would access the proposed auto dealership building from the west or south side.



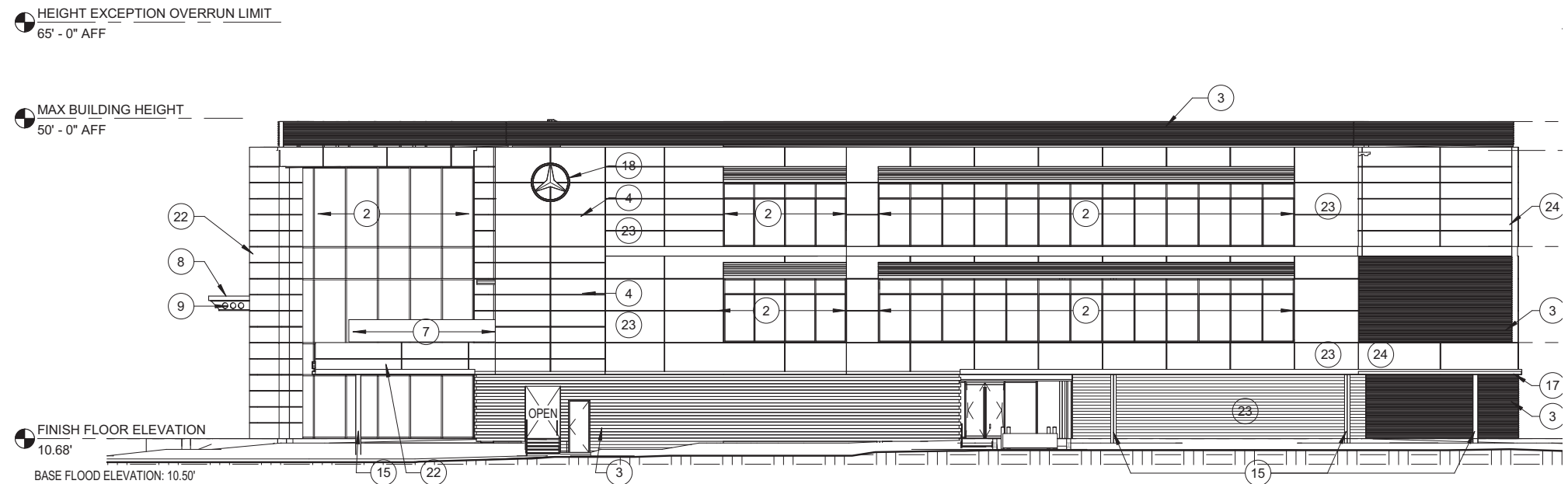
AREA CALCULATIONS

LOT AREA : 2.54 ACRES	110,642 SF
EXISTING LOT COVERAGE	15,168 @ 13.7%
PROPOSED LOT COVERAGE	28,190 @ 25.5%
EXISTING FLOOR AREA (FAR)	0.137:1
PROPOSED FLOOR AREA (FAR)	0.555:1





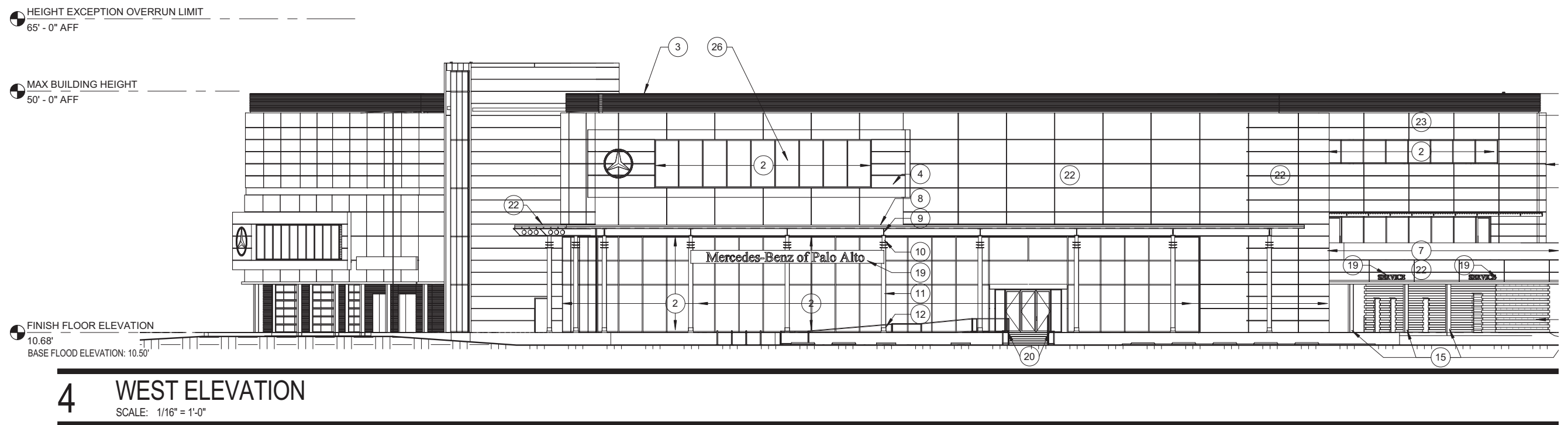
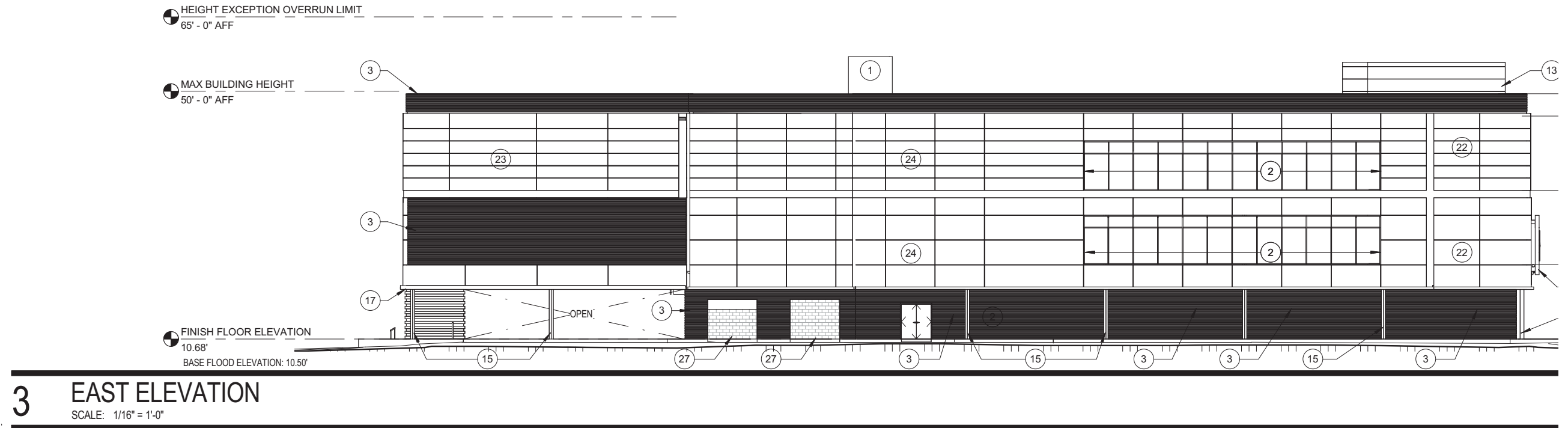
**1** NORTH ELEVATION  
SCALE: 1/16" = 1'-0"



**2** SOUTH ELEVATION  
SCALE: 1/16" = 1'-0"

Proposed Building Elevations





Proposed Building Elevations



### **Landscaping**

According to an Arborist Report prepared by Skender Construction (August 3, 2015), there are a total of 63 existing trees within the project site. Of the 63 trees, 36 would be preserved during construction period. The 36 trees to be preserved include Chinese Elm, Loquat, Privot, Blue Gum Eucalyptus, and Iron Bark Eucalyptus. The trees to be removed include Chinese Elm and Iron Bark Eucalyptus.

New trees would be planted on the project site, including two Flax Leaf PaperBark street trees on Embarcadero Road, four Crape Myrtle and Purple Leaf Plum trees, 12 London Plane trees, seven Marina Arbutus, and seven Canary Island Pine and Bradford Pear trees.

Additional landscaping would include foundation shrubs and perennials (Manzanita Hybrids, Dwarf Bottlebrush, Fortnight Lily, Silverberry, Pineapple Guava, Yaupon, Angelwing Jasmine, Juniper, Glossy Privet, Red Fringe Flower, India Hawthorn, and White Shrub Rose), groundcovers (Prostate Cotoneaster, Creeping Mahonia, Prostrate Juniper, and Green Lavender Cotton), bio-swale groundcover (California Meadow Sedge), and ornamental grasses (Feathered Reed Grass, Cape Rush, California Fescue, Blue Oat Grass, Red Fountain Grass, Dwarf Fountain Grass, and Deep Grass).

### **Utilities**

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 and Grading**

Development of the proposed project is expected to occur over approximately 14 months. The total amount of soil that would be imported is between 3,500 cubic yards (CY) and 5,000 depending on what can be used from the site utility excavation.

### **Green Building Features**

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 building would include insulated metal panel, high efficiency glass with protective bird coatings, insulation of mechanical heating and cooling, as well as passive ventilation strategies to maximize the building's energy performance.

The carwash structure would include a recycled water recapture system.





## 10. Surrounding Land Uses and Setting

The relatively flat, generally square project site is currently developed with a 17,942 square-foot single-story commercial restaurant building (formerly Ming’s Chinese Cuisine and Bar, now vacant) and surface parking areas with non-native landscape trees and a decorative pond on the corner of East Bayshore Road and Embarcadero Road. The existing building is located in the northerly portion of the site. Surface parking can be found on all sides of the building. The site includes an approximately 80-foot wide easement to accommodate overhead high voltage electric transmission lines at the northwest corner of the site parallel to East Bayshore Road, and a sub-surface storm drain line. Figure 5 shows photos of the existing site.

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) and Stanford University Marguerite shuttle line TECH stop is located at 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 to the south, and an Audi automobile dealership to the east. The Audi dealership is currently being remodeled and will include a new 7,380 square foot showroom, 1,036 square foot service area, and a 3,139 square foot covered drop-off area. Across the street on Embarcadero Road are professional offices and to the west across the street on East Bayshore Road are medical offices. Figure 6a-b shows photos of the surrounding uses.

The Baylands Nature Preserve (“Baylands”) is located approximately 250 feet from the southeast corner of the project site. Bounded by Mountain View and East Palo Alto, the 1,940-acre Baylands is one of the largest tracts of undisturbed marshland remaining in the San Francisco Bay (City of Palo Alto, 2016). Fifteen miles of multi-use trails provide access to a unique mixture of tidal and fresh water habitats (City of Palo Alto, 2016). The project site is included within the City’s Baylands Master Plan and located within the “Privately Owned Lands.” Figure 7 shows photos of the Baylands near the project site.

## 11. Other Public Agencies Whose Approval is Required

The proposed project would require the following discretionary approvals by the City of Palo Alto. No other public agency discretionary approvals are required.

- Site and Design Review, per Palo Alto Municipal Code (PAMC) Section 18.30 (G);
- A Zone Change, per PAMC Section 18.80.030, to apply the Auto Dealership Combining (AD) District, to allow the proposed use, additional FAR and other development standards for auto dealerships;
- Architectural Review, per PAMC Section 18.76.020; and
- A Design Enhancement Exception, per PAMC Section 18.76.050, for the proposed deviation from the “build-to” line (percentage of building along the front setback) requirement within CS district.





**Photo 1:** Front of project site from Embarcadero Road looking south



**Photo 2:** Western side of project site from East Bayshore Road looking east





**Photo 1:** New Audi Dealership building east of project site



**Photo 2:** Office building across Embarcadero Road north of project site





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



**Photo 2:** Office building south of project site





**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



## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is “Potentially Significant” or “Potentially Significant Unless 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 type="checkbox"/> Cultural Resources               | <input checked="" type="checkbox"/> Geology/Soils                      |
| <input type="checkbox"/> Greenhouse Gas Emissions          | <input type="checkbox"/> Hazards & Hazardous Materials    | <input type="checkbox"/> Hydrology/Water Quality                       |
| <input type="checkbox"/> Land Use/Planning                 | <input type="checkbox"/> Mineral Resources                | <input 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 checked="" type="checkbox"/> Mandatory Findings of Significance |

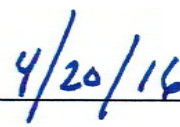


## DETERMINATION

On the basis of 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 in 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.
- 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.

  
\_\_\_\_\_  
Signature

  
\_\_\_\_\_  
Date



## ENVIRONMENTAL CHECKLIST

The City of Palo Alto has adopted CEQA thresholds that augment the thresholds contained in the *State CEQA Guidelines* Appendix G checklist. The following checklist is based on the City’s thresholds as well as the Appendix G checklist. This checklist has been formulated by the City to determine the potential for the project to result in significant environmental effects.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>I. AESTHETICS</b>				
-- Would the Project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) **LESS THAN SIGNIFICANT IMPACT.** The project site is located in a fully urbanized area of Palo Alto that is developed primarily with commercial land uses near the Baylands and adjacent to properties that are tangent to the Baylands. The project site and its surrounding areas are currently developed with structures, surface parking, power lines, and mature trees and other landscaping. The topography of the area is generally flat. Building heights in the immediate vicinity range from one to three stories and are a mix of architectural styles that are consistent with the Baylands Design Guidelines. The project site is currently developed with a one-story commercial restaurant building and surface parking. The proposed project would involve the construction of two new buildings, one three-story auto dealership building and a one-story detached carwash.

The City of Palo Alto’s CEQA thresholds state that a proposed project would have a significant impact if it would “have a substantial adverse effect on a public view or view corridor” or if the proposed project would violate existing Comprehensive Plan policies regarding visual resources. According to Policy Program L-71 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, Embarcadero Road, Page Mill Road, Oregon Expressway, Interstate 280, Arastradero Road (west of Foothill Expressway), Junipero Serra Boulevard/Foothill Expressway, and Skyline Boulevard. These roads are to be maintained as local scenic routes. The project site is on





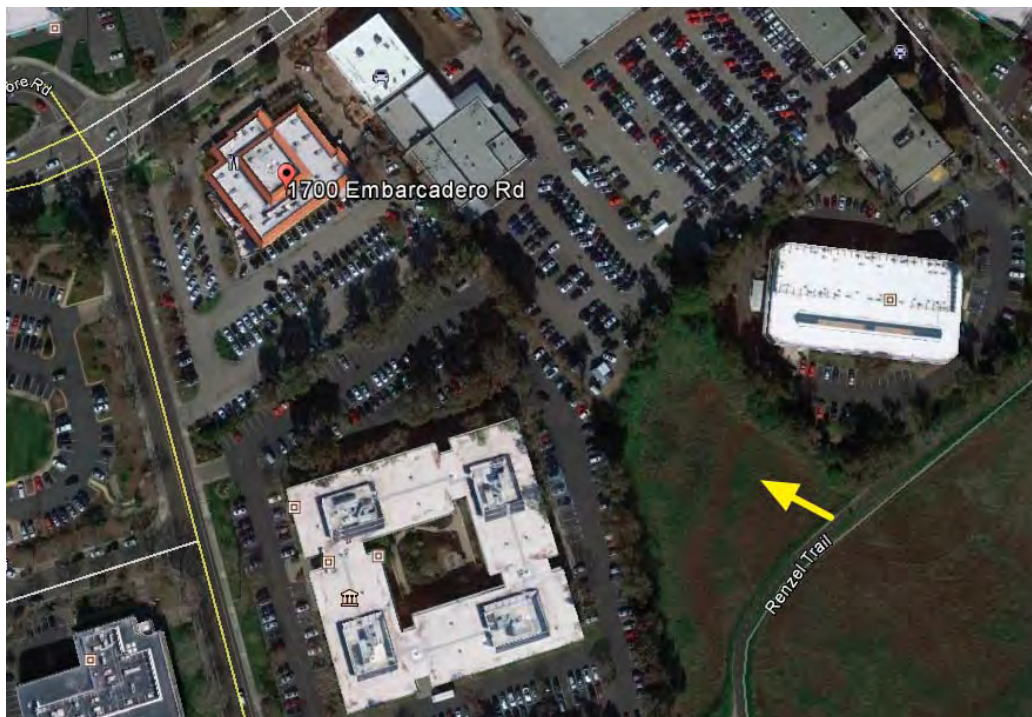
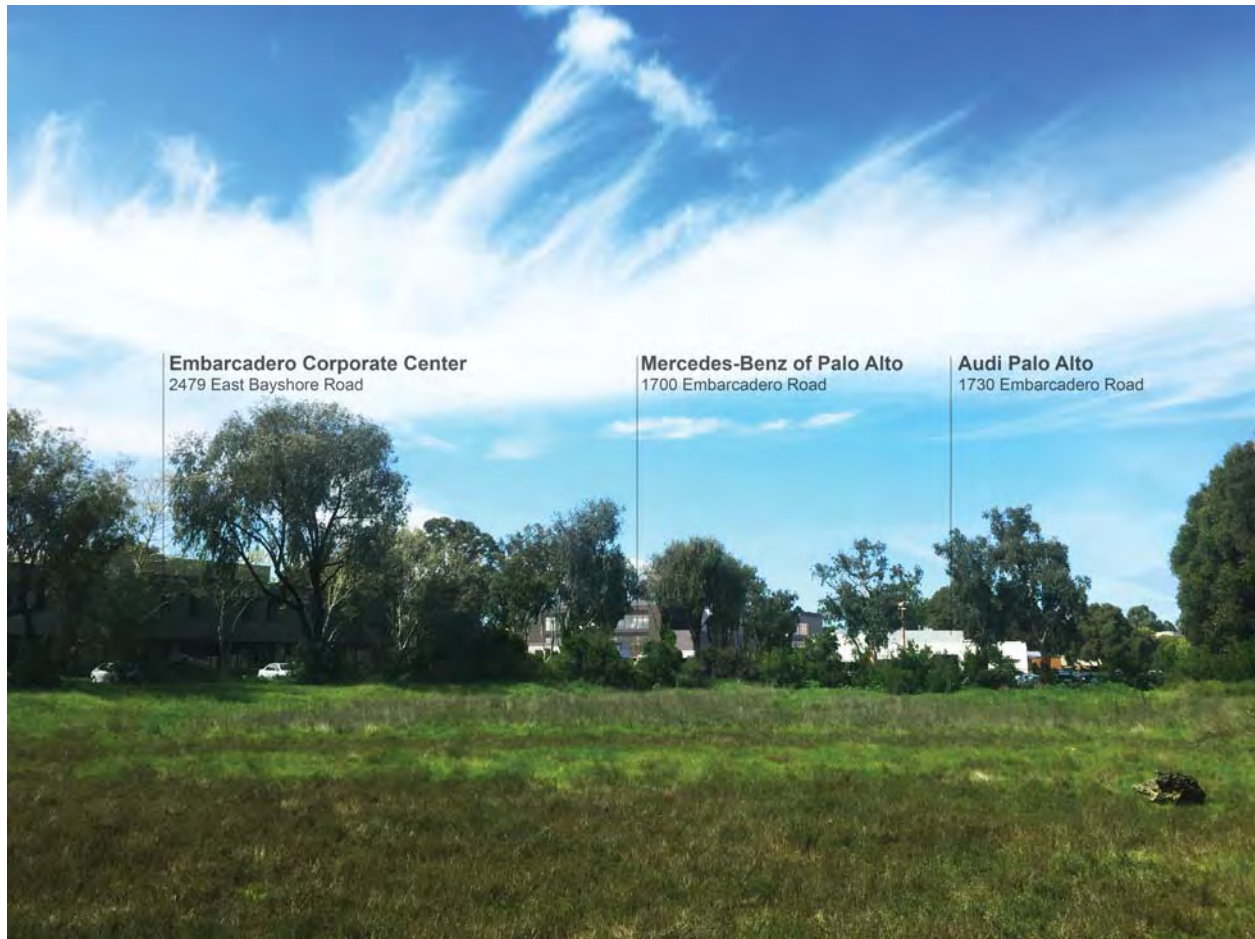
Embarcadero Road which, past (northeast of) the project site, afford scenic views of the Palo Alto Golf Course and ultimately of the Baylands, the south bay and the hills of the East Bay. None of these scenic views are currently available through the project site. Views to the Baylands from Embarcadero Road adjacent to the site are already blocked by existing development and mature trees. Given this, the project would not block views of the Baylands, bay or distant hills. Therefore, the proposed project would not have a substantial adverse effect on identified scenic views or vistas or on a public view or view corridor.

b) **LESS THAN SIGNIFICANT IMPACT.** There are no rock outcroppings or historic buildings on the site; however, there are 63 trees on the site. Of these, 27 (Chinese Elm and Iron Bark Eucalyptus) would be removed. Although they have value as visual resources, these trees are not considered protected trees by the City of Palo Alto Tree Protection Ordinance, and the proposed project would involve planting additional street trees on both East Bayshore Road and Embarcadero Road to replace the trees to be removed. The most prominent trees visible from and along Embarcadero and East Bayshore roads would be retained, including the two large elm trees on Embarcadero at the site's main frontage. Impacts to scenic resources would be less than significant.

c) **LESS THAN SIGNIFICANT IMPACT.** The visual character of the area surrounding the project site includes one- to three-story office park and commercial development. The Palo Alto Golf Course is approximately 600 feet east of the project site. The proposed project involves the construction of a new three-story auto dealership building and a detached one-story carwash as well as surface parking and landscaping. The proposed project would increase the massing and intensity of development on the project site (see Figure 4). As such, the proposed project would represent a change in the visual character of the site. However, the existing visual character and quality of the site, characterized by a one-story commercial building, surface parking and landscaping, are considered low to moderate. Figure 8 shows a visual simulation of the proposed project from the Renzel Trail within the Baylands Nature Preserve. 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 two-story auto dealership located to the east. In addition, the proposed project would be consistent with the FAR and height allowances for the CS(AD) zone in accordance with the Palo Alto Municipal Code (PAMC) (see Section X, *Land Use and Planning*). 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.

Assuming the Design Enhancement Exemption is granted (see Section X, *Land Use and Planning*, for further explanation) the proposed structure would be set back approximately 40 feet from Embarcadero Road. This is a greater setback than the existing building on site. Though the height of the on-site structures would increase from one to three stories, the setback would retain some of the elements of the existing visual character – such as surface parking and landscaping, including trees, fronting Embarcadero Road – and by locating the building with





Visual Simulation of Proposed Project from  
the Baylands Nature Preserve

increased setback would help reduce the perceived scale of the building from Embarcadero Road and East Bayshore Road.

As mentioned above in subsection (b), the proposed project would increase the number of street trees and planted trees on the project site and would involve additional landscaping, which would soften the appearance of the new larger building.

The project components require Major Architectural Review under PAMC Section 18.76.020. Therefore, it would be subject to review by the City's Architectural Review Board. The purposes of the City's architectural review process are to:

- *Promote orderly and harmonious development in the city;*
- *Enhance the desirability of residence or investment in the city;*
- *Encourage the attainment of the most desirable use of land and improvements;*
- *Enhance the desirability of living conditions upon the immediate site or in adjacent areas; and*
- *Promote visual environments which are of high aesthetic quality and variety and which, at the same time, are considerate of each other.*

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

The project site is also within the Site and Design Review combining district. Therefore, it would be subject to review by the City's Planning and Transportation Commission. The purpose of this process is 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, in order to assure that use and development will be harmonious with other uses in the general vicinity and will be in accord with the Palo Alto Comprehensive Plan.

Based on the discussion above and with the required Major Architectural Review and Site and Design Review and approval, the proposed auto dealership building and carwash structure would not significantly degrade the existing visual character or quality of the site and its surroundings. Impacts related to visual character and quality would be less than significant.

d) **LESS THAN SIGNIFICANT IMPACT.** 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 source of glare adjacent to the project site is the sun's reflection from metallic and glass surfaces on buildings and on vehicles parked on adjacent streets and in adjacent parking areas.

The proposed project would incorporate exterior lighting in the form of pedestrian walkway lighting, parking lot lighting, and other safety related lighting. Additionally, interior lighting would be visible through the proposed building's windows. Although auto dealership lighting typically has a higher intensity than a typical commercial use, these light sources would not



have a significant impact on the night sky, as they would only incrementally add to the existing background light levels already present as a result of the surrounding street lighting and urban development. In addition, the proposed project would be required to adhere to the standards in PAMC Section 18.23.030, which requires exterior lighting in parking areas, pathways, and common open space to “be designed to achieve the following: (1) provide for safe and secure access on the site, (2) achieve maximum energy efficiency, and (3) reduce impacts or visual intrusions on abutting or nearby properties from spillover and architectural lighting that projects upward.” According to the proposed project’s photometric plan, lighting associated with the proposed project would be directed towards the site. Minimal light spillover would occur on adjacent uses to the east and south. Lighting impacts would be less than significant.

According to the City’s CEQA thresholds, a significant impact would also occur if the proposed project would “substantially shadow public space (other than public streets and adjacent sidewalks) between 9:00 AM and 3:00 PM from September 21 to March 21.” The proposed auto dealership structure is three stories high in height; therefore, it may cast shadows in the immediate area. Additionally, the detached carwash structure would be approximately 20 feet high. However, surrounding structures are similar in height (two to four stories) to the proposed structures. There are no public open space areas (besides public streets and sidewalks) adjacent to the project site. Other shadow-sensitive uses include nurseries, outdoor-oriented retail uses (e.g., certain restaurants), or routinely useable outdoor spaces associated with recreational, institutional, or residential land uses. These uses are considered sensitive because sunlight is important to their function, physical comfort, and/or commerce. There are no shadow-sensitive uses surrounding the project site. Impacts would be less than significant.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>II. AGRICULTURE AND FOREST RESOURCES</b>				
<p>-- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:</p>				
a) 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?	<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-e) **NO IMPACT.** The Land Use and Design Chapter of the City’s Comprehensive Plan show the various farmland types throughout the City. The project site is not identified as any farmland type or enrolled in Williamson Act contracts, or 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. 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.

	<b>Potentially Significant Impact</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<b>III. AIR QUALITY</b>				
-- Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality 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 “non-attainment.” 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 BAAQMD is in non-attainment for the state and federal ozone standards, the



state and federal PM<sub>2.5</sub> (particulate matter up to 2.5 microns<sup>1</sup> in size) standards and the state PM<sub>10</sub> (particulate matter up to 10 microns in size) standards and is required to prepare a plan for improvement (BAAQMD, “Air Quality Standards and Attainment Status” webpage, accessed July 2015). The health effects associated with criteria pollutants for which the Basin is in non-attainment are described in Table III-1.

**Table III-1  
 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 <sub>10</sub> )	(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). <sup>a</sup>
Suspended particulate matter (PM <sub>2.5</sub> )	(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. <sup>a</sup>

Source: U.S. EPA, <http://www.epa.gov/airquality/urbanair/>, accessed November 21, 2014.

<sup>a</sup> More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in the following documents: EPA, *Air Quality Criteria for Particulate Matter*, October 2004.

**Air Quality Management**

The Bay Area 2010 Clean Air Plan (CAP) provides a plan to improve Bay Area air quality and protect public health. The legal impetus for the CAP is to update the most recent ozone plan, the Bay Area 2005 Ozone Strategy, to comply with state air quality planning requirements as codified in the California Health & 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, September 2010).

In 2006, the U.S. Environmental Protection Agency (U.S. EPA) tightened the national 24-hour PM<sub>2.5</sub> standard regarding short-term exposure to fine particulate matter from 65 µg/m<sup>3</sup> (micrograms per cubic meter) to 35 µg/m<sup>3</sup>. 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

<sup>1</sup> One micron equals one-millionth of a meter; i.e. 10<sup>-6</sup>



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<sub>2.5</sub> 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<sub>2.5</sub> 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<sub>2.5</sub>, 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<sub>2.5</sub> (adopted December 2012).<sup>2</sup> 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<sub>2.5</sub> 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 Emission Thresholds**

On March 5, 2012 the Alameda County Superior Court issued a judgment finding that the BAAQMD had failed to comply with CEQA when it adopted the thresholds contained in the BAAQMD’s 2010 CEQA Guidelines. The court did not determine whether the thresholds were valid on the merits, but found that the adoption of the thresholds was a project under CEQA. The court issued a writ of mandate ordering the District to set aside the thresholds and cease dissemination of them until the Air District had complied with CEQA. The Air District has appealed the Alameda County Superior Court’s decision. The Court of Appeal of the State of California, First Appellate District, reversed the trial court's decision. The Court of Appeal's decision was appealed to the California Supreme Court, which granted limited review, and the matter is currently pending there (BAAQMD, “Updated CEQA Guidelines” webpage, updated January 16, 2014). In view of the trial court’s order which remains in place pending final resolution of the case, BAAQMD is no longer recommending that the thresholds be used as a generally applicable measure of a project’s significant air quality impacts.

As such, lead agencies need to determine appropriate air quality thresholds of significance based on substantial evidence in the record. Lead agencies may rely on the BAAQMD’s CEQA Guidelines (updated May 2012) for assistance in calculating air pollution emissions, obtaining information regarding the health impacts of air pollutants, and identifying potential mitigation measures. However, the BAAQMD has been ordered to set aside the thresholds and is no longer recommending that these thresholds be used as a general measure of a project’s significant air quality impacts. Lead agencies may continue to rely on the BAAQMD’s 1999 Thresholds of Significance and to make determinations regarding the significance of an

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<sup>2</sup> 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 (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), volatile organic compounds (VOCs), and ammonia (NH<sub>3</sub>).





individual project’s air quality impacts based on substantial evidence in the record for that project.

For this Initial Study, the City of Palo Alto has determined that the BAAQMD’s significance thresholds in the updated May 2011 CEQA Guidelines for project operations within the San Francisco Bay Area Air Basin are the most appropriate thresholds for use in determining air quality impacts of the proposed project. These thresholds are lower than the 1999 BAAQMD thresholds, and thus use of the thresholds in the May 2011 CEQA Guidelines is more conservative. Therefore, these thresholds are considered reasonable for use in this Initial Study. Table III-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 III-2:<sup>3</sup>

**Table III-2  
 Thresholds of Significance for Air Pollutants and Precursors**

<b>Pollutant/ Precursor</b>	<b>Maximum Annual Emissions (tpy)</b>	<b>Average Daily Emissions (lbs/day)</b>
ROG	10	54
NO <sub>x</sub>	10	54
PM <sub>10</sub>	15	82
PM <sub>2.5</sub>	10	54

*Source: Table 2-2, Bay Area Air Quality Management District, CEQA Air Quality Guidelines, May 2011.*

*Notes: tpy = tons per year; lbs/day = pounds per day; NO<sub>x</sub> = oxides of nitrogen; PM<sub>2.5</sub> = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM<sub>10</sub> = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ROG = reactive organic gases; tpy = tons per year.*

In addition, a significant air quality impact would occur if the project design or project construction does not incorporate control measures recommended by the BAAQMD to control emissions during construction (as listed in Table 8-1 of the BAAQMD CEQA Guidelines).

a) **LESS THAN SIGNIFICANT IMPACT.** 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

<sup>3</sup> Note the thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> apply to construction exhaust emissions only.



the 2010 Clean Air Plan (CAP). Therefore, consistent with the City's CEQA thresholds, the proposed project would result in a significant impact if it would conflict with or obstruct with implementation of the 2010 CAP.

Given the nature of the proposed project, it would not substantially induce population growth directly as it does not include or directly facilitate the construction of new housing. The proposed auto dealership building would incrementally increase employment opportunities in Palo Alto. As discussed in Section XIII, *Population and Housing*, the proposed project would increase employment by an estimated 14 jobs. According to the Association of Bay Area Government's employment growth projections for the City of Palo Alto, there would be approximately 104,430 employees in 2015 and 112,560 employees by 2025 (City of Palo Alto, 2009). The incremental addition of approximately 14 employees would not result in a substantial change in employment growth in Palo Alto. As a result, a substantial change in employment growth in Palo Alto would not occur; therefore, the proposed project would not induce employment growth beyond the forecasts. Impacts related to conflict or obstruction of applicable air quality plans would be less than significant.

b, c) **LESS THAN SIGNIFICANT IMPACT.** The proposed project would generate temporary construction emissions (direct emissions) and long-term operational emissions (direct and indirect emissions). Emissions associated with the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) version 2013.2.2. Complete CalEEMod results and assumptions can be viewed in Appendix A.

#### *Construction Emissions*

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) and exhaust emissions from heavy construction vehicles, in addition to reactive organic gases (ROG) that would be released during the drying phase upon application of architectural coatings. The proposed project would be required to comply with all BAAQMD rules and regulations regarding construction emission control measures.

Development of the proposed project is expected to occur over approximately 14 months. The total amount of soil that would be imported is between 3,500 CY and 5,000 CY depending on what can be used from the site utility excavation. The more conservative amount of 5,000 CY was applied to CalEEMod.

Table III-3 summarizes the estimated maximum daily emissions of pollutants during construction on the project site. As shown in the table, the BAAQMD thresholds would not be exceeded. Therefore, impacts would be less than significant.



**Table III-3  
 Estimated Construction Average Daily Air Pollutant Emissions**

	Average Daily Emissions (lbs/day)					
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
Average Daily Emissions <sup>a</sup>	8.33	38.63	29.97	16.27	9.64	< 0.01
BAAQMD Thresholds	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

See Table 2.1 “Overall Construction-Mitigated” of annual emissions CalEEMod worksheets in Appendix A.

**Long-Term Emissions**

Long-term emissions associated with project operation, as shown in Table III-4, 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 onsite development (area sources).

Emissions would not exceed BAAQMD thresholds for any criteria pollutant. Consequently, the impact of the proposed project’s operational emissions on regional air quality under thresholds (b) and (c) would be less than significant.

**Table III-4  
 Estimated Project Operational Emissions**

Sources	Estimated Emissions (lbs/day)					
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
Area	3.51	<0.01	<0.01	<0.01	<0.01	0.00
Energy	<0.01	0.44	0.38	<0.01	<0.01	<0.01
Mobile	9.92	14.74	76.66	8.00	2.25	0.11
<b>Total Emissions (lbs/day)</b>	<b>13.48</b>	<b>15.23</b>	<b>77.04</b>	<b>8.05</b>	<b>2.30</b>	<b>0.11</b>
BAAQMD Thresholds	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

Source: Calculations were made in CalEEMod. See Table 2.2 “Unmitigated Operational” in CalEEMod annual emissions worksheets in Appendix A. Estimated operational emissions do not take into account emissions reductions from removal of existing uses on site, therefore, this analysis is conservative.

Note: numbers may not add up due to rounding.

**Carbon Monoxide**

According to the City’s CEQA thresholds, CO modeling should occur when

- a) project CO emissions exceed 550 pounds per day or 100 tons per year; or
- b) project traffic would impact intersections of roadway links operating at Level of Service (LOS) D, E, or F, or would cause LOS to decline to D, E, or F; or
- c) the project would increase traffic volumes on nearby roadways by 10% or more.



As discussed above and in Section XVI, *Transportation/Traffic*, the proposed project would not meet any of the criteria outlined above. Therefore, CO impacts would be less than significant.

d) **LESS THAN SIGNIFICANT IMPACT.** Certain population groups are more sensitive to air pollution than the general population; in particular, children, the elderly, and acutely ill and chronically ill persons, especially those with cardio-respiratory diseases, are considered sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. The closest sensitive receptor to the project site is the school (Hope Technology) approximately 500 feet south of the project site.

As discussed above under subpart (b, c) of this section, the proposed project would not exceed BAAQMD thresholds for any pollutant; therefore, it would not expose sensitive receptors to substantial pollutant concentrations. According to the City's CEQA thresholds, the proposed project would have a significant impact if it would expose sensitive receptors to substantial levels of toxic air contaminants (TAC). The proposed project involves retail sales and repair service operation with ancillary carwash for customers of the dealership or service department and would not emit substantial levels of TACs. TAC emissions are mostly associated with industrial sources, manufacturing uses, as well as with diesel exhaust. The proposed project would not involve any industrial or manufacturing processes. As discussed in Section VIII, *Hazards and Hazardous Materials*, the proposed project may involve the use, storage, disposal or transportation of hazardous materials but these would be subject to hazardous materials regulations and would not be expected to emit substantial amounts of TACs. The proposed project may involve heavy truck usage associated with deliveries and trash hauling; however, heavy truck usage would be similar to other retail sales and repair service operation with ancillary carwash for internal use and would not result in substantial TAC emissions. In addition, there are no sensitive uses within the vicinity of the site; the closest sensitive receptor to the project site is the school (Hope Technology) approximately 500 feet south of the project site. Impacts would be less than significant.

e) **LESS THAN SIGNIFICANT IMPACT.** 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 carwash for internal use. These types of uses would not generate objectionable odors that would affect a substantial number of people. Therefore, impacts related to odor are less than significant.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**IV. BIOLOGICAL RESOURCES**

-- Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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,) **POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED.** The project site is located in an urbanized area of Palo Alto, but near the Baylands, and has been graded and developed/paved for the existing building and surface parking lot. The proposed project would involve the demolition of the existing commercial building and the construction of a new three-story, auto dealership building, surface parking, and a detached carwash. 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.

### **Special Status Species**

For the purpose of this analysis, special status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) under the Federal Endangered Species Act (FESA) or those listed or proposed for listing as rare, threatened, or endangered by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA). No federal-or-state-listed endangered, threatened, rare, or otherwise sensitive flora or fauna were observed at the project site. The salt marsh harvest mouse and the California clapper rail, both on the federal endangered species list, are permanent Baylands residents. However, the project site is 250 feet away from the nearest Baylands habitat and does not contain native or extensive vegetation or other suitable habitat for sensitive or special status species. No direct impacts to special status species would occur.

### **Migratory Birds**

A total of 63 trees are located on the site. Of the 63 trees, 36 would be preserved. The 36 trees to be preserved include Chinese Elm, Loquat, Privot, Blue Gum Eucalyptus, and Iron Bark Eucalyptus. The 27 trees to be removed include Chinese Elm and Iron Bark Eucalyptus. The 36 trees to be preserved have an overall health and structure rating of fair to good based on Tree Care Industry Association, 2012 standards. On-site trees may support nesting birds protected under the Migratory Bird Treaty Act. The removal of approximately 27 trees and construction adjacent to the remaining trees may affect protected nesting birds. Therefore, *Mitigation Measure BIO-1* is required to protect nesting birds.

### **Indirect Impacts to Wildlife**

The project site is located approximately 250 feet from the boundary of the Baylands Nature Preserve. The proposed project could indirectly affect wildlife or wildlife habitat through water, noise, dust or light pollution. As discussed below under Item 'c,' water quality impacts to Baylands habitat would be less than significant. As discussed in Section III, *Air Quality*, air quality impacts would be less than significant. As discussed in Section XII, *Noise*, noise impacts would be less than significant. Therefore, water, dust, or noise pollution would not adversely affect wildlife or habitat associated with the Baylands. As discussed in Section I, *Aesthetics*, the proposed project would increase the amount and intensity of lighting compared to existing conditions. However, lighting would be directed towards the project site. Relatively small amounts of light spillover to adjacent properties towards the Baylands would occur, as shown on the project photometric plan (on file at Planning Division offices). This spillover would affect the closest border of the adjacent property, which is a developed site and not part of the Baylands. In addition, there are buildings, parking areas, and mature trees between the project site and the Baylands which would block visibility of the light sources from the Baylands. Therefore, no significant light impacts on the Baylands would occur. The proposed project would not have significant indirect effects related to water quality, noise, or lighting on birds, fish, or mammals in the Baylands Nature Preserve. Impacts would be less than significant.

### Mitigation Measure

The following mitigation measure would be required to reduce impacts to protected nesting birds. With implementation of Mitigation Measure BIO-1, impacts would be less than significant.

**BIO-1 Nesting Bird Protection.** To avoid disturbance of nesting and special-status birds, activities related to the project, including, but not limited to, tree removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season (typically February through August in the project region). If construction must begin within the breeding season, then a pre-construction nesting bird survey shall be conducted no more than 3 days prior to initiation of ground disturbance and vegetation removal activities. The nesting bird pre-construction survey shall be conducted within the Project Boundary, including a 300-foot buffer (500-foot for raptors), on foot, and within inaccessible areas (i.e., private lands) afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in the area. If nests are found, an avoidance buffer (which is dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the avian biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

b) **LESS THAN SIGNIFICANT IMPACT.** The project site does not contain any riparian habitat or sensitive natural communities. Habitat impacts would be less than significant.

c) **LESS THAN SIGNIFICANT IMPACT.** 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 in the vicinity of the proposed survey area (United States Department of the Interior, Fish & Wildlife Service 2015).

A 118-acre fresh water emergent wetland, the Baylands, is located approximately 250 feet from the southeast corner of the project site border. 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 wetlands dominated by persistent herbaceous vegetation. However, the proposed project would not directly impact the Baylands habitat. The project site is about 250 feet away from the boundary of the Baylands.

Potential indirect effects to the wetland habitat related to lighting are discussed above under subsection (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 VI, *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 IX, *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. Impacts would be less than significant.

d) **LESS THAN SIGNIFICANT IMPACT**. The project site is not located within any known regional wildlife movement corridors or any other sensitive biological areas as indicated by the United States Fish & Wildlife Service Critical Habitat Portal or California Department of Fish & Wildlife Biogeographic Information and Observations System. The project site does not contain a native wildlife nursery site. Impacts would be less than significant.

e) **LESS THAN SIGNIFICANT IMPACT**. According to the City's CEQA thresholds, a significant impact would occur if the project would conflict with the City's Tree Preservation Ordinance. The purpose of the City of Palo Alto Tree Preservation Ordinance (PAMC Chapter 18.10) is to promote the health, safety, welfare, and quality of life of the residents of the city through the protection of specified trees located on private 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 protected trees will include appropriate conditions providing for the protection of such trees during construction and for maintenance of the trees thereafter. "Protected tree" is defined as any tree of the species *Quercus agrifolia* (Coast Live Oak) or *Quercus lobata* (Valley Oak). There are a total of 63 existing trees identified to be within site improvements. Of the 63 trees, 36 trees would be preserved, including 17 Chinese Elm, one Loquat, one Privot, three Blue Gum Eucalyptus, and eight Iron Bark Eucalyptus. The trees to be removed include Chinese Elm and Iron Bark Eucalyptus, none of which are protected under the Palo Alto Tree Preservation Ordinance, are located on or adjacent to the project site.

The PAMC regulates specific types of trees on public and private property for the purpose of avoiding their removal or disfigurement without first being reviewed and permitted by the City. Although 27 trees would be removed, none are considered protected trees. Therefore, impacts would be less than significant.

f) **NO IMPACT**. The project site is not within an approved Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No impact would occur.





	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**V. CULTURAL RESOURCES**

-- Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) **LESS THAN SIGNIFICANT IMPACT.** The proposed project would involve the demolition of the former Ming’s Restaurant building at 1700 Embarcadero Road, constructed in 1968. A Historic Resource Evaluation was prepared by M-Group on December 4, 2015. M-Group reviewed 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. A field survey was undertaken by M-Group Preservation Specialist Lilly Bianco on November 12, 2015 to perform photographic documentation and evaluate the level of integrity of the building. The evaluation identifies the building as a “neo-electric commercial building” and concludes that it is not eligible for listing on the California Register of Historic Resources based on its failure to meet one or more of the four significance criterion. More details of the findings can be found in the report, included in its entirety as Appendix B to this document. Impacts to historic resources from demolition of the existing building would be less than significant.

b-d) **LESS THAN SIGNIFICANT IMPACT.** The project site is within a highly urbanized area and is currently developed with a commercial restaurant building and surface parking. 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 sensitivity area (City of Palo Alto Comprehensive Plan Update, 2014).

The proposed project would include some below-grade construction including an elevator shaft pit, removal of existing structures and paving and constructing new foundations, utility trenches and surface paving. The site has been previously graded and disturbed during construction of the existing surface parking lot and structure. As a result, the possibility of encountering undisturbed subsurface cultural or paleontological resources is considered low. In the unlikely event that such un-documented resources are unearthed during construction, applicable regulatory requirements pertaining to the handling and treatment of such resources



would be followed. If archaeological or paleontological resources are identified, as defined by Section 21083.2 of the Public Resources Code, the site would be required to be treated in accordance with the provisions of Section 21083.2 of the Public Resources Code as appropriate. If human remains are unearthed, State Health and Safety Code Section 7050.5 require that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. Impacts would be less than significant with adherence to existing regulatory requirements.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>VI. GEOLOGY AND SOILS</b>				
-- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property?	<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"/>



Romig Engineers, Inc. prepared a geotechnical investigation for the proposed project in August 2015 (see Appendix C). The discussion below is based primarily on the analysis and conclusions of this study.

a.i) **NO IMPACT.** 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 (State of California Department of Conservation, 2015). No known fault lines cut through the site. The closest active fault is the San Andreas fault, located approximately 7.5 miles southwest of the project site. Therefore, the likelihood of surface rupture occurring from active faulting at the site is remote (Romig Engineers, Inc., 2015). No impact would occur.

a.ii) **LESS THAN SIGNIFICANT IMPACT.** 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. The faults considered most likely to produce large earthquakes in the area include the San Andreas, San Gregorio, Hayward, and Calaveras faults. The San Gregorio fault is located approximately 18 miles southwest of the site. The Hayward and Calaveras faults are located approximately 12 and 18 miles northeast of the site, respectively. 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. 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 Environmental Resources Policy 14, Program 47 (City of Palo Alto, 2015).

The State of California requires that buildings and structures be designed in accordance with the seismic design provisions included in the California Building Code (CBC) and in ASCE 7-10, "Minimum Design Loads for Buildings and Other Structures." With modern construction techniques and adherence to geology and soil provisions set forth in CBC, Chapters 16 and 18) impacts would be less than significant.

a.iii, c) **POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED.** According to the City's CEQA thresholds, a significant impact would also occur if the proposed project would "expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques."

Liquefaction is a phenomenon where saturated sand and silt take on the characteristics of a liquid during the intense shaking of an earthquake. The highest hazard areas are concentrated in regions of man-made landfill, especially fill that was placed many decades ago in areas that were once submerged bay floor. Such areas along the Bay margins are found in San Francisco, Oakland and Alameda Island, as well as other places around San Francisco Bay. Other potentially hazardous areas include larger stream channels, which produce the loose young soils that are particularly susceptible to liquefaction. 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 potential for failure from lateral spreading is highest in



areas where the groundwater table is high and where relatively soft, where recent alluvial deposits exist, and in areas with liquefaction risks. Per the Geology, Soils, and Seismicity Chapter of the Comprehensive Plan Update’s liquefaction susceptibility map, the project site is located in a “very high” liquefaction susceptibility part of the City. The geotechnical investigation prepared for the proposed project 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). Therefore, *Mitigation Measure GEO-1* is required to reduce potential impacts related to liquefaction. Though there is liquefaction risk associated with the project site, 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.

### **Mitigation Measure**

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

**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.*

a.iv) **NO IMPACT.** 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 State of California Landslides map, the project site is not located within an earthquake-induced landslide hazard zone (State of California Department of Conservation, 2015). The project site is generally flat and is not at risk of a landslide. Therefore, no impact would occur.

b) **LESS THAN SIGNIFICANT IMPACT.** 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 site-specific grading for foundations, building pads, access roads, and utility trenches. Temporary erosion could occur



during project construction. 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 (2009)* 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 to track dust particles (CASQA, 2009). This is commonly achieved by applying soil binders or water to disturbed surfaces.

In addition, the Air Quality Management District (AQMD) with jurisdiction over the project site, the Bay Area AQMD, specifies measures that 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 PM<sub>10</sub> 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, 2012).*

With compliance with above listed requirements, impacts of the proposed development associated with soil erosion and the loss of topsoil would be less than significant.

d) **LESS THAN SIGNIFICANT IMPACT.** Per the Geology, Soils, and Seismicity Chapter of the Comprehensive Plan Update, the project site is located in the eastern part of Palo Alto, where the prevalent soil types include Urban-Land Stevenscreek, Flaskan, Hangerone, and Clear Lake complexes, and Urban-Land Orthents and Botella soils. These soils are typically well to moderately-well drained, and they are characterized by low runoff. One exception is the Urban-Land hangerone complex, which is poorly drained. The Botella complex soils are generally composed of deep or very deep, well-drained clay loams, whereas Urban-Land Orthents are very deep, poorly drained, texturally heterogeneous soils.

A number of widely used treatments are available to mitigate expansive soils, including soil grouting, recompaction, and replacement with a non-expansive material. CBC Section 1808.6 requires special foundation design for buildings constructed on expansive soils. If the soil is not removed or stabilized, then foundations must be designed to prevent uplift of the supported structure or to resist forces exerted on the foundation due to soil volume changes or shall be isolated from the expansive soil. Compliance with CBC requirements would ensure protection of structures and occupants from impacts related to expansive soils. Impacts would be less than significant.



Under the City’s CEQA thresholds, a significant impact would also occur if the project would result in siltation. As discussed in Section IX, *Hydrology and Water Quality*, the proposed project would not result in substantial siltation. Impacts would be less than significant.

e) **NO IMPACT.** The proposed projects would be connected to the local wastewater treatment system. Septic systems would not be used. No impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**VII. GREENHOUSE GAS EMISSIONS**

-- Would the project:

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 for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 greenhouse gases (GHGs), gases that trap heat in the atmosphere, analogous to the way in which a greenhouse retains heat. Common GHG include water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxides (N<sub>2</sub>O), fluorinated gases, and ozone. GHGs are emitted by both natural processes and human activities. Of these gases, CO<sub>2</sub> and CH<sub>4</sub> are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are largely by-products of fossil fuel combustion, whereas CH<sub>4</sub> results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO<sub>2</sub>, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride (SF<sub>6</sub>) (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.

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 create a project-specific impact through a direct influence on climate change; therefore, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact is 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 (State CEQA Guidelines, Section 15355).

The significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with a regional GHG reduction plan (such as a Climate Action Plan). Neither the State nor the City of Palo Alto have adopted GHG emissions thresholds, and no GHG emissions reduction plan with established GHG emissions reduction strategies has yet been adopted. The BAAQMD adopted significance thresholds for GHGs in June 2010 (Table 6). For land use development projects (residential, commercial, industrial), the threshold is compliance with a qualified GHG Reduction Strategy; or annual emissions less than 1,100 metric tons per year (MT/year) of CO<sub>2</sub>E; or 4.6 MT CO<sub>2</sub>E per service population (residents + employees) per year.

a) **LESS THAN SIGNIFICANT IMPACT.** 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. Project-related construction emissions are confined to a relatively short period of time in relation to the overall life of the proposed project. Therefore, construction-related GHG emissions were amortized over a 30-year period to determine the annual construction-related GHG emissions over the life of the project.

GHG emissions associated with construction emissions and operational emissions from the proposed project were estimated using CalEEMod (see Appendix A for model output) and are discussed below. CalEEMod does not calculate N<sub>2</sub>O emissions related to mobile sources. As such, N<sub>2</sub>O emissions were calculated based on the existing uses VMT using calculation methods provided by the California Climate Action Registry General Reporting Protocol (January 2009).

### **Existing Conditions**

The project site currently is developed with a vacant 17,942 square foot restaurant. Although it is currently vacant, the restaurant could be reopened at any time without discretionary approval from the City. Therefore, emissions from the existing restaurant use were taken into account in this analysis. Existing GHG emissions from the project site were calculated in CalEEMod. Table VII-1 shows the existing emissions.



**Table VII-1  
 Existing Annual GHG Emissions**

<b>Emission Sources</b>	<b>Annual Emissions</b>
Existing Operational	
Area	<0.01 metric tons CO <sub>2</sub> E
Energy	304 metric tons CO <sub>2</sub> E
Solid Waste	97 metric tons CO <sub>2</sub> E
Water	12 metric tons CO <sub>2</sub> E
Existing Mobile	
CO <sub>2</sub> and CH <sub>4</sub>	1,276 metric tons CO <sub>2</sub> E
N <sub>2</sub> O	60 metric tons CO <sub>2</sub> E
<b>Existing GHG Emissions</b>	<b>1,749 metric tons CO<sub>2</sub>E</b>

*See Appendix A for CalEEMod Results.*

**Construction Emissions**

As shown in Table VII-2, emissions of CO<sub>2</sub>E units generated by construction of the proposed project are estimated at 961 metric tons. When amortized over a 30-year period (the assumed life of the project), CO<sub>2</sub>E construction emissions would be approximately 32 metric tons CO<sub>2</sub>E per year.

**Table VII-2  
 Estimated Construction-Related GHG Emissions**

	<b>Annual Emissions</b>
Total	961 metric tons CO <sub>2</sub> E
<b>Amortized over 30 years</b>	<b>32 metric tons per year CO<sub>2</sub>E</b>

*See Appendix A for CalEEMod Results.*

**Operational Indirect and Stationary Direct Emissions**

Operational Emissions include area sources (consumer products, landscape maintenance equipment, and painting), energy use (electricity and natural gas), solid waste, electricity to deliver water, and transportation emissions. Operational Emissions were calculated using CalEEMod. In accordance with AB 939, it was assumed that the proposed project would achieve at least a 50% waste diversion rate. Trips associated with the proposed project would include employee and visitor trips to and from the project site as well as ancillary trips such as test drives. CalEEMod does not specifically state that test drives are included in the trip generation assumptions for the dealership. However, in general the trip generation calculations in CalEEMod are very conservative. For example, based on standard inputs, CalEEMod assumed 3,863 trips per day whereas the traffic study estimated 102 AM peak hour trips and 149 PM peak hour trips (see Section XVI, *Transportation/Traffic*). Therefore, CalEEMod assumes more trips than if the PM peak hour trips occurred every hour (149 trips \* 24 hours = 3,576 trips). Consequently, although test drives are not explicitly factored in, the model is conservative such that ancillary trips are accounted for.

Table VII-3 combines the construction, operational and mobile GHG emissions associated with onsite development for the proposed project. As shown in Table VII-1, existing conditions include the emission of 1,749 metric tons of CO<sub>2</sub>E annually.





Construction emissions associated with construction activity (approximately 961 metric tons of CO<sub>2</sub>E) are amortized over 30 years (the anticipated life of the project). As shown in Table VIII-3, the proposed project would result in a net increase of 333 metric tons of CO<sub>2</sub>E. Although development facilitated by the proposed project would generate additional GHG emissions beyond existing conditions, because the total amount of net GHG emissions would be lower than the threshold of 1,100 metric tons CO<sub>2</sub>E per year, impacts from GHG emissions would be less than significant.

**Table VII-3  
Proposed Project Annual GHG Emissions**

<b>Emission Source</b>	<b>Annual Emissions (CO<sub>2</sub>E)</b>
Project Construction	32 metric tons
Project Operational	< 0.01 metric tons
Area	236 metric tons
Energy	108 metric tons
Solid Waste	14 metric tons
Water	
Project Mobile	
CO <sub>2</sub> and CH <sub>4</sub>	1,608 metric tons
N <sub>2</sub> O	84 metric tons
<b>Project Subtotal</b>	<b>2,082 metric tons</b>
<i>Existing Conditions Subtotal<sup>1</sup></i>	<i>(1,749 metric tons)</i>
<b>Total Net Emissions (Project-Existing)</b>	<b>333 metric tons</b>

<sup>1</sup> See Table 6

( ) denotes subtractions

Sources: See Appendix A for calculations and for GHG emission factor assumptions.

b) **LESS THAN SIGNIFICANT IMPACT.** Senate Bill 375, signed in August 2008, requires the inclusion of sustainable communities' strategies (SCS) in regional transportation plans (RTPs) for the purpose of reducing GHG emissions. The Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) adopted an SCS that meets greenhouse gas reduction targets. Plan Bay Area 2040 is a state-mandated, integrated long-range transportation, land-use and housing plan that would support a growing economy, provide more housing and transportation choices and reduce transportation-related pollution in the nine-county San Francisco Bay Area (Plan Bay Area, 2016). The SCS builds on earlier efforts to develop an efficient transportation network and grow in a financially and environmentally responsible way. Plan Bay Area 2040 would be updated every four years to reflect new priorities. A goal of the SCS is to "promote access to housing, jobs and transportation for all Bay Area residents, particularly low-income and lower-middle-income Bay Area residents" (Plan Bay Area, 2016).

The project site is currently occupied by a commercial building, formerly the Ming's Restaurant, and parking area, consisting of approximately 17,492 square feet (sf) of commercial floor area on the subject site. The remainder of the site is an asphalt parking lot. There are currently no residents living at the project site. The proposed auto dealership development would provide



jobs for Bay Area residents. According to the project applicant, the proposed project would generate an estimated 63 jobs (25 techs, 5 support tech staff, 10 salesmen, 4 finance, 5 management positions, 4 service advisors, 4 valet positions, 4 carwash and detail positions, and 2 reception positions). Additionally, the proposed auto dealership would add temporary construction jobs during demolition and construction. Therefore, the project would be consistent with this goal.

Another goal of the SCS is to “grow economic productivity in the Bay Area by 2% annually” (Plan Bay Area, 2016). The proposed project would involve additional job opportunities and car and auto repair sales. As a result, the proposed project would help grow economic productivity in the Bay Area.

According to *The Impacts of Sea-Level Rise on the California Coast*, prepared by the California Climate Change Center (CCCC) (May 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. ~~However, the~~ The project site is located approximately a mile from the San Francisco Bay and approximately 17 miles from the coast of the Pacific Ocean. According to the Cal-Adapt website, it is within a potential inundation area for flooding due to sea level rise and is not at risk for inundation from sea level rise (California Energy Commission, Cal-Adapt website, 2015). 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.

As mentioned, according to BAAQMD GHG significance thresholds, a proposed project’s GHG emissions would be less than significant if it is less than 1,100 metric tons per year (MT/year) of CO<sub>2e</sub> and the proposed project is consistent with an adopted regional GHG reduction plan such as Plan Bay Area 2040. The proposed project would not conflict with any 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 97 and SB 375. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**VIII. HAZARDS AND HAZARDOUS MATERIALS**

-- Would the project:

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 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"/> |



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS</b>				
-- Would the project:				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) 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"/>
h) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a, b) **LESS THAN SIGNIFICANT IMPACT.** Potential effects regarding hazards and hazardous materials from the project could come from construction and operational activities. Both activities are described further below.

**Construction Activities**

The use of heavy construction equipment, the transport of material to support construction, or the disturbance of any pre-existing hazards underground or in existing buildings or structures being demolished during construction has the potential to create impacts related to hazards or hazardous materials.



Construction of the proposed project would require the limited 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 (2.54), 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. Due to the medium-term construction period (approximately 14 months), the relatively small size of the project site (approximately 2.54 acres in total), and the minimal amount of construction equipment and associated hazardous materials to be used in construction of the proposed project, the potential for an accidental release of hazardous materials to harm the public or the environment would be minor. This potential would be further reduced through compliance with applicable regulations.

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. The total amount of soil that would be imported would be between 3,500 and 5,000 cubic yards depending on what could be used from the site utility excavation. As discussed under subsection (d) below, the project site is not included on a list of hazardous material sites. There is no evidence of contamination at the project site; therefore, the proposed project would not involve the release of contaminated soil during grading and excavation.

Construction activities may include the temporary transport, storage, and use of potentially hazardous materials including fuels, lubricating fluids, cleaners, solvents 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 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.

### **Operational Activities**

Once construction is complete, the operation phase of the project would include the daily activities of an automobile dealership, automobile services business, and carwash that 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 specific to automobile uses and other administrative offices. The surrounding area is known for automotive uses, and the proposed project would not differ substantially from existing nearby uses and activities. Two auto dealerships (Audi of Palo Alto and Anderson Honda) and an auto body repair shop (Matthews-Carlson Body Works) are located nearby.

The project site has a zoning designation of CS and a Comprehensive Plan land use designation of Service Commercial. The proposed auto dealership building would not be allowed under this designation and zoning. The proposed project would include a request to allow a zoning change for the Auto Dealership (AD) overlay. According to PAMC Chapter 18.30.020, the (AD) combining district may be combined with a CS district. The proposed auto dealership use would be permitted within the CS(AD) combining district.

As with any automotive activities that involve the storage and use of hazardous materials, on-site 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 a Hazardous Materials Business Plan (HMBP). 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.

c) **LESS THAN SIGNIFICANT IMPACT.** Hope Technology School, located approximately 0.1 miles 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. Additionally, the proposed uses would be similar to existing uses adjacent to the site along Embarcadero Road (Audi of Palo Alto and Anderson Honda). According to the City's CEQA thresholds, a significant impact would also occur if the proposed project would construct a school on a property that is subject to hazardous materials



contamination, emissions, or accidental release. The proposed project does not involve construction of a school. Therefore, impacts would be less than significant.

d) **LESS THAN SIGNIFICANT IMPACT.** Romig Engineers completed a Phase I Environmental Site Assessment (ESA) for the project site on June 11, 2013 (included in this document as Appendix D). According to the study, the State and local file review materials did not reveal any underground storage tanks, hazardous materials use or any contaminant problems reported for the property addresses. The City, County and State agency file reviews did not reveal the presence of an aboveground storage tank (AST), motor oil or fuel underground storage tank (UST), pits, lagoons or use or suspect disposal on the property or nearby sites with groundwater or soil vapor incidents that would likely impact the property. Additionally, a review of federal and state environmental generator and spill lists revealed that several leaking underground storage tanks (LUST) and groundwater contaminant cases have been reported in the general site area. However, the identified spills are being investigated or closed by the State or Federal agencies, or are located far enough from the site as to have little likelihood of impacting the site.

Anderson Honda, located within 1,000 feet east of the project site, is currently a Cleanup Program Site (Case #: 43S1123). The potential contaminants of concern are diesel, waste oil/motor/hydraulic/lubricating. The potential media of concern is other groundwater (uses other than drinking water), soil. Anderson Honda is currently in compliance with the San Francisco Bay Regional Water Quality Control Board, who is overseeing site investigation and cleanup of unregulated discharges adversely affecting the State's waters. The project site is not included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or the environment. Impacts would be less than significant.

e, f) **LESS THAN SIGNIFICANT IMPACT.** The Palo Alto Airport of Santa Clara County (PAO) is the closest airport to the project site. PAO is a 103-acre facility with a single runway, parallel taxiway, and a building area located approximately 0.2 miles east of the project site. The airport primarily serves small general aviation aircraft. The project site is located within the airport safety and traffic pattern zones (Palo Alto Airport Master Plan Report, 2006). The project consists of the construction of a new auto dealership building and detached carwash. However, neither would be more than 50 feet (auto dealership max height 50 feet) or four stories (auto dealership 3 stories) in height. Additionally the existing building is two stories. The proposed structures on site would be similar in height to surrounding development. 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.

g) **LESS THAN SIGNIFICANT IMPACT.** 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 two existing entryways to the project site, which would be required to be reviewed and approved by the Palo Alto Fire Department to ensure safety emergency access is provided. Therefore, impacts would be less than significant.



h) **NO IMPACT.** The project site is within an urban area in Palo Alto. According to the Comprehensive Plan, the project site is not adjacent to or within the vicinity to 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.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>IX. HYDROLOGY AND WATER QUALITY</b>				
-- Would the project:				
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 which 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 alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**IX. HYDROLOGY AND WATER QUALITY**

-- Would the project:

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Result in inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a, e, f) **LESS THAN SIGNIFICANT IMPACT.** The project site is located within the San Francisco Bay Hydrologic Region (HR) and is subject to the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB). Within the San Francisco Bay HR, 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 named 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 0.3 mile northwest of the project site, supports beneficial uses for cold and warm freshwater water habitat (COLD and WARM), fish migration (MIGR), fish spawning (SPWN), wildlife habitat (WILD), and contact and noncontact water recreation (REC-1 and REC-2). The designated beneficial uses of San Francisquito Creek are impaired by pesticides, sediment, and trash.

Matadero Creek and Mayfield Slough are located approximately 0.7 mile southeast of the project site. Matadero Creek supports beneficial uses for COLD, MIGR, preservation of rare and endangered species (RARE), SPWN, WARM, WILD, REC-1, and REC-2. Mayfield Slough supports beneficial uses for estuarine habitat (EST), MIGR, RARE, WILD, REC-1, and REC-2. The three waterbodies listed above all drain to the Palo Alto Harbor & Baylands, which supports beneficial uses for EST, MIGR, RARE, WILD, REC-1 and REC-2. The beneficial uses of Matadero Creek are impaired by pesticides and trash.

The project site is generally flat and currently entirely developed and paved. 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 includes the installation of bio-swales along the western and southern perimeters of the project site. These bio-swales would capture some stormwater from the site, slowing the rate of stormwater runoff, promoting infiltration, and capturing pollutants. Therefore, the proposed project would improve on-site stormwater retention and treatment compared to existing conditions.

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.

b) **LESS THAN SIGNIFICANT IMPACT.** As discussed in Section XVII, *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 would not include installation of new groundwater wells, or use of groundwater from existing wells. Additionally, the project site is currently almost entirely impermeable. Implementation of the proposed project would not alter existing permeability conditions. Therefore, development under the proposed project would not result in a net deficit in aquifer volume or a lowering of the groundwater table.



c, d) **LESS THAN SIGNIFICANT IMPACT.** According to the City’s CEQA thresholds, a significant impact would occur if the project would cause 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 0.3 mile northwest of the proposed project site and does not flow through or adjacent to the site. Additionally, Matadero Creek and Mayfield Slough are located approximately 0.7 mile the south of the project site and do not flow through or adjacent to the site. 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 proposed development would not introduce new paved areas to the extent that the rate or amount of surface runoff would substantially increase.

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 project site is currently nearly entirely developed and paved with some landscaping. As described above under subsection (a, e, f), the proposed project would not increase the amount of impervious surface area compared to existing conditions. In addition, 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. The proposed project would involve replacing more than 10,000 square feet of impervious surfaces and would be subject to these requirements.

The proposed project would not substantially alter the drainage pattern of the site such that substantial erosion, siltation, or flooding would occur. In addition, the proposed project would not alter any drainage features associated with the Baylands. Impacts would be less than significant.

g-i) **LESS THAN SIGNIFICANT IMPACT.** The project site is located within Flood Zone AE10.5, a Special Flood Hazard Area (SFHA) where the flood waters are “ponded,” with a more or less level surface like a lake (City of Palo Alto Online Parcel Reports, 2016; FEMA, Flood Insurance Rate Map 06085C0030H, 2009). The largest AE zone in Palo Alto is an area predicted to be flooded by extraordinary bay tides overtopping the levees around the Baylands and reaching a height of nearly eight feet above sea level. This AE zone covers a large area generally from Middlefield Road to the bay. Some properties within this area have an elevation as low as 2.1 feet above sea level, meaning the predicted flood would be some six feet deep.

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 AE10.5 zone, the base flood elevation for the project site is 10.5 feet above mean sea



level (MSL). The finished floor elevation for the proposed project would be at 10.68 feet MSL. Therefore, the building would be above the floor elevation. FEMA requires an elevation certificate, which shows new buildings in all identified SFHAs are properly elevated. This elevation information is needed to show compliance with the floodplain management ordinance (FEMA, 2016). 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 (Palo Alto, 2016). Pursuant to Chapter 16.52 Flood Hazard Regulations, the proposed project would comply with PAMC Section 16.52.130 Standards of Construction. The elevated floor design would allow the site to be naturally drained to Best Management Practices (BMP) surface treatments located around the perimeter of the site. Additionally, the carwash structure is designed as a slab on grade with drainage in accordance with the City's required openings at the base for water to pass through in case of flooding. As a result, potential flood hazards to habitable structures would be less than significant.

Levees were built in the Baylands to drain the wetlands. Flooding in the AE Zone is due to potential overtopping of the Bayfront levees in the event of an extremely high tide (Palo Alto, 2016). Because the levees lack required freeboard (additional height above the estimated high water level) and were not constructed in accordance with current engineering standards, FEMA does not consider these levees to be adequate protection from a high tide event that has a one percent (100-year) probability of occurring (Palo Alto, 2016). The Flood Insurance Rate Maps were prepared under the assumption that the levees will overtop or fail and that the area in the AE 10.5 Zone will be flooded by tidal water to an elevation of ten and one-half feet above sea level (which is not the same as a depth of ten and one-half feet) (Palo Alto, 2016). However, 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.

As a result, the project would not expose people or structures to a significant loss, injury, or death involving flooding, including flooding as a result of the failure of a levee. In addition, the project site is not within a damn inundation zone (Palo Alto Comprehensive Plan, Natural Environment Element, 2007). Impacts would be less than significant.

j) **LESS THAN SIGNIFICANT IMPACT.** The project site is located approximately a mile from the San Francisco Bay and approximately 17 miles from the coast of the Pacific Ocean. The risk of a tsunami is negligible due to the distance from the Pacific Ocean. According to the City of Palo Alto's Natural and Urban Environment and Safety Element, mudflows and seiches are not identified as issues for the city. In addition, the nearest body of water that could experience a seiche event is the San Francisco bay, which is located approximately a mile east of the project site. However, due to various physical barriers (i.e. buildings) between the Bay and the project site, a seiche in the Bay would not 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.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**X. LAND USE AND PLANNING**

-- Would the project:

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| 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 general plan, specific plan, local coastal program, or 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) **NO IMPACT.** The proposed project would involve the demolition of an existing 17,942-square foot restaurant building and associated surface parking lot and the construction and operation of two new buildings: a three-story auto dealership building with parking and a detached carwash. The project site is located on Embarcadero Road in a fully urbanized area of Palo Alto near the Baylands. 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.

b) **LESS THAN SIGNIFICANT IMPACT.**

**City of Palo Alto Comprehensive Plan**

The project site has a Comprehensive Plan land use designation of Service Commercial. 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. Thus the proposed land use is consistent with this designation.

The Comprehensive Plan identifies the Embarcadero Corridor, in the Baylands, as the “East Bayshore Employment District.” Goal B-6 calls for “Thriving Employment Districts at East Bayshore/San Antonio Road Area and Bayshore Corridor that Complement the City’s Business and Neighborhood Centers.” The supportive text for Goal B-6 goes on to say that “These Districts are an essential part of the local economic base. They provide thousands of jobs, create a customer base for many Palo Alto businesses, and generate revenues to the City through



property and sales taxes. Keeping these areas economically healthy and viable will require local policies that recognize market realities and respond to the needs of local businesses.” Additionally, Policy L-46 states to “Maintain the East Bayshore and San Antonio Road/Bayshore Corridor areas as diverse businesses and light industrial districts.” The proposed project involves an auto dealership that would provide increased employment opportunities and sales tax revenue and would be generally consistent with these goals and policies of the Comprehensive Plan.

### **City of Palo Alto Zoning Ordinance**

The project site is zoned Service Commercial (CS). The proposed auto dealership building would not be allowed under this designation and zoning. The proposed project includes a request to apply the Auto Dealership (AD) overlay to the 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 0.56:1 and a maximum height of 50 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 (see Section XVI, *Transportation/Traffic*).

The applicant is also requesting a Design Enhancement Exception (DEE) per PAMC Section 18.76.050 to deviate from the “build-to-line” requirement with the CS district. According to the build-to-line requirement for the CS district, 50% 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 setback 40 feet from Embarcadero Road. Therefore, none of the building would be built to the front 10-foot setback. However, assuming the DEE is granted, the proposed project not conflict with the build-to-line requirement for 50% of the building frontage to be 10-foot 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.

### **Baylands Master Plan**

The project site is also 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 (2006), Palo Alto Baylands Nature Preserve was 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 City's Architectural Review Board would consider this policy context and the site's proximity to the Baylands during their review of the project. Therefore, the proposed project is potentially consistent with the first private lands policy in the Baylands Master Plan.

The proposed project would involve a landscaped stormwater bio-retention area on along the southern boundary of the project site. The southern boundary would also include a total of nine trees, including perimeter screening trees and parking lot shade trees. The landscaping palette for the project site would include "Bayland-inspired" plantings such as native plants and trees. The proposed project would thus also be generally consistent with the second policy that calls for screening planting along the southern edge of the site. In addition, on the northwestern corner of the project site, the proposed project would involve public amenities (bench seating, bike repair and water station).

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.

In addition to checklist question (b) above, according to the City's CEQA thresholds, a significant impact would also occur if the proposed project would:

1) *substantially adversely change the type or intensity of existing or planned land use in the area.*

The project involves the demolition of an existing one-story restaurant and the construction of a new three-story auto dealership building and detached car wash structure. The project would increase the massing and intensity of development on the project site (see Figure 4). However, the existing visual character and quality of the site, characterized by a one-story commercial building, surface parking and landscaping, are considered low to moderate. In addition, the project would generally be within the range of development intensity of the surrounding area, which includes one- to three-story office park and commercial developments. Further, the proposed project is consistent with the allowed height and FAR for the project site (see discussion above under "City of Palo Alto Zoning Ordinance"). The type and intensity of the proposed project would be greater than existing for the site but generally within the range of adjacent and surrounding land use and development. As a result, the project would be bigger and more intense, but the change would not be substantially adverse.

2) *be incompatible with adjacent land uses or with the general character of the surrounding area, including density and building height.*

The project would be generally consistent with the size and scale of the adjacent two-story office building to the south and two-story auto dealership located to the east, although it would be



approximately one story taller than most development in the neighborhood. The proposed project would be consistent with height and FAR requirements set forth in the Palo Alto Municipal Code (PAMC) for CS(AD) properties. In addition, with approval of the DEE and due to the utility easement along East Bayshore Road, the proposed project would be set back from Embarcadero and East Bayshore roads to decrease the perceived massing from adjacent sidewalks and roads. Therefore, the project would be generally compatible with the general character of the surrounding area, including density and building height.

3) *conflict with established residential, recreational, educational, religious, or scientific uses of an area.*

There are two such facilities in proximity to the site (within 0.25 miles). The closest recreational and residential uses are Baylands Athletic Center approximately 1,000 feet north, the Palo Alto Golf Course approximately 500 feet northeast, and the residences on Saint Francis Drive approximately 2,500 feet west of the project site. The proposed auto dealership building and detached carwash would not conflict with these uses. Therefore, impacts would be less than significant.

c) **NO IMPACT.** The project site is located in an entirely urbanized area of Palo Alto and is currently zoned for urban uses. There are not natural communities or habitats located on the project site. As discussed above in Section IV, *Biological Resources*, the project site is not within an approved Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Additionally, the proposed project would adhere to the City’s Baylands Master Plan. Therefore, the project would not conflict with any habitat/natural community conservation plans and no impact would occur.

	<b>Potentially Significant Impact</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<b>XI. MINERAL RESOURCES</b>				
-- Would the project:				
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, b) **NO IMPACT.** 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 Comprehensive Plan, 2007). No mineral resource activities would be altered or displaced by the proposed project. No impact would occur.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XII. NOISE</b>				
-- Would the project result in:				
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 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 within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Noise Fundamentals**

Noise is defined as 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 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 a sound’s physical intensity 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, 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 Fundamentals**

Vibration is a unique form of noise. It is unique 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**

*City of Palo Alto Comprehensive Plan.* 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 XII-1). For residential land uses, noise levels up to 60 dBA Ldn are identified as generally acceptable and levels up to 75 dBA Ldn as conditionally acceptable noise levels. For office 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 XII-1  
Palo Alto Land Use Compatibility for Community Noise Environments**

Land Use Category	Exterior Noise Exposure L <sub>dn</sub> 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, & Amphitheaters	N/A	50-75	75+
Industrial, Manufacturing, Utilities, and Agriculture	50-70	75+	N/A

Source: City of Palo Alto Comprehensive Plan Update Noise Draft Existing Conditions Report, August 29, 2014

City of Palo Alto Municipal Code. 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 PAMC contains additional specific and general provisions relating to noise. Most notably, the PAMC contains performance standards for Multiple Family, Commercial, Manufacturing and Planned Community Districts. For commercial and industrial properties, a violation occurs at an increase of eight or more decibels.

Federal Railroad Administration. Vibration impacts would be significant if they exceed the following Federal Railroad Administration (FRA) thresholds:

- 65 VdB where low ambient vibration is essential for interior operations, such as hospitals and recording studios
- 72 VdB for residences and buildings where people normally sleep, including hotels
- 75 VdB for institutional land uses with primary daytime use, such as churches and schools
- 95 VdB for physical damage to extremely fragile historic buildings
- 100 VdB for physical damage to buildings

Construction-related vibration impacts would be less than significant for residential receptors if they are below the threshold of physical damage to buildings and occur during the City’s normally permitted hours of construction, as described above, because these construction hours are during the daytime and would therefore not normally interfere with sleep.

a, c) **LESS THAN SIGNIFICANT IMPACT.** The main noise source on the project site is traffic noise from adjacent roadways, especially Embarcadero Road which is adjacent to the site. The project site is adjacent to commercial, office, and automotive uses. The Noise Element of the City’s Comprehensive Plan identifies noise levels up to 70 dBA L<sub>dn</sub> as generally acceptable and up to 80 dBA L<sub>dn</sub> as conditionally acceptable noise levels for commercial uses.



Noise associated with operation of the proposed project may be periodically audible at adjacent uses. The proposed project would involve retail sales and repair service operation with ancillary carwash for automobile sales and service customers. Noise events that are typical of automotive uses involving auto repair and sales and carwash buildings include auto traffic, announcements, conversations, light industrial mechanical equipment as well as noise typical of parking areas such as car alarms and car doors slamming. Vehicles to be serviced on the site would drop off and pick up vehicles at the service area on the southern side of the proposed building. In this area would also be a small express service area with space for three vehicles. The main vehicle service/repair area would be located on the third floor. Because the service/repair area would be located within the building, most noise would be shielded and would not affect the ambient noise environment. The car wash would be located at the southern boundary of the project site. Noise from the mechanical equipment associated with the car wash could be audible at adjacent uses. However, the car wash is adjacent to a parking area. The office building south of the project site is located over 150 feet away. In addition, noise would only occur intermittently when the car wash is in operation. No sensitive receptors are located within 500 feet of the site. Noise associated with vehicle repair and washing would not create a substantial permanent increase in ambient noise levels and would not affect sensitive receptors.

On-site operations would also involve noise associated with rooftop heating, ventilation, and air condition systems (HVAC), heavy-duty truck deliveries, and trash hauling. Noise levels from commercial HVAC equipment can reach 100 dBA at a distance of three feet (USEPA, 1971). These units usually have noise shielding cabinets placed on the roof or are in mechanical equipment rooms. Typically, the shielding and location of these units reduces noise levels to no greater than 55 dBA at 50 feet from the source. The rooftop HVAC systems for the proposed project would be at least 50 feet from adjacent uses and would not create significant noise impacts. In addition, noise associated with truck deliveries and trash hauling would be similar to the surrounding commercial uses and previous on-site restaurant uses and would not result in substantial increase compared to the existing commercial use on-site.

Further, project-related changes in noise would result from an increase in traffic volumes on nearby street segments. For traffic-related noise, impacts would be significant if project-generated traffic results in exposure of sensitive receptors to unacceptable noise levels. Some land uses are considered more sensitive to ambient noise levels than other uses due to the amount of noise exposure and the types of activities involved. Residences, motels, hotels, schools, libraries, churches, nursing homes, auditoriums, parks and outdoor recreation areas are more sensitive to noise than are commercial and industrial land uses. The project site is surrounded by light industrial and commercial uses. Traffic to and from the project site would use surrounding roadways such as East Bayshore Road, Embarcadero Road, and the U.S. 101 freeway. There are no sensitive receptors on these roadways in the vicinity of the project site. As discussed in Section XVI, *Transportation and Traffic*, the existing storage capacity for the northbound left-turn lane from East Bayshore Road onto Embarcadero Road is currently exceeding capacity during the PM peak hour. The proposed project would add to this movement during the PM Peak Hour (Hexagon, 2016). However, there are no sensitive receptors heading west on Embarcadero Road. Therefore, impacts would be less than significant.



b) **LESS THAN SIGNIFICANT IMPACT.** The proposed project would involve standard construction activities that are anticipated to result in some vibration that may be felt on properties in the immediate vicinity of the project site, as commonly occurs with construction projects.

The closest building to the project site is the Audi Dealership approximately 25 feet to the east; however, the closest sensitive receptor to the project site is the school (Hope Technology) approximately 500 feet south of the project site. As shown in Table XII-2, vibration levels could reach approximately 87 VdB at the Audi Dealership and 61 VdB at the closest receptor; therefore, vibration levels would not exceed the FRA threshold of 72 VdB for institutions and buildings where people normally learn, including schools. However, 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’s day, Labor day, Martin Luther King day, Columbus day, Washington’s birthday, Veteran’s day, Memorial day, Thanksgiving day, Independence day, Christmas day).

Therefore, due to the project’s distance from the sensitive receptor and regulated construction schedule, impacts to the nearby school would be less than significant. In addition, vibration levels would not exceed 95 VdB and therefore no damage to adjacent structures would occur.

**Table XII-2  
 Vibration Source Levels for Construction Equipment**

<b>Equipment</b>	<b>PPV at 25 ft (in/sec)</b>	<b>Approximately VdB at 25 ft</b>	<b>Approximate VdB at 50 ft</b>	<b>Approximate VdB at 500 ft</b>
Large Bulldozer	0.089	87	81	61
Loaded Truck	0.076	86	80	60
Jack Hammer	0.035	79	73	53

*Source: Federal Transit Administration, 2006.*

d) **LESS THAN SIGNIFICANT IMPACT.** 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 Audi Dealership building approximately 25 feet east of the site; however, the closest sensitive receptor to the project site is a school (Hope Technology) approximately 500 feet south of the project site. Table XII-3 identifies various construction equipment noise emission levels for different types of construction equipment at 25 and 500 feet from the source.



**Table XII-3  
 Construction Equipment Noise Emission Levels**

<b>Equipment</b>	<b>Typical Noise Level (dBA) 25 ft from source</b>	<b>Typical Noise Level (dBA) 50 ft from source</b>	<b>Typical Noise Level (dBA) 500 ft from the source</b>
Dozer	91	85	65
Truck	94	88	68
Jack Hammer	94	88	68

*Source: Federal Transit Administration, 2006.*

Pursuant to Section 9.10.060 of the PAMC, noise associated 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, Veteran’s 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 subcontractors, their employees, agents, materialmen and all other persons at the construction site, of the basic requirements of this chapter.*

The closest receptor is approximately 500 feet south of the project site. As seen above in Table 11, the typical noise level at 500 feet would reach a maximum of 68 dBA. This noise level would be generally similar to existing ambient noise levels in much of the area. Additionally, construction noise impacts would be temporary, and construction contractors would be required to comply with PAMC requirements restricting hours of excessive noise generation. Therefore, the project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Impacts would be less than significant.

e, f) **LESS THAN SIGNIFICANT IMPACT.** The Palo Alto Airport of Santa Clara County (PAO) is the closest airport to the project site. According to the Comprehensive Plan, air traffic makes only a modest contribution to the noise environment of Palo Alto. PAO is a 103-acre facility with a single run way, parallel taxiway, and a building area located approximately 0.2 miles east of the project site. The airport primarily serves small general aviation aircraft. The project is located within the PAO Airport Influence Area (AIA). As a result, the project site would be subject to noise, height, and safety considerations and must be evaluated to determine how the Airport Comprehensive Land Use Plan may impact the proposed development. This evaluation is to determine that the development meets the conditions specified for height restrictions, and noise and safety protection to the public. The project consists of the construction of a new auto dealership building and detached carwash. However, neither would be more than 50 feet (auto



dealership max height 50 feet) or four stories (auto dealership 3 stories) in height. Additionally, the proposed auto dealership project would not involve the conversion of land from existing or planned agricultural, industrial, or commercial use to residential uses. The project would continue the existing land use pattern of commercial uses. The proposed project would not expose people working in the project area to excessive noise levels. Therefore, the project would not need a review from the Airport Land Use Commission (ALUC).

At the nearest points within city limits, Palo Alto is located approximately 2.6 miles to the west of Moffett Federal Airfield, 6 miles to the southeast of San Carlos Airport, 10 miles to the northwest of the San Jose International Airport, 15 miles to the southeast of San Francisco International Airport, and 17 miles to the south of Oakland International Airport. Although Palo Alto does receive some noise from aircraft using these facilities, the Palo Alto city limit does not fall within the airport land use planning areas/ airport influence areas, runway protection zones, or the identified noise contours of any airport other than Palo Alto Airport. As a result, impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XIII. POPULATION AND HOUSING**

-- Would the project:

a) 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers 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"/>

a) **LESS THAN SIGNIFICANT IMPACT.** In addition to the threshold under checklist item (a) above, according to the City’s CEQA thresholds, the project would result in a significant impact if it would cumulatively exceed regional or local population projections or would create an imbalance between employed residents and jobs. The proposed development would not involve new residential units and, therefore, would not directly generate population growth. Therefore, the proposed project would not exceed regional or local population projections.

The proposed project would involve commercial uses, which would result in the generation of additional employment opportunities. According to the project applicant, the proposed project would generate an estimated 63 jobs (25 techs, 5 support tech staff, 10 salesmen, 4 finance, 5 management positions, 4 service advisors, 4 valet positions, 4 carwash and detail positions, and 2 reception positions). Ming’s Chinese Cuisine and Bar employed an estimated 49 employees



(Noguchi, 2014). Therefore, the proposed project would increase employment opportunities in the area by an estimated 14 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. The proposed project would contribute to this imbalance. Recent estimates put the current jobs/housing balance at 3.05 jobs per employed resident. This trend requires the City to import most of its workers to meet the needs of business and industry, indicating in a large unmet need for worker housing in the City. The Housing Element as well as 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.

The project site has a Comprehensive Plan land use designation and zoned for Service Commercial. The proposed project is not consistent with the use designations for the sites. The project would require a zone change, per PAMC Section 18.80.030, to apply the Auto Dealership Combining (AD) District to allow the proposed use, additional FAR and other development standards for auto dealerships. Though the proposed project would incrementally affect the jobs/housing ratio, the project would not substantially impact the ratio. The project involves infill development on sites designated for commercial uses. Impacts would be adverse, but less than significant.

b, c) **NO IMPACT**. There are no housing units on the project site or people residing on the project site in any form of temporary housing. Therefore, the project would not displace any existing housing units or people. No impact would occur.

	<b>Potentially Significant Impact</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
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**XIV. PUBLIC SERVICES**

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

i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XIV. PUBLIC SERVICES</b>				
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a (i) **LESS THAN SIGNIFICANT IMPACT.** Fire protection is provided by the City of Palo Alto Fire Department (PAFD). The Fire Department provides 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 proposed project would adhere to the conditions of approval set forth by the PAFD.

The fire station closest to the project site is Fire Station 3, located at 799 Embarcadero Road, approximately 1.4 miles west of the project site. The site is within the existing service area of the PAFD and onsite construction would comply with applicable Fire Code requirements. The proposed project would be a new commercial use in a commercial zone. The local water supply would be evaluated and additional fire hydrant(s) or relocation of existing hydrant(s) may be required, but the project would not create excessive demand for emergency services, so new fire protection facilities are not anticipated at this time (personal communication, Gordon Simpkinson, Plan Checker, Palo Alto Fire Department, November 13, 2015). 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. Impacts would be less than significant.

a (ii) **LESS THAN SIGNIFICANT IMPACT.** Police protection is provided by the Palo Alto Police Department (PAPD). The closest police station is located at 275 Forest Avenue, which is approximately 2.6 miles west of the project site. The project site is within the PAPD's service area. It is assumed that the auto dealership would have a security system. The project would be located in an area with commercial uses. The proposed project would not create the need for new or expanded police protection facilities (personal communication, Craig Lee, Sergeant, Palo Alto Police Department, November 15, 2015). Impacts would be less than significant.

a (iii) **NO IMPACT.** The project site is served by the Palo Alto Unified School District (PAUSD). The proposed project would involve the construction of a new auto dealership building and carwash structure. The proposed project would not involve any new residential uses; therefore, the proposed project would not directly increase the number of school-aged children in the area. The proposed project would not result in the need for new or physically altered school facilities. No impacts to public schools would occur.





a (iv) **LESS THAN SIGNIFICANT IMPACT**. Refer to Section XV, *Recreation*.

a (v) **LESS THAN SIGNIFICANT IMPACT**. Library services are provided by the Palo Alto City Library (PACL). The closest library branch is Rinconada Library located at 1213 Newell Road, Palo Alto, CA 94303, which is 1.5 miles west of the project site. The proposed project would not directly generate substantial population growth and therefore would not result in the need for new library facilities.

Impacts to other public facilities (e.g., sewer storm drains and roadways) are discussed in Sections XVI, *Transportation/Traffic*, and Section XVII, *Utilities and Service Systems*, of this Initial Study. Impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XV. RECREATION**

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, b) **NO IMPACT**. 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, 2015). The parks closest to the proposed project is Baylands Athletic Center, located less than half a mile north of the project site, and Greer Park, located 1.4 miles south of the project site. The City’s estimated current population is 66,932 residents (DOF, 2015). Therefore, the ratio of public parks to residents in the City is 2.4 acres of parkland per for every 1,000 residents, which is slightly less than the standard ratio of 3 acres of parkland for every 1,000 residents used by the Quimby Act. Accounting for open space, the City has approximately 62 acres of parks and open space for every 1,000 residents.

The proposed project would not directly affect any existing or planned parks. Additionally, development of the proposed project does not involve new housing and would not directly add residents to the total City population. The parkland ratio would remain around 62 acres of parks and open space for every 1,000 residents after development of the proposed project. Therefore, the project would not substantially alter citywide demand for parks. No impacts to parks or recreational facilities would occur.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XVI. TRANSPORTATION/TRAFFIC</b>				
-- Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) 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 checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a, b) **POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED.** Hexagon Transportation Consultants completed a traffic study for the proposed project in January of 2016 (see Appendix E). The discussion below is based primarily on the analysis and conclusions of this study.

Construction of the project would generate temporary construction-related traffic such as deliveries of equipment and materials to the project site and construction worker traffic. Construction traffic would be limited and temporary, and would not be substantial in relation to the existing traffic load and capacity of the street system. In addition, the project is on a four-



lane arterial roadway with direct access to US 101, so deliveries and hauling would not be routed through residential neighborhoods.

### **Methodology and Thresholds of Significance**

According to the City's CEQA thresholds, in addition to the thresholds in the checklist above, significant impacts would occur if the proposed project would:

- *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);*
- *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;*
- *Result in inadequate parking capacity that impacts traffic circulation and air quality; or,*
- *Cause queuing impacts based on a comparative analysis between the design queue length and the available queue storage capacity;*

The potential impacts of the project were evaluated in accordance with the standards set forth by the City of Palo Alto, the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP). 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.

Two nearby signalized intersections were analyzed: East Bayshore Road & Embarcadero Road and St. Francis Drive & Embarcadero Road. Two nearby freeway segments were analyzed: US 101 North of Embarcadero Road and US 101 South of Embarcadero Road. Additionally, four freeway ramps were analyzed: Southbound US 101 Off Ramp at Embarcadero Road, Southbound US 101 On Ramp at Embarcadero Road, Northbound US 101 Off Ramp at Embarcadero Road, and Northbound US 101 On Ramp at Embarcadero Road.

Levels of service were calculated for these intersections, freeway segments, and freeway ramps under the following scenarios:

- Existing (2015) Conditions
- Existing plus Project Conditions
- Background Conditions (estimated by adding to existing traffic volumes the trips generated by nearby approved projects that have not been completed or occupied, including the Palo Alto Golf Course Reconfiguration Project, Palo Alto Audi Expansion, and the Edgewood Plaza Shopping Center Project)
- Background plus Project Conditions
- Cumulative (2020) Conditions (estimated by applying a 1.4% annual growth rate through the year 2020 to the existing traffic conditions)
- Cumulative with Project Conditions.

Traffic conditions at the study intersections were analyzed for both the weekday AM and PM peak hours of adjacent street traffic. The AM peak hour is expected to occur between 7:00 AM and 9:00 AM and the PM peak hour is expected to occur between 4:00 PM and 6:00 PM on a



regular weekday. These are the peak commute hours during which most traffic congestion occurs on the roadways.

Both of the signalized study intersections are located in the City of Palo Alto and are therefore subject to the City of Palo Alto level of service standards. The City of Palo Alto evaluates level of service at signalized intersections based on the 2000 Highway Capacity Manual (HCM) level of service methodology using TRAFFIX software. The City of Palo Alto level of service standard for signalized intersections is LOS D or better.

Both the City of Palo Alto and CMP guidelines consider a project to have a significant impact on an intersection if it causes the intersection LOS to fall from an acceptable level to unacceptable, 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 .01 or more.

### **Project Trip Generation**

Trip generation for the proposed automobile dealership was estimated based on calculating the average trip generation rates for nearby automobile dealerships in Palo Alto and Belmont, based on Showroom/Office Space square footage. Driveway counts were conducted at the Palo Alto Audi, Anderson Honda, and Autobahn Motors (Belmont) on July 22 and 23, 2015. Using these driveway counts, and the estimated showroom and office size, average rates for trips per 1,000 square feet were calculated from the three dealerships. Based on showroom size, the nearby automobile dealerships were found to produce 5.52 trips per 1,000 square feet during the AM peak hour, and 8.01 trips per 1,000 square feet during the PM peak hour.

Using these rates, as shown in Table XVI-1, the project is estimated to produce 102 total trips during the AM peak hour, with 57 trips inbound and 45 trips outbound. During the PM peak hour, the project is estimated to produce 149 total trips, with 58 trips inbound and 91 trips outbound. No credit was given for the existing restaurant on the site because it is vacant.

**Table XVI-1  
 Project Trip Generation Estimates**

	Showroom Size (ksf)	Rate <sup>1</sup>		AM Peak Hour Trips			PM Peak Hour Trips		
		AM	PM	In	Out	Total	In	Out	Total
Proposed Project	18.537	5.52	8.01	57	45	102	58	91	149
<b>New Trips Generated</b>				<b>57</b>	<b>45</b>	<b>102</b>	<b>58</b>	<b>91</b>	<b>149</b>

<sup>1</sup> Peak Hour rates based on trips per 1,000 square feet of Showroom/Office Space from similar Auto Dealerships in Palo Alto and Belmont

Source: Hexagon Transportation Consultants, January 2016 (see Appendix E).

### **Intersection Analysis**

Tables XVI-2, XVI-3, and XVI-4 show the proposed intersection levels of service under existing, background, and cumulative conditions with the proposed project.



**Table XVI-2  
Existing Intersection Level of Service Summary**

Intersection Name	Peak Hour	Existing		Existing Plus Project			
		Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Increase in Critical Delay (sec)	Increase in Critical V/C
E Bayshore Rd / Embarcadero Rd <sup>1</sup>	AM	47.7	D	52.4	D	2.8	0.009
	PM	<b>83.5</b>	<b>F</b>	<b>91.2</b>	<b>F</b>	<b>4.5</b>	<b>0.016</b>
St Francis Dr / Embarcadero Rd	AM	20.8	C	20.8	C	0.0	0.002
	PM	11.8	B	11.8	B	0.0	0.002

Notes:

<sup>1</sup> Intersection LOS calculations based on traffic counts conducted prior to construction along the US 101. Calculation adjustments made to represent observed intersection operations during PM peak hour of LOS F.

**Bold** indicates a substandard level of service.

Source: Hexagon Transportation Consultants, January 2016 (see Appendix E).

**Table XVI-3  
Background Intersection Level of Service Summary**

Intersection Name	Peak Hour	Background		Background Plus Project			
		Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Increase in Critical Delay (sec)	Increase in Critical V/C
E Bayshore Rd / Embarcadero Rd <sup>1</sup>	AM	48.7	D	53.5	D	2.8	0.009
	PM	95.6	F	<b>104.2</b>	<b>F</b>	<b>5.1</b>	<b>0.015</b>
	With Mitigation		<b>88.7</b>	<b>F</b>			
St Francis Dr / Embarcadero Rd	AM	21.9	C	21.8	C	0.0	0.002
	PM	16.0	B	15.9	B	0.0	0.002

Notes:

<sup>1</sup> Intersection LOS calculations based on traffic counts conducted prior to construction along the US 101. Calculation adjustments made to represent observed intersection operations during PM peak hour of LOS F.

**Bold** indicates a substandard level of service.

**Bold** indicates a significant project impact.

Source: Hexagon Transportation Consultants, January 2016 (see Appendix E).

**Table XVI-4  
Cumulative (2020) Intersection Level of Service Summary**

Intersection Name	Peak Hour	Cumulative		Cumulative Plus Project			
		Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Increase in Critical Delay <sup>2</sup>	Increase in Critical V/C
E Bayshore Rd / Embarcadero Rd <sup>1</sup>	AM	<b>65.7</b>	<b>E</b>	<b>73.0</b>	<b>E</b>	<b>10.3</b>	<b>0.028</b>
	With Mitigation		<b>61.1</b>	<b>E</b>			
	PM	<b>122.0</b>	<b>F</b>	<b>136.3</b>	<b>F</b>	<b>19.4</b>	<b>0.048</b>
	With Mitigation		<b>111.6</b>	<b>F</b>			
St Francis Dr / Embarcadero Rd	AM	22.9	C	23.0	C	0.0	0.002
	PM	16.4	B	16.4	B	0.0	0.002

Notes:

<sup>1</sup> Intersection LOS calculations based on traffic counts conducted prior to construction along the US 101. Calculation adjustments made to represent observed intersection operations during PM peak hour of LOS F.

<sup>2</sup> Increase in Critical Delay and Increase in Critical V/C were calculated by comparing Cumulative with Cumulative No Project Conditions.

**Bold** indicates a substandard level of service.

**Bold** indicates a significant project impact.

Source: Hexagon Transportation Consultants, January 2016 (see Appendix E).



As shown in the tables, the addition of project-generated traffic would create a significant impact at the intersection of East Bayshore Road and Embarcadero Road during the PM peak hour under Background plus Project and Cumulative scenarios, and during the AM peak hour under the Cumulative scenario. Mitigation is required to reduce impacts to a less than significant level. The identified mitigation would address congestion related to the large volume of left turns and a large volume of through traffic on eastbound Embarcadero Road in the morning. Creating two separate dedicated left turn lanes and two through lanes would reduce delay for eastbound traffic.

### **Mitigation Measure**

The following mitigation measure would be required to reduce traffic impacts. With implementation of *Mitigation Measure T-1*, impacts would be less than significant.

- T-1**            **East Bayshore Road and Embarcadero Road.** The project applicant shall construct the following improvements and enter into a reimbursement agreement with the City for payment less their fair share of the improvement costs:
1. Revise the eastbound leg on Embarcadero Road to include two left-turn pockets, a through lane, and a shared through/right-turn lane. This improvement shall also include changing the east-west phasing from split phase timing to protected left turn phasing.
  2. Restripe the northbound approach to have one left turn lane and one shared left-through-right lane. This would likely require modifying the median island and relocating the signal equipment on the west leg of the intersection.

### **Freeway Analysis**

*Freeway Segment Analysis.* The freeway segment closest to the project site is US 101 between Embarcadero Road and University Avenue. This segment was operating at LOS F during the PM peak hour in 1991, when the Santa Clara County Congestion Management Plan (CMP) was first adopted. The CMP defines an acceptable level of service for freeway segments in Santa Clara County as LOS E or better. According to CMP methodology, the proposed project would create a significant adverse impact on traffic conditions on a CMP freeway segment if for either peak hour the number of project trips on that segment constitutes at least one percent of capacity on that segment.

According to Hexagon Transportation Consultants, the project would contribute trips equivalent to less than one percent of the segment capacity (see Tables 9 and 10 in Appendix E). Thus, the project would have a less than significant impact on nearby freeway segments (Hexagon Transportation Consultants, 2016).

*Freeway Ramp Capacity Analysis.* The analysis of freeway ramps provided in the Hexagon traffic study showed that the US 101 ramps at Embarcadero Road that provide access to the project site would have sufficient capacity to serve the projected traffic volumes with the proposed project. The study ramps are expected to have volume-to-capacity (V/C) ratios below 1.0. Therefore, the project is considered to have a less than significant impact on the study



freeway ramps. Based on field observations, the freeway ramps are congested during peak hours. This congestion is largely due to the congestion on the freeway itself due to the current construction project at the US 101 crossing over San Francisquito Creek north of the project site. Absent the construction project, the ramps themselves have adequate capacity to serve the volumes of vehicles that used them prior to the construction.

The project is considered to have a less than significant impact on the study freeway ramps. However, it is recommended that these ramps be reevaluated following the completion of these construction projects. With the completion of the construction, the freeway is expected to carry additional traffic, and the ramp should be analyzed to determine if ramp metering rates or signal timing at the ramp-arterial intersections should be adjusted to reduce potential on- and off-ramp queuing.

### **Parking**

According to the City of Palo Alto Zoning Ordinance (PAMC Chapter 18.52), the project is required to provide parking at the following rates:

- *Automobile Dealerships*: 1 per 400 sq. ft. of sales, service and office administration area, and 1 per 500 sq. ft. of exterior sales or display area, excluding automobile storage (not on display)
- *Automotive Services & Service Station*
  - (a) Service Station: 1 per 350 sq. ft. of gross enclosed floor area, plus queue capacity equivalent to the service capacity of gasoline pumps
  - (b) Services, Enclosed: 1 per 350 sq. ft. of enclosed space; and 1 per 500 sq. ft. of exterior sales, display or storage site area (open lot area)

As shown in Table 1, the total required parking is 165 spaces (91 spaces for sales service & office, 67 spaces for automotive services, enclosed, and seven (7) spaces for exterior sales/display). The proposed auto dealership would provide a total of 179 parking spaces.

### **Queuing Analysis**

The traffic study prepared by Hexagon (January 2016) included a queuing analysis. The existing storage capacity for the northbound left-turn lane from East Bayshore Road onto Embarcadero Road is up to 11 vehicles (275 feet) without interfering with other movements. The number of left-turning vehicles already exceeds this capacity during the PM peak hour. The project would add ~~7743~~ vehicles to this movement during the PM peak hour. The 95th percentile queue with the proposed project is projected to extend to 425 feet. The roadway is not wide enough, between the stripped yellow line and the curb, to allow for all vehicles going right or through at the intersection to make it around this queue. Embarcadero Road is wide enough for the center line to be restriped to extend the left turn pocket should the City desire to do so. With implementation of *Mitigation Measure T-1*, impacts would be less than significant.

### **Site Access and Circulation**

The proposed project would make use of the existing site driveways, one of which is located on Embarcadero Road near Geng Road, and the other is located on E. Bayshore Road at the southern edge of the property. The Embarcadero Road driveway would be restricted to right



turns only due to the median on Embarcadero Road. The driveway on East Bayshore Road would allow full access.

Most vehicles entering the site will be heading eastbound on Embarcadero Road, either coming from the freeway or Palo Alto. These vehicles could enter the site either by making a left turn off of East Bayshore Road or a right turn off of Embarcadero Road. Most vehicles exiting the site would travel westbound on Embarcadero Road. They could do so by first turning right on East Bayshore Road and then left on Embarcadero Road at the signal. Vehicles exiting the Embarcadero Road driveway would have a difficult time heading west on Embarcadero Road. There is a median preventing left turns, and the driveway is too close to Geng Road to allow access to the left turn pocket. Also, Embarcadero Road is not wide enough for U-turns, and U-turns are prohibited at the Geng Road intersection. Because of these difficulties, it is assumed that traffic heading west on Embarcadero Road would use the East Bayshore Road driveway.

Based on the site description and field observations, adequate sight distance is available at the East Bayshore Road driveway to insure that exiting vehicles can see pedestrians on the sidewalk, as well as vehicles on East Bayshore Road. Vehicles making a left-turn, 30 AM vehicles and 31 PM vehicles, into the project driveway at this location may occasionally have to wait for a gap in northbound traffic. Based on the driveway LOS calculations, shown in Table 15 of the traffic study (Appendix E), the average delay for vehicles turning right at the driveway is between 9.4 and 9.7 seconds during the AM peak periods, and between 13.9 and 15.4 seconds during the PM peak periods. The delay for vehicles turning left into the site ranges between 7.7 and 9.2 seconds for all time periods. There is currently no left turn pocket at the location of this driveway and with so few project trips a pocket would not be warranted.

Based on a review of the site description there will be no issues with site access along both Embarcadero Road and East Bayshore Road. No issues are expected to arise regarding on-site circulation. The final site plan would be required to demonstrate conformance with the City of Palo Alto design guidelines and requirements.

c) **LESS THAN SIGNIFICANT IMPACT.** The Palo Alto Airport is located approximately 0.2 miles east of the project site. The project consists of the construction of a new auto dealership building and detached carwash that would be no more than 50 feet or four stories in height. The proposed project would not affect airport operations, alter air traffic patterns or in any way conflict with established Federal Aviation Administration (FAA) flight protection zones. A less than significant impact would occur.

d, e) **LESS THAN SIGNIFICANT IMPACT.** According to the City's CEQA thresholds, in addition to the checklist question above, a significant impact would occur if the proposed project would create an operational safety hazard. The project site would have both construction traffic and operational traffic access the site from the existing driveway on Embarcadero Road and the existing driveway on East Bayshore Road. The proposed project does not include any design features that would increase hazards. There are no sharp curves or dangerous intersections.

The proposed project would be required to conform to traffic and safety regulations that specify adequate emergency access measures. In addition, the project site would be required to meet





the standards set forth by the Palo Alto Fire Department. Adherence to existing state and federal regulations and City of Palo Alto Comprehensive Plan policies and goals would reduce impacts. No operational safety hazards would occur. Therefore, impacts would be less than significant.

f) **LESS THAN SIGNIFICANT IMPACT.** In addition to the City's thresholds, a significant impact would occur if the proposed project would:

- Impede the development or function of planned pedestrian or bicycle facilities; or
- Impede the operation of a transit system as a result of congestion.

### **Pedestrian Impacts**

According to the completed traffic study conducted by Hexagon Transportation Consultants, the project would not result in significant impacts or need for improvements to pedestrian facilities (Hexagon, 2016). Currently all of the signalized intersections near the project site have crosswalks and pedestrian signals and all of the streets have sidewalks. Therefore, the proposed project would provide adequate pedestrian access to areas east, south, north, and west of the project site.

The San Francisco Bay trail is a partially existing Class I trail that provides a regional connection along the San Francisco Bay shoreline. This is a multi-use trail designed for hiking and cycling. This trail is located near the project site, with access along E. Bayshore Road. Views from trails are discussed in Section I, *Aesthetics*. The project would not result in significant traffic or circulation impacts to the trail.

### **Bicycle Impacts**

The proposed project would not change or block bicycle routes, and adequate bicycle facilities are available to serve the project site. The streetscape would provide elements from the Baylands design guidelines as well as include a resting place for bikers to get water and make minor adjustments on their bikes. The proposed project would have bike parking that meets the PAMC requirements, bike repair station signage, and a bike station. Additionally, according to the completed traffic study conducted by Hexagon Transportation Consultants, the project is assumed to create no impacts or need for improvements to bicycle facilities (Hexagon, 2016). Therefore, the project would not conflict with existing and planned bicycle facilities; the impact to bicycle facilities would be less than significant and no mitigation measures are needed.

The California Avenue Trail is a partially existing Class II trail that currently extends from St. Francis Drive to the Baylands preserve. This planned trail will provide bicycle and pedestrian access between the existing bike/pedestrian bridge over US 101 to the existing Class II bicycle lanes along Louis Road. The completion of this trail will enhance the pedestrian and bicycle access to and from the west side of the US 101 and the project area. The proposed project would not result in significant traffic or circulation impacts to this trail.

### **Transit Impacts**

Valley Transportation Authority (VTA) operates bus service in Palo Alto. However, there are no VTA lines near the project site. The project site is served by the Palo Alto Embarcadero Shuttle



(line E) and Stanford University Marguerite shuttle line TECH stop, both of which are located at the northeast corner of the project site on Embarcadero Road. Because the Embarcadero Shuttle that provides transit service in the site vicinity is limited to weekday commute hours, the project is not expected to generate a significant number of transit trips. It is unlikely that the project would by itself generate enough demand for transit service to justify the extension of shuttle hours. As mentioned above, all traffic impacts would be less than significant. Therefore, the proposed project would not impede the operation of a transit system as a result of congestion.

In addition, the proposed project would add vehicle traffic to nearby roadways and intersections which could cause transit vehicle delay. Hexagon prepared an analysis of transit vehicle delay in May 2016 (“1700 Embarcadero CEQA Comments” memorandum included in Appendix E). The results of this analysis are summarized below.

There are no regular VTA bus lines that travel through the study intersections, but there are two shuttles: the City of Palo Alto Embarcadero Shuttle Service and the Marguerite Shuttle Service operated by Stanford. The increase in transit delay was determined by summing the increase in movement delay at each of the study intersections for each route in each direction. These movement delays were obtained from the level of service calculation sheets at each signalized study intersection, which were included in the traffic study (Appendix E). The sum of movement delay that the buses would experience at each of the study intersections was calculated under existing and existing plus project conditions for both the AM and PM peak hours. Table XVI-5 presents the delay that the buses would experience in each travel direction under existing and existing plus project conditions.

**Table XVI-5  
 Transit Vehicle Delay**

Route		Transit Service Delay at Study Intersections (seconds)					
		AM Peak Hour			PM Peak hour		
		Existing	Existing + Project	Change (+/-)	Existing	Existing + Project	Change (+/-)
City of Palo Alto Embarcadero Shuttle	NB	71.5	79.9	+ 8.4	42.6	46.0	+3.4
	SB	138.4	141.4	+ 3.0	110.7	118.6	+7.9
Stanford Marguerite Tech Shuttle	NB	171.9	156.2	- 15.7	129.0	127.0	-2.0
	SB	138.4	141.4	+ 3.0	110.7	118.6	+7.9

*Source: Hexagon Transportation Consultants, May 2016 (see Appendix E).*

The traffic study identified a significant traffic impact at the intersection of Embarcadero Road & East Bayshore Road. Mitigation Measure T-1 would offset the additional delay created by the project. This improvement also would offset the increase in transit travel time. Impacts associated with transit vehicle delay would be less than significant.

The proposed project involves infill development on an existing infill site. The proposed project would not impede with the development or function of planned pedestrian or bicycle facilities and would not affect or conflict with the adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially reduce the performance or safety of such facilities. Impacts would be less than significant.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XVII. UTILITIES AND SERVICE SYSTEMS</b>				
-- Would the project:				
a) 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"/>
b) Require or result in the construction of new water or wastewater treatment 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"/>
c) 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"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) 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"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a, b, e) **LESS THAN SIGNIFICANT IMPACT.** In addition to the thresholds under items (a), (b), and (e) above, the City's CEQA thresholds state that a significant impact would occur if the project would result in a substantial physical deterioration of a public facility. The City of Palo Alto Utilities Department (CPAU) oversees a wastewater collection system consisting of over 208 miles of sewer lines. The City operates the Regional Water Quality Control Plant (RWQCP), which has primary treatment (bar screening and primary sedimentation), secondary treatment (fixed film reactors, conventional activated sludge, clarification and filtration), and tertiary treatment (filtration through a sand and coal filter and UV disinfection). Wastewater is routed to RWQCP, where it is treated prior to discharge into the San Francisco Bay. While the CPAU is responsible for the wastewater collection system, the Palo Alto Public Works Department is responsible for the collection/conveyance of sewage collected and delivered to the RWQCP.



The RWQCP is designed to have an average dry weather flow (ADWF) capacity of 39 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% is estimated to come from residences, 10% from industries, and 30% 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).

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 carwash would use a tank system to reclaim its water. With the reclaim tank, the proposed car wash would use approximately 45 gallons of reclaimed water and 16 gallons of city water per car wash. For the purposes of this analysis, it is conservatively assumed that 16 gallons of wastewater would be generated per car wash

As shown in Table XVII-1, the proposed project would generate a net increase of approximately 35,920 gallons of wastewater per day. This increase would be approximately 0.21% (35,920/17 MGD \* 100) 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.

**Table XVII-1  
 Estimated Wastewater Generation**

Type of Use	Quantity	Generation Factor (Per Day)	Amount (gallons per day)
<b>Existing Uses</b>			
Restaurant	17,942 sf	30 / seat*	(15,000)
<b>Proposed Project</b>			
Auto Parking	39,983 sf	20 / 1,000 sf	800
Auto Body / Mech Repair Shop	61,510 sf	800 / 1,000 sf	49,208
Car Wash: Automatic	57 cars**	16 gpc**	912
<i>Proposed Project Subtotal</i>			<i>50,920</i>
<b>Total Net Increase in Wastewater Generation</b>			<b>35,920</b>

Source: City of Los Angeles CEQA Thresholds Guidelines (2006).

Notes: gdp= gallons per day, sf= square feet, ( ) denotes subtraction, gpc = gallons per car

\* Restaurant has 500 seats. 30 gallons \* 500 seats = 15,000 gallons per day (Source: <http://www.paloaltoonline.com/news/2014/12/18/mings-restaurant-to-close-dec-28>)

\*\* There would be 24 service bays that can service about two cars per stall per day. There would be an estimated average of 48 washes per day for Monday through Friday and 80 washes on Saturday and Sunday, which averages to around 57 washes per day.



c) **LESS THAN SIGNIFICANT IMPACT.** The City’s CEQA thresholds state that a significant impact would occur if the project would result in a substantial physical deterioration of a public facility. 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. Because the project site is already developed and covered with impermeable surfaces, the proposed project would not require the construction of substantial new storm water drainage facilities or expansion of existing facilities. The proposed project would not result in a substantial physical deterioration of public stormwater facilities. Therefore, impacts would be less than significant.

d) **LESS THAN SIGNIFICANT IMPACT.** In addition to the thresholds under item (d) above, the City’s CEQA thresholds state that a significant impact would occur if the project would result in a substantial physical deterioration of a public facility. Since 1962, the City of Palo Alto’s potable water supply has come from the SFPUC. In 1999, the City began to prepare a new Water Integrated 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. At this time, no decision has been made regarding whether or not to use groundwater as a supplemental supply in droughts, though the City is proceeding with the Emergency Water Supply and Storage project which would provide the City the flexibility to rely on groundwater during a drought if necessary. The City is also a participating agency on the Bay Area Water Supply and Conservation Agency’s (BAWSCA) 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 XVII-2 shows the projected City water supply and demand through the year 2030 according to the City’s Urban Water Management Plan.

**Table XVII-2  
 City of Palo Alto Supply/Demand Balance (AFY)**

	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Projected SFPUC demand	14,253	14,157	14,353	14,971
Individual Supply Guarantee	19,118	19,118	19,118	19,118
<b>Difference</b>	<b>4,866</b>	<b>4,962</b>	<b>4,766</b>	<b>4,148</b>

*Source: City of Palo Alto Urban Water Management Plan, Table 41, June 2011*

Development of the proposed project would increase demand for potable water. Assuming that water use is approximately 120% of wastewater generation, the proposed project would demand approximately 43,104 gallons of water per day, or approximately 48.3 acre-feet per year (AFY). As shown in Table 17, available water supply is projected through 2030. The proposed project would have sufficient water supplies available to serve the project from existing entitlements and resources. No new or expanded entitlements would be needed to serve the



proposed project. The proposed project would not result in a substantial physical deterioration of public water facilities. Therefore, impacts would be less than significant.

f) **LESS THAN SIGNIFICANT IMPACT.** In addition to the threshold under item (f) above, the City’s CEQA thresholds state that a significant impact would occur if the project would result in a substantial physical deterioration of a public facility. 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. Annualized solid waste tonnage received by Kirby Canyon Landfill is approximately 475,000 tons. At that rate, the Kirby Canyon Landfill would reach capacity in approximately 45 years. 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 XVII-3, the proposed project would generate 232 pounds, or 0.115 tons, of solid waste per day. This incremental increase in solid waste would be within the permitted capacities of Kirby Canyon Landfill. Therefore, the project would be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs. The proposed project would not result in a substantial physical deterioration of public solid waste facilities. Impacts would be less than significant.

**Table XVII-3  
 Estimated Solid Waste Generation**

Land Use	Size	Generation Factor	Total (lbs/day)	Total (tons/day)
<i>Existing Uses</i>				
Restaurant	17,942 sf	0.005 lbs / sf / day	(90)	(0.05)
<b>Proposed Project</b>				
Auto dealer and service station	61,510 sf	0.9 lbs / 100 sf / day	554	0.28
<b>Total Net Solid Waste Generation</b>			<b>464</b>	<b>0.23</b>
<b>Total Solid Waste Sent to Landfill (Assuming 50% diversion rate)</b>			<b>232</b>	<b>0.115</b>

Notes: sf = square feet, lbs = pounds, ( ) denotes subtraction, numbers may not add up due to rounding

\*CalRecycle Waste Generation Rates, available at <http://www.calrecycle.ca.gov/wastechar/WasteGenRates/>

g) **NO IMPACT.** Palo Alto’s Municipal Code Section 5.20.020 follows State regulations for solid waste and recycling. The project would comply with all applicable regulations related to solid waste. No impact would occur.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE**

- |  |                          |                                     |                          |                          |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
| 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"/> |
| 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"/> |
| 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) **POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED.** As noted in Section IV, *Biological Resources*, impacts to nesting birds could be potentially significant and therefore *Mitigation Measure BIO-1* is required to reduce potential impacts. Incorporation of this mitigation measure would reduce impacts to wildlife to a less than significant level. As discussed in Section V, *Cultural Resources*, the existing commercial building is not eligible for listing on the California Register of Historic Resources based on its failure to meet one or more of the four significance criterion. The proposed project would not eliminate important examples of major periods of California history or prehistory.

b) **POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED.** As described in the discussion of environmental checklist Sections I through XVII, the project would have no impact, a less than significant impact, or a less than significant impact after mitigation with respect to all environmental issues. Cumulative impacts with some of the resource areas have been addressed in the individual resource sections above: Air Quality, Greenhouse Gases, Water Supply, and Solid Waste (see CEQA Guidelines Section 15064(h)(3)). As mentioned above in Section XVI, *Transportation/Traffic*, impacts to East Bayshore Road and Embarcadero Road could be potentially significant and therefore *Mitigation Measure T-1* has been required to address congestion related to the a large volume of left turns and a large volume of through traffic on eastbound Embarcadero Road in the morning. Aside from the Audi auto dealership



currently under construction adjacent to the project site to the east, there are no other known projects in development or under consideration that would affect the other resource areas. The Audi dealership is undergoing a remodel. There is no change in use. As such, cumulative impacts would also be less than significant (not cumulatively considerable).

c) **LESS THAN SIGNIFICANT IMPACT.** In general, impacts to human beings are associated with air quality, hazards and hazardous materials, traffic hazards, and noise impacts. As detailed in the preceding responses, the proposed project would not result, either directly or indirectly, in adverse impacts related to air quality or noise. Impacts related to unstable soils are potentially significant and *Mitigation Measure GEO-1* is required to reduce impacts to less than significant. The project as designed adequately addresses public health and safety objectives identified in the General Plan and Municipal Code. With mitigation, no significant impact was identified that could result in an adverse impact to human beings. Therefore, the project would result in a less than significant effect on human beings either directly or indirectly. However, the addition of project-generated traffic would create a significant impact at the intersection of East Bayshore Road and Embarcadero Road during the PM peak hour under Background Plus Project and Cumulative scenarios, and during the AM peak hour under the Cumulative scenario and therefore *Mitigation Measure T-1* has been required to reduce impacts to less than significant.





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### **Persons Contacted**

Craig Lee. Sergeant, City of Palo Alto Police Department. Personal communication, November 15, 2015.

Gordon Simpkinson. Plan Checker, City of Palo Alto Fire Department. Personal communication, November 13, 2015.



## **Appendix A**

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### *Air Quality and Greenhouse Gas Modeling Results*

**1700 Embarcadero Road Auto Dealership Project**  
**San Francisco Bay Area Air Basin, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	114.00	Space	1.03	45,600.00	0
Parking Lot	65.00	Space	0.59	26,000.00	0
Automobile Care Center	62.31	1000sqft	1.43	62,312.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2018
<b>Utility Company</b>	City of Palo Alto Public Utilities				
<b>CO2 Intensity (lb/MW hr)</b>	354.26	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Default

Construction Phase - App. Construction Schedule

Grading -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	153.00
tblConstructionPhase	NumDays	230.00	193.00
tblConstructionPhase	NumDays	20.00	27.00
tblConstructionPhase	NumDays	18.00	16.00
tblConstructionPhase	NumDays	5.00	278.00
tblConstructionPhase	PhaseEndDate	11/9/2017	6/30/2017
tblConstructionPhase	PhaseEndDate	3/17/2017	4/10/2017
tblConstructionPhase	PhaseEndDate	7/10/2017	6/21/2016
tblConstructionPhase	PhaseEndDate	6/2/2017	6/16/2017
tblConstructionPhase	PhaseStartDate	4/11/2017	11/30/2016
tblConstructionPhase	PhaseStartDate	6/22/2016	7/14/2016
tblConstructionPhase	PhaseStartDate	6/17/2017	5/31/2016
tblConstructionPhase	PhaseStartDate	5/11/2016	5/25/2016
tblGrading	MaterialImported	0.00	5,000.00
tblLandUse	LandUseSquareFeet	62,310.00	62,312.00
tblProjectCharacteristics	OperationalYear	2014	2018

## 2.0 Emissions Summary

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**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6492	2.0000e-005	2.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5600e-003
Energy	9.2100e-003	0.0837	0.0703	5.0000e-004		6.3600e-003	6.3600e-003		6.3600e-003	6.3600e-003	0.0000	234.6239	234.6239	0.0135	4.1000e-003	236.1785
Mobile	1.8056	2.6937	13.9873	0.0216	1.4318	0.0324	1.4642	0.3842	0.0299	0.4141	0.0000	1,606.5458	1,606.5458	0.0710	0.0000	1,608.0359
Waste						0.0000	0.0000		0.0000	0.0000	48.3159	0.0000	48.3159	2.8554	0.0000	108.2791
Water						0.0000	0.0000		0.0000	0.0000	1.8598	7.1179	8.9777	0.1916	4.6300e-003	14.4369
<b>Total</b>	<b>2.4640</b>	<b>2.7774</b>	<b>14.0599</b>	<b>0.0221</b>	<b>1.4318</b>	<b>0.0388</b>	<b>1.4705</b>	<b>0.3842</b>	<b>0.0362</b>	<b>0.4205</b>	<b>50.1757</b>	<b>1,848.2919</b>	<b>1,898.4676</b>	<b>3.1314</b>	<b>8.7300e-003</b>	<b>1,966.9349</b>



## 2.2 Overall Operational

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6492	2.0000e-005	2.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5600e-003
Energy	9.2100e-003	0.0837	0.0703	5.0000e-004		6.3600e-003	6.3600e-003		6.3600e-003	6.3600e-003	0.0000	234.6239	234.6239	0.0135	4.1000e-003	236.1785
Mobile	1.8056	2.6937	13.9873	0.0216	1.4318	0.0324	1.4642	0.3842	0.0299	0.4141	0.0000	1,606.5458	1,606.5458	0.0710	0.0000	1,608.0359
Waste						0.0000	0.0000		0.0000	0.0000	48.3159	0.0000	48.3159	2.8554	0.0000	108.2791
Water						0.0000	0.0000		0.0000	0.0000	1.8598	7.1179	8.9777	0.1916	4.6200e-003	14.4339
<b>Total</b>	<b>2.4640</b>	<b>2.7774</b>	<b>14.0599</b>	<b>0.0221</b>	<b>1.4318</b>	<b>0.0388</b>	<b>1.4705</b>	<b>0.3842</b>	<b>0.0362</b>	<b>0.4205</b>	<b>50.1757</b>	<b>1,848.2919</b>	<b>1,898.4676</b>	<b>3.1314</b>	<b>8.7200e-003</b>	<b>1,966.9320</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.11</b>	<b>0.00</b>

## 3.0 Construction Detail

### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/4/2016	5/10/2016	5	27	
2	Site Preparation	Site Preparation	5/25/2016	6/16/2017	5	278	
3	Paving	Paving	5/31/2016	6/21/2016	5	16	
4	Building Construction	Building Construction	7/14/2016	4/10/2017	5	193	
5	Architectural Coating	Architectural Coating	11/30/2016	6/30/2017	5	153	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 163,038; Non-Residential Outdoor: 54,346 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	2	6.00	130	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	494.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	50.00	22.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

### 3.2 Demolition - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0579	0.6164	0.4729	5.4000e-004		0.0309	0.0309		0.0288	0.0288	0.0000	50.0814	50.0814	0.0136	0.0000	50.3675
<b>Total</b>	<b>0.0579</b>	<b>0.6164</b>	<b>0.4729</b>	<b>5.4000e-004</b>		<b>0.0309</b>	<b>0.0309</b>		<b>0.0288</b>	<b>0.0288</b>	<b>0.0000</b>	<b>50.0814</b>	<b>50.0814</b>	<b>0.0136</b>	<b>0.0000</b>	<b>50.3675</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	1.1100e-003	0.0108	2.0000e-005	1.8400e-003	2.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.6670	1.6670	9.0000e-005	0.0000	1.6689
<b>Total</b>	<b>7.7000e-004</b>	<b>1.1100e-003</b>	<b>0.0108</b>	<b>2.0000e-005</b>	<b>1.8400e-003</b>	<b>2.0000e-005</b>	<b>1.8500e-003</b>	<b>4.9000e-004</b>	<b>1.0000e-005</b>	<b>5.0000e-004</b>	<b>0.0000</b>	<b>1.6670</b>	<b>1.6670</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.6689</b>

### 3.2 Demolition - 2016

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0579	0.6164	0.4729	5.4000e-004		0.0309	0.0309		0.0288	0.0288	0.0000	50.0814	50.0814	0.0136	0.0000	50.3674
<b>Total</b>	<b>0.0579</b>	<b>0.6164</b>	<b>0.4729</b>	<b>5.4000e-004</b>		<b>0.0309</b>	<b>0.0309</b>		<b>0.0288</b>	<b>0.0288</b>	<b>0.0000</b>	<b>50.0814</b>	<b>50.0814</b>	<b>0.0136</b>	<b>0.0000</b>	<b>50.3674</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	1.1100e-003	0.0108	2.0000e-005	1.8400e-003	2.0000e-005	1.8500e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.6670	1.6670	9.0000e-005	0.0000	1.6689
<b>Total</b>	<b>7.7000e-004</b>	<b>1.1100e-003</b>	<b>0.0108</b>	<b>2.0000e-005</b>	<b>1.8400e-003</b>	<b>2.0000e-005</b>	<b>1.8500e-003</b>	<b>4.9000e-004</b>	<b>1.0000e-005</b>	<b>5.0000e-004</b>	<b>0.0000</b>	<b>1.6670</b>	<b>1.6670</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>1.6689</b>

**3.3 Site Preparation - 2016****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.5112	0.0000	2.5112	1.3804	0.0000	1.3804	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4011	4.3160	3.2473	3.0900e-003		0.2322	0.2322		0.2136	0.2136	0.0000	291.3292	291.3292	0.0879	0.0000	293.1745
<b>Total</b>	<b>0.4011</b>	<b>4.3160</b>	<b>3.2473</b>	<b>3.0900e-003</b>	<b>2.5112</b>	<b>0.2322</b>	<b>2.7434</b>	<b>1.3804</b>	<b>0.2136</b>	<b>1.5939</b>	<b>0.0000</b>	<b>291.3292</b>	<b>291.3292</b>	<b>0.0879</b>	<b>0.0000</b>	<b>293.1745</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.3200e-003	0.0420	0.0363	1.1000e-004	3.7100e-003	5.5000e-004	4.2600e-003	9.8000e-004	5.0000e-004	1.4800e-003	0.0000	9.6304	9.6304	7.0000e-005	0.0000	9.6319
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3900e-003	7.8100e-003	0.0757	1.5000e-004	0.0129	1.1000e-004	0.0130	3.4300e-003	1.0000e-004	3.5300e-003	0.0000	11.7058	11.7058	6.4000e-004	0.0000	11.7193
<b>Total</b>	<b>8.7100e-003</b>	<b>0.0498</b>	<b>0.1120</b>	<b>2.6000e-004</b>	<b>0.0166</b>	<b>6.6000e-004</b>	<b>0.0173</b>	<b>4.4100e-003</b>	<b>6.0000e-004</b>	<b>5.0100e-003</b>	<b>0.0000</b>	<b>21.3362</b>	<b>21.3362</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>21.3513</b>

### 3.3 Site Preparation - 2016

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.5112	0.0000	2.5112	1.3804	0.0000	1.3804	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4011	4.3160	3.2473	3.0900e-003		0.2322	0.2322		0.2136	0.2136	0.0000	291.3288	291.3288	0.0879	0.0000	293.1742
<b>Total</b>	<b>0.4011</b>	<b>4.3160</b>	<b>3.2473</b>	<b>3.0900e-003</b>	<b>2.5112</b>	<b>0.2322</b>	<b>2.7434</b>	<b>1.3804</b>	<b>0.2136</b>	<b>1.5939</b>	<b>0.0000</b>	<b>291.3288</b>	<b>291.3288</b>	<b>0.0879</b>	<b>0.0000</b>	<b>293.1742</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.3200e-003	0.0420	0.0363	1.1000e-004	3.7100e-003	5.5000e-004	4.2600e-003	9.8000e-004	5.0000e-004	1.4800e-003	0.0000	9.6304	9.6304	7.0000e-005	0.0000	9.6319
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3900e-003	7.8100e-003	0.0757	1.5000e-004	0.0129	1.1000e-004	0.0130	3.4300e-003	1.0000e-004	3.5300e-003	0.0000	11.7058	11.7058	6.4000e-004	0.0000	11.7193
<b>Total</b>	<b>8.7100e-003</b>	<b>0.0498</b>	<b>0.1120</b>	<b>2.6000e-004</b>	<b>0.0166</b>	<b>6.6000e-004</b>	<b>0.0173</b>	<b>4.4100e-003</b>	<b>6.0000e-004</b>	<b>5.0100e-003</b>	<b>0.0000</b>	<b>21.3362</b>	<b>21.3362</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>21.3513</b>

**3.3 Site Preparation - 2017****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.5112	0.0000	2.5112	1.3804	0.0000	1.3804	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2903	3.1052	2.3638	2.3500e-003		0.1653	0.1653		0.1520	0.1520	0.0000	217.8923	217.8923	0.0668	0.0000	219.2943
<b>Total</b>	<b>0.2903</b>	<b>3.1052</b>	<b>2.3638</b>	<b>2.3500e-003</b>	<b>2.5112</b>	<b>0.1653</b>	<b>2.6765</b>	<b>1.3804</b>	<b>0.1520</b>	<b>1.5324</b>	<b>0.0000</b>	<b>217.8923</b>	<b>217.8923</b>	<b>0.0668</b>	<b>0.0000</b>	<b>219.2943</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3300e-003	0.0286	0.0262	8.0000e-005	3.5700e-003	3.7000e-004	3.9400e-003	9.3000e-004	3.4000e-004	1.2700e-003	0.0000	7.1898	7.1898	5.0000e-005	0.0000	7.1909
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6300e-003	5.3100e-003	0.0511	1.2000e-004	9.8000e-003	8.0000e-005	9.8700e-003	2.6100e-003	7.0000e-005	2.6800e-003	0.0000	8.5519	8.5519	4.5000e-004	0.0000	8.5613
<b>Total</b>	<b>5.9600e-003</b>	<b>0.0339</b>	<b>0.0773</b>	<b>2.0000e-004</b>	<b>0.0134</b>	<b>4.5000e-004</b>	<b>0.0138</b>	<b>3.5400e-003</b>	<b>4.1000e-004</b>	<b>3.9500e-003</b>	<b>0.0000</b>	<b>15.7417</b>	<b>15.7417</b>	<b>5.0000e-004</b>	<b>0.0000</b>	<b>15.7522</b>



### 3.3 Site Preparation - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.5112	0.0000	2.5112	1.3804	0.0000	1.3804	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2903	3.1052	2.3638	2.3500e-003		0.1653	0.1653		0.1520	0.1520	0.0000	217.8921	217.8921	0.0668	0.0000	219.2940
<b>Total</b>	<b>0.2903</b>	<b>3.1052</b>	<b>2.3638</b>	<b>2.3500e-003</b>	<b>2.5112</b>	<b>0.1653</b>	<b>2.6765</b>	<b>1.3804</b>	<b>0.1520</b>	<b>1.5324</b>	<b>0.0000</b>	<b>217.8921</b>	<b>217.8921</b>	<b>0.0668</b>	<b>0.0000</b>	<b>219.2940</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.3300e-003	0.0286	0.0262	8.0000e-005	3.5700e-003	3.7000e-004	3.9400e-003	9.3000e-004	3.4000e-004	1.2700e-003	0.0000	7.1898	7.1898	5.0000e-005	0.0000	7.1909
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6300e-003	5.3100e-003	0.0511	1.2000e-004	9.8000e-003	8.0000e-005	9.8700e-003	2.6100e-003	7.0000e-005	2.6800e-003	0.0000	8.5519	8.5519	4.5000e-004	0.0000	8.5613
<b>Total</b>	<b>5.9600e-003</b>	<b>0.0339</b>	<b>0.0773</b>	<b>2.0000e-004</b>	<b>0.0134</b>	<b>4.5000e-004</b>	<b>0.0138</b>	<b>3.5400e-003</b>	<b>4.1000e-004</b>	<b>3.9500e-003</b>	<b>0.0000</b>	<b>15.7417</b>	<b>15.7417</b>	<b>5.0000e-004</b>	<b>0.0000</b>	<b>15.7522</b>

### 3.4 Paving - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0144	0.1467	0.1005	1.5000e-004		8.8500e-003	8.8500e-003		8.1600e-003	8.1600e-003	0.0000	13.8053	13.8053	4.0600e-003	0.0000	13.8905
Paving	7.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0151</b>	<b>0.1467</b>	<b>0.1005</b>	<b>1.5000e-004</b>		<b>8.8500e-003</b>	<b>8.8500e-003</b>		<b>8.1600e-003</b>	<b>8.1600e-003</b>	<b>0.0000</b>	<b>13.8053</b>	<b>13.8053</b>	<b>4.0600e-003</b>	<b>0.0000</b>	<b>13.8905</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	8.8000e-004	8.5200e-003	2.0000e-005	1.4500e-003	1.0000e-005	1.4600e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.3171	1.3171	7.0000e-005	0.0000	1.3186
<b>Total</b>	<b>6.1000e-004</b>	<b>8.8000e-004</b>	<b>8.5200e-003</b>	<b>2.0000e-005</b>	<b>1.4500e-003</b>	<b>1.0000e-005</b>	<b>1.4600e-003</b>	<b>3.9000e-004</b>	<b>1.0000e-005</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>1.3171</b>	<b>1.3171</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.3186</b>

### 3.4 Paving - 2016

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0144	0.1467	0.1005	1.5000e-004		8.8500e-003	8.8500e-003		8.1600e-003	8.1600e-003	0.0000	13.8053	13.8053	4.0600e-003	0.0000	13.8905
Paving	7.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0151</b>	<b>0.1467</b>	<b>0.1005</b>	<b>1.5000e-004</b>		<b>8.8500e-003</b>	<b>8.8500e-003</b>		<b>8.1600e-003</b>	<b>8.1600e-003</b>	<b>0.0000</b>	<b>13.8053</b>	<b>13.8053</b>	<b>4.0600e-003</b>	<b>0.0000</b>	<b>13.8905</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	8.8000e-004	8.5200e-003	2.0000e-005	1.4500e-003	1.0000e-005	1.4600e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.3171	1.3171	7.0000e-005	0.0000	1.3186
<b>Total</b>	<b>6.1000e-004</b>	<b>8.8000e-004</b>	<b>8.5200e-003</b>	<b>2.0000e-005</b>	<b>1.4500e-003</b>	<b>1.0000e-005</b>	<b>1.4600e-003</b>	<b>3.9000e-004</b>	<b>1.0000e-005</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>1.3171</b>	<b>1.3171</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.3186</b>

### 3.5 Building Construction - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2078	1.7389	1.1289	1.6400e-003		0.1200	0.1200		0.1128	0.1128	0.0000	147.7137	147.7137	0.0366	0.0000	148.4830
<b>Total</b>	<b>0.2078</b>	<b>1.7389</b>	<b>1.1289</b>	<b>1.6400e-003</b>		<b>0.1200</b>	<b>0.1200</b>		<b>0.1128</b>	<b>0.1128</b>	<b>0.0000</b>	<b>147.7137</b>	<b>147.7137</b>	<b>0.0366</b>	<b>0.0000</b>	<b>148.4830</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0171	0.1345	0.1985	3.2000e-004	8.6400e-003	2.0100e-003	0.0106	2.4800e-003	1.8400e-003	4.3200e-003	0.0000	29.0220	29.0220	2.3000e-004	0.0000	29.0269
Worker	0.0116	0.0168	0.1624	3.3000e-004	0.0277	2.3000e-004	0.0279	7.3600e-003	2.1000e-004	7.5700e-003	0.0000	25.1074	25.1074	1.3800e-003	0.0000	25.1364
<b>Total</b>	<b>0.0287</b>	<b>0.1513</b>	<b>0.3609</b>	<b>6.5000e-004</b>	<b>0.0363</b>	<b>2.2400e-003</b>	<b>0.0385</b>	<b>9.8400e-003</b>	<b>2.0500e-003</b>	<b>0.0119</b>	<b>0.0000</b>	<b>54.1294</b>	<b>54.1294</b>	<b>1.6100e-003</b>	<b>0.0000</b>	<b>54.1633</b>

### 3.5 Building Construction - 2016

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2078	1.7389	1.1289	1.6400e-003		0.1200	0.1200		0.1128	0.1128	0.0000	147.7135	147.7135	0.0366	0.0000	148.4829
<b>Total</b>	<b>0.2078</b>	<b>1.7389</b>	<b>1.1289</b>	<b>1.6400e-003</b>		<b>0.1200</b>	<b>0.1200</b>		<b>0.1128</b>	<b>0.1128</b>	<b>0.0000</b>	<b>147.7135</b>	<b>147.7135</b>	<b>0.0366</b>	<b>0.0000</b>	<b>148.4829</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0171	0.1345	0.1985	3.2000e-004	8.6400e-003	2.0100e-003	0.0106	2.4800e-003	1.8400e-003	4.3200e-003	0.0000	29.0220	29.0220	2.3000e-004	0.0000	29.0269
Worker	0.0116	0.0168	0.1624	3.3000e-004	0.0277	2.3000e-004	0.0279	7.3600e-003	2.1000e-004	7.5700e-003	0.0000	25.1074	25.1074	1.3800e-003	0.0000	25.1364
<b>Total</b>	<b>0.0287</b>	<b>0.1513</b>	<b>0.3609</b>	<b>6.5000e-004</b>	<b>0.0363</b>	<b>2.2400e-003</b>	<b>0.0385</b>	<b>9.8400e-003</b>	<b>2.0500e-003</b>	<b>0.0119</b>	<b>0.0000</b>	<b>54.1294</b>	<b>54.1294</b>	<b>1.6100e-003</b>	<b>0.0000</b>	<b>54.1633</b>

### 3.5 Building Construction - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1101	0.9374	0.6436	9.5000e-004		0.0632	0.0632		0.0594	0.0594	0.0000	85.0151	85.0151	0.0209	0.0000	85.4545
<b>Total</b>	<b>0.1101</b>	<b>0.9374</b>	<b>0.6436</b>	<b>9.5000e-004</b>		<b>0.0632</b>	<b>0.0632</b>		<b>0.0594</b>	<b>0.0594</b>	<b>0.0000</b>	<b>85.0151</b>	<b>85.0151</b>	<b>0.0209</b>	<b>0.0000</b>	<b>85.4545</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0100e-003	0.0702	0.1086	1.9000e-004	5.0300e-003	1.0100e-003	6.0400e-003	1.4400e-003	9.3000e-004	2.3700e-003	0.0000	16.6048	16.6048	1.3000e-004	0.0000	16.6075
Worker	5.9700e-003	8.7300e-003	0.0840	1.9000e-004	0.0161	1.3000e-004	0.0162	4.2800e-003	1.2000e-004	4.4000e-003	0.0000	14.0552	14.0552	7.4000e-004	0.0000	14.0707
<b>Total</b>	<b>0.0150</b>	<b>0.0789</b>	<b>0.1926</b>	<b>3.8000e-004</b>	<b>0.0211</b>	<b>1.1400e-003</b>	<b>0.0223</b>	<b>5.7200e-003</b>	<b>1.0500e-003</b>	<b>6.7700e-003</b>	<b>0.0000</b>	<b>30.6600</b>	<b>30.6600</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>30.6782</b>

### 3.5 Building Construction - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1101	0.9374	0.6436	9.5000e-004		0.0632	0.0632		0.0594	0.0594	0.0000	85.0150	85.0150	0.0209	0.0000	85.4544
<b>Total</b>	<b>0.1101</b>	<b>0.9374</b>	<b>0.6436</b>	<b>9.5000e-004</b>		<b>0.0632</b>	<b>0.0632</b>		<b>0.0594</b>	<b>0.0594</b>	<b>0.0000</b>	<b>85.0150</b>	<b>85.0150</b>	<b>0.0209</b>	<b>0.0000</b>	<b>85.4544</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0100e-003	0.0702	0.1086	1.9000e-004	5.0300e-003	1.0100e-003	6.0400e-003	1.4400e-003	9.3000e-004	2.3700e-003	0.0000	16.6048	16.6048	1.3000e-004	0.0000	16.6075
Worker	5.9700e-003	8.7300e-003	0.0840	1.9000e-004	0.0161	1.3000e-004	0.0162	4.2800e-003	1.2000e-004	4.4000e-003	0.0000	14.0552	14.0552	7.4000e-004	0.0000	14.0707
<b>Total</b>	<b>0.0150</b>	<b>0.0789</b>	<b>0.1926</b>	<b>3.8000e-004</b>	<b>0.0211</b>	<b>1.1400e-003</b>	<b>0.0223</b>	<b>5.7200e-003</b>	<b>1.0500e-003</b>	<b>6.7700e-003</b>	<b>0.0000</b>	<b>30.6600</b>	<b>30.6600</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>30.6782</b>

### 3.6 Architectural Coating - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1893					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2400e-003	0.0273	0.0217	3.0000e-005		2.2600e-003	2.2600e-003		2.2600e-003	2.2600e-003	0.0000	2.9362	2.9362	3.5000e-004	0.0000	2.9435
<b>Total</b>	<b>0.1936</b>	<b>0.0273</b>	<b>0.0217</b>	<b>3.0000e-005</b>		<b>2.2600e-003</b>	<b>2.2600e-003</b>		<b>2.2600e-003</b>	<b>2.2600e-003</b>	<b>0.0000</b>	<b>2.9362</b>	<b>2.9362</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>2.9435</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.3000e-004	6.1200e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0500e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.9467	0.9467	5.0000e-005	0.0000	0.9478
<b>Total</b>	<b>4.4000e-004</b>	<b>6.3000e-004</b>	<b>6.1200e-003</b>	<b>1.0000e-005</b>	<b>1.0400e-003</b>	<b>1.0000e-005</b>	<b>1.0500e-003</b>	<b>2.8000e-004</b>	<b>1.0000e-005</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>0.9467</b>	<b>0.9467</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.9478</b>



### 3.6 Architectural Coating - 2016

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1893					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.2400e-003	0.0273	0.0217	3.0000e-005		2.2600e-003	2.2600e-003		2.2600e-003	2.2600e-003	0.0000	2.9362	2.9362	3.5000e-004	0.0000	2.9435
<b>Total</b>	<b>0.1936</b>	<b>0.0273</b>	<b>0.0217</b>	<b>3.0000e-005</b>		<b>2.2600e-003</b>	<b>2.2600e-003</b>		<b>2.2600e-003</b>	<b>2.2600e-003</b>	<b>0.0000</b>	<b>2.9362</b>	<b>2.9362</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>2.9435</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	6.3000e-004	6.1200e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0500e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.9467	0.9467	5.0000e-005	0.0000	0.9478
<b>Total</b>	<b>4.4000e-004</b>	<b>6.3000e-004</b>	<b>6.1200e-003</b>	<b>1.0000e-005</b>	<b>1.0400e-003</b>	<b>1.0000e-005</b>	<b>1.0500e-003</b>	<b>2.8000e-004</b>	<b>1.0000e-005</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>0.9467</b>	<b>0.9467</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.9478</b>

**3.6 Architectural Coating - 2017****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0216	0.1420	0.1214	1.9000e-004		0.0113	0.0113		0.0113	0.0113	0.0000	16.5962	16.5962	1.7500e-003	0.0000	16.6330
<b>Total</b>	<b>1.0917</b>	<b>0.1420</b>	<b>0.1214</b>	<b>1.9000e-004</b>		<b>0.0113</b>	<b>0.0113</b>		<b>0.0113</b>	<b>0.0113</b>	<b>0.0000</b>	<b>16.5962</b>	<b>16.5962</b>	<b>1.7500e-003</b>	<b>0.0000</b>	<b>16.6330</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1900e-003	3.2000e-003	0.0308	7.0000e-005	5.9000e-003	5.0000e-005	5.9400e-003	1.5700e-003	4.0000e-005	1.6100e-003	0.0000	5.1470	5.1470	2.7000e-004	0.0000	5.1526
<b>Total</b>	<b>2.1900e-003</b>	<b>3.2000e-003</b>	<b>0.0308</b>	<b>7.0000e-005</b>	<b>5.9000e-003</b>	<b>5.0000e-005</b>	<b>5.9400e-003</b>	<b>1.5700e-003</b>	<b>4.0000e-005</b>	<b>1.6100e-003</b>	<b>0.0000</b>	<b>5.1470</b>	<b>5.1470</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>5.1526</b>

### 3.6 Architectural Coating - 2017

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0701					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0216	0.1420	0.1214	1.9000e-004		0.0113	0.0113		0.0113	0.0113	0.0000	16.5961	16.5961	1.7500e-003	0.0000	16.6329
<b>Total</b>	<b>1.0917</b>	<b>0.1420</b>	<b>0.1214</b>	<b>1.9000e-004</b>		<b>0.0113</b>	<b>0.0113</b>		<b>0.0113</b>	<b>0.0113</b>	<b>0.0000</b>	<b>16.5961</b>	<b>16.5961</b>	<b>1.7500e-003</b>	<b>0.0000</b>	<b>16.6329</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1900e-003	3.2000e-003	0.0308	7.0000e-005	5.9000e-003	5.0000e-005	5.9400e-003	1.5700e-003	4.0000e-005	1.6100e-003	0.0000	5.1470	5.1470	2.7000e-004	0.0000	5.1526
<b>Total</b>	<b>2.1900e-003</b>	<b>3.2000e-003</b>	<b>0.0308</b>	<b>7.0000e-005</b>	<b>5.9000e-003</b>	<b>5.0000e-005</b>	<b>5.9400e-003</b>	<b>1.5700e-003</b>	<b>4.0000e-005</b>	<b>1.6100e-003</b>	<b>0.0000</b>	<b>5.1470</b>	<b>5.1470</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>5.1526</b>

### 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.8056	2.6937	13.9873	0.0216	1.4318	0.0324	1.4642	0.3842	0.0299	0.4141	0.0000	1,606.5458	1,606.5458	0.0710	0.0000	1,608.0359
Unmitigated	1.8056	2.6937	13.9873	0.0216	1.4318	0.0324	1.4642	0.3842	0.0299	0.4141	0.0000	1,606.5458	1,606.5458	0.0710	0.0000	1,608.0359

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	3,863.22	3,863.22	3,863.22	3,848,486	3,848,486
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>3,863.22</b>	<b>3,863.22</b>	<b>3,863.22</b>	<b>3,848,486</b>	<b>3,848,486</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	9.50	7.30	7.30	33.00	48.00	19.00	21	51	28
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.546229	0.063048	0.174586	0.122573	0.033968	0.004845	0.015596	0.024745	0.002089	0.003270	0.006707	0.000678	0.001667

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	143.4800	143.4800	0.0118	2.4300e-003	144.4800
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	143.4800	143.4800	0.0118	2.4300e-003	144.4800
NaturalGas Mitigated	9.2100e-003	0.0837	0.0703	5.0000e-004		6.3600e-003	6.3600e-003		6.3600e-003	6.3600e-003	0.0000	91.1439	91.1439	1.7500e-003	1.6700e-003	91.6986
NaturalGas Unmitigated	9.2100e-003	0.0837	0.0703	5.0000e-004		6.3600e-003	6.3600e-003		6.3600e-003	6.3600e-003	0.0000	91.1439	91.1439	1.7500e-003	1.6700e-003	91.6986

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Automobile Care Center	1.70797e+006	9.2100e-003	0.0837	0.0703	5.0000e-004		6.3600e-003	6.3600e-003		6.3600e-003	6.3600e-003	0.0000	91.1439	91.1439	1.7500e-003	1.6700e-003	91.6986
<b>Total</b>		<b>9.2100e-003</b>	<b>0.0837</b>	<b>0.0703</b>	<b>5.0000e-004</b>		<b>6.3600e-003</b>	<b>6.3600e-003</b>		<b>6.3600e-003</b>	<b>6.3600e-003</b>	<b>0.0000</b>	<b>91.1439</b>	<b>91.1439</b>	<b>1.7500e-003</b>	<b>1.6700e-003</b>	<b>91.6986</b>

#### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Automobile Care Center	1.70797e+006	9.2100e-003	0.0837	0.0703	5.0000e-004		6.3600e-003	6.3600e-003		6.3600e-003	6.3600e-003	0.0000	91.1439	91.1439	1.7500e-003	1.6700e-003	91.6986
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>9.2100e-003</b>	<b>0.0837</b>	<b>0.0703</b>	<b>5.0000e-004</b>		<b>6.3600e-003</b>	<b>6.3600e-003</b>		<b>6.3600e-003</b>	<b>6.3600e-003</b>	<b>0.0000</b>	<b>91.1439</b>	<b>91.1439</b>	<b>1.7500e-003</b>	<b>1.6700e-003</b>	<b>91.6986</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	562677	90.4164	7.4000e-003	1.5300e-003	91.0466
Enclosed Parking with Elevator	307344	49.3870	4.0400e-003	8.4000e-004	49.7312
Parking Lot	22880	3.6766	3.0000e-004	6.0000e-005	3.7022
<b>Total</b>		<b>143.4800</b>	<b>0.0117</b>	<b>2.4300e-003</b>	<b>144.4800</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	562677	90.4164	7.4000e-003	1.5300e-003	91.0466
Enclosed Parking with Elevator	307344	49.3870	4.0400e-003	8.4000e-004	49.7312
Parking Lot	22880	3.6766	3.0000e-004	6.0000e-005	3.7022
<b>Total</b>		<b>143.4800</b>	<b>0.0117</b>	<b>2.4300e-003</b>	<b>144.4800</b>

### 6.0 Area Detail

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### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6492	2.0000e-005	2.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5600e-003
Unmitigated	0.6492	2.0000e-005	2.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5600e-003

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1260					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1000e-004	2.0000e-005	2.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5600e-003
<b>Total</b>	<b>0.6492</b>	<b>2.0000e-005</b>	<b>2.2500e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.5600e-003</b>



### 6.2 Area by SubCategory

#### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1260					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1000e-004	2.0000e-005	2.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5600e-003
<b>Total</b>	<b>0.6492</b>	<b>2.0000e-005</b>	<b>2.2500e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>4.5600e-003</b>

### 7.0 Water Detail

#### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.9777	0.1916	4.6200e-003	14.4339
Unmitigated	8.9777	0.1916	4.6300e-003	14.4369

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	5.86219 / 3.59296	8.9777	0.1916	4.6300e-003	14.4369
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>8.9777</b>	<b>0.1916</b>	<b>4.6300e-003</b>	<b>14.4369</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	5.86219 / 3.59296	8.9777	0.1916	4.6200e-003	14.4339
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>8.9777</b>	<b>0.1916</b>	<b>4.6200e-003</b>	<b>14.4339</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	48.3159	2.8554	0.0000	108.2791
Unmitigated	48.3159	2.8554	0.0000	108.2791

### 8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	238.02	48.3159	2.8554	0.0000	108.2791
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>48.3159</b>	<b>2.8554</b>	<b>0.0000</b>	<b>108.2791</b>

## 8.2 Waste by Land Use

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	238.02	48.3159	2.8554	0.0000	108.2791
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>48.3159</b>	<b>2.8554</b>	<b>0.0000</b>	<b>108.2791</b>

## 9.0 Operational Offroad

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## 10.0 Vegetation

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## Ming's Restaurant

### San Francisco Bay Area Air Basin, Annual

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	0.00		0.00		0
High Turnover (Sit Down Restaurant)	18.00	1000sqft	2.54	18,000.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2014
<b>Utility Company</b>	City of Palo Alto Public Utilities				
<b>CO2 Intensity (lb/MW hr)</b>	354.26	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Actual Lot Acreage

Construction Phase - No construction period

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	8.00
tblLandUse	LotAcreage	0.41	2.54

### 2.0 Emissions Summary

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**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0912	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.2000e-004	3.2000e-004	0.0000	0.0000	3.4000e-004
Energy	0.0205	0.1862	0.1564	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	301.8950	301.8950	0.0120	5.4000e-003	303.8199
Mobile	1.5861	2.5994	12.9255	0.0153	1.0274	0.0348	1.0622	0.2757	0.0319	0.3076	0.0000	1,274.991 1	1,274.991 1	0.0705	0.0000	1,276.470 5
Waste						0.0000	0.0000		0.0000	0.0000	43.4807	0.0000	43.4807	2.5696	0.0000	97.4430
Water						0.0000	0.0000		0.0000	0.0000	1.7334	4.9467	6.6801	0.1784	4.2900e-003	11.7563
<b>Total</b>	<b>1.6978</b>	<b>2.7857</b>	<b>13.0821</b>	<b>0.0164</b>	<b>1.0274</b>	<b>0.0489</b>	<b>1.0763</b>	<b>0.2757</b>	<b>0.0460</b>	<b>0.3217</b>	<b>45.2140</b>	<b>1,581.833 2</b>	<b>1,627.047 2</b>	<b>2.8305</b>	<b>9.6900e- 003</b>	<b>1,689.490 1</b>

## 2.2 Overall Operational

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0912	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.2000e-004	3.2000e-004	0.0000	0.0000	3.4000e-004
Energy	0.0205	0.1862	0.1564	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	301.8950	301.8950	0.0120	5.4000e-003	303.8199
Mobile	1.5861	2.5994	12.9255	0.0153	1.0274	0.0348	1.0622	0.2757	0.0319	0.3076	0.0000	1,274.9911	1,274.9911	0.0705	0.0000	1,276.4705
Waste						0.0000	0.0000		0.0000	0.0000	43.4807	0.0000	43.4807	2.5696	0.0000	97.4430
Water						0.0000	0.0000		0.0000	0.0000	1.7334	4.9467	6.6801	0.1784	4.2800e-003	11.7536
<b>Total</b>	<b>1.6978</b>	<b>2.7857</b>	<b>13.0821</b>	<b>0.0164</b>	<b>1.0274</b>	<b>0.0489</b>	<b>1.0763</b>	<b>0.2757</b>	<b>0.0460</b>	<b>0.3217</b>	<b>45.2140</b>	<b>1,581.8332</b>	<b>1,627.0472</b>	<b>2.8305</b>	<b>9.6800e-003</b>	<b>1,689.4873</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00

## 3.0 Construction Detail

### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/1/2014	1/10/2014	5	8	

Acres of Grading (Site Preparation Phase): 0



**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 27,000; Non-Residential Outdoor: 9,000 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	2.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Architectural Coating - 2014**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2086					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7800e-003	0.0111	7.6900e-003	1.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	1.0213	1.0213	1.5000e-004	0.0000	1.0244
<b>Total</b>	<b>0.2104</b>	<b>0.0111</b>	<b>7.6900e-003</b>	<b>1.0000e-005</b>		<b>9.8000e-004</b>	<b>9.8000e-004</b>		<b>9.8000e-004</b>	<b>9.8000e-004</b>	<b>0.0000</b>	<b>1.0213</b>	<b>1.0213</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.0244</b>

### 3.2 Architectural Coating - 2014

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.4000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0705	0.0705	0.0000	0.0000	0.0706	0.0706
<b>Total</b>	<b>4.0000e-005</b>	<b>5.0000e-005</b>	<b>5.4000e-004</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0705</b>	<b>0.0705</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0706</b>	<b>0.0706</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2086					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7800e-003	0.0111	7.6900e-003	1.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	1.0213	1.0213	1.5000e-004	0.0000	1.0244
<b>Total</b>	<b>0.2104</b>	<b>0.0111</b>	<b>7.6900e-003</b>	<b>1.0000e-005</b>		<b>9.8000e-004</b>	<b>9.8000e-004</b>		<b>9.8000e-004</b>	<b>9.8000e-004</b>	<b>0.0000</b>	<b>1.0213</b>	<b>1.0213</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.0244</b>

### 3.2 Architectural Coating - 2014

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	5.0000e-005	5.4000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0705	0.0705	0.0000	0.0000	0.0706
<b>Total</b>	<b>4.0000e-005</b>	<b>5.0000e-005</b>	<b>5.4000e-004</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0705</b>	<b>0.0705</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0706</b>

### 4.0 Operational Detail - Mobile

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5861	2.5994	12.9255	0.0153	1.0274	0.0348	1.0622	0.2757	0.0319	0.3076	0.0000	1,274.9911	1,274.9911	0.0705	0.0000	1,276.4705
Unmitigated	1.5861	2.5994	12.9255	0.0153	1.0274	0.0348	1.0622	0.2757	0.0319	0.3076	0.0000	1,274.9911	1,274.9911	0.0705	0.0000	1,276.4705

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	2,288.70	2,850.66	2373.12	2,762,636	2,762,636
Total	2,288.70	2,850.66	2,373.12	2,762,636	2,762,636

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	37	20	43

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.546249	0.062948	0.174600	0.125189	0.034587	0.004960	0.015036	0.022157	0.002053	0.003311	0.006538	0.000702	0.001670

### 5.0 Energy Detail

#### 4.4 Fleet Mix

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Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	99.1809	99.1809	8.1200e-003	1.6800e-003	99.8721
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	99.1809	99.1809	8.1200e-003	1.6800e-003	99.8721
NaturalGas Mitigated	0.0205	0.1862	0.1564	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	202.7142	202.7142	3.8900e-003	3.7200e-003	203.9479
NaturalGas Unmitigated	0.0205	0.1862	0.1564	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	202.7142	202.7142	3.8900e-003	3.7200e-003	203.9479

**5.2 Energy by Land Use - NaturalGas**  
**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High Turnover (Sit Down Restaurant)	3.79872e+006	0.0205	0.1862	0.1564	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	202.7142	202.7142	3.8900e-003	3.7200e-003	203.9479
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0205</b>	<b>0.1862</b>	<b>0.1564</b>	<b>1.1200e-003</b>		<b>0.0142</b>	<b>0.0142</b>		<b>0.0142</b>	<b>0.0142</b>	<b>0.0000</b>	<b>202.7142</b>	<b>202.7142</b>	<b>3.8900e-003</b>	<b>3.7200e-003</b>	<b>203.9479</b>

### 5.2 Energy by Land Use - NaturalGas

#### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
High Turnover (Sit Down Restaurant)	3.79872e+006	0.0205	0.1862	0.1564	1.1200e-003		0.0142	0.0142		0.0142	0.0142	0.0000	202.7142	202.7142	3.8900e-003	3.7200e-003	203.9479
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0205</b>	<b>0.1862</b>	<b>0.1564</b>	<b>1.1200e-003</b>		<b>0.0142</b>	<b>0.0142</b>		<b>0.0142</b>	<b>0.0142</b>	<b>0.0000</b>	<b>202.7142</b>	<b>202.7142</b>	<b>3.8900e-003</b>	<b>3.7200e-003</b>	<b>203.9479</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	617220	99.1809	8.1200e-003	1.6800e-003	99.8721
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>99.1809</b>	<b>8.1200e-003</b>	<b>1.6800e-003</b>	<b>99.8721</b>

### 5.3 Energy by Land Use - Electricity

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	617220	99.1809	8.1200e-003	1.6800e-003	99.8721
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>99.1809</b>	<b>8.1200e-003</b>	<b>1.6800e-003</b>	<b>99.8721</b>

### 6.0 Area Detail

#### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0912	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.2000e-004	3.2000e-004	0.0000	0.0000	3.4000e-004
Unmitigated	0.0912	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.2000e-004	3.2000e-004	0.0000	0.0000	3.4000e-004

## 6.2 Area by SubCategory

### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0209					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0703					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.2000e-004	3.2000e-004	0.0000	0.0000	3.4000e-004
<b>Total</b>	<b>0.0912</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>3.2000e-004</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>3.4000e-004</b>

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0209					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0703					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.2000e-004	3.2000e-004	0.0000	0.0000	3.4000e-004
<b>Total</b>	<b>0.0912</b>	<b>0.0000</b>	<b>1.7000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>3.2000e-004</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>0.0000</b>	<b>3.4000e-004</b>

## 7.0 Water Detail



### 7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.6801	0.1784	4.2800e-003	11.7536
Unmitigated	6.6801	0.1784	4.2900e-003	11.7563

### 7.2 Water by Land Use

#### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	5.46361 / 0.348741	6.6801	0.1784	4.2900e-003	11.7563
<b>Total</b>		<b>6.6801</b>	<b>0.1784</b>	<b>4.2900e-003</b>	<b>11.7563</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	5.46361 / 0.348741	6.6801	0.1784	4.2800e-003	11.7536
<b>Total</b>		<b>6.6801</b>	<b>0.1784</b>	<b>4.2800e-003</b>	<b>11.7536</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	43.4807	2.5696	0.0000	97.4430
Mitigated	43.4807	2.5696	0.0000	97.4430

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	214.2	43.4807	2.5696	0.0000	97.4430
<b>Total</b>		<b>43.4807</b>	<b>2.5696</b>	<b>0.0000</b>	<b>97.4430</b>

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	214.2	43.4807	2.5696	0.0000	97.4430
<b>Total</b>		<b>43.4807</b>	<b>2.5696</b>	<b>0.0000</b>	<b>97.4430</b>

## 9.0 Operational Offroad

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## **10.0 Vegetation**

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**Greenhouse Gas Emission Worksheet**  
**N2O Mobile Emissions**

1700 Embarcadero Road Auto Dealership Project

From CalEEMod Vehicle Fleet Mix Output:

Annual VMT: 3,848,486

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)**	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)**
Light Auto	54.6%	0.04	0.0218492	0.04	0.021849
Light Truck < 3750 lbs	6.3%	0.05	0.0031524	0.06	0.003783
Light Truck 3751-5750 lbs	17.5%	0.05	0.0087293	0.06	0.010475
Med Truck 5751-8500 lbs	12.3%	0.12	0.0147088	0.2	0.024515
Lite-Heavy Truck 8501-10,000 lbs	3.4%	0.12	0.0040762	0.2	0.006794
Lite-Heavy Truck 10,001-14,000 lbs	0.5%	0.09	0.0004361	0.125	0.000606
Med-Heavy Truck 14,001-33,000 lbs	1.6%	0.06	0.0009358	0.05	0.00078
Heavy-Heavy Truck 33,001-60,000 lbs	2.5%	0.06	0.0014847	0.05	0.001237
Other Bus	0.2%	0.06	0.0001253	0.05	0.000104
Urban Bus	0.3%	0.06	0.0001962	0.05	0.000164
Motorcycle	0.7%	0.09	0.0006036	0.01	6.71E-05
School Bus	0.1%	0.06	4.068E-05	0.05	3.39E-05
Motor Home	0.2%	0.09	0.00015	0.125	0.000208
<b>Total</b>	<b>100.0%</b>		<b>0.0564882</b>		<b>0.070615</b>

**Total Emissions (metric tons) =**

**Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g**

**Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)**

CH4 21 GWP  
 N2O 310 GWP  
 1 ton (short, US) = 0.90718474 metric ton

**Annual Mobile Emissions:**

	Total Emissions	Total CO2e units
N2O Emissions:	0.2718 metric tons N2O	84 metric tons CO2e
<b>Project Total:</b>	<b>84 metric tons CO2e</b>	

**References**

- \* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile). in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009. Assume Model year 2000-present, gasoline fueled.
- \*\* Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.
- \*\*\* From URBEMIS 2007 results for mobile sources

**Greenhouse Gas Emission Worksheet**  
**N2O Mobile Emissions**

Ming's Restaurant - existing use

From CalEEMod Vehicle Fleet Mix Output:

Annual VMT: 2,762,636

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)**	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)**
Light Auto	54.6%	0.04	0.0218492	0.04	0.021849
Light Truck < 3750 lbs	6.3%	0.05	0.0031524	0.06	0.003783
Light Truck 3751-5750 lbs	17.5%	0.05	0.0087293	0.06	0.010475
Med Truck 5751-8500 lbs	12.3%	0.12	0.0147088	0.2	0.024515
Lite-Heavy Truck 8501-10,000 lbs	3.4%	0.12	0.0040762	0.2	0.006794
Lite-Heavy Truck 10,001-14,000 lbs	0.5%	0.09	0.0004361	0.125	0.000606
Med-Heavy Truck 14,001-33,000 lbs	1.6%	0.06	0.0009358	0.05	0.00078
Heavy-Heavy Truck 33,001-60,000 lbs	2.5%	0.06	0.0014847	0.05	0.001237
Other Bus	0.2%	0.06	0.0001253	0.05	0.000104
Urban Bus	0.3%	0.06	0.0001962	0.05	0.000164
Motorcycle	0.7%	0.09	0.0006036	0.01	6.71E-05
School Bus	0.1%	0.06	4.068E-05	0.05	3.39E-05
Motor Home	0.2%	0.09	0.00015	0.125	0.000208
<b>Total</b>	<b>100.0%</b>		<b>0.0564882</b>		<b>0.070615</b>

**Total Emissions (metric tons) =**

**Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g**

**Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)**

CH4 21 GWP  
 N2O 310 GWP  
 1 ton (short, US) = 0.90718474 metric ton

**Annual Mobile Emissions:**

	Total Emissions	Total CO2e units
N2O Emissions:	0.1951 metric tons N2O	60 metric tons CO2e
	<b>Project Total: 60 metric tons CO2e</b>	

**References**

- \* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile). in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009. Assume Model year 2000-present, gasoline fueled.
- \*\* Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.
- \*\*\* From URBEMIS 2007 results for mobile sources

## **Appendix B**

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### *Historic Resource Evaluation*



# 1700 Embarcadero Historic Resource Evaluation

City of Palo Alto, CA  
December 4, 2015



Prepared by



**m-group**

1303 Jefferson Street, Suite 100-B

Napa, CA 94559



## 1. PURPOSE

The project applicant is requesting to demolish the former Ming's Restaurant building at 1700 Embarcadero Road, constructed in 1968, and redevelop the property.

Recognizing the potential historical significance of the subject building, the City of Palo Alto has requested that a Historic Resource Evaluation be prepared to accompany the demolition permit submittal in order to determine if the property meets the CEQA definition of a Historical Resource as defined in CEQA § 15064.5. Generally, a resource shall be considered to be "historically significant" if the resource meets the criteria for listing on the California Register of Historic Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852).

## 2. METHODOLOGY

M-Group used a systematic approach to perform the Historic Resource Evaluation. Our approach 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 or its setting. A field survey was undertaken by M-Group Preservation Specialist, Lilly Bianco on November 12, 2015 to perform photographic documentation and evaluate the level of integrity.

The evaluation focuses on the identification of essential character defining features important for conveying the properties significance, the role the property played in the larger historic context, and an assessment of the extent to which those essential features have or have not been retained.

## 3. SUMMARY OF FINDINGS

The following Evaluation performed for the subject property indicates that the subject building is a neo-eclectic commercial building and confirms that the subject building is not eligible for listing on the California Register of Historic Resources based on its failure to meet one or more of the four significance criterion.

## 4. HISTORIC CONTEXT

### Growth in Palo Alto

The 1960's saw the beginnings of Palo Alto as a financial, technological and medical hub. The City of Palo Alto largely developed as an off shoot of Stanford University and until the 1960s the City was generally considered a community of homeowners and shopkeepers.<sup>1</sup> Accordingly, up until that time, Palo Alto was largely defined by residential, agricultural, and small commercial land uses. From 1950 to 1960 Palo Alto's population doubled, increasing from 25,475 in 1950 to 52,287 in 1960. This

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<sup>1</sup> Arthur Coffman, *An Illustrated History of Palo Alto*, Lewis Osborne: Palo Alto, 1969. 90

growth was in line with the rest of the Country which saw the nation's longest period of continuous growth following the Second World War.<sup>2</sup> During this period a series of annexations pushed the City's boundaries south past Oregon Avenue all the way to San Antonio Road which nearly doubled the City in size and allowed for the profound population growth<sup>3</sup>.

This period of growth coincided with the construction of the Stanford Shopping Center, relocation of the Stanford Medical School from San Francisco to its new location on the Stanford Campus, and the opening of the Stanford Research Park. This era was also the golden era of architect Joseph Eichler (1900-1974), who popularized the Mid Century modern style for residential architecture.

### Chinese Americans in Palo Alto

Prior to the middle of the twentieth century Chinese immigrants in California were faced with a multitude of struggles and were often confined to the life of a laborer building railroads, working as laundrymen, grocers, servants and factory workers.

With the end of World War II came the end of the Chinese exclusion acts and the Chinese in the Santa Clara Valley felt a sense of relief and optimism. The forthcoming era was not without its barriers though. While the Exclusion Acts had been rescinded there remained barriers to obtaining housing and business licenses. Chinese- Americans in Palo Alto often had help from white friends who helped them purchase homes.<sup>4</sup> Many Chinese also purchased land in the name of their American born children to get around the land ownership prohibitions and established farms, namely flower farms.

As population and technological advancement surged in the middle and latter half of the twentieth century many Chinese transitioned their business efforts from floriculture to commercial ventures that included supermarkets, restaurants, and retail establishments to serve the ever growing population<sup>5</sup>

### Ming's Restaurant

The original Ming's Restaurant was opened by famed San Francisco Restaurateur, Mr. Johnny Kan of San Francisco and graphic illustrator, Dan Lee on July 26, 1956 at 4100 El Camino Real in Palo Alto, taking over what was known as the "former Longbarn restaurant".

Johnny Kan was a Chinese American Restaurateur that made his mark in San Francisco Chinatown by introducing a more authentic version of Cantonese cuisine to Americans which contrasted rather significantly with the Americanized interpretation of Chinese food Americans had been consuming

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<sup>2</sup> Mary Brown, San Francisco Planning Department, *San Francisco Modern Architecture and Landscape Design, 1955-1970*, Final Draft, San Francisco, CA, January 12, 2011. 115

<sup>3</sup> Ward Winslow, *Palo Alto: A Centennial History*, Palo Alto Historical Association, 1993. 54

<sup>4</sup> Lillian Gong Guy and Gerrye Wong, *Images of America: Chinese in San Jose and the Santa Clara Valley* (San Francisco: Arcadia, 2007), 33.

<sup>5</sup> Ibid

up until then. He also is credited with creating an early example of the restaurant designed around an open kitchen so as to allow diners to observe the preparation of food and with introducing an innovative lazy Susan/ revolving tabletop to Chinese Restaurants. After the success of Kan's first restaurant in San Francisco, he and his three partners (George Hall, John C Young, and George Chow) recruited graphic illustrator Dan Lee as a fifth partner and opened Ming's in Palo Alto as another premium Cantonese restaurant. Dan Lee was a commercial graphic artist who ended up serving as the interior designer for Ming's. When the partner scheduled to serve as the manager was called for Military Duty, Dan Lee was asked to serve as the manager and subsequently became partner.<sup>6</sup>

Ming's Restaurant served over a hundred different dishes and thrived at that location until 1968 when a road widening project along El Camino Real necessitated demolition of much of the existing building and required the restaurant to move. In 1968 the Restaurant relocated to 1700 Embarcadero at the Southeast corner of Embarcadero Road and East Bayshore Road. The new Ming's was designed by architects Philip Choy and David Arnold of San Francisco<sup>7</sup> and constructed by contractors Howard J. White Inc. The new building was purported to have cost \$300,000 to construct exclusive of furnishings, equipment, and landscaping.<sup>8</sup> Much of the decorative features including wooden plaques and oriental screens were brought over from the original location on El Camino Real.<sup>9</sup>

The new Ming's Restaurant was to be housed in a single story redwood commercial building designed in the neo-eclectic style with Asian influence reflected in the detailing and featuring approximately 17,942 square feet of floor area with two large dining rooms separated by a bar/lounge area capable of accommodating 350 patrons at a given time. The restaurant would be surrounded by a large surface parking lot.

On May 22, 1968 the new Ming's Restaurant opened. On April 15, 1969, Institutions Magazine, an international publication related to the food and beverage industry, awarded Ming's "an award of special distinction for total design". Ming's became a Palo Alto Institution that served as a gathering place for the Stanford Varsity teams, executives, and Palo Alto families.<sup>10</sup>

The restaurant changed hands in 1986 after an approximately 7 month closure. In June 1986 Ming's Restaurant was sold by Dan Lee and partners to Felicity and Francis Tse of Oakland who owned and operated "Jade's Villa" restaurant in Oakland. Francis Tse was a prominent anesthesiologist in Berkeley. The Restaurant was co-owned by Dr. Tse's sister Bataille Wong. The Tses renamed the restaurant "Ming's Villa". The new owners embarked on a 1.5 million dollar renovation that included the addition of two additional kitchens and expansion of the dining rooms to increase the capacity

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<sup>6</sup> Daily Palo Alto Times, August 24, 1967

<sup>7</sup> Daily Palo Alto Times, August 24, 1967

<sup>8</sup> Daily Palo Alto Times, May 10, 1968.

<sup>9</sup> Ibid

<sup>10</sup> Lillian Gong-Guy and Gerrye Wong, 50

from approximately 350 to over 600. The renovation added a new entrance facing Embarcadero Road, fountains, landscaping, and new interior facilities<sup>11</sup>. A Palo Alto Weekly article recalled that when comparing the renovated restaurant to the previous iteration, “about the only things you can expect to find the same are the basic menu and the size of the building.”<sup>12</sup>

As part of the rehabilitation and in accordance with Chinese customs, the Tses added features intended to ensure good fortune to those who ate and worked in the restaurant including offsetting the front door by 24 degrees from true north — according to a Chinese soothsayer such an angle allows good spirits to flow through and bad ones to vent. In addition, two large stone lions were added in front of the entrance as “guards”<sup>13</sup>. Unlike the traditional Chinese American restaurant, the renovated Ming’s was designed to exhibit an open and airy look that veered away from the traditional dark, gold, and red décor. The interior was finished in pastel shades of green and pink and enhanced by indirect neon cove lighting.<sup>14</sup> The added kitchen was a full 4,200 square feet larger than most commercial kitchens and staffed by 40 people. The Kitchen featured bowling alley sized aisles lined with gas flamed woks. The kitchen was divided into three areas: dim sum, barbecue and dinner<sup>15</sup>. The Tses hired Hing Kei Lam as executive chef who had been the former executive chef at Maxim’s in Hong Kong.

The restaurant operated until December 2014 and has been closed since.

### Architects

Philip Choy was born in 1926 and raised in San Francisco Chinatown by his second generation American Mother and Chinese Immigrant father. He had three sisters and one brother. In 1945 Choy joined the air force where he served for one and a half years. Following his tenure with the air force he attended U.C Berkeley under the G.I Bill and graduated with a degree in Architecture.

Once out of school, Choy worked for an architectural firm for 12 years designing schools- one of which is located in Watsonville. After gaining experience working for a large firm, Choy went into private practice. It was during his time in private practice that he designed the award winning Ming’s Restaurant.

Since the 1970’s Choy has served as an adjunct professor in the Asian American Studies Department in San Francisco State University. He is passionately involved in Chinese American History in the Bay Area and has taught and lectured on the subject throughout the Bay Area.<sup>16</sup>

No information could be found related to architect, David Arnold.

---

<sup>11</sup> Daily Palo Alto Times, June 10,1986

<sup>12</sup> Palo Alto Weekly March 18, 1987

<sup>13</sup> Daily Palo Alto Times, November 18,1986

<sup>14</sup> Ibid

<sup>15</sup> Palo Alto Weekly March 18, 1987

<sup>16</sup> Choy: A Period of Ethnic Awakening, published in the Asian American Times, September & October 2002 Issue Vol.2, No. 20 California Edition <http://www.angelfire.com/clone/aatimes/cat5.html> accessed 12.1.15

## 5. ARCHITECTURAL DESCRIPTION

The former Ming's Restaurant is located on a 2.5 acre lot at 1700 Embarcadero at the corner of Embarcadero Road and Bayshore Road. The property is surrounded by Merrill Corporation offices to the north and across Embarcadero Road, professional offices to the south and west, and auto dealerships to the east.

The style of the former Ming's restaurant is most reminiscent of the neo-eclectic style which became common after 1965. Neo Eclectic architecture is a style known for borrowing from past eras and foreign influences without necessarily being duplicative of any particular style or building type. The building exhibits both neo-traditional details visible in the wood paneled walls and ribbons of windows, but also eclectic Asian influences readily visible in the pagoda style roof, articulation in form, and Chinese talismans and details as well as in the landscape.

The restaurant exhibits a complex, irregular plan (somewhat surprisingly based on how Chinese architecture often features bilateral symmetry) that is topped with a deck/mansard shaped roof featuring red pantile and reminiscent of the pagoda style roof. The roof line exhibits various levels with a taller roof at the center of the building and shorter rooflines exhibited by the irregular projections off the primary building. The irregularity in the rooflines provides articulation and perpetuates the emphasis on the horizontal orientation and expansiveness of the building.

FAÇADE (North Elevation) The entrance (relocated in 1986) is situated on the north elevation, facing Embarcadero Road. The entrance projects from the wall and is offset by approximately 24 degrees from due north with the intention of letting good spirits in and bad out. The entrance features paired glass doors with gold anodized aluminum handles and a jade colored marble surround that give a nod to the Moderne style. The entrance is flanked by plain pastel green walls, intentionally meant to depart from the traditional dark reds, and golds typical of Chinese American Restaurants.

A series of wooden pillars and a trellis system line a pathway leading to what was the original entrance at the northwest corner of the building. The pathway leads to the side of the building and provides access to the entrance via concrete stairs and landing that surround the front of the building. Accessibility ramps have also been added.

SIDES (East and West Elevations) The east and west elevations feature rather traditional detailing that provides for an interesting contrast with the Chinese influences. The side elevations reinforce the strong horizontal orientation, and feature paneling on bulkheads and frieze, ribbons of large 9-paned fixed windows, side lights on either side of paired French entry doors, and regularly spaced wooden piers.

A large deck and ADA access have been added to the west elevation and ADA access has also been added to access the building at the east elevation. The northeast corner of the building includes a small alcove featuring a traditional Chinese garden.

REAR (South Elevation) The rear elevation is generally free of adornment and features a wood clad wall. An outdoor dining area is situated at the far corner on the southeast portion of the building and exhibits similar architectural detailing as the side elevations.

**Alterations:**

- April 22, 1969**            Enlarged and reconfigured parking lot for improved traffic configuration
- C. Dec 6, 1986**            Added new front entrance facing Embarcadero Road, fountains, landscaping, and new interior facilities including the addition of two kitchens and expansion of dining area
- June 21, 1994**            Addition of approximately 980 square feet of outdoor dining (deck) in an existing enclosed garden area and construction of handicap ramp.
- August 29, 2003**        New roof

**Essential Character Defining Features:**

- Emphasis on articulation
- Horizontal Emphasis
- Talismans and imagery of good fortune
- Pagoda style roof
- Ribbon windows
- Wall Paneling

**6. SIGNIFICANCE**

Eligibility for listing on the California Register and/or National Register is determined based on how well a given property meets one or more of the following criteria. It is not required that all four criteria are met for a resource to be considered significant. The applicable criteria are listed below.

- Criterion 1        Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States
- Criterion 2        Associated with the lives of persons important to local, California or national history
- Criterion 3        Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values
- Criterion 4        Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation

## Evaluation of Significance

### Criterion 1: Associated with Significant Events

The former Ming's Restaurant does not appear eligible based on its association with significant events related to local, California, or National History. The Restaurant did serve as a popular Chinese Restaurant in the Bay Area and became somewhat of an institution over its existence; however the restaurant did not play such a pivotal role as to be considered eligible for the California Register of Historic Resources merely based on its long lived popularity. The property does not appear eligible under Criterion 1.

### Criterion 2: Associated with Significant Persons

A property may be considered significant under Criterion 2 based on its association with a person whose specific contributions to history can be identified and documented. Persons "significant in our past" refers to individuals whose activities are demonstrably important within a local, State, or national historic context. The criterion is generally restricted to those properties that illustrate (rather than commemorate) a person's important achievements.

The Restaurant is most closely associated with original owners Johnny Kan and Dan Lee, who opened the restaurant in 1956 and the principal architect Philip Choy who constructed the relocated Ming's in 1968. The restaurant was also associated with Mr. and Mrs. Tse who purchased the property in 1986. While owner Johnny Kan did contribute greatly to the Cantonese dining experience in America, his first restaurant, "Kan's" in San Francisco is much more representative and illustrative of those contributions. Partner, Dan Lee also contributed to the Chinese-American dining experience in Palo Alto; however, his contributions to the industry are not so substantial as to consider the property significance based on its association with him.

Architect, Philip Choy was a notable member of the Bay Area community and advocated recognition of Chinese American heritage in the Bay Area. He served as an architect for many years until becoming a teacher and advocate of Chinese American heritage. While Philips did contribute to the architectural fabric of Palo Alto and make many other types of contributions through his teaching and lecturing, the former Ming's restaurant is not necessarily most illustrative of his contributions. Further, it is unusual to deem a building significant based on its association with a living person because it is thought that not enough time would have passed for a scholarly perspective to have been formed. As such, the restaurant does not appear to be significant based on its association with architect, Philip Choy. Accordingly, it is determined that the subject property is not eligible for listing under Criterion 2.

### Criterion 3: Architectural or Artistic Value

Criterion 3 applies to properties significant for their physical design or construction, including such elements as architecture, landscape architecture, engineering etc. Most properties found eligible under Criterion C are those that embody "distinctive characteristics of a type" which refers to all

architectural styles and construction practices. To be eligible under this portion of the Criterion, a property must clearly illustrate the physical features or traits that commonly recur in individual types, periods, or methods of construction. To be eligible, a property must clearly contain enough of those characteristics to be considered a true representative of a particular type, period, or method of construction.

The former Ming's Restaurant is a neo-eclectic commercial building which exhibits both neo-traditional elements and Chinese influences, it is not; however, especially illustrative of a particular discernible style and does not constitute a true representative of any one type, period, or method of construction that it would be considered eligible under this criterion. As such, the subject property does not appear eligible under Criterion 3.

#### **Criterion 4: Potential to yield Information**

The building site does is not expected to hold significant archeological resources and the building itself does not exhibit construction methods that would be particularly important to yielding information related to prehistory or history of California. Accordingly, the building at 1700 Embarcadero does not appear eligible pursuant to Criterion 4.

## **7. INTEGRITY**

Historic Resources deemed to be significant must also be able to convey their historic significance. The ability to do this is judged by how well the resource meets the seven aspects of integrity: Location, design, setting, materials, workmanship, feeling and association. However, the individual nature of the property and its particular significance may result in certain aspects holding more weight than others. It is not required that a property retains *all* of its historic physical features or characteristics, rather a property must retain at the very least, those essential features which allow it to convey its significance. The essential features are those that define (1) why a property is significant and (2) when it was significant.

1. Location: Refers to the building's original geographical location.
2. Design: Design refers to the organization of space, proportion, scale, technology, ornamentation and materials used. Design is reflective of function, technology and aesthetic trends of a respective time period. In order for integrity of design to be retained the resource should retain the original structural systems, massing, spatial arrangement, texture and color of materials, detailing and arrangement and type of vegetation or, at the least, a majority of those elements.
3. Setting: Setting refers to the character of the place in which the property played its historical role. Setting often reflects the basic physical conditions under which a property was built and the functions it was intended to serve.



4. **Materials:** Materials are the physical elements that were combined in a particular pattern or configuration to form a historic property. The choice and combination of materials reveal the preferences of those who created the property and indicate the availability of particular types of materials and technologies. In order to retain integrity a property should retain the key exterior materials dating to the period of significance.
5. **Workmanship:** Workmanship is important because it can furnish evidence of the technology of a craft, illustrate the aesthetic principles of a historic or prehistoric period, and reveal individual, local, regional, or national applications of both technological practices and aesthetic principles.
6. **Feeling:** Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, taken together, convey the property's historic character.
7. **Association:** Association is the direct link between an important historic event or person and a historic property. A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer.

*The subject property was determined not to be significant and as such, consideration of integrity — those components which work together to convey a properties significance—is not warranted.*

## 9. CONCLUSION

The former Ming's Restaurant at 1700 Embarcadero is not considered eligible for listing on the California Register of Historic Resources. The neo-eclectic commercial building fails to meet one or more of the criterion for listing on the California Register of Historic Resources and therefore, is not a significant historical resource. No further evaluation or documentation of the property is warranted.

## REFERENCES

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California Office of Historic Preservation. *Technical Assistant Series No. 7, How to Nominate a Resource to the California Register of Historic Resources*. Sacramento: California Office of State Publishing, 4 September 2001.

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Gong Guy, Lillian and Gerrye Wong. *Images of America: Chinese in San Jose and the Santa Clara Valley*. San Francisco: Arcadia, 2007.

Winslow, Ward. *Palo Alto: A Centennial History*. Prepared by Palo Alto Historical Association, 1993.

### Public Records

City of Palo Alto Planning Department

Palo Alto Historical Society Archives

Palo Alto Times

Palo Alto Weekly

RL. Polk & CO. Palo Alto City Directory

### Personal Correspondence

Steve Saiger, Historian at Palo Alto Historical Society, DATE

## QUALIFICATIONS

Lilly Bianco of M-Group performed the Historic Resource Evaluation. Ms. Bianco holds a Masters in Historic Preservation and is a qualified Architectural Historian pursuant to the Secretary of the Interior's Standards and as defined in the Code of Federal Regulations, 36 CFR Part 61. Ms. Bianco is listed as an Architectural Historian on the California Historic Resources Information Systems list of qualified consultants.

M-Group Principal, Heather Hines, oversaw the evaluation. Heather Hines is a qualified Architectural Historian pursuant to the Secretary of the Interior's Standards and as defined in the Code of Federal Regulations, 36 CFR Part 61. Ms. Hines holds a Masters in Urban Planning and Graduate Certificate in Historic Preservation. She has 14 years of experience in the fields of historic preservation and urban planning and is listed as an Architectural Historian on the California Historic Resources Information Systems list of qualified consultants.

## ATTACHMENTS

- A. Photographs
- B. DPR 523

ATTACHMENT A



Figure 1 Front (North) Entrance Facing Embarcadero Road. Photo taken Nov 12, 2015.



Figure 2 Path to Former Entry at northeast corner. Photo taken Nov 12, 2015



Figure 3 Close Up of Architecture at Northeast corner. Photo Taken Nov 12, 2015



Figure 4 Landscaping at northwest corner. Photo taken Nov 12, 2015



Figure 5 West elevation. Photo taken Nov 12, 2015



Figure 6 South (Rear) elevation. Photo Taken Nov 12, 2015



Figure 7 Outdoor Patio at Southwest Corner. Photo taken Nov 12, 2015



Figure 8 East Elevation. Photo taken Nov 12, 2015

State of California & The Resources Agency  
 DEPARTMENT OF PARKS AND RECREATION  
**PRIMARY RECORD**

Primary #  
 HRI #  
 Trinomial  
**NRHP Status Code**  
 Other Review Code  
 Reviewer  
 Date  
 Listings

Page 1 of 1 \*Resource Name or #: (Assigned by recorder) Former "Ming's Restaurant" \_\_\_\_\_

P1. Other Identifier: \_\_\_\_\_

\*P2. Location:  Not for Publication × Unrestricted

\*a. County Santa Clara and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

\*b. USGS 7.5' Quad \_\_\_\_\_ Date \_\_\_\_\_ T \_\_\_\_; R \_\_\_\_; \_\_\_\_ of \_\_\_\_ of Sec \_\_\_\_; \_\_\_\_\_ B.M.

c. Address 1700 Embarcadero Road City Palo Alto Zip 94303

d. UTM: (Give more than one for large and/or linear resources) Zone \_\_\_\_, \_\_\_\_\_ mE/ \_\_\_\_\_ mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate) APN. 008-03-08

\*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The restaurant was constructed in 1968 and designed in the neo-eclectic style which became common after 1965. The building exhibits both neo-traditional details visible in the wood paneled walls and ribbons of windows, but also eclectic Asian influences readily visible in the pagoda style roof, articulation in form, and Chinese talismans and details as well as in the landscape. The front entrance (added in 1986) gives a nod to the Moderne style. The building has undergone extensive alterations including a large scale renovation and expansion in 1986 in which the front entrance was relocated to face Embarcadero Road and the capacity enlarged from approximately 350 patrons to over 600.

P5a.



\*P3b. Resource Attributes: (List attributes and codes) HP 6 Commercial Building

\*P4. Resources Present:  Building  Structure  Object  Site  District  Element of District  Other (Isolates, etc.)

P5b. Description of Photo: (view, date, accession #) North elevation, looking southeast. Photo taken Nov 12, 2015

\*P6. Date Constructed/Age and Source:

1968  Historic  Prehistoric

Both

\*P7. Owner and Address:

Unknown

7300 W Sahara Av Las Vegas NV 89117

\*P8. Recorded by: (Name, affiliation, and address)

Lilly Bianco, M-Group, 1303 Jefferson St. Suite 100-B, Napa, CA 94559

\*P9. Date Recorded: Dec 3, 2015

Intensive

\*P10. Survey Type: (Describe)

None

\*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

1700 Embarcadero Historic Resource Evaluation, Prepared by M-Group, December 4, 2015

\*Attachments:  NONE  Location Map  Continuation Sheet  Building, Structure, and Object Record

Archaeological Record  District Record  Linear Feature Record  Milling Station Record  Rock Art Record

Artifact Record  Photograph Record  Other (List): \_\_\_\_\_



## **Appendix C**

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*Geotechnical Investigation*



**GEOTECHNICAL INVESTIGATION  
FOR  
MERCEDES-BENZ DEALERSHIP  
1700 EMBARCADERO ROAD  
PALO ALTO, CALIFORNIA 94303**

August 2015

Prepared for

**Jones Real Estate Property II, LLC**  
c/o Fletcher Jones Management Group  
7300 W. Sahara Avenue  
Las Vegas, Nevada 89117

Project No. 3489-1

**ROMIG ENGINEERS, INC.**  
GEOTECHNICAL & ENVIRONMENTAL SERVICES

August 31, 2015  
3489-1

**Jones Real Estate Property II, LLC**  
c/o Fletcher Jones Management Group  
7300 W. Sahara Avenue  
Las Vegas, Nevada 89117

**RE: GEOTECHNICAL INVESTIGATION  
MERCEDES-BENZ DEALERSHIP  
1700 EMBARCADERO ROAD  
PALO ALTO, CALIFORNIA**

Attention: Mr. Shawn Dettrey

Gentlemen:


In accordance with your request, we have performed a geotechnical investigation for the proposed Mercedes-Benz Dealership to be constructed at 1700 Embarcadero Road in Palo Alto, California. The accompanying report summarizes the results of our field exploration, laboratory testing, and engineering analysis, and presents our geotechnical recommendations for the project.


We refer you to the text of our report for specific recommendations.


Thank you for the opportunity to work with you on this project. If you have any questions or comments about our findings or recommendations for the project, please call.


Very truly yours,

**ROMIG ENGINEERS, INC.**

  
Tom W. Porter, P.E.



  
Glenn A. Romig, P.E., G.E.



Copies: Addressee (1)  
Genzler (3)  
    Attn: Mr. Deeg Snyder  
KJWW Engineering (1)  
    Attn: Mr. Arun Garg  
    Attn: Mr. Karl Pennings  
Calichi Design Group (1)  
    Attn: Mr. Austin Hahn  
Skender Construction (1)  
    Attn: Mr. Tom Kooiker

GAR:TWP:dr

**GEOTECHNICAL INVESTIGATION  
MERCEDES-BENZ DEALERSHIP  
1700 EMBARCADERO ROAD  
PALO ALTO, CALIFORNIA 94303**

**PREPARED FOR:  
JONES REAL ESTATE PROPERTY II, LLC  
c/o FLETCHER JONES MANAGEMENT GROUP  
7300 W. SAHARA AVENUE  
LAS VEGAS, NEVADA 89117**

**PREPARED BY:  
ROMIG ENGINEERS, INC.  
1390 EL CAMINO REAL, SECOND FLOOR  
SAN CARLOS, CALIFORNIA 94070**

**AUGUST 2015**

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FIGURE 2 - SITE PLAN

FIGURE 3 - VICINITY GEOLOGIC MAP

FIGURE 4 - CONTOUR MAP OF BAY MUD THICKNESS

### APPENDIX A - SUMMARY FIELD INVESTIGATION DATA

    Cone Penetration Test Method Description

    Cone Penetration Test Logs CPT-1 through CPT-3 (2009)

    Figure A-1 - Key to Exploratory Boring Logs

    Exploratory Boring Logs EB-5 through EB-8 (2013)

    Boring Logs EB-1 through EB-4 (Billy Lin and Associates, 2005)

### APPENDIX B - SUMMARY OF LABORATORY TEST RESULTS

    Figure B-1 - Plasticity Chart

    Figure B-2 - Liquid and Plastic Limits Test Report

    Figure B-3 - Liquid and Plastic Limits Test Report

    Figure B-4 - Particle Size Distribution Report

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Figure C-3 - Allowable 16-inch Auger Cast Pile Capacity

Figure C-4 - Allowable 18-inch Auger Cast Pile Capacity

Figure C-5 - Lateral Pile Deflection, Free Head Condition, 16-inch Pile

Figure C-6 - Pile Bending Moment, Free Head Condition, 16-inch Pile

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**GEOTECHNICAL INVESTIGATION  
FOR  
MERCEDED-BENZ DEALERSHIP  
1700 EMBARCADERO ROAD  
PALO ALTO, CALIFORNIA**

**INTRODUCTION**

We are pleased to present this geotechnical investigation report for the proposed Mercedes-Benz dealership to be constructed at 1700 Embarcadero Road in Palo Alto, California. The location of the site is shown on the Vicinity Map, Figure 1. The purpose of this investigation was to review our previous work at the site and to provide geotechnical design and construction recommendations for the proposed project.

**Project Description**

The project consists of constructing an approximately 110,000 square-foot, 4-level Mercedes-Benz dealership facility at the subject property in Palo Alto. The building will include a ground level showroom and offices and an open service drive through. Additional showroom space, offices, and vehicle parking/storage will be provided at the second floor with the service shop and parking on the third floor. The entire roof will consist of additional parking (fourth floor). The building foundation will be supported on a deep pile foundation tied together with grade beams with a structural floor spanning between the grade beams. Typical interior column dead plus live loads are expected to be on the order of about 800 kips. A detached car wash structure is planned along the southeast side of the property with paved drive aisles and parking along the perimeter of the building. Vehicle access to the upper floors will be provided with car elevators.

The building will have a finished first floor elevation of about 10.68 feet and site grades vary from about 5.7 feet at the south corner of the property to about 7.2 feet at the north corner (based on the previous survey by Kier & Wright, dated July, 2009; datum NAVD 1988). Several feet of fill will be needed below the floor slab and along the perimeter of the building to adjust site grades. The existing building on the property will be demolished.



**Scope of Work**

Our scope of work for this investigation was presented in detail in our agreement with Jones Real Estate Property II, LLC dated June 29, 2015. In order to complete our investigation, we performed the following work.

- Reviewed readily available geologic and geotechnical literature pertinent to the general area of the site. We also reviewed a preliminary geotechnical report for the property.
- Review of our previous subsurface exploration and laboratory testing for the site and information available in our files concerning the site.
- Engineering analysis and evaluation of the subsurface data and laboratory testing to develop geotechnical design criteria for the project.
- Preparation of this report presenting our findings and geotechnical recommendations for the proposed project.

**Limitations**

This report has been prepared for the exclusive use of Jones Real Estate Property II, LLC for specific application to developing geotechnical design criteria for the proposed Mercedes-Benz dealership to be constructed at 1700 Embarcadero Road Avenue in Palo Alto, California. We make no warranty, expressed or implied, except that our services are performed in accordance with the geotechnical engineering principles generally accepted at this time and location. This report was prepared to provide engineering opinions and recommendations only. In the event there are any changes in the nature, design, or location of the project, or if any future improvements are planned, the conclusions and recommendations presented in this report should not be considered valid unless 1) the project changes are reviewed by us, and 2) the conclusions and recommendations presented in this report are modified or verified in writing.

The analysis, conclusions, and recommendations presented in this report are based on site conditions as they existed at the time of our investigation; the currently planned improvements; review of previous reports relevant to the site conditions; and laboratory test results. In addition, it should be recognized that certain limitations are inherent in the evaluation of subsurface conditions, and that certain conditions may not be detected during an investigation of this type. Changes in the information or data gained from any of these sources could result in changes in our conclusions or recommendations. If such changes occur, we should be advised so that we can review our report in light of those changes.

**SITE EXPLORATION AND RECONNAISSANCE**

Site reconnaissance and subsurface exploration were initially performed on June 25, 2009, using track-mounted, electronic cone penetration test (CPT) equipment. Three CPT probes were advanced to a depth of approximately 80 feet below ground surface. Supplemental subsurface exploration work was performed on November 12, 2013 using a Mobile B-53 truck-mounted drill equipped with 8-inch diameter hollow-stem augers in order to obtain additional samples to test soil properties for use as potential off haul material. Four exploratory borings (Borings EB-5 through EB-8) were advanced to depths ranging between 13 and 18 feet. Additional site reconnaissance was performed on August 18, 2015 to observe the current condition of the site. The approximate locations of the CPT probes and borings are shown on the Site Plan, Figure 2. The CPT data and boring logs are included on Appendix A and the results of our laboratory tests are included in Appendix B.

**Previous Geotechnical Investigation**

We reviewed a preliminary geotechnical report for a previously proposed hotel complex prepared by Billy Lin and Associates, dated December 15, 2005. This previous investigation included four exploratory borings, each advanced to a depth of 46.5 feet. Subsurface conditions at the location of the borings generally consisted of approximately 4 to 8 feet of artificial fill (intermixed clay, silt, sand, and gravels of variable density) underlain by 4 to 6 feet of Bay Mud comprised of soft to firm fat clay of high plasticity. The artificial fill and Bay Mud were generally underlain by interbedded layers of loose to very dense clean sands and silty sands intermixed with stiff to very stiff lean clays of moderate plasticity and fat clays of high plasticity. The approximate locations of the borings from the investigation are also shown on the Site Plan, Figure 2 and the boring logs are attached in Appendix A.

The primary geotechnical considerations for the project outlined in the report included the presence of a thin layer of soft compressible Bay Mud, the high ground water table, and presence of several relatively thick potentially liquefiable sand and silt layers encountered in the borings. The loose to medium dense sand layers were encountered at various depths in Boring EB-1 between a depth of 14 to 38 feet, Boring EB-3 from 12 to 36 feet, and Boring EB-4 from 27 to 36 feet. Ground water was encountered in the borings between depths of approximately 5 to 7 feet below the ground surface. The report concluded that the full extent of these potentially liquefiable layers was not fully established and recommended that further exploration be performed.

**Surface Conditions**

The site is located in a commercial area at the east corner of the intersection of Embarcadero Road and East Bayshore Road. The site is occupied by a single-story, wood-frame building which had a wood siding exterior. An asphalt parking lot and access driveways extended around the building. Concrete walkways extended along the perimeter of the building with concrete stairs along the front of the building. The finished floor elevation of the building was several feet higher than the pavement grades. A steel framed, utility tower was located at the west corner of the site. The relatively flat site was landscaped with small to medium shrubs, and medium to large trees.

The asphalt concrete was in fair to poor condition with extensive stress cracks and alligator cracks. Several large asphalt concrete patches were evident throughout the parking lot. The walkways were in adequate condition with only minor offset between slabs.

**Subsurface Conditions**

The upper 3 to 5 feet of surface soil at each CPT location were excavated with a hand auger in order to avoid potential unmarked utilities. Beneath the asphalt pavement, the fill soils exposed during the hand auguring consisted of gravel mixed with sand in the upper 2 feet underlain by sandy clay, sandy silt and clayey sand with gravel. These soils to a depth of approximately 5 to 7 feet were interpreted to be artificial fill.

Below the fill, we encountered approximately 4.5 to 6.5 feet of soft to firm clay and sensitive fine-grained soils. These soft soils were interpreted to be younger Bay Mud. Relatively high water contents were measured on the Bay Mud during the previous geotechnical investigation. The Bay Mud is expected to be highly compressible under new foundation or fill loads.

Beneath the fill and Bay Mud, we encountered stratified layers of firm to stiff silty clay with interbeds of firm to stiff clayey silt and medium dense sand and silty sand that extended to depths of approximately 28 to 34 feet. We then encountered stiff to very stiff silty clay and clayey silt, interbedded with medium dense to very dense sand and silty sand extending to approximately 80 feet, the maximum depth of our exploration.

At the location of the exploratory borings (2013), we generally encountered approximately 5 to 7 feet of artificial fill which consisted of dense/hard, clayey sand/sandy lean clay and stiff to hard sandy lean clay of low to moderate plasticity underlain by approximately 7 to 9.5 feet of younger Bay Mud which consisted of soft fat clay of very high plasticity. Beneath the fill and Bay Mud, we encountered stiff to very stiff sandy lean clay/sandy fat clay of moderate to high plasticity with medium dense clayey sand encountered in Boring EB-5.

**Soil Properties Testing**

The laboratory testing was conducted on 10 selected soil samples which included sieve analysis including percent passing the No. 200 sieve and Atterberg Limit tests to establish the Liquid Limit and Plasticity Index of the clay material. A summary of the test results are presented in Table 1, below. The results of the sieve analysis of selected samples are presented in the particle size distribution report, Figures B-4 and B-5.

**Table 1. Soil Properties Testing  
Mercedes-Benz Dealership  
Palo Alto, California**

<b>Boring</b>	<b>Depth (feet)</b>	<b>Soil Type</b>	<b>Liquid Limit</b>	<b>Plasticity Index</b>	<b>% Passing #200 Sieve</b>
EB-5	1.5-2	Artificial Fill	33	16	51%
EB-5	6-6.5	Bay Mud	88	40	91%
EB-5	13.5-14	Clayey Sand	22	8	28%
EB-6	2.5-3	Artificial Fill	38	21	56%
EB-6	8.5-9	Bay Mud	89	47	95%
EB-7	1.5-2	Artificial Fill	27	12	61%
EB-7	6-6.5	Artificial Fill	43	25	71%
EB-7	11-11.5	Sandy Fat Clay	53	32	66%
EB-8	1.5-2	Artificial Fill	47	29	57%
EB-8	6.5-7	Bay Mud	81	40	92%

**Ground Water**

At the time of our exploration, ground water was estimated to be present at a depth of about 7 feet below grade at all the CPT locations based on the dynamic pore pressure response observed during testing in 2009. Because of the low permeability of the Bay Mud, pore pressure dissipation tests performed at two CPT locations were inconclusive, therefore these ground water levels do not represent stabilized ground water levels. Ground water was measured at a depth of between 9.5 to 14 feet in our supplemental exploratory borings in 2013. As noted earlier, ground water was encountered in the previous borings (Billy Lin and Associates, 2005) between depths of approximately 5 to 7 feet below the ground surface. Please be cautioned that fluctuations in the level of ground water can occur due to variations in rainfall, tidal fluctuations, local surface and subsurface drainage patterns, landscaping, and other factors.

Two ground water monitoring wells were installed to facilitate measuring pre-construction ground water levels on the property in November, 2013. The exploratory monitoring wells were permitted through the Santa Clara Valley Water District (SCVWD). The two wells were installed in order to sample ground water and for initial depth to water measurements for the previously proposed hotel complex basement. "Stabilized" ground water levels in these wells after well development showed depth to ground water in MW-1 and MW-2 at a depth of about 7 feet. The location of the monitoring wells are show on Figure 2.

Information contained in Seismic Hazard Zone Report 111 for the Palo Alto 7.5-Minute Quadrangle (California Geological Survey, 2006) indicates the depth to the historic high ground water level in the area of the site is approximately 5 feet or less. Based on our experience at other sites in the area, we expect that ground water will be present in the fill above the Bay Mud and that the stabilized ground water level could seasonally be as high as approximately 3 feet below grade.

#### **Corrosion Potential Testing**

Corrosion potential tests were performed by Cooper Testing Laboratory on two samples of surface fill obtained from the CPT locations. The soil samples were tested for resistivity, pH, sulfate content, chloride content, and redox potential. The results of these tests are presented in Appendix B.

Resistivity of the lab-saturated soil samples measured in accordance with ASTM Test G57 ranged from 1,502 to 4,158 ohm-cm. These test results suggest the surface soils may be severely corrosive.

The pH of the soil samples ranged from 7.9 to 8.0. A pH between 5 and 8.5 is generally considered relatively passive from a corrosion standpoint. Chloride content was <2 mg/kg (ppm) for each sample. The oxidation-reduction potential (Redox) ranged from -34 to 123 mv.

The water-soluble sulfate content of the samples that were tested in accordance with California Test Method 417-modified were measured to be <5 parts per million (<0.0005% by dry weight). Table 19A-A-4 of the California Building Code classifies a water-soluble sulfate content of 0.0 to 0.10% by dry weight as producing negligible sulfate exposure. The Bay Mud soils encountered at depth however would be expected to have moderate to high sulfate content.

Due to the Bay Mud and salt water environment, for specific long-term corrosion control design recommendations, it may be beneficial to retain a corrosion engineer to evaluate the corrosion potential and protection for buried metal and concrete elements.

### **GEOLOGIC SETTING**

We have briefly reviewed our local experience and geologic literature pertinent to the area of the site. The information that we reviewed for this study indicates the site is underlain by Historic Artificial fill, af (Brabb, Graymer and Jones, 2000). These deposits are generally found to consist of loose to very well consolidated gravel, sand, silt, clay, rock fragments, organic matter, and man-made debris in various combinations. Thickness is variable and may exceed 30 meters in some places. Some of the fill is compacted and quite firm, but fill made before 1965 is nearly everywhere not compacted and consists of dumped materials. The geology of the site vicinity is shown on the Vicinity Geologic Map, Figure 3.

Based on information presented in a report titled “Geologic and Engineering Aspects of San Francisco Bay Fill” (CDMG, 1969), the surface fill is mapped as being underlain by approximately 10 feet of soft, compressible, younger Bay Mud (CDMG, 1969). The young Bay Mud covers most of the bottom of the San Francisco Bay and some of the Bay margins and generally consists of soft, silty clay, silt, minor fine sand, and shell fragments. The estimated thickness of the young Bay Mud indicated in the reference noted above is shown on the Contour Map of Bay Mud Thickness, Figure 4.

The Seismic Hazards Zones Map of the Palo Alto Quadrangle prepared by the California Geologic Survey (Seismic Hazard Zone Report 111, 2006) indicates the site is located in an area where historical occurrence of liquefaction, or local geological, geotechnical, and ground water conditions indicate a potential for permanent ground displacement from liquefaction such that mitigation would be required. A site specific liquefaction discussion is presented later in this report.

The property and the immediate site vicinity are located in an area that slopes very gently to the east (approximately 10 feet vertically per 1,600 feet laterally, although locally the topography may be steeper). The site is located at an elevation of approximately 6 feet above sea level (see Figure 1).

### **Faulting and Seismicity**

There are no mapped through-going faults within or adjacent to the site and the site is not located within a State of California Earthquake Fault Zone (formerly known as a Special Studies Zone), an area where the potential for fault rupture is considered probable. The closest active fault is the San Andreas fault, located approximately 7.5 miles southwest of

the property. Thus, the likelihood of surface rupture occurring from active faulting at the site is remote.

The San Francisco Bay Area is an active seismic region. Earthquakes in the region result from strain energy constantly accumulating because of the northwestward movement of the Pacific Plate relative to the North American Plate. On average about 1.6-inches of movement occur per year. Historically, the Bay Area has experienced large, destructive earthquakes in 1838, 1868, 1906, and 1989. The faults considered most likely to produce large earthquakes in the area include the San Andreas, San Gregorio, Hayward, and Calaveras faults. The San Gregorio fault is located approximately 18 miles southwest of the site. The Hayward and Calaveras faults are located approximately 12 and 18 miles northeast of the site, respectively. These faults and significant earthquakes that have been documented in the Bay Area are listed in Table 2 below.

**Table 2. Earthquake Magnitudes and Historical Earthquakes  
Mercedes-Benz Dealership  
Palo Alto, California**

<b><u>Fault</u></b>	<b><u>Maximum Magnitude (Mw)</u></b>	<b><u>Historical Earthquakes</u></b>	<b><u>Estimated Magnitude</u></b>
San Andreas	7.9	1989 Loma Prieta	6.9
		1906 San Francisco	7.9
		1865 N. of 1989 Loma Prieta Earthquake	6.5
		1838 San Francisco-Peninsula Segment	6.8
		1836 East of Monterey	6.5
Hayward	7.1	1868 Hayward	6.8
		1858 Hayward	6.8
Calaveras	6.8	1984 Morgan Hill	6.2
		1911 Morgan Hill	6.2
		1897 Gilroy	6.3
San Gregorio	7.3	1926 Monterey Bay	6.1

In the future, the subject property will undoubtedly experience severe ground shaking during moderate and large magnitude earthquakes produced along the San Andreas fault or other active Bay Area fault zones. The Working Group On California Earthquake Probabilities, a panel of experts that are periodically convened to estimate the likelihood of future earthquakes based on the latest science and ground motion prediction modeling, concluded there is a 72 percent chance for at least one earthquake of Magnitude 6.7 or larger in the Bay Area before 2045. The Hayward fault has the highest likelihood of an earthquake greater than or equal to magnitude 6.7 in the Bay Area, estimated at 14 percent, while the likelihood on the San Andreas and Calaveras faults is estimated at approximately 6 and 7 percent, respectively (Working Group, 2015).

**Earthquake Design Parameters**

The State of California currently requires that buildings and structures be designed in accordance with the seismic design provisions presented in the 2013 California Building Code and in ASCE 7-10, "Minimum Design Loads for Buildings and Other Structures." Based on site geologic conditions, and on information from our subsurface exploration at the site, the site may be classified as Site Class F due to the potential for liquefaction, in accordance with Table 1613.5.2 in the 2013 California Building Code and Section 20.3.1 of ASCE 7-10. In Site Class F, a site specific response analysis can be required to obtain the seismic design parameters however, for structures with a fundamental period of equal or less than 0.5 second, a site response analysis is not required for areas of liquefiable soils.

Based on the information we were provided by KJWW Engineering, the proposed structure will have a fundamental period of less than 0.5 second. The project may be designed based on the higher values of the seismic design parameters of Site Class D and E, in our opinion. Spectral Response Acceleration parameters  $S_S$  and  $S_1$ , and site coefficients  $F_a$  and  $F_v$ , may be taken directly from the figures and tables in the 2013 California Building Code and in the lookup tables at the U.S.G.S. website based on the longitude and latitude of the site. For the site latitude (37.4495) and longitude (-122.1188),  $SD_s = 1.00g$  for Site Class D, and  $SD_1 = 0.961g$  for Site Class E.

**Liquefaction Evaluation**

Severe ground shaking during an earthquake can cause loose to medium dense granular soils to densify. If the granular soils are below ground water, their densification can cause increases in pore water pressure, which can lead to soil softening, liquefaction, and ground deformation. Soils most prone to liquefaction are saturated, loose to medium dense, silty sands and sandy silts with limited drainage, and in some cases, sands and gravels that are interbedded with or that contain seams or layers of impermeable soil.

To evaluate the potential for earthquake-induced liquefaction of the soils at the site, we performed a liquefaction analysis of the data from our CPT probe following the methods described in the 2008 publication by Idriss and Boulanger titled "Soil Liquefaction During Earthquakes".

The peak ground acceleration (PGA) used for our liquefaction analysis was based on information presented on the Probabilistic Seismic Hazards Mapping Ground Motion Page (CGS, 2014) which indicates that the maximum considered earthquake acceleration ( $PGA_M$ ) is 0.54g. The depth to ground water used in our liquefaction analysis was 3 feet below grade.



The silt and sand layers encountered at the site below a depth of 3 feet (the ground water level used in our analysis) and the maximum of our exploration were considered in our liquefaction analysis. Soils with a soil behavior classified as “clay” and “silty clay to clay” (based on soil the behavior correlations referenced in Appendix A) were considered too clay-rich to liquefy.

The results of our analyses indicate that some of the interbedded layers of medium dense, sand, sandy silt, and silty sand encountered in the CPT’s at the site between depths of approximately 15 feet and 45 feet could liquefy when subjected to the PGA that has a 10 percent probability of being exceeded in 50 years. Total ground surface settlement that could occur as a result of liquefaction from the design-level earthquake is estimated to be approximately 2.5 to 3.7 inches at the ground surface. In our opinion, differential settlement of about 1½- to 2-inch over a horizontal distance of about 50 feet is possible at the ground surface from this amount of total settlement. However, since the proposed buildings will be supported on pile foundations extending well below the liquefiable layers, in our opinion, the likelihood of significant damage to the proposed buildings from liquefaction is low.

The clayey soils that we encountered in the exploratory borings were primarily of moderate to high plasticity, generally having a low potential for liquefaction. Because the CPT tests included continuous measurement to a depth of about 80 feet, the CPT evaluation is considered more reliable, in our opinion.

Since there are no open faces or steep creek banks in the immediate site area, it is our opinion that there is a low potential for lateral spreading to occur at the site as a result of an earthquake.

#### **Compressible Bay Mud**

As discussed above, up to about 5 to 9.5 feet of relatively soft younger Bay Mud was encountered across the project site, and the Bay Mud is expected to be compressible under new building and fill loads. Based on the documents reviewed, the existing fills across the site appear to have been placed about 40 years ago. Because fill was placed so long ago and its thickness at the site, additional ongoing settlement within the Bay Mud from the existing fill loads is not expected to be significant.

Based on the preliminary grading plan, up to about 3 feet of fill may be required to raise the site grades and up to about 3.5 feet of fill may be required to raise the pad grade below the building floor slab. We estimated the amount of consolidation settlement that will occur based on the varying amounts of fill that will be placed. The results of our settlement evaluation for the range of Bay Mud thickness are presented in Table 3 below.

**Table 3. Estimated Fill 30-Year Consolidation Settlement  
Mercedes-Benz Dealership  
Palo Alto, California**

<u>Fill Thickness (ft)</u>	<u>Fill Load (psf)</u>	<u>Approximate Consolidation Settlement (inches)</u>
0.5	62.5	0.3 - 0.4
1.0	125	0.7 - 1.2
1.5	187.5	1.2 - 2.1
2.0	250	1.7 - 2.8
2.5	312.5	2.1 - 3.6
3.0	375	2.5 - 4.3
3.5	437.5	2.8 - 4.8

About 70 percent of the total settlement estimated in Table 3 from new fill placement will occur in a time period of about four months to one year, with 90 percent of the total settlement occurring over about one and a half to two years. We recommend that the fill for the building pads and surrounding areas be placed as early as practical.

Since the buildings will be supported on pile foundations, differential settlement will occur between the buildings and the surrounding areas receiving fill. This differential settlement should be considered in the design of entrance slabs or ramps that will not be supported on deep foundations and may need to be adjusted in the future. In addition, the above estimated settlement should be considered during the design of the underground utilities to be constructed within or around the building pads or across portions of the site requiring varying amounts of new fill. The settlement will also place a downdrag load on pile foundations that will need to be considered during design.

#### **Geologic Hazards**

We briefly reviewed the potential for geologic hazards other than liquefaction and lateral spreading (which were discussed previously) to impact the site, considering the geologic setting and the soils encountered during our investigation. The results of our review are presented below:

- **Fault Rupture** - The site is not located in a State of California Earthquake Fault Zone or area where fault rupture is considered likely. Therefore, active faults are not believed to exist beneath the site and the potential for fault rupture at the site is considered low.

- Ground Shaking - The site is located in an active seismic area. Moderate to large earthquakes are probable along several active faults in the greater Bay Area over a 30 to 50 year design life. Strong ground shaking should therefore be expected several times during the life of the building, as is typical for sites throughout the Bay Area. The building should be designed in accordance with current earthquake resistance standards.
- Differential Compaction - Differential compaction can occur during moderate and large earthquakes when soft or loose, natural or fill soils are densified and settle, often unevenly across a site. The soils encountered in our CPT's and borings were generally firm to very stiff clay and medium dense to dense sand. However some loosely compacted fill was encountered in the upper 5 to 7 feet in the previous borings advanced at the site. Since the proposed buildings are expected to be supported on pile foundations extending well below the fill, in our opinion, the likelihood of structural damage to the proposed buildings from differential compaction is low, however some differential compaction could affect flatwork and pavements supported on existing grades or new fill areas.

## CONCLUSIONS

From a geotechnical viewpoint, the site is suitable for the proposed Mercedes-Benz dealership building and associated site improvements provided the recommendations presented in this report are followed during design and construction. Specific recommendations are provided in the following sections of this report.

The primary geotechnical concerns are the presence of a shallow ground water table, the presence of soft compressible Bay Mud below the fill, and the probability of liquefaction and liquefaction-induced total and differential settlement at the site as a result of a major earthquake in the loose to medium dense sands encountered between depths of about 15 and 35 feet particularly in the north portion of the site.

Due to the presence of compressible Bay Mud and the anticipated high column loads of the proposed dealership building (on the order of about 800 kips service load), we recommend that the dealership building and car wash structure be supported on a driven or auger cast pile foundation system. The piles will gain support in friction and will need to extend below the liquefaction prone soils encountered to depths of about 45 feet. In addition, because of the amount of consolidation settlement from new fills to be placed at the site, the floor slabs at the ground level should be designed as structural slabs supported on the pile foundation. Differential settlement should also be considered in the design of entrance slabs or ramps that will not be supported on deep foundations and for underground utilities that connect to the pile supported structures or extend across portions of the site requiring varying amounts of new fill.

Because subsurface conditions may vary from those encountered at the locations of our CPT's and borings and to observe that our recommendations are properly implemented, we recommend that we be retained to 1) review the project plans for conformance with our report recommendations and 2) observe and test the earthwork and foundation installation phases of construction.

## **PILE FOUNDATIONS**

Based on our evaluation of subsurface conditions and preliminary column load estimates provided to us by the project structural engineer, the proposed building should be supported on a deep foundation system, such as pre-cast, pre-stressed driven concrete piles or auger-cast piles. Recommendations for driven concrete piles and auger cast piles are presented in the following sections of this report.

### **Pre-Cast Pre-Stressed Driven Concrete Piles**

The proposed dealership building and car wash structure may be supported on pre-cast, pre-stressed driven concrete piles. Since a sufficiently thick and continuous end-bearing strata was not encountered during subsurface exploration, the piles will gain support primarily from friction along the pile shaft. In our opinion, 12- or 14-inch-square pre-stressed concrete piles 60 to 80 feet long will probably be the most economic pile type and size for the proposed structures.

To help establish allowable pile capacities, we utilized the data from the three CPTs that were advanced and the method of estimating pile capacity developed by Eslami and Fellenius (1997). This method uses direct readings of the cone tip resistance to estimate pile friction capacity by applying correlation coefficients based on soil type. We also estimated pile capacity using adhesion factors and shear strength profiles established during our field investigation.

Figures C-1 and C-2 present recommended allowable pile capacity with depth for 14-inch-square and 12-inch-square piles, respectively. These allowable pile capacities include a factor of safety of 2.0 and may be increased by one-third when considering additional short-term wind or seismic loading. An 80-foot-long, 14-inch-square, concrete pile will have an allowable capacity of about 180 kips when considering dead plus live loads. The allowable capacities include a downdrag load caused by consolidation settlement of the Bay Mud from placement of new fill. The structural engineer should confirm that the total structural load on the piles plus the downdrag load exceed the structural capacity of the pile that is selected.

Some adjustment of the recommended allowable pile capacity may be appropriate following completion of the indicator pile program and dynamic pile monitoring.

The uplift capacity of the piles may be estimated using an allowable average skin friction value of 425 pounds per square foot. The tensile capacity of the piles and pile cap should be evaluated to verify the actual structural uplift capacity.

Medium dense to very dense sand strata were encountered at several locations in the previous borings and the recent CPTs. These dense strata may result in refusal driving conditions. If refusal driving occurs within these dense sand layers, our office will need to review the driving record to assess the upward and downward capacity for the pile. Some pre-drilling may be required depending upon the depth of refusal. In areas where hard driving through sand layers is anticipated, it may be desirable to increase the effective pre-stress in the piles to reduce the potential for damaging the piles during installation.

#### **Pile Groups**

When grouped or in closely spaced configuration, the center-to-center spacing of the piles should not be less than three pile widths. The capacity of driven friction piles in groups will be less than the sum of the individual pile capacities of the group and should be reduced by a group efficiency factor. A group efficiency factor of 0.92 should be applied for pile groups with six piles spaced at three pile widths; a group efficiency factor of 0.78 should be applied for pile groups with nine piles spaced at three pile widths; and a group efficiency factor of 0.71 should be applied for pile groups with twelve piles spaced at three pile widths. We can provide pile efficiency factors for other pile spacing, if requested. A group reduction factor is not necessary for pile groups of four piles or less.

#### **Pile Foundation Settlement**

On a preliminary basis, based on the recommended maximum allowable pile load capacity described above, we estimate that total pile settlement will be less than 1-inch to mobilize the allowable static capacity of the driven piles. Differential settlement between adjacent pile groups will depend on pile length, loading, and spacing, although we expect that differential settlement will be less than about 1/2- to 3/4-inch between adjacent columns. As the foundation plan is being finalized, the foundation settlement estimates can be updated.

#### **Pile Lateral Load Resistance**

Lateral resistance to wind or earthquake loadings will be developed by passive resistance against pile caps and grade beams and by bending in the piles. For pile caps and grade beams supported with fill soils placed above the Bay Mud, a passive resistance of 300 pounds per cubic foot may be used. The upper foot of passive soil resistance should be neglected where soil adjacent to the pile cap is not covered and protected by a concrete slab or pavement.

Lateral loads may also be resisted by passive earth pressure acting on the projected area of the pile. If it is decided to support the building on 12- or 14-inch square piles a detailed estimate of the lateral load capacity of individual piles can be developed using the soil structure interaction program L-Pile to model lateral pile capacity and load/deflection response. Please contact us if this analysis is required by the structural engineer for either the 12- or 14-inch square pile alternatives. A group lateral load reduction factor will also need to be considered in the analysis.

#### **WEAP Analysis**

The pile contractor should have a Wave Equation Analysis of Piles (WEAP analysis) performed to confirm compatibility and drivability of the pile driving system with the selected piles and the anticipated soil conditions at the site. We should review the results of the WEAP analysis prior to mobilization of pile driving equipment to the site.

#### **Indicator Piles**

Some of the uncertainties associated with production pile driving can be reduced by performing an indicator pile program. An indicator pile program will provide a means of confirming the limits of layers where high driving resistance may be encountered and more accurately estimate final pile length and capacity.

The number of indicator piles to be driven should be determined by the geotechnical engineer once the foundation plan has been finalized. On a preliminary basis we expect that 8 to 12 indicator piles should be installed across the proposed building area before the final pile casting lengths have been selected. Some of the indicator piles should be located close to selected CPT locations. The indicator piles should be driven with the same equipment that will be used to drive the production piles. The indicator pile lengths should be based on the design lengths required to meet the desired pile capacity plus 5 feet. It is expected that some indicator piles may not be driven their entire length and will require cutting to provide the desired butt elevation. Indicator piles can be used for building support and should be accurately located.

#### **PDA Monitoring**

A Pile Driving Analyzer (PDA) should be used during the indicator pile program to determine approximate pile capacities through dynamic testing. PDA monitoring may allow a reduction in production pile length resulting in cost savings. PDA monitoring should be performed during indicator pile driving and on piles selected for restrike. Pile restriking should be performed no sooner than seven days after initial driving. Since restrike testing more than one day after installation may alter the contractor's sequencing, it should be clearly identified on the plans and specifications to avoid unexpected change-orders for out-of-sequence moves. PDA monitoring would be beneficial for checking

tensile stresses in the piles during driving and for evaluating pile integrity on any piles suspected of being damaged during indicator or production driving.

#### **Pre-Drilling and Pile Driving**

The exact locations of the piles should be carefully marked on the site. To help spot the piles and to avoid the possibility of driving piles into obstructions, the contractor may pre-drill to a depth of about 10 feet, with an auger no larger than 14-inches in diameter for a 14-inch square pile or 12-inches in diameter for a 12-inch square pile. Typical measures should be taken during driving to avoid overstressing the piles. Our office should review the details of the pile driving hammer proposed by the contractor.

Pre-drilling at depth is not expected to be needed except in some locations where dense to very dense sand and/or gravelly sand interbeds are present and piles cannot be driven to the required design depths without damaging the pile. The areas where this may occur can likely be better established with further site exploration and during the indicator pile program. Where predrilling below a depth 10 feet is required to penetrate these sand layers, an auger no larger than 12-inches should be used for a 14-inch square pile and an auger no larger than 10-inches should be used for a 12-inch square pile.

All indicator and production piles should be driven under the continuous observation of our staff. The piles should be driven without interruption until minimum pile depth criteria is met or refusal driving conditions occur. It is possible that at some locations refusal driving conditions will be encountered in dense to very dense sand and/or gravelly sand strata. If pile driving refusal conditions occur, our staff will need to review the pile driving records to assess the vertical and lateral capacity of the pile, and to determine in conjunction with the structural engineer whether additional piles will need to be installed.

ACI 318 referenced in the 2013 California Building Code provides minimum requirements for concrete exposed to sulfate-containing solutions. In our experience, sulfate levels in Bay Mud and in a salt water environment are typically in the range of 1,000 to 1,500 parts per million (ppm). Based on Bay Mud and salt water environment, sulfate exposure may be considered Moderate. Consequently, concrete piles should be constructed with Type II cement and a maximum water/cement ratio no greater than 0.50. However, the structural criteria may result in more stringent requirements.

A corrosion consultant may be retained to provide specific design recommendations for corrosion protection of piles.

### **Auger Cast Piles**

As an alternative to pre-cast, pre-stressed driven concrete piles, the dealership building and car wash structure may be supported on auger cast piles. The advantages of auger cast piles may include economy, reduced vibration influence on adjacent buildings, and reduced noise during pile installation.

Based on our conversations with the design team, we understand the method, details, and equipment for construction of auger cast piles will be determined by a design/build auger cast pile subcontractor. In our opinion, the auger cast pile design/build contractor should have at least 5 years of auger cast pile experience and a proven track record of successful design and installation of auger cast piles in the Bay Area. We anticipate the preferred type of auger cast piles will be auger pressure-grouted, partial displacement piles (Partial APGD).

On a preliminary basis, the design lengths for individual 16- and 18-inch diameter auger cast piles may be estimated using the allowable capacity curves presented on Figures C-3 and C-4 of this report, respectively. The allowable pile capacity was calculated based a factor of safety of about 2.0. The axial capacity may be increased by one-third when evaluating for total loads, including wind or seismic forces. The allowable capacities include a downdrag load caused by consolidation settlement of the Bay Mud from placement of new fill. The structural engineer should confirm that the total structural load on the piles plus the downdrag load exceed the structural capacity of the pile that is selected. The actual capacity of auger cast piles will depend on the methods and details of pile installation and will need to be confirmed in the field by static and/or dynamic load tests on auger cast test piles prior to constructing the production piles.

Depending on the method and details of pile installation, it is possible that field load testing of auger cast test piles will establish that the allowable capacity of auger cast piles is on the order of 25 percent higher than the pile capacity shown on Figure C-3 and C-4.

The allowable uplift capacity of auger cast piles may be assumed to be 75 percent of the allowable downward capacity but no more than the allowable structural capacity of the pile in tension, as determined by the auger cast pile designer.

### **Pile Groups**

The center-to-center spacing of auger cast piles in pile groups should be at least three pile diameters. With at least this minimum spacing, we expect the auger cast pile designer will determine that a pile group reduction factor is not required.



### **Pile Foundation Settlement**

On a preliminary basis, we expect that total pile group settlement will be less than 1-inch to mobilize the allowable static capacity. Differential settlement between adjacent pile groups will depend on pile length, loading, and spacing, although we expect that differential settlement will be less than about 1/2- to 3/4-inch between adjacent columns. Total settlement of pile groups and differential settlement between pile groups can be estimated after the pile lengths, diameter, and configurations of the pile caps are selected by the auger cast pile designer.

### **Lateral Loads on Piles and Pile Caps**

Lateral resistance to wind or earthquake loadings will be developed by passive resistance against pile caps and grade beams and by bending in the piles. For pile caps and grade beams supported with fill soils placed above the Bay Mud, a passive resistance of 300 pounds per cubic foot may be used. The upper foot of passive soil resistance should be neglected where soil adjacent to the pile cap is not covered and protected by a concrete slab or pavement.

The auger cast pile designer should model and analyze the lateral load behavior of the selected auger cast piles and auger cast pile groups. We would be pleased to review and discuss with the auger cast pile designer the range of lateral modulus values that could be used to model the on-site soils during static and cyclical loading. To provide a preliminary estimate for the design team of the lateral load capacity and bending moment for the pile expected to be used, we modeled a 16-inch diameter auger cast pile using L-Pile 3.0, a program that estimates lateral pile capacity and load/deflection response.

Our lateral pile analyses were intended to model 80-foot-long, 16-inch diameter auger cast piles with an assumed pile concrete compressive strength of at least 6,000 pounds per square inch and a modulus of elasticity of  $4.4 \times 10^6$  pounds per square inch. An axial compression load of 180 kips was assumed to act on the head of the piles during lateral loading. Our analysis used typical average soil conditions and no factor of safety was included. The structural engineer may need to use an appropriate factor of safety for their design, as appropriate. The calculated deflection, bending moment, and shear versus pile depth for various lateral loads under free head and fixed head conditions for the 16-inch auger cast pile are presented on Figures C-5 through C-10 of this report.

Individual piles in pile groups will have lower lateral load capacity than calculated for an individual pile. To account for the reduction in soil resistance due to group effects, we recommend multiplying the lateral loads corresponding to a given pile deflection by the *p*-multipliers listed in Table 4 below.

For example, a 4 x 5 pile group with a center-to-center pile spacing (S/D) of 3 times the shaft diameter would use p-multipliers of 0.54 and 0.52 for loads applied in the direction of (perpendicular to) the 4 and 5 pile rows, respectively.

**Table 4. Average P-Multipliers for Various Pile Groups  
Mercedes-Benz Dealership  
Palo Alto, California**

		PILE SPACING (S/D)		
		2.5	3	4
Number of Rows*	2	0.61	0.68	0.79
	3	0.50	0.59	0.72
	4	0.45	0.54	0.69
	5	0.42	0.52	0.67

\* Number of pile rows in the direction of loading

#### **Auger Cast Pile Load Testing**

Preliminary estimates of auger cast pile capacity will need to be confirmed in the field by static and/or dynamic load tests on auger cast test piles prior to constructing production piles. The number of test piles to be driven should be determined by the geotechnical engineer once the foundation plan has been finalized. On a preliminary basis we expect that 8 to 12 test piles should be installed within the proposed building area to confirm the required final pile lengths. Some of the test piles should be located close to selected CPT locations. The test piles should be installed with the same equipment that will be used to construct the production piles. The test piles should be constructed with continuous observation and monitoring by our staff. Pile load testing should also be monitored by our staff, and the results of the load testing used to confirm the final length and configuration of the production piles and pile caps.

#### **Installation of Production Piles**

We note that the actual load capacity and performance of auger cast piles are highly dependent on the method of installation, the contractor's experience, and the equipment that is used. Therefore, monitoring the installation of the auger cast piles will be essential to confirm the integrity and capacity of the piles. We recommend that only specialized contractors with proper equipment be considered for this project, and that all piles be installed under the continuous observation of the geotechnical engineer to confirm that the pile foundations are constructed in accordance with the recommendations presented in this report. For quality assurance purposes, we recommend that each auger cast pile rig be equipped with a Pile Installation Recorder (PIR), or comparable instrumentation, in order to accurately monitor the installation of each pile.

**SPREAD FOOTINGS FOR SURFACE IMPROVEMENTS**

In our opinion, miscellaneous landscape improvements, such as low landscaping walls, may be supported on conventional spread footings bearing on stiff onsite soils. Once the type of structures to be supported on shallow foundations are known, these preliminary recommendations may need to be updated for the specific loading and type of improvement proposed. In general, footings should have a minimum width of 15 inches and extend at least 24 inches below the bottom of slabs-on-grade and at least 24 inches below exterior finish grade. Footings may be designed for allowable bearing pressures of 2,000 pounds per square foot for dead plus live loads, with a one-third increase allowed for total loads including wind or seismic forces. The weight of the footings can be neglected for design purposes.

All footings located adjacent to utility lines or other footings should bear below a 1:1 plane extended upward from the bottom edge of the utility trench. All continuous footings should be reinforced with top and bottom steel to provide structural continuity and to permit spanning of local irregularities.

The bottom of all footing excavations should be cleaned of loose material. Our representative should observe the excavations to confirm that they are founded in suitable materials and have been properly cleaned prior to placing concrete forms and reinforcing steel. If soft or loose materials are encountered at the foundation bearing depth, our field representative may require over-excavation and/or compaction before the reinforcing steel is placed or may require a deeper footing embedment depth.

**Lateral Loads**

Lateral loads will be resisted by friction between the bottom of the footings and the supporting subgrade. A coefficient of friction of 0.30 may be assumed for design of improvements supported in fill. Lateral resistance may also be provided by passive soil pressure acting against foundations cast neat in footing excavations or backfilled with properly compacted structural fill. We recommend that passive soil resistance simulated by an equivalent fluid pressure of 300 pounds per cubic foot be used for design, where appropriate. The upper foot of passive soil resistance should be neglected where soil adjacent to the footing is not covered and protected by a concrete slab or pavement.

**Settlement for Footings**

We are not aware of any heavy landscape improvements that are planned for the project. When the actual loads and foundation configuration of the landscape improvements are available, we should be contacted and settlement analyses may need to be performed based on the actual loads and footing sizes.

As discussed above, on the order of about 2.5 to 4.3 inches of total settlement could occur in the areas where the exterior site grades will be raised by about 3 feet, and the amount of settlement will vary across the site based on the thickness of the fill that will be placed and the thickness of the underlying compressible Bay Mud. The estimated consolidation settlement discussed in the above section titled "Compressible Bay Mud" should be considered during the design of any surface improvements to be constructed on shallow foundations. In addition, miscellaneous structures that are sensitive to differential settlement preferably should not be located in areas where the thickness of new fill will vary significantly across the improvement area or deep foundations should be considered.

**SLABS-ON-GRADE****General Slab Considerations**

The surface and near surface fill soils at this site generally have a low potential for expansion. To reduce the potential for movement of the slab subgrade, at least the upper 6-inches of surface soil should be scarified and compacted at a moisture content at least 2 percent above the laboratory optimum. The native or fill soil subgrade should be kept moist up until the time the non-expansive fill and/or aggregate base is placed. Slab subgrades and non expansive fill should be prepared and compacted as recommended in the section of this report titled "Earthwork." Exterior flatwork should be underlain by a layer of non expansive fill as discussed below. The non expansive fill should consist of aggregate base rock or a clayey soil with a plasticity index of 15 or less.

Considering the potential for expansive soil movements of the surface soils, we expect that a reinforced slab will perform better than an unreinforced slab. Consideration should also be given to using a control joint spacing on the order of 2 feet in each direction for each inch of slab thickness.

**Exterior Flatwork**

Concrete walkways and exterior flatwork should be at least 4 inches thick and should be constructed on at least 4 inches of Class 2 aggregate base. We recommend that exterior slabs-on-grade be constructed with a thickened edge to improve edge stiffness and to reduce the potential for water seepage under the edge of the slabs.

**Interior Slabs**

We understand that concrete floors at the ground level of the structures will be designed and constructed as structural slabs spanning across the foundations. In our opinion, structural slabs should be constructed on a properly prepared and compacted soil subgrade. In areas where dampness of concrete floor slabs would be undesirable, such as within building interiors, concrete slabs should be underlain by at least 4 inches of clean, free-draining gravel, such as ½-inch to ¾-inch clean crushed rock with no more than 5 percent passing the ASTM No. 200 sieve. Pea gravel should not be used. The crushed rock should be compacted with vibratory equipment.

To reduce vapor transmission up through at-grade concrete floor slabs, the crushed rock section should be covered with a high-quality, UV-resistant membrane vapor retarder meeting the minimum ASTM E 1745, Class C requirements or better. If moisture-sensitive floor coverings are proposed and/or additional protection is desired by the owner, a higher quality vapor barrier conforming to the requirements of ASTM E 1745 Class A, with a water vapor transmission rate less than or equal to 0.01 perms (such as 15-mil thick “Stego Wrap Class A”) may be used rather than a Class C vapor retarder. The vapor retarder or barrier should be placed directly below the concrete slab. Sand above the vapor retarder/barrier is not recommended. The vapor retarder/barrier should be installed in accordance with ASTM E 1643. All seams and penetrations of the vapor barrier should be sealed in accordance with manufacturer’s recommendations.

The permeability of concrete is affected significantly by the water:cement ratio of the mix, with lower water:cement ratios producing more damp-resistant slabs and higher strength. Where moisture protection is important and/or where the concrete will be placed directly on the vapor barrier, the water:cement ratio should be 0.45 or less. To increase the workability of the concrete, mid-range plasticizers may be added to the mix. Water should not be added to the mix unless the slump is less than specified and the water:cement ratio will not exceed 0.45. Other steps that may be taken to reduce moisture transmission through concrete slabs-on-grade include moist curing for 5 to 7 days and allowing the slab to dry for a period of two months or longer prior to placing floor coverings. Prior to installation of floor coverings, it may be appropriate to test the slab moisture content for adherence to the manufacturer’s requirements to determine whether a longer drying time is necessary.

**RETAINING WALLS**

We recommend retaining walls with level backfill that are not free to deflect or rotate, such as building, site walls or elevator pits, be designed to resist an equivalent fluid pressure of 45 pounds per cubic foot, plus an additional uniform lateral pressure of  $8H$  pounds per square foot, where  $H$  is the height of the wall in feet. Where retaining walls are assumed to be undrained, such as for the elevator pit walls, these walls should be designed to resist an equivalent fluid pressure of 80 pounds per cubic foot plus an additional uniform lateral pressure of  $8H$  pounds per square foot (where  $H$  is the height of the wall in feet).

Retaining walls with level backfill that are free to rotate, such as site retaining walls (if any), may be designed to resist an equivalent fluid pressure of 45 pounds per cubic foot. Retaining walls with backfill that slopes at about 2:1 (horizontal:vertical) should be designed to resist an equivalent fluid pressure of 65 pounds per cubic foot for walls free to rotate, with  $8H$  added as recommended above for walls not free to rotate. Wherever retaining walls or elevator pit walls will be subjected to surcharge loads, the walls should be designed for an additional uniform lateral pressure equal to one-half of the surcharge load for restrained walls and one-third of the surcharge load for unrestrained walls.

Based on the site peak ground acceleration (PGA), on Seed and Whitman (1970); Al Atik and Sitar (2010); and Lew et al. (2010); seismic loads on retaining walls that can yield may be simulated by a line load of  $2H^2$  (in pounds per foot, where  $H$  is the wall height in feet). Seismic loads on walls that cannot yield may be subjected to a seismic load as high as about  $8H^2$ . This seismic surcharge line load should be assumed to act at  $1/3H$  above the base of the wall (in addition to an active wall design pressure of 45 pounds per cubic foot).

To prevent buildup of water pressure from surface water infiltration, a subsurface drainage system could be installed behind retaining walls, otherwise the walls should be designed for undrained pressures as discussed above. The drainage system should consist of a 4-inch diameter perforated pipe (perforations placed down) embedded in a section of 1/2- to 3/4-inch, clean, crushed rock at least 12 inches wide. Backfill above the perforated drain line should also consist of 1/2- to 3/4-inch, clean, crushed rock to within about 1½ to 2 feet below exterior finished grade. A filter fabric should be wrapped around the crushed rock to protect it from infiltration of native soil. The upper 1½ to 2 feet of backfill should consist of compacted native soil. The perforated pipe should discharge into a free-draining outlet or sump that pumps to a suitable location. Damp-proofing of the walls should be included in areas where wall dampness and efflorescence would be undesirable.

Miradrain, Enkadrain or other drainage fabrics approved by our office may be used for wall drainage as an alternative to the gravel drainage system described above. If used, the drainage fabric should extend from a depth of about 1 foot below the top of the wall backfill down to the drain pipe at the base of the wall. A minimum 12-inch wide section of ½-inch to ¾-inch clean crushed rock and filter fabric should be placed around the drainpipe, as recommended previously.

Backfill placed behind the basement walls should be compacted to at least 90 percent relative compaction using light compaction equipment. If heavy equipment is used for compaction of wall backfill, the walls should be temporarily braced.

Building retaining walls should be supported on a pile foundation designed in accordance with the recommendations presented previously. Low landscaping walls may be supported on conventional continuous shallow foundations as presented previously.

## **VEHICLE PAVEMENTS**

### **Asphalt Concrete Pavements**

We understand the existing vehicle pavements will be removed, finished grades adjusted slightly for improved surface water drainage, and new asphalt concrete pavements constructed. The new pavement sections will be supported on the existing variable clayey sandy fill soils, which may be assumed to have an R-value of 18 for design purposes. Following Procedure 630 of Caltrans Highway Design Manual, we developed the minimum recommended pavement section thicknesses presented on Table 5 on the following page.

The Traffic Indices used in our pavement thickness calculations are considered reasonable values for this development and are based on engineering judgment rather than on detailed traffic projections. Asphalt concrete and aggregate base should conform to and be placed in accordance with the requirements of the Caltrans Standard Specifications, latest edition, except that compaction should be based on ASTM Test D1557.

**Table 5. Minimum Asphalt Concrete Pavement Sections  
Mercedes-Benz Dealership  
Palo Alto, California**

<b>Traffic Loading Condition</b>	<b>Design Traffic Index</b>	<b>Asphalt Concrete (inches)</b>	<b>Aggregate Base* (inches)</b>	<b>Total Thickness (inches)</b>
Automobile Parking	4.0	3.0	5.0	8.0
Automobile Access	4.5	3.0	7.0	10.0
Light Truck Traffic	5.0	3.0	8.0	11.0
	5.5	3.0	10.0	13.0
Moderate Truck Traffic	6.0	4.0	9.0	13.0
Heavy Truck Traffic	7.0	4.0	12.0	16.0

\*Caltrans Class 2 Aggregate Base (minimum R-value = 78).

We recommend that measures be taken to limit the amount of surface water that seeps into the aggregate base and subgrade below vehicle pavements, particularly where the pavements are adjacent to landscape areas. Seepage of water into the pavement base material tends to soften the subgrade, increasing the amount of pavement maintenance that is required and shortening the pavement service life. Deepened curbs extending 4-inches below the bottom of the aggregate base layer are generally effective in limiting excessive water seepage. Other types of water cutoff devices or edge drains may also be considered to maintain pavement service life.

#### **Portland Cement Concrete Pavements**

If Portland Cement Concrete (PCC) pavements are to be used on portions of the site, the minimum required thickness of the PCC pavements should be based on the anticipated traffic loading, the modulus of rupture of the concrete that will be used for pavement construction, and the composition and supporting characteristics of the soil subgrade below the pavement section.

To provide a general guideline for the minimum required thickness of PCC pavements, we used information in the Portland Cement Association publication titled "Thickness Design for Concrete Highway and Street Pavements." We assumed "low" subgrade support from the on-site fills, typical residential street traffic (trucks with maximum single axle loads of 22 kips and maximum tandem axle loads of 36 kips), aggregate-interlock joints (i.e. no dowels), no concrete shoulder or curb, a modulus of rupture of concrete of 550 psi (which correlates to a concrete compressive strength of approximately 3,700 psi), at least 8 inches of Class 2 aggregate base below the PCC pavement, and 20-



year pavement service life. Sufficient control joints should be incorporated in the design and construction to limit and control cracking.

Based on the design assumptions described above, a PCC pavement with a thickness of at least 6 inches would be adequate for average daily truck traffic (ADTT) of one; a thickness of at least 6.5 inches would be adequate for ADTT of 13; and a thickness of at least 7 inches would be adequate for ADTT of 110.

## **EARTHWORK**

### **Clearing and Subgrade Preparation**

All deleterious materials, such as existing foundations and pavements, utilities to be abandoned, vegetation, root systems, loose surface fills, topsoil, etc. should be cleared from areas of the site to be built on or paved. The actual stripping depth should be determined by a member of our staff in the field at the time of construction. Excavations that extend below finished grade should be backfilled with structural fill that is water-conditioned, placed, and compacted as recommended in the section of this report titled "Compaction."

After the site has been properly cleared, stripped, and excavated to the required grades, exposed soil surfaces in areas to receive structural fill or slabs-on-grade should be scarified to a depth of 6 inches, moisture conditioned, and compacted as recommended for structural fill in the section of this report titled "Compaction."

On-site native soils, slab and pavement subgrades, footing, grade beam and pile cap excavations, and utility trench excavation, should be kept in a moist condition throughout the construction period.

### **Material For Fill**

All on-site soil containing less than 3 percent organic material by weight (ASTM D2974) may be suitable for use as structural fill. Structural fill should not contain rocks or pieces larger than 6 inches in greatest dimension and no more than 15 percent larger than 2.5 inches. Imported, non-expansive fill should have a Plasticity Index no greater than 15, should be predominately granular, and should have sufficient binder so as not to slough or cave into foundation excavations or utility trenches. A member of our staff should approve proposed import materials prior to their delivery to the site.

**Recycling of Existing Building and Pavement Materials**

Portions of the concrete floors, and foundations of the existing buildings, and other miscellaneous concrete that are present are expected to be pulverized on-site and reused as part of the proposed construction. If these materials are properly crushed and handled, the pulverized materials will be suitable for use as structural fill, non-expansive fill, and subbase, and possibly as Class 2 aggregate base below vehicle pavements.

If the on-site asphalt concrete is properly pulverized and handled, the pulverized asphalt concrete should be suitable for use as aggregate base or subbase below exterior flatwork, walkways, and vehicle pavements depending on the gradation of the pulverized asphalt concrete material. We also expect the majority of the existing aggregate base below pavements, buildings, and slabs will be able to be used as structural fill, non-expansive fill, subbase, or aggregate base, depending on how the materials are handled. We do not recommend that recycled asphalt concrete be used as non-expansive fill below the footprint of the building.

**Temporary Slopes, Excavations and Dewatering**

Ground water should be expected in the bottom of utility trench and manhole excavations that extend down to or below the ground water elevations described previously. If this occurs, provisions will need to be made for dewatering and maintaining sidewall stability during placement and compaction of pipe bedding and backfill.

The contractor should be responsible for the design and construction of all temporary slopes, excavations, and shoring. Shoring and bracing should be designed and installed in accordance with applicable local, state, and federal safety regulations, including current OSHA excavation and trench safety standards.

If deep excavations are required that extend into or close to the soft saturated Bay Mud, they may be prone to sloughing and/or caving if excavated near-vertical, and could become unstable. If excavations will extend into the Bay Mud, sheet piles or an equivalent method may be required to support the walls of the excavations. This information should be considered by the contractor when establishing temporary shoring/bracing/cut slope criteria for any deep utility trench excavations and other temporary cuts. Excavations that extend below ground water will require flatter inclinations or temporary shoring. If deep excavations are required, we can provide further input as needed.

Because of the potential variation of the surface and near-surface soils, field modification of temporary cut slopes and excavations may be required. Unstable materials near trenches, excavations, and slopes should be trimmed off even if this requires cutting the slopes back to a flatter inclination.

Protection of structures near excavations and trenches will also be the responsibility of the contractor. In our experience, a preconstruction survey is generally performed to document existing conditions prior to construction, with intermittent monitoring of the structures during construction.

### **Compaction**

Scarified soil surfaces and all structural fill should be compacted in uniform lifts no thicker than 8-inches in uncompacted thickness, conditioned to the appropriate moisture content, and compacted as recommended for structural fill in Table 6 on the following page. The relative compaction and moisture content recommended in Table 6 is relative to ASTM Test D1557, latest edition.

**Table 6. Compaction Recommendations  
Mercedes-Benz Dealership  
Palo Alto, California**

<b><u>General</u></b>	<b><u>Relative Compaction*</u></b>	<b><u>Moisture Content*</u></b>
• Scarified subgrade in areas to receive structural fill.	90 percent	Above optimum
• Structural fill composed of native soil.	90 percent	Above optimum
• Structural fill composed of non-expansive fill.	90 percent	Above optimum
• Structural fill below a depth of 4 feet.	93 percent	Above optimum
<b><u>Pavement Subgrade</u></b>		
• On-site soil.	95 percent	Near optimum
• Aggregate base.	95 percent	Near optimum
<b><u>Utility Trench Backfill</u></b>		
• On-site soil.	90 percent	Near optimum
• Imported sand.	93 percent	Near optimum

\* Relative to ASTM Test D1557, latest edition.

**Finished Slopes**

We recommend that finished slopes be cut or filled to an inclination no steeper than 3:1 (horizontal:vertical). Exposed slopes may be subject to minor sloughing and erosion that would require periodic maintenance. We recommend that all slopes and soil surfaces disturbed during construction be planted to with erosion resistant vegetation.

**Surface Drainage**

Finished grades should be designed to prevent ponding and to drain surface water away from foundations and edges slabs and pavements, and toward suitable collection and discharge facilities. Slopes of at least 2 percent are recommended for flatwork and pavement areas with 5 percent preferred in landscape areas within 8 feet of the structures, where possible. At a minimum, splash blocks should be provided at the ends of downspouts to carry surface water away from perimeter foundations. Preferably, downspout drainage should be collected in a closed pipe system that is routed to a storm drain system or other suitable discharge outlet.

Drainage facilities should be observed to verify that they are adequate and that no adjustments need to be made, especially during first two years following construction. We recommend that an as-built plan be prepared to show the locations of all surface and subsurface drain lines and clean-outs. Drainage facilities should be periodically checked to verify that they are continuing to function properly. The drainage facilities will probably need to be periodically cleaned of silt and debris that may build up in the lines.

**FUTURE SERVICES****Plan Review**

Romig Engineers should review the completed grading and foundation plans for conformance with the recommendations contained in this report. We should be provided with these plans as soon as possible upon completion in order to limit the potential for delays in the permitting process that might otherwise be attributed to our review process. In addition, it should be noted that many of the local building and planning departments now require “clean” geotechnical plan review letters prior to acceptance of plans for their final review. Since our plan reviews typically result in recommendations for modification of the plans, our generation of a “clean” review letter often requires two iterations. At a minimum, we recommend the following note be added to the plans:

“Earthwork, slab subgrade preparation, foundation construction, pile installation and load testing, pavement construction, backfilling of walls and utility trenches, and site drainage should be performed in accordance with the geotechnical report prepared by Romig Engineers, Inc., dated August 31, 2015. Romig Engineers should be notified at least 48 hours in advance of any earthwork and should observe and test during earthwork and foundation construction as recommended in the geotechnical report.”

**Construction Observation and Testing**

The earthwork and foundation phases of construction should be observed and tested by us to 1) establish that subsurface conditions are compatible with those used in the analysis and design; 2) observe compliance with the design concepts, specifications and recommendations; and 3) allow design changes in the event that subsurface conditions differ from those anticipated. The recommendations in this report are based on a limited amount of subsurface exploration. The nature and extent of variation across the site may not become evident until construction. If variations are exposed during construction, it will be necessary to reevaluate our recommendations.



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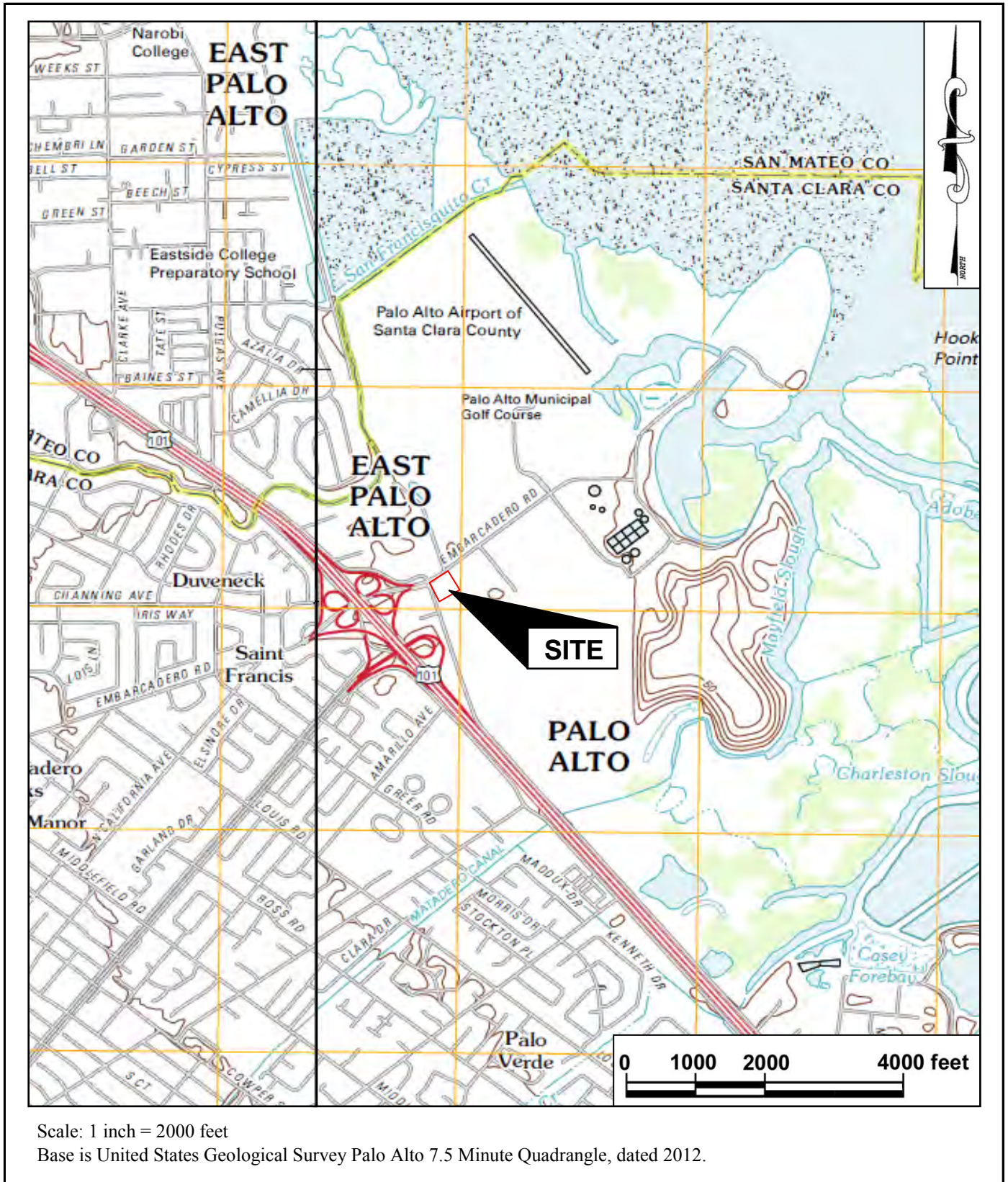
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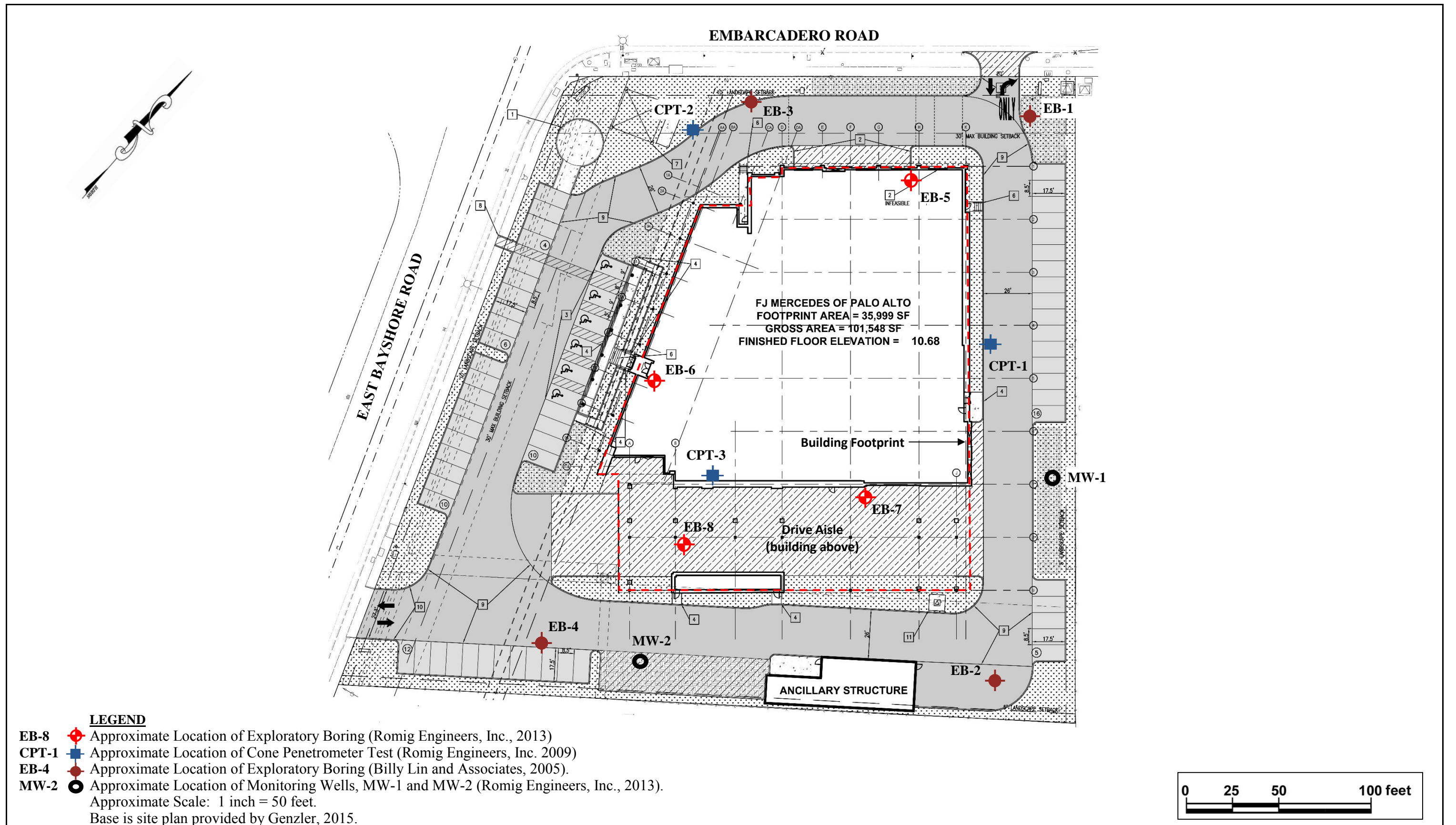
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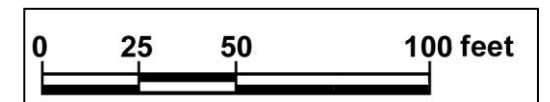
**VICINITY MAP**  
 MERCEDES-BENZ DEALERSHIP  
 PALO ALTO, CALIFORNIA

**FIGURE 1**  
 AUGUST 2015  
 PROJECT NO. 3489-1

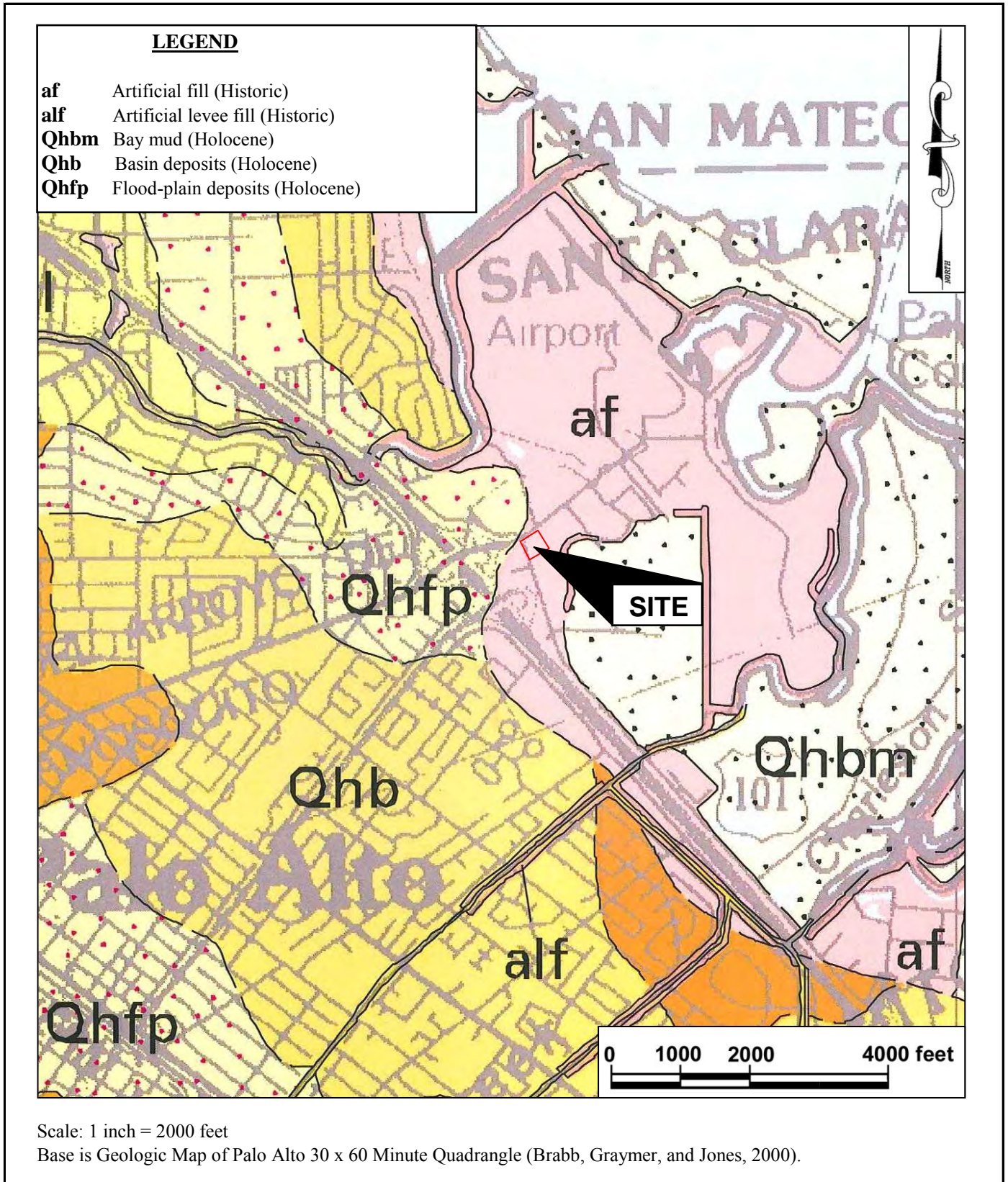


**LEGEND**

- EB-8 Approximate Location of Exploratory Boring (Romig Engineers, Inc., 2013)
  - CPT-1 Approximate Location of Cone Penetrometer Test (Romig Engineers, Inc. 2009)
  - EB-4 Approximate Location of Exploratory Boring (Billy Lin and Associates, 2005).
  - MW-2 Approximate Location of Monitoring Wells, MW-1 and MW-2 (Romig Engineers, Inc., 2013).
- Approximate Scale: 1 inch = 50 feet.  
 Base is site plan provided by Genzler, 2015.

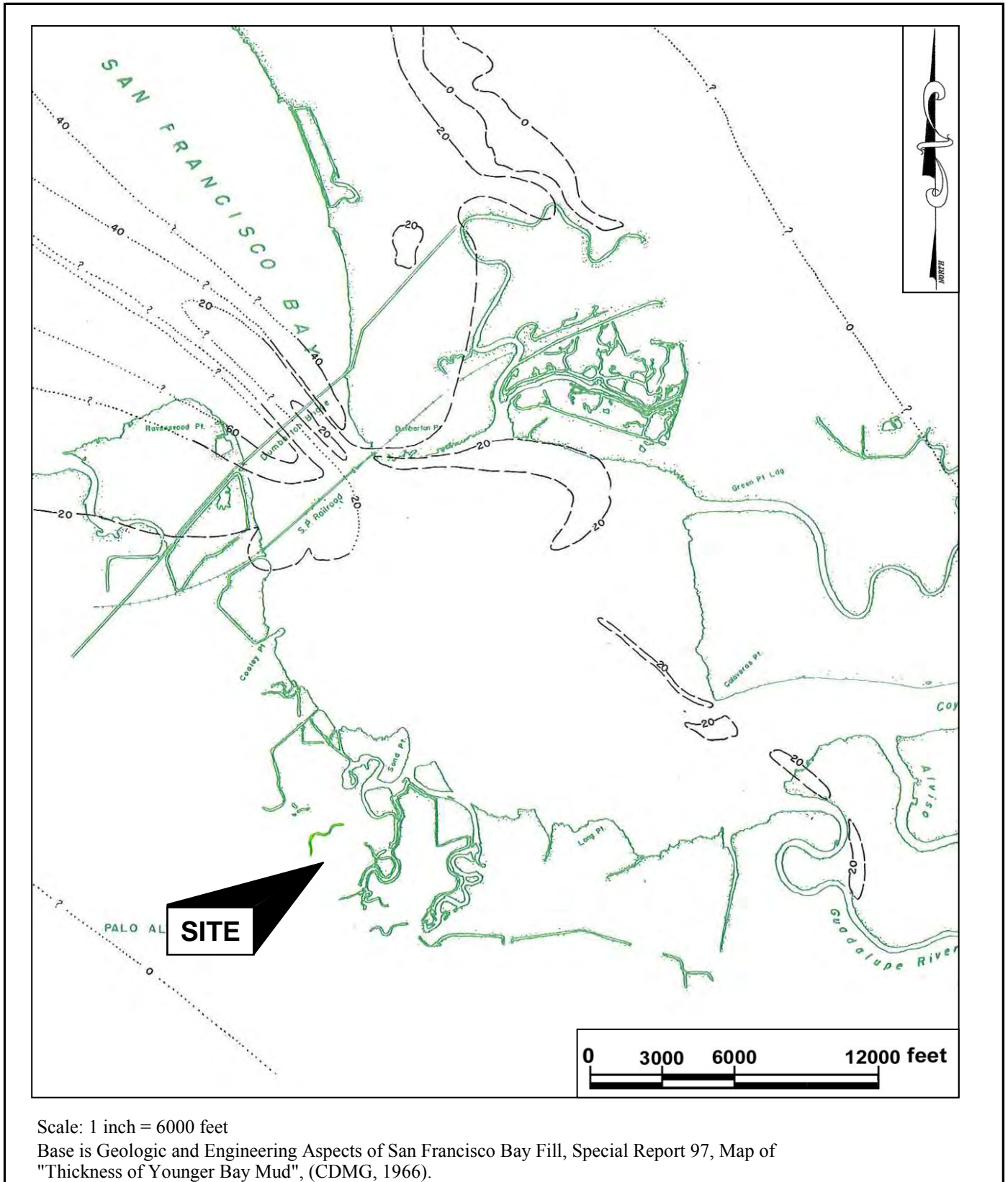






**VICINITY GEOLOGIC MAP**  
**MERCEDES-BENZ DEALERSHIP**  
**PALO ALTO, CALIFORNIA**

**FIGURE 3**  
 AUGUST 2015  
 PROJECT NO. 3489-1



**VICINITY GEOLOGIC MAP**  
 MERCEDES-BENZ DEALERSHIP  
 PALO ALTO, CALIFORNIA

**FIGURE 4**  
 AUGUST 2015  
 PROJECT NO. 3489-1

## APPENDIX A

### SUMMARY OF FIELD INVESTIGATION DATA

Subsurface exploration at the site was performed by means of exploratory borings and Cone Penetration Test (CPT) probes to explore subsurface conditions. Three cone penetration test (CPT) probes were advanced using a track-mounted, Geoprobe Model 6625CPT rig to advance an electronic cone penetration test (CPT) probe with a down pressure capacity of 20 tons.

The soils encountered during drilling of the borings were logged by our representative and samples were obtained at depths appropriate to the investigation. The samples were taken to our laboratory where they were evaluated and classified in accordance with the Unified Soil Classification System. The logs of our borings, and a summary of the soil classification system used on the logs (Figure A-1), are included in this appendix.

Several tests were performed in the field during drilling. The standard penetration test resistance was determined by dropping a 140-pound hammer through a 30-inch free fall and recording the blows required to drive the 2-inch (outside diameter) sampler 18 inches. The standard penetration test (SPT) resistance is the number of blows required to drive the sampler the last 12 inches and is recorded on the boring logs at the appropriate depths. Soil samples were also collected using 3.0-inch O.D. drive samplers. The blow counts shown on the logs for these larger samplers do not represent SPT values and have not been corrected in any way.

The locations of the CPTs and borings were determined by pacing using the site plan provided to us. The CPT and boring locations should be considered accurate only to the degree implied by the method used.

The CPT and boring logs and related information depict our interpretation of subsurface conditions only at the specific location and time indicated. Subsurface conditions and ground water levels at other locations may differ from conditions at the locations where sampling was conducted. The passage of time may also result in changes in the subsurface conditions.





## Cone penetration testing and soil sampling methods description.

### Rig Description

Our services are based on the state-of-the-art, Geoprobe Model 6625CPT rig, a limited-access, self-anchoring, 20-ton push capacity, track-mounted push platform for dedicated Geotechnical CPT applications with the unique and valuable added ability to quickly perform intermittent or continuous soil sampling.

Weight = ~ 9,500 pounds

Surface load = ~ 4.5 psi

Push capacity = ~ 20 tons; self-anchoring achieved using 10- or 15-inch diameter helical soil anchors driven 4- to 10-feet into the soil

Sampling hammer percussion rate = 32 Hz & 20,000 lbs force/blow

Length = ~ 12 feet; Width = ~ 7 feet

Height (folded) = 7 feet; Height (unfolded) = 14 feet

### CPT Description

Our Geoprobe 6625CPT incorporates the Swedish-made Geotech AB Cone Penetration Testing tools which meet the ASTM D-5778 Standard Test Method for Performing Electronic Friction Cone and Piezocone Penetration Testing of Soils. Cones have 10 cm<sup>2</sup> tips and 150 cm<sup>2</sup> friction sleeves, and include a porous filter and pressure sensor located in the u<sub>2</sub> position directly behind the cone. The cone and porous filter are saturated under vacuum with glycerin to promote rapid equilibration with in-situ pore pressures. Cones are advanced at the ASTM standard rate of 2 cm/second. Baseline readings are performed both before and after each push to check for load cell drift. The cone measures bearing (max load = 100 MPa ~ 1044 TSF), friction sleeve (max load = 1.0 MPa ~ 10.4 TSF), and dynamic pore pressure (max load = 2.5 MPa ~ 363 psi) at 2 cm or 4 cm intervals (client's choice) and this data is plotted in real-time and recorded on a laptop computer adjacent to the push platform. Holes are grouted upon completion of each push, or at the end of each day, as site conditions and regulations warrant.

The basic equation to determine the depth to the free water surface from the pore pressure dissipation test is;

Depth to phreatic surface = [Dissipation depth] – [equilibrium pore pressure / unit weight of H<sub>2</sub>O x unit conversion factor]

...where;

- 1) Surface elevation is always assumed to be 0 feet
- 2) Dissipation depth = the depth (feet) below surface elevation where the cone advancement was paused while waiting for equilibrium pore pressure to be achieved
- 3) Equilibrium pore pressure = the pore pressure after an elapsed time where no increase or decrease in pore pressure is occurring, in pounds per square inch (psi)
- 4) Unit weight of water = 62.3 pounds per cubic foot (lb/ft<sup>3</sup>)
- 5) Unit conversion factor (for dimensional analysis): 1 psi = 144 lb/ft<sup>3</sup>

From the dissipation plots, simply read the dissipation depth and dissipated pressure for the values to plug into the equation above. On the plots, pore pressure (psi) is on the abscissa and log time (seconds) is on the ordinate.

### **Sampling Description**

Geoprobe® brand Dual Tube Sampling Systems are efficient methods of collecting continuous soil cores with the added benefit of a cased hole. Dual tube sampling uses two sets of probe rods to collect continuous soil cores. One set of rods is driven into the ground as an outer casing (2.2 or 3.25 inches in diameter). These rods receive the driving force from the hammer and provide a sealed hole from which soil samples may be recovered without the threat of cross contamination. The second, smaller set of rods are placed inside the outer casing. The smaller rods hold a sample liner in place as the outer casing is driven one sampling interval. The small rods are then retracted to retrieve the filled liner. Soil samples are collected in 1.85-inch diameter or 1.125-inch diameter clear PVC sample sheaths.

### **Interpretations**

Soil behavior type (SBT), SPT N60 energy ratio, undrained shear strength, OCR, and unit weights are calculated and/or are interpretations generated by the CPT-Pro software based on empirical relationships derived in the following references;

P.K. Robertson, R.G. Campanella, D. Gillespie, and J. Greig, 1986, Use of Piezometer Cone Data, Proceedings of the ASCE Specialty Conference In Situ '86: Use of In Situ Tests in Geotechnical Engineering; pp. 1263-1280.

P.K. Roberston, 1990, Soil Classification Using the Cone Penetration Test, Canadian Geotechnical Journal, 27(1), pp. 151-158.

T. Lunne, P.K. Robertson, and J.J.M. Powell, 1997, Cone Penetration in Geotechnical Practice, Taylor and Francis Publishing.

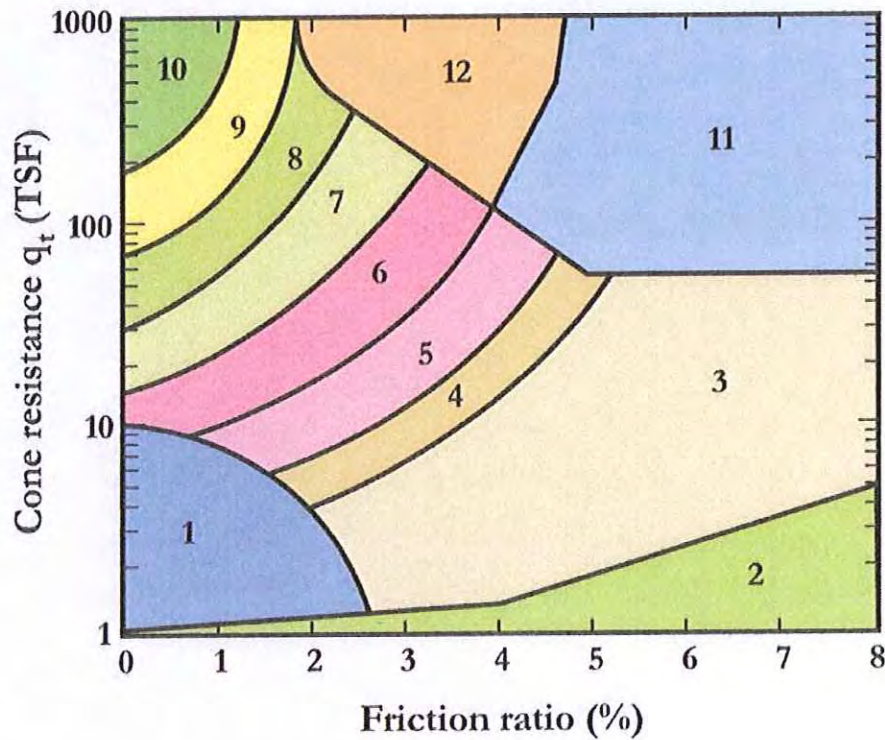
CPT Inc. makes no recommendation on which soil behavior type analysis is “most-correct”. The engineer should be aware of the limitations of using CPT data to derive soil behavior type and other engineering parameters and is encouraged to review the above references to better understand the applicability and limitations of CPT data. It is sometimes not possible to determine soil type based solely on tip resistance, sleeve friction, and dynamic pore pressure response, and confirmatory samples may be required.

Please do not hesitate to contact CPT Inc. if you have questions.

Sincerely,  
John Rogie



President  
California Push Technologies, Inc.



Zone	Soil Behavior Type
1	sensitive fine grained
2	organic material
3	clay
4	silty clay to clay
5	clayey silt to silty clay
6	sandy silt to clayey silt
7	silty sand to sandy silt
8	sand to silty sand
9	sand
10	gravelly sand to sand
11	very stiff fine grained (overconsolidated or cemented)
12	sand to clayey sand (overconsolidated or cemented)

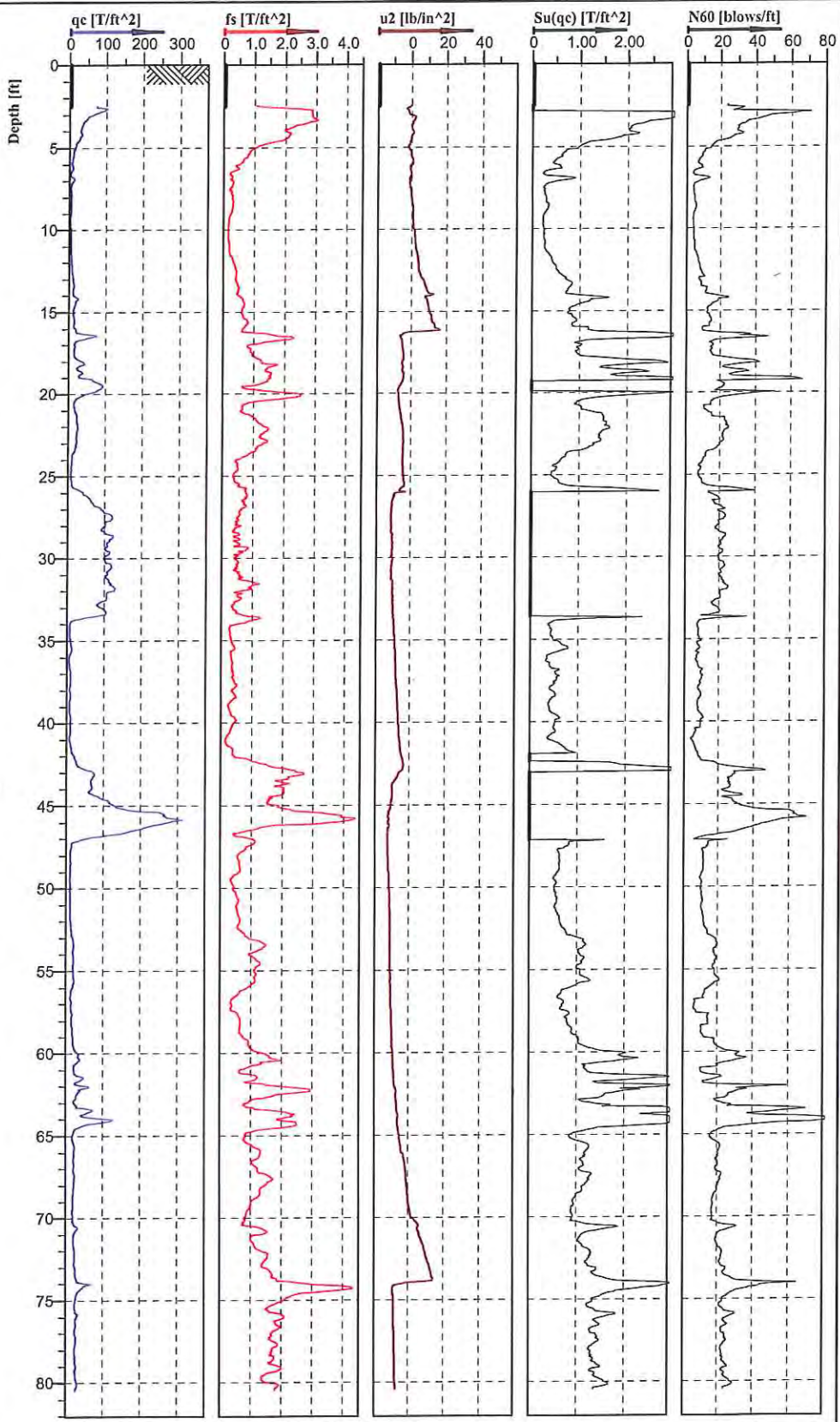
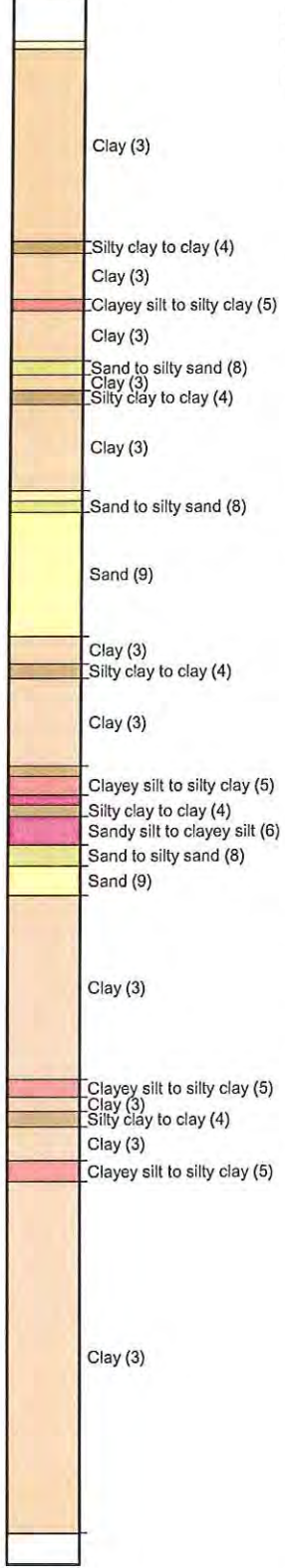
Source: Robertson, P.K., Campanella, R.G., Gillespie, D., and Greig, J., 1986, Use of Piezometer Cone Data. Proceedings of the ASCE Specialty Conference In Situ 86: Use of In Situ Tests in Geotechnical Engineering.




CALIFORNIA PUSH  
TECHNOLOGIES  
INCORPORATED

Soil Behavior Type (SBT) Model

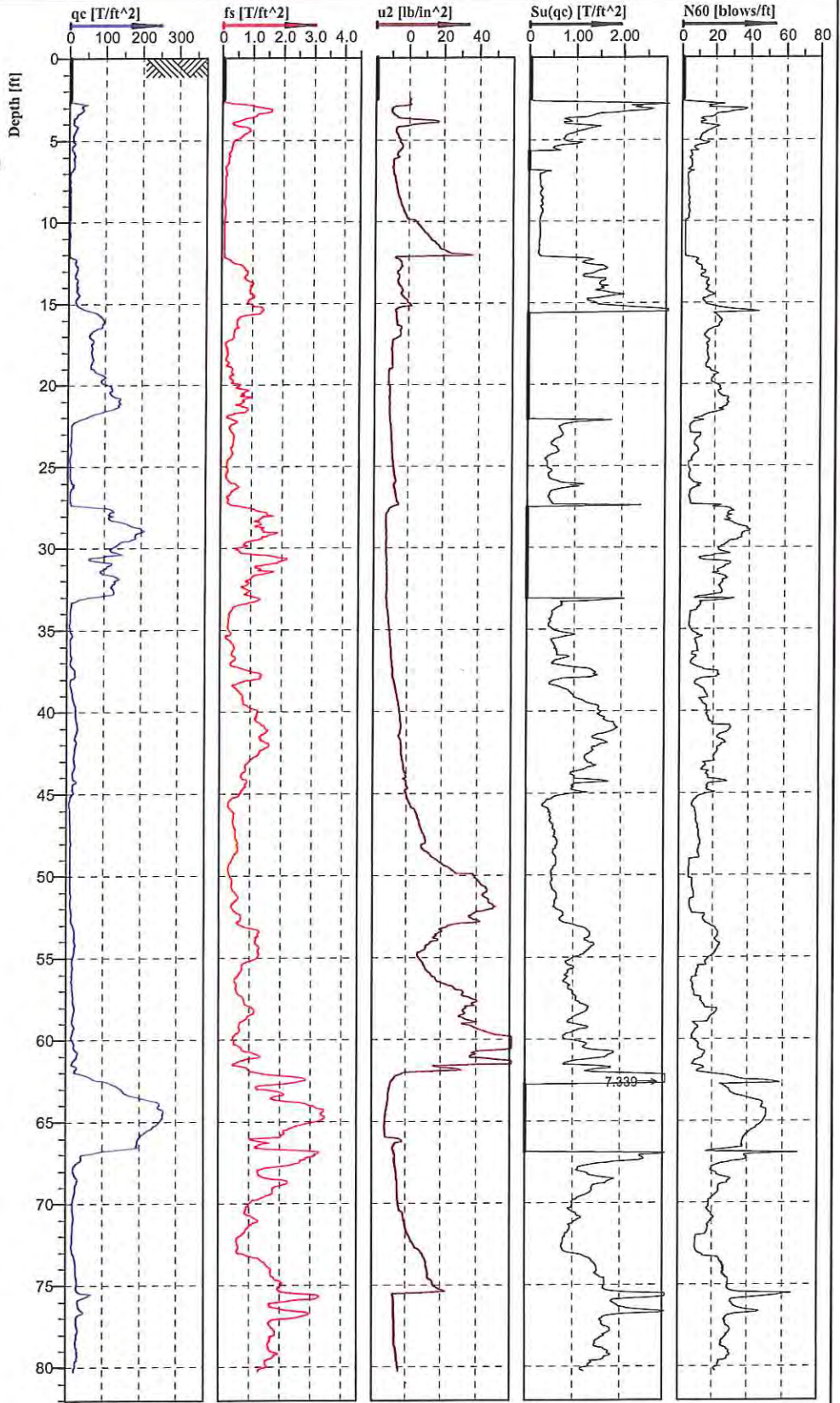
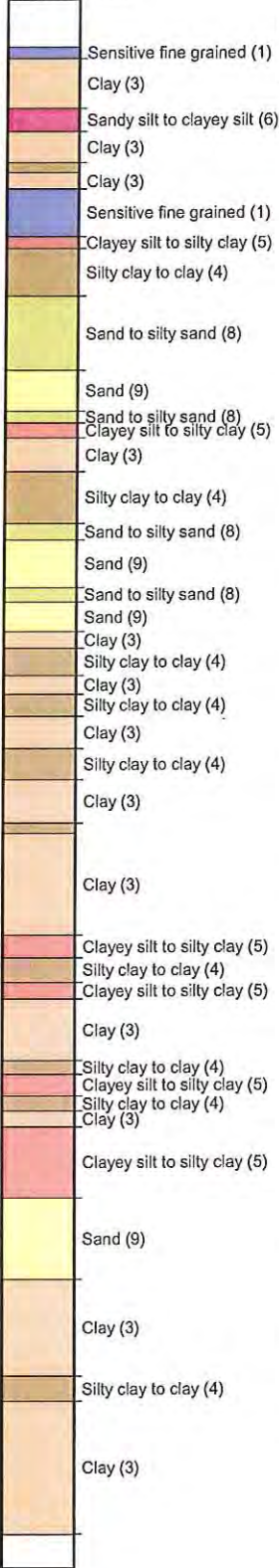
Classification by  
Robertson 1986



   
 Cone No: 3794  
 Tip area [cm<sup>2</sup>]: 10  
 Sleeve area [cm<sup>2</sup>]: 150

Location: Palo Alto, California	Position:	Ground level:	Test no: CPT-1
Project ID: 2317-1	Client: Romig Engineers	Date: 6/25/2009	Scale: 1 : 115
Project: Wu-Chang Project		Page: 1/1	Fig:
File: CPT-1.cpd			

Classification by  
Robertson 1986

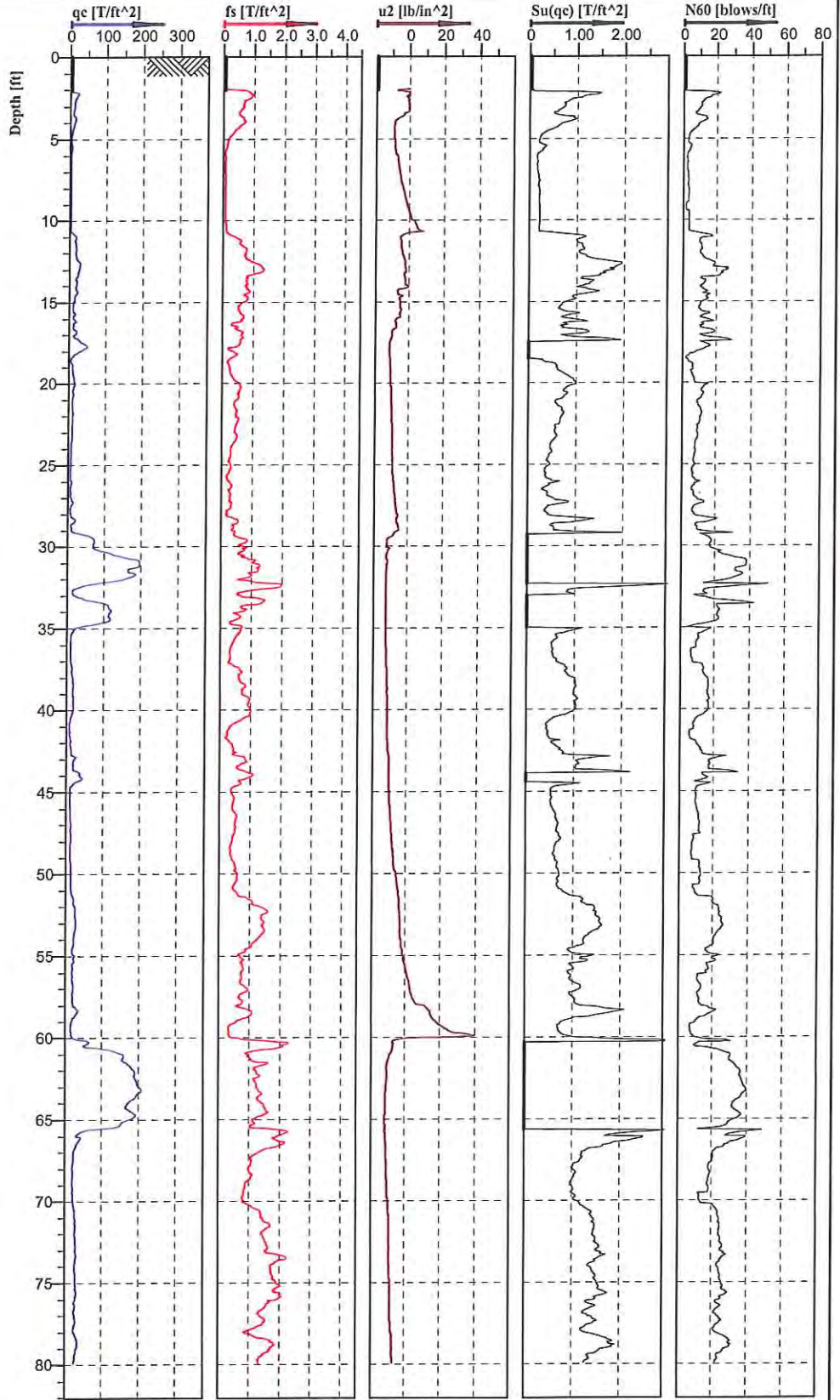


Cone No: 3794  
Tip area [cm<sup>2</sup>]: 10  
Sleeve area [cm<sup>2</sup>]: 150

Location: Palo Alto, California	Position:	Ground level:	Test no: CPT-2
Project ID: 2317-1	Client: Romig Engineers	Date: 6/25/2009	Scale: 1 : 115
Project: Wu-Chang Project		Page: 1/1	Fig:
		File: CPT-2.cpd	



Classification by  
Robertson 1986



  
 Cone No: 3794  
 Tip area [cm<sup>2</sup>]: 10  
 Sleeve area [cm<sup>2</sup>]: 150

Location: Palo Alto, California	Position:	Ground level:	Test no: CPT-3
Project ID: 2317-1	Client: Romig Engineers	Date: 6/25/2009	Scale: 1 : 115
Project: Wu-Chang Project		Page: 1/1	Fig:
		File: CPT-3.cpd	

## USCS SOIL CLASSIFICATION

PRIMARY DIVISIONS			SOIL TYPE	SECONDARY DIVISIONS	
COARSE GRAINED SOILS (< 50 % Fines)	GRAVEL	CLEAN GRAVEL (< 5% Fines)	<b>GW</b>	Well graded gravel, gravel-sand mixtures, little or no fines.	
		GRAVEL with FINES	<b>GP</b>	Poorly graded gravel or gravel-sand mixtures, little or no fines.	
		SAND	CLEAN SAND (< 5% Fines)	<b>GM</b>	Silty gravels, gravel-sand-silt mixtures, non-plastic fines.
			SAND WITH FINES	<b>GC</b>	Clayey gravels, gravel-sand-clay mixtures, plastic fines.
	FINE GRAINED SOILS (> 50 % Fines)	SILT AND CLAY Liquid limit < 50%		<b>SW</b>	Well graded sands, gravelly sands, little or no fines.
				<b>SP</b>	Poorly graded sands or gravelly sands, little or no fines.
				<b>SM</b>	Silty sands, sand-silt mixtures, non-plastic fines.
		SILT AND CLAY Liquid limit > 50%		<b>SC</b>	Clayey sands, sand-clay mixtures, plastic fines.
<b>ML</b>				Inorganic silts and very fine sands, with slight plasticity.	
<b>CL</b>				Inorganic clays of low to medium plasticity, lean clays.	
SILT AND CLAY Liquid limit > 50%		<b>OL</b>	Organic silts and organic clays of low plasticity.		
		<b>MH</b>	Inorganic silt, micaceous or diatomaceous fine sandy or silty soil.		
HIGHLY ORGANIC SOILS		<b>CH</b>	Inorganic clays of high plasticity, fat clays.		
		<b>OH</b>	Organic clays of medium to high plasticity, organic silts.		
BEDROCK			<b>Pt</b>	Peat and other highly organic soils.	
			<b>BR</b>	Weathered bedrock.	

### RELATIVE DENSITY

SAND & GRAVEL	BLOWS/FOOT*
VERY LOOSE	0 to 4
LOOSE	4 to 10
MEDIUM DENSE	10 to 30
DENSE	30 to 50
VERY DENSE	OVER 50

### CONSISTENCY

SILT & CLAY	STRENGTH <sup>^</sup>	BLOWS/FOOT*
VERY SOFT	0 to 0.25	0 to 2
SOFT	0.25 to 0.5	2 to 4
FIRM	0.5 to 1	4 to 8
STIFF	1 to 2	8 to 16
VERY STIFF	2 to 4	16 to 32
HARD	OVER 4	OVER 32

### GRAIN SIZES

BOULDERS	COBBLES	GRAVEL		SAND			SILT & CLAY
		COARSE	FINE	COARSE	MEDIUM	FINE	
12 "	3"	0.75"		4	10	40	200
SIEVE OPENINGS				U.S. STANDARD SERIES SIEVE			

Classification is based on the Unified Soil Classification System; fines refer to soil passing a No. 200 sieve.

\* Standard Penetration Test (SPT) resistance, using a 140 pound hammer falling 30 inches on a 2 inch O.D. split spoon sampler; blow counts not corrected for larger diameter samplers.

<sup>^</sup> Unconfined Compressive strength in tons/sq. ft. as estimated by SPT resistance, field and laboratory tests, and/or visual observation.

#### KEY TO SAMPLERS

	Modified California Sampler (3-inch O.D.)
	Mid-size Sampler (2.5-inch O.D.)
	Standard Penetration Test Sampler (2-inch O.D.)

**KEY TO EXPLORATORY BORING LOGS**  
 WU-CHUNG HOTEL COMPLEX  
 PALO ALTO, CALIFORNIA

**FIGURE A-1**  
 DECEMBER 2013  
 PROJECT NO. 2317-1A

**DRILL TYPE:** Mobile Drill B-53 with 8" Hollow Stem Auger

**LOGGED BY:** TWP

**DEPTH TO GROUND WATER:** Not Encountered. **SURFACE ELEVATION:** NA

**DATE DRILLED:** 11/12/13

CLASSIFICATION AND DESCRIPTION	SOIL CONSISTENCY/ DENSITY or ROCK HARDNESS* (Figure A-2)	SOIL TYPE	SOIL SYMBOL	DEPTH (FEET)	SAMPLE INTERVAL	SPT RESISTANCE (Blows/ft)	WATER CONTENT (%)	SHEAR STRENGTH (TSF)*	UNCONFIN. COMP. (TSF)*
2-inches of asphalt concrete over 4-inches of baserock.				0					
<b>Artificial Fill:</b> Brown, Clayey Sand/Sandy Lean Clay, moist, fine to coarse sand, fine to coarse gravel, low plasticity.  ■ Liquid Limit = 33, Plasticity Index = 16. ● 51% Passing No. 200 Sieve.  Becoming dark grayish brown, moderate plasticity.	Dense/ Hard	SC/ CL				45	13		
				5					
<b>Young Bay Mud:</b> Blue gray, Fat Clay, wet, fine sand, high plasticity.  ■ Liquid Limit = 88, Plasticity Index = 40. ● 91% Passing No. 200 Sieve.  ▼ Ground water measured at 9.5 feet shortly after drilling.	Soft	CH				3	62		
				10					
Gray, Clayey Sand, moist, fine to medium sand. ■ Liquid Limit = 22, Plasticity Index = 8. ● 28% Passing No. 200 Sieve.	Medium Dense	SC				10			
				15					
Bottom of Boring at 14.5 feet.									
Note: The stratification lines represent the approximate boundary between soil and rock types, the actual transition may be gradual.				20					

**EXPLORATORY BORING LOG EB-5**  
 WU-CHUNG HOTEL COMPLEX  
 PALO ALTO, CALIFORNIA

**BORING EB-5**  
 DECEMBER 2013  
 PROJECT NO. 2317-1A








**DRILL TYPE:** Mobile Drill B-53 with 8" Hollow Stem Auger

**LOGGED BY:** TWP

**DEPTH TO GROUND WATER:** 9.5 Feet.

**SURFACE ELEVATION:** NA

**DATE DRILLED:** 11/12/13

CLASSIFICATION AND DESCRIPTION	SOIL CONSISTENCY/ DENSITY or ROCK HARDNESS* (Figure A-2)	SOIL TYPE	SOIL SYMBOL	DEPTH (FEET)	SAMPLE INTERVAL	SPT RESISTANCE (Blows/ft)	WATER CONTENT (%)	SHEAR STRENGTH (TSF)*	UNCONFIN. COMP. (TSF)*
2-inches of asphalt concrete over 4-inches of baserock.				0					
<p><b>Artificial Fill:</b> Brown, Sandy Lean Clay, very moist, fine to medium sand, fine gravel, moderate plasticity, gray mottling.</p> <p>■ Liquid Limit = 38, Plasticity Index = 21. ● 56% Passing No. 200 Sieve.</p>	Very Stiff	CL		5		21	28		
<p><b>Young Bay Mud:</b> Blue gray, Fat Clay, wet, fine sand, high plasticity.</p> <p>■ Liquid Limit = 89, Plasticity Index = 47. ● 95% Passing No. 200 Sieve.</p> <p>▼ Ground water measured at 14 feet shortly after drilling.</p> <p>Transitioning from gray to brown.</p>	Soft	CH		10		3	81		
Brown, Sandy Fat Clay, very moist, fine to medium sand, moderate to high plasticity.	Very Stiff	CL/CH				18	23		
<p>Bottom of Boring at 18 feet.</p> <p>Note: The stratification lines represent the approximate boundary between soil and rock types, the actual transition may be gradual.</p>				20					

**EXPLORATORY BORING LOG EB-6**  
 WU-CHUNG HOTEL COMPLEX  
 PALO ALTO, CALIFORNIA








**BORING EB-6**  
 DECEMBER 2013  
 PROJECT NO. 2317-1A

**DRILL TYPE:** Mobile Drill B-53 with 8" Hollow Stem Auger

**LOGGED BY:** TWP

**DEPTH TO GROUND WATER:** Not Encountered. **SURFACE ELEVATION:** NA

**DATE DRILLED:** 11/12/13

CLASSIFICATION AND DESCRIPTION	SOIL CONSISTENCY/ DENSITY or ROCK HARDNESS* (Figure A-2)	SOIL TYPE	SOIL SYMBOL	DEPTH (FEET)	SAMPLE INTERVAL	SPT RESISTANCE (Blows/ft)	WATER CONTENT (%)	SHEAR STRENGTH (TSF)*	UNCONFIN. COMP. (TSF)*
2-inches of asphalt concrete over 4-inches of baserock.				0					
<p><b>Artificial Fill:</b> Brown, Sandy Lean Clay with gravel, moist, fine to coarse sand, fine to coarse gravel, low plasticity.</p> <p>■ Liquid Limit = 27, Plasticity Index = 12. ● 61% Passing No. 200 Sieve.</p> <p>Becoming dark brown to black, Sandy Lean Clay, moist, fine to medium sand, low to moderate plasticity.</p> <p>■ Liquid Limit = 43, Plasticity Index = 25. ● 71% Passing No. 200 Sieve.</p>	Very Stiff to Hard	CL		5		50/5"			
Brown, Sandy Lean Clay/Sandy Fat Clay, moist, fine to medium sand, moderate to high plasticity (Bay Mud crust?).	Stiff	CL/CH		10		15			
<p>Gray, Sandy Fat Clay, very moist, fine sand, high plasticity (possible stiffer area of Bay Mud).</p> <p>■ Liquid Limit = 53, Plasticity Index = 32. ● 66% Passing No. 200 Sieve.</p>	Very Stiff	CH				23	32		
<p>Bottom of Boring at 13 feet.</p> <p>Note: The stratification lines represent the approximate boundary between soil and rock types, the actual transition may be gradual.</p>				15					
				20					

**EXPLORATORY BORING LOG EB-7**  
 WU-CHUNG HOTEL COMPLEX  
 PALO ALTO, CALIFORNIA

**BORING EB-7**  
 DECEMBER 2013  
 PROJECT NO. 2317-1A

**DRILL TYPE:** Mobile Drill B-53 with 8" Hollow Stem Auger

**LOGGED BY:** TWP

**DEPTH TO GROUND WATER:** Not Encountered. **SURFACE ELEVATION:** NA

**DATE DRILLED:** 11/12/13



CLASSIFICATION AND DESCRIPTION	SOIL CONSISTENCY/ DENSITY or ROCK HARDNESS* (Figure A-2)	SOIL TYPE	SOIL SYMBOL	DEPTH (FEET)	SAMPLE INTERVAL	SPT RESISTANCE (Blows/ft)	WATER CONTENT (%)	SHEAR STRENGTH (TSF)*	UNCONFIN. COMP. (TSF)*
2-inches of asphalt concrete over 4-inches of baserock.				0					
<b>Artificial Fill:</b> Brown, Sandy Lean Clay with gravel, moist, fine to coarse sand, fine gravel, moderate plasticity.  ■ Liquid Limit = 47, Plasticity Index = 29. ● 57% Passing No. 200 Sieve.	Stiff	CL				11			
<b>Young Bay Mud:</b> Blue gray, Fat Clay, wet, fine sand, high plasticity.  ■ Liquid Limit = 81, Plasticity Index = 40. ● 92% Passing No. 200 Sieve.  ▼ Ground water measured at 10 feet shortly after drilling.	Soft	CH		5		4	78		
Brown and gray, Sandy Lean Clay/Sandy Fat Clay, very moist, fine sand, moderate plasticity.	Stiff	CL/ CH		15		14	25		
Bottom of Boring at 15.5 feet.  Note: The stratification lines represent the approximate boundary between soil and rock types, the actual transition may be gradual.  *Measured using Torvane and Pocket Penetrometer devices.				20					

**EXPLORATORY BORING LOG EB-8**  
 WU-CHUNG HOTEL COMPLEX  
 PALO ALTO, CALIFORNIA

**BORING EB-8**  
 DECEMBER 2013  
 PROJECT NO. 2317-1A

DRILL RIG: Truck-Mounted CME-75 with continuous hollow-stem flight augers		SURFACE ELEVATION: 7.34 feet (±)					LOGGED BY: Billy Lin				
GROUNDWATER: 7 feet below existing ground surface		BORING DIAMETER: 8 inches					DATE DRILLED: 10/13/2005				
DESCRIPTION	Symbol	Color	Consistency	Soil Type	Depth (feet)	Sampler	Penetration Resistance (blows/foot)	In-Place Moisture Content (%)	In-Place Dry Density (pcf)	Pocket Penetrometer Strength (tsf)	Saturation (%)
<b>PAVEMENT (1½" AC over 4" AB)</b> CLAYEY SAND, fine- to coarse-grained, silty, with trace of coarse-grained, angular gravels (rock fragments).  FILL	[Symbol]	Gray	Moderate Compaction	SC	1	[Sampler]	37	7.6	118.0		
					2						
					3						
					4						
SILTY SAND, fine-grained	[Symbol]	Dark Bluish Gray	Very Loose Compaction	SM	5	[Sampler]	6	32.4	83.6		
					6						
					7						
					8						
FAT CLAY, with some fine-grained sands and trace of fine-grained gravels; desiccated, (Bay Mud)  (*1 Test: Liquid limit = 60%, Plastic Limit = 17%, PI = 43%) (*2 Test: Initial void ratio = 0.960, maximum consolidation pressure = ±1,900 psf)	[Symbol]	White & Gray mottled	Firm	CH	8	[Sampler]	Elev -0.66				
					9						
					10						
					11						
					12						
					13						
					14						
					15						
CLEAN SAND, fine to coarse grained, with significant amount of fine-grained, round gravels; poorly graded  (*3 Test: 74% fine to coarse sands, 23% fine gravels, and 3% fines)  (grading with some silts below 18 feet)	[Symbol]	Grayish Brown	Medium Dense	SP	16	[Sampler]	18	15.5	114.4		88.0
					17						
					18						
					19						
					20						
					21						

Remark:

 Groundwater Table
  California Split Spoon Sampler, 2-inch inside diameter

\* AC: Asphaltic Concrete, AB: Aggregate Base

<b>Billy Lin and Associates</b>  5088 CRIBARI BLUFFS SAN JOSE, CALIFORNIA 95135 PHONE: (408) 531-9889 FAX: (408) 531-8913 E-MAIL: billy.lin@sbcglobal.net	<b>EXPLORATORY BORING LOGS</b>			
	<b>HOTEL/CONDOMINIUM COMPLEX</b>			
	<b>1700 EMBARCADERO ROAD, PALO ALTO, CA</b>			
	Project Number	Date	Boring Number	Page No.
267-02	11/16/2005	EB-1	1 of 3	

**DRILL RIG:** Truck-Mounted CME-75 with continuous hollow-stem flight augers

**SURFACE ELEVATION:** 7.34 feet (±)

**LOGGED BY:** Billy Lin


**GROUNDWATER:** 7 feet below existing ground surface


**BORING DIAMETER:** 8 inches

**DATE DRILLED:** 10/13/2005

DESCRIPTION	Symbol	Color	Consistency	Soil Type	Depth (feet)	Sampler	Penetration Resistance (blows/foot)	In-Place Moisture Content (%)	In-Place Dry Density (pcf)	Pocket Penetrometer Strength (fsf)	Saturation (%)
CLEAN SAND (continued) (*1 Test: 62% fine to coarse sands, 30% fine to coarse gravels and 8% fines)		Gray	Very Dense	SP	21	*1	69	11.8	124.6		90.0
					22						
					23						
					24						
					25						
SILTY CLAY		Light Brown	Stiff	CL	25		25	23.6	108.4	1.7	
					26						
CLEAN SAND, fine to coarse grained, fine gravelly, with some silts; poorly graded; locally with clayey sand pockets  (*2 Test: 60% fine to coarse sands, 32% fine gravels, and 8% silts)  (graded to fine-grained sands below 34 feet)		Grayish Brown	Dense	SP	27		32	10.9	115.8		
					28						
					29						
					30						
					31						
					32						
					33						
					34						
					35						
					36						
LEAN CLAY, with some fine-grained sands		Greenish Gray	Medium Dense	CL-CH	37		12	18.9	112.3		
					38						
					39						
					40						
LEAN CLAY, with some fine-grained sands		Bluish Gray	Very Stiff	CL-CH	38	Elev -30.66					
					39						
					40						
					40						

Remark:

 Groundwater Table

 California Split Spoon Sampler, 2-inch inside diameter

**Billy Lin and Associates**

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**EXPLORATORY BORING LOGS**

**HOTEL/CONDOMINIUM COMPLEX  
1700 EMBARCADERO ROAD, PALO ALTO, CA**

Project Number	Date	Boring Number	Page No.
267-02	11/16/2005	EB-1	2 of 3



**DRILL RIG:** Truck-Mounted CME-75 with continuous hollow-stem flight augers

**SURFACE ELEVATION:** 7.34 feet (±)

**LOGGED BY:** Billy Lin


**GROUNDWATER:** 7 feet below existing ground surface


**BORING DIAMETER:** 8 inches

**DATE DRILLED:** 10/13/2005

DESCRIPTION	Symbol	Color	Consistency	Soil Type	Depth (feet)	Sampler	Penetration Resistance (blows/foot)	In-Place Moisture Content (%)	In-Place Dry Density (pcf)	Pocket Penetrometer Strength (fsf)	Saturation (%)
LEAN CLAY (continued)  (*1 Test: Liquid limit = 49%, plastic limit = 17%, PI = 32%)	[Symbol]	Bluish Gray	Very Stiff	CL-CH	41	*1	26	24.5	102.5		99.6
					42						
					43						
CLEAN SAND, fine to medium grained, with some coarse gravels	[Symbol]	Grayish Brown	Dense	SP	44		29	21.6	104.4		
					45						
					46						
					47						
BOTTOM OF BORING = ±46.5 FEET					48						
					49						
					50						
					51						
					52						
					53						
					54						
					55						
					56						
					57						
					58						
					59						
					60						

Remark:

 Groundwater Table

 California Split Spoon Sampler, 2-inch inside diameter

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	<b>HOTEL/CONDOMINIUM COMPLEX</b> <b>1700 EMBARCADERO ROAD, PALO ALTO, CA</b>			
	Project Number	Date	Boring Number	Page No.
	267-02	11/16/2005	EB-1	3 of 3

**DRILL RIG:** Truck-Mounted CME-75 with continuous hollow-stem flight augers **SURFACE ELEVATION:** 8.74 feet (±) **LOGGED BY:** Billy Lin



**GROUNDWATER:** 6 feet below existing ground surface **BORING DIAMETER:** 8 inches **DATE DRILLED:** 10/13/2005

DESCRIPTION	Symbol	Color	Consistency	Soil Type	Depth (feet)	Sampler	Penetration Resistance (blows/foot)	In-Place Moisture Content (%)	In-Place Dry Density (pcf)	Pocket Penetrometer Strength (tsf)	Saturation (%)
PAVEMENT (2" AC over 6" AB)											
SILTY CLAY, with fine- to coarse-grained sands and some fine- to coarse-grained gravels (rock & brick fragments)	█	Brown	Loose to Moderate Compaction	CL	1	█	15	17.9	108.8		
					2						
					3						
SILTY CLAY	█	Light Gray & Brown mottled	Loose to Moderate Compaction	CL	4	█	10	22.4	101.3	2.0	
					5						
					6						
FAT CLAY, with organics, (Bay Mud)	█	Bluish Gray	Soft	CH	7	█	4	81.6	52.6	99.8	
					8						
					9						
					10						
					11						
SILTY CLAY, locally with pockets of fine-grained sands and fine-grained gravels	█	Greenish Gray	Stiff	CL	12	█	15	23.0	102.3	1.5	
					13						
					14						
					15						
					16						
					17						
					18						
					19						
					20						

Remark:  Groundwater Table  California Split Spoon Sampler, 2-inch inside diameter

\* AC: Asphaltic Concrete, AB: Aggregate Base

<b>Billy Lin and Associates</b> 5088 CRIBARI BLUFFS SAN JOSE, CALIFORNIA 95135 PHONE: (408) 531-9889 FAX: (408) 531-8913 E-MAIL: billy.lin@sbcglobal.net	<b>EXPLORATORY BORING LOGS</b>			
	<b>HOTEL/CONDOMINIUM COMPLEX</b>			
	<b>1700 EMBARCADERO ROAD, PALO ALTO, CA</b>			
	<b>Project Number</b>	<b>Date</b>	<b>Boring Number</b>	<b>Page No.</b>
267-02	11/16/2005	EB-2	1 of 3	

DRILL RIG: Truck-Mounted CME-75 with continuous hollow-stem flight augers		SURFACE ELEVATION: 8.74 feet (±)				LOGGED BY: Billy Lin							
GROUNDWATER: 6 feet below existing ground surface		BORING DIAMETER: 8 inches				DATE DRILLED: 10/13/2005							
DESCRIPTION	Symbol	Color	Consistency	Soil Type	Depth (feet)	Sampler	Penetration Resistance (blows/foot)	In-Place Moisture Content (%)	In-Place Dry Density (pcf)	Pocket Penetrometer Strength (tsf)	Saturation (%)		
<b>SILTY CLAY (continued)</b>  (*1 Test: Liquid limit = 32%, Plastic Limit = 21%, PI = 11%)  (Grading with significantly less silts, but more fine-grained sands with depth below 22 feet)	[Symbol]	Greenish Gray & Brown mottled	Stiff	CL	21	*1	12	27.2	96.8		99.0		
					22								
					23								
					24								
					25								
					26								
					27								
					28								
					29								
					30								
<b>SANDY CLAY, fine- to coarse-grained sands</b>  (*2 Test: Liquid limit = 32%, Plastic Limit = 17%, PI = 15%) (*3 Test: Initial void ratio = 0.726, maximum consolidation pressure = ± 2,150 psf)  (with a 6" layer of fine- to coarse-grained sand and trace of sub-angular coarse-grained gravels below 35½ feet)	[Symbol]	Brown	Stiff	CL	31	*2 *3	11	26.2	99.5				
					32								
					33								
					34								
					35								
					36								
					37								
					38								
					39								
					40								
<b>LEAN CLAY, with some fine-grained sands</b>	[Symbol]	Bluish Gray	Very Stiff	CL-CH	38	Elev -29.26	9	22.1	104.2				
					39								
Remark:  Groundwater Table  California Split Spoon Sampler, 2-inch inside diameter													
<b>Billy Lin and Associates</b>  5088 CRIBARI BLUFFS SAN JOSE, CALIFORNIA 95135 PHONE: (408) 531-9889 FAX: (408) 531-8913 E-MAIL: billy.lin@sbcglobal.net						<b>EXPLORATORY BORING LOGS</b>  <b>HOTEL/CONDOMINIUM COMPLEX</b> <b>1700 EMBARCADERO ROAD, PALO ALTO, CA</b>							
						Project Number		Date		Boring Number		Page No.	
						267-02		11/16/2005		EB-2		2 of 3	

DRILL RIG: Truck-Mounted CME-75 with continuous hollow-stem flight augers

SURFACE ELEVATION: 8.74 feet (±)

LOGGED BY: Billy Lin

GROUNDWATER: 6 feet below existing ground surface

BORING DIAMETER: 8 inches

DATE DRILLED: 10/13/2005

DESCRIPTION	Symbol	Color	Consistency	Soil Type	Depth (feet)	Sampler	Penetration Resistance (blows/foot)	In-Place Moisture Content (%)	In-Place Dry Density (pcf)	Pocket Penetrometer Strength (fsf)	Saturation (%)
LEAN CLAY (continued)	[Symbol]	Light Bluish Gray	Very Stiff	CL-CH	41	[Sampler]	23	28.1	94.5	2.6	
					42						
					43						
					44						
					45						
SANDY SILT to SILTY SAND, fine-grained	[Symbol]	Light Gray	Medium Dense	ML-SM	46	[Sampler]	16	27.7	94.7		
BOTTOM OF BORING = ±46.5 FEET					47						
					48						
					49						
					50						
					51						
					52						
					53						
					54						
					55						
					56						
					57						
					58						
					59						
					60						

Remark:

 Groundwater Table

 California Split Spoon Sampler, 2-inch inside diameter

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**EXPLORATORY BORING LOGS**

**HOTEL/CONDOMINIUM COMPLEX**  
**1700 EMBARCADERO ROAD, PALO ALTO, CA**

Project Number	Date	Boring Number	Page No.
267-02	11/16/2005	EB-2	3 of 3

**DRILL RIG:** Truck-Mounted CME-75 with continuous hollow-stem flight augers

**SURFACE ELEVATION:** 8.07 feet (±)

**LOGGED BY:** Billy Lin

**GROUNDWATER:** 5 feet below existing ground surface

**BORING DIAMETER:** 8 inches

**DATE DRILLED:** 10/14/2005

DESCRIPTION	Symbol	Color	Consistency	Soil Type	Depth (feet)	Sampler	Penetration Resistance (blows/foot)	In-Place Moisture Content (%)	In-Place Dry Density (pcf)	Penetrometer Strength (tsf)	Saturation (%)
<b>PAVEMENT (1" AC over 3" AB)</b> <b>SILTY CLAY</b> , with significant amount of fine- to coarse-grained sands, and some fine-grained gravels  (grading very silty below 3.5 feet)  (*1 Test: Liquid limit = 31%, Plastic Limit = 20%, PI = 11%)	█	Dark Grayish Brown	Moderate Compaction	CL	1	█	29	6.4	124.7		
					2						
					3						
					4						
					5						
					6						
					7						
<b>FAT CLAY</b> , with organics, (Bay Mud)  (*2 Test: Liquid limit = 72%, Plastic Limit = 30%, PI = 42%)	█	Bluish Gray	Soft	CH	8	█	4	83.1	51.9		99.7
					9						
					10						
					11						
					12						
					13						
					14						
					15						
					16						
					17						
					18						
<b>CLEAN SAND</b> , fine- to coarse-grained, fine gravelly, with some silts; poorly graded  (*3 Test: 72% fine to coarse sands, 18% fine gravels, and 10% silts)	█	Gray	Loose	SP	13	█	17	15.1	115.9		89.7
					14						
					15						
					16						
					17						
					18						
					19						
					20						

Remark:

▬ Groundwater Table

▬ California Split Spoon Sampler, 2-inch inside diameter

\* AC: Asphaltic Concrete, AB: Aggregate Base

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**EXPLORATORY BORING LOGS**

**HOTEL/CONDOMINIUM COMPLEX**  
**1700 EMBARCADERO ROAD, PALO ALTO, CA**

Project Number	Date	Boring Number	Page No.
267-02	11/16/2005	EB-3	1 of 3

DRILL RIG: Truck-Mounted CME-75 with continuous hollow-stem flight augers		SURFACE ELEVATION: 8.07 feet (±)				LOGGED BY: Billy Lin							
GROUNDWATER: 5 feet below existing ground surface		BORING DIAMETER: 8 inches				DATE DRILLED: 10/14/2005							
DESCRIPTION	Symbol	Color	Consistency	Soil Type	Depth (feet)	Sampler	Penetration Resistance (blows/foot)	In-Place Moisture Content (%)	In-Place Dry Density (pcf)	Pocket Penetrometer Strength (tsf)	Saturation (%)		
CLEAN SAND (continued)  (grading with no gravel below 24 feet)  (*1 Test: 97% fine to medium sands, 3% fines)  (grading fine gravelly again below 28 feet)  (grading to fine-grained CLEAN SAND below 33 feet)		Gray & Brown mottled	Medium Dense	SP	21		20	15.4	114.2				
		22											
		23											
		24											
		25											
		(*1 Test: 97% fine to medium sands, 3% fines)		Greenish Gray	Loose		26	*1	2	20.2	105.4		91.0
				27									
				28									
				29									
		(grading fine gravelly again below 28 feet)		Brown	Medium Dense		30		22	17.7	114.6		
							31						
							32						
							33						
							34						
							35						
(grading to fine-grained CLEAN SAND below 33 feet)					36		11	17.4	110.7				
					37								
					38								
					39								
					40								
LEAN CLAY, with some fine-grained sands		Bluish Gray	Very Stiff	CL-CH	Elev -27.93								

Remark:

 Groundwater Table



California Split Spoon Sampler, 2-inch inside diameter

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**EXPLORATORY BORING LOGS**

**HOTEL/CONDOMINIUM COMPLEX  
1700 EMBARCADERO ROAD, PALO ALTO, CA**

Project Number	Date	Boring Number	Page No.
267-02	11/16/2005	EB-3	2 of 3

**DRILL RIG:** Truck-Mounted CME-75 with continuous hollow-stem flight augers

**SURFACE ELEVATION:** 8.07 feet (±)

**LOGGED BY:** Billy Lin

**GROUNDWATER:** 5 feet below existing ground surface

**BORING DIAMETER:** 8 inches

**DATE DRILLED:** 10/14/2005

DESCRIPTION	Symbol	Color	Consistency	Soil Type	Depth (feet)	Sampler	Penetration Resistance (blows/foot)	In-Place Moisture Content (%)	In-Place Dry Density (pcf)	Pocket Penetrometer Strength (tsf)	Saturation (%)
LEAN CLAY (continued)		Bluish Gray	Very Stiff	CL-CH	41		20	26.0	97.5	2.3	
					42						
					43						
					44						
					45						
					46						
					46						
BOTTOM OF BORING = ±46.5 FEET					47						
					48						
					49						
					50						
					51						
					52						
					53						
					54						
					55						
					56						
					57						
					58						
					59						
					60						

Remark:

 Groundwater Table

 California Split Spoon Sampler, 2-inch inside diameter

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EXPLORATORY BORING LOGS			
HOTEL/CONDOMINIUM COMPLEX			
1700 EMBARCADERO ROAD, PALO ALTO, CA			
Project Number	Date	Boring Number	Page No.
267-02	11/16/2005	EB-3	3 of 3

DRILL RIG: Truck-Mounted CME-75 with continuous hollow-stem flight augers		SURFACE ELEVATION: 6.50 feet (±)				LOGGED BY: Billy Lin						
GROUNDWATER: 6 feet below existing ground surface		BORING DIAMETER: 8 inches				DATE DRILLED: 10/14/2005						
DESCRIPTION	Symbol	Color	Consistency	Soil Type	Depth (feet)	Sampler	Penetration Resistance (blows/foot)	In-Place Moisture Content (%)	In-Place Dry Density (pcf)	Pocket Penetrometer Strength (tsf)	Saturation (%)	
PAVEMENT (2" AC over 3" AB) SILTY CLAY, with significant amount of fine-grained sands, and with trace of fine-grained gravels (broken rock fragments)	█	Dark Grayish	Moderate Compaction	CL	1	█	21	13.3	116.8			
2												
3												
4					Elev. +2.50							
FAT CLAY, with organics, desiccated, (Bay Mud)  (*1 Test: Liquid limit = 76%, Plastic Limit = 31%, PI = 45%)	█	Light Bluish Gray	Firm	CH	5	█	6	57.9	64.4	0.5	96.5	
6					*1							Elev. +0.50
7					Elev. -1.50							
8												
SILTY CLAY	█	Bluish Gray	Stiff	CL	9	█	14	24.0	99.2	1.7		
10												
11												
12												
SANDY CLAY, fine- to coarse-grained sands  (*2 Test: 28% fine to coarse sands, 2% fine gravels, and 70% silts & clays) (grading sandier below 16 feet)	█	Light Bluish Gray	Firm to Stiff	CL	13	█	9	26.8	97.8	0.8	99.6	
14												
15					*2							
16												
SILTY CLAY	█	Light Gray & Brown mottled	Stiff	CL	17	█						
18												
19												
20												

Remark:

 Groundwater Table

 California Split Spoon Sampler, 2-inch inside diameter

\* AC: Asphaltic Concrete, AB: Aggregate Base

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	<b>HOTEL/CONDOMINIUM COMPLEX 1700 EMBARCADERO ROAD, PALO ALTO, CA</b>			
	Project Number	Date	Boring Number	Page No.
	267-02	11/16/2005	EB-4	1 of 3



**DRILL RIG:** Truck-Mounted CME-75 with continuous hollow-stem flight augers

**SURFACE ELEVATION:** 6.50 feet (±)

**LOGGED BY:** Billy Lin

**GROUNDWATER:** 6 feet below existing ground surface

**BORING DIAMETER:** 8 inches

**DATE DRILLED:** 10/14/2005

DESCRIPTION	Symbol	Color	Consistency	Soil Type	Depth (feet)	Sampler	Penetration Resistance (blows/foot)	In-Place Moisture Content (%)	In-Place Dry Density (pcf)	Pocket Penetrometer Strength (tsf)	Saturation (%)
<b>SILTY CLAY (continued)</b>  (grading with some fine-grained sands below 23½ feet; locally with lenses and pockets of fine-grained sands)	[Symbol]	Light Gray & Brown mottled	Stiff	CL	21	[Sampler]	15	24.8	99.8	1.7	
					22						
					23						
					24						
					25						
					26						
					27						
<b>CLEAN TO SILTY SAND</b> , fine to coarse grained; locally with sandy clay pockets  (*1 Test: 74% fine to coarse sands, 2% fine gravels, and 24% silts & clays)  (grading with fine-grained, round, gravels also below 35 feet)	[Symbol]	Greenish Gray	Loose	SP-SM	27	[Sampler]	6	25.1	101.7		
					28						
					29						
					30						
					31						
					32						
					33						
					34						
					35						
					36						
<b>LEAN CLAY</b> , with some fine-grained sands	[Symbol]	Light Bluish Gray	Stiff	CL-CH	36	[Sampler]	9	32.3	86.2		
					37						
					38						
					39						
					40						

Remark:

 Groundwater Table

 California Split Spoon Sampler, 2-inch inside diameter

**Billy Lin and Associates**



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EXPLORATORY BORING LOGS			
HOTEL/CONDOMINIUM COMPLEX			
1700 EMBARCADERO ROAD, PALO ALTO, CA			
Project Number	Date	Boring Number	Page No.
267-02	11/16/2005	EB-4	2 of 3

DRILL RIG: Truck-Mounted CME-75 with continuous hollow-stem flight augers SURFACE ELEVATION: 6.50 feet (±) LOGGED BY: Billy Lin

GROUNDWATER: 6 feet below existing ground surface BORING DIAMETER: 8 inches DATE DRILLED: 10/14/2005

DESCRIPTION	Symbol	Color	Consistency	Soil Type	Depth (feet)	Sampler	Penetration Resistance (blows/foot)	In-Place Moisture Content (%)	In-Place Dry Density (pcf)	Pocket Penetrometer Strength (tsf)	Saturation (%)
LEAN CLAY (continued)		Light Bluish Gray	Stiff	CL-CH	41		13	30.9	90.1	2.0	
					42						
					43						
					44						
					45						
					46						
					46						
BOTTOM OF BORING = ±46.5 FEET					47						
					48						
					49						
					50						
					51						
					52						
					53						
					54						
					55						
					56						
					57						
					58						
					59						
					60						

Remark:  Groundwater Table  California Split Spoon Sampler, 2-inch inside diameter

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	<b>HOTEL/CONDOMINIUM COMPLEX 1700 EMBARCADERO ROAD, PALO ALTO, CA</b>			
	<b>Project Number</b>	<b>Date</b>	<b>Boring Number</b>	<b>Page No.</b>
	267-02	11/16/2005	EB-4	3 of 3

## **APPENDIX B**

### **SUMMARY OF LABORATORY TEST RESULTS**

Samples from the subsurface exploration were selected for tests to help evaluate the physical and engineering properties of the soils. The tests performed are briefly described below.

The natural moisture content was determined in accordance with ASTM D2216 on selected samples recovered from the borings. This test determines the moisture content, representative of field conditions, at the time the samples were collected. The results are presented on the boring logs at the appropriate sample depths.

The Atterberg Limits were determined on ten samples in accordance with ASTM D4318. The Atterberg Limits are the moisture content within which the soil is workable or plastic. The results of these tests are presented in Figure B-1, B-2, and B-3 and on the boring logs at the appropriate sample depths.

The particle size distribution was determined on ten samples of soil in accordance with ASTM D422. The results of these tests are presented in Figure B-4 and B-5 and on the boring logs at the appropriate sample depths.

The following corrosion potential tests were performed by Cooper Testing Laboratory on six samples of surface and near-surface soil from the site: resistivity, pH, chloride content, sulfate content, and Redox Potential (Oxidation/Reduction Potential). The test methods that were used and the results of these tests are included in this appendix.



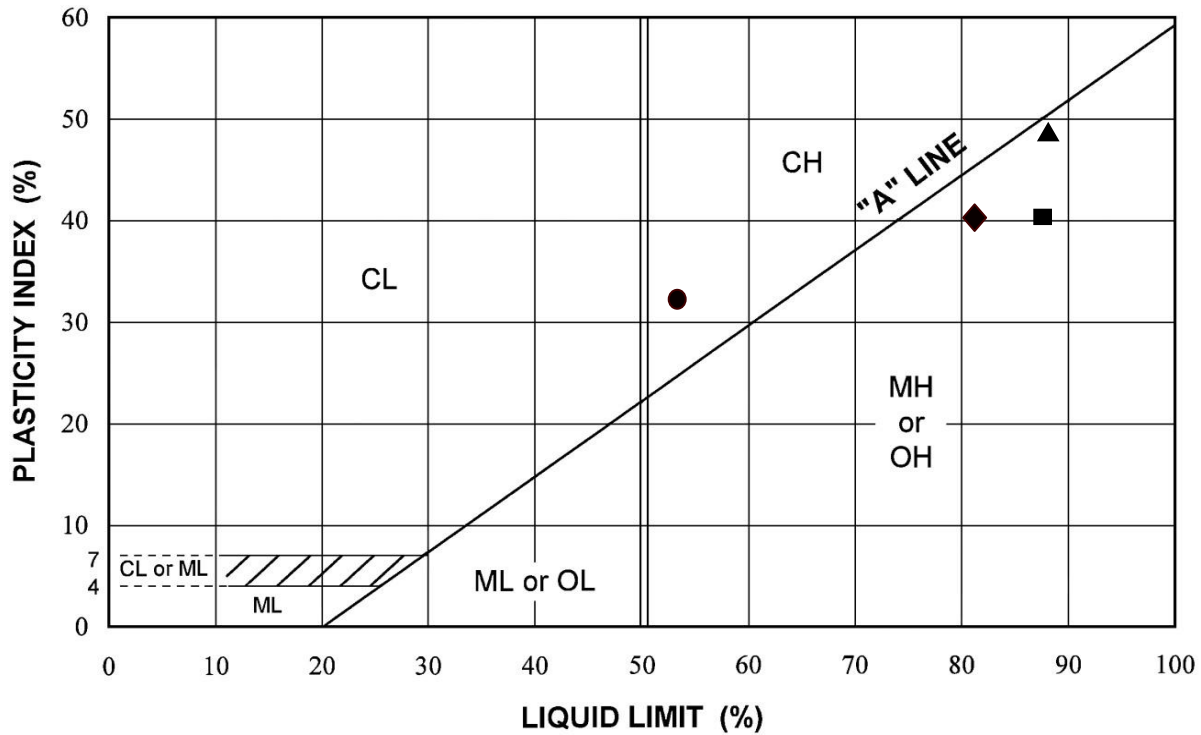
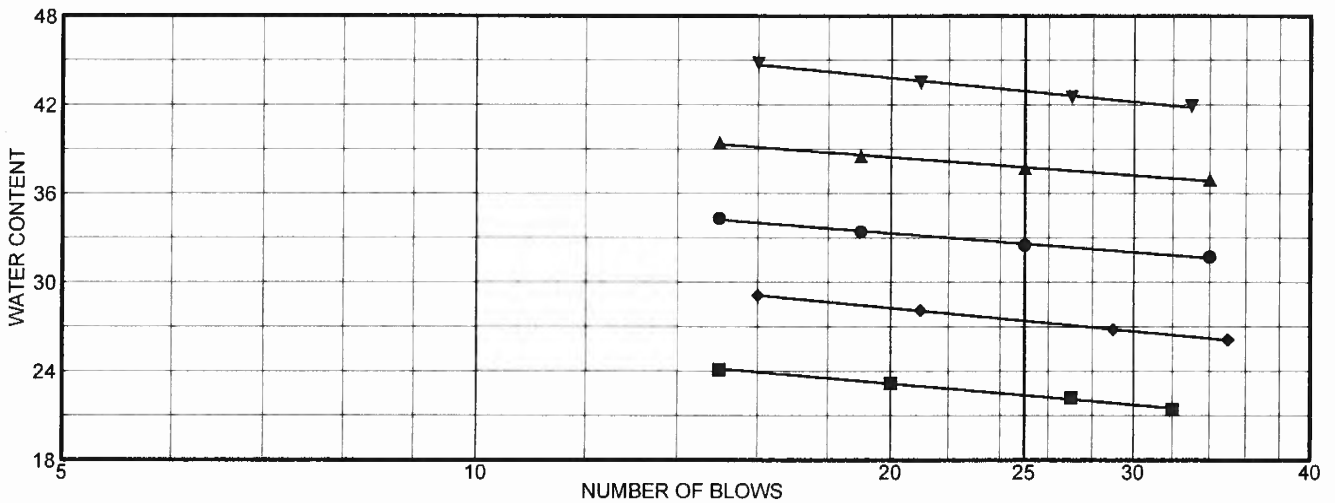
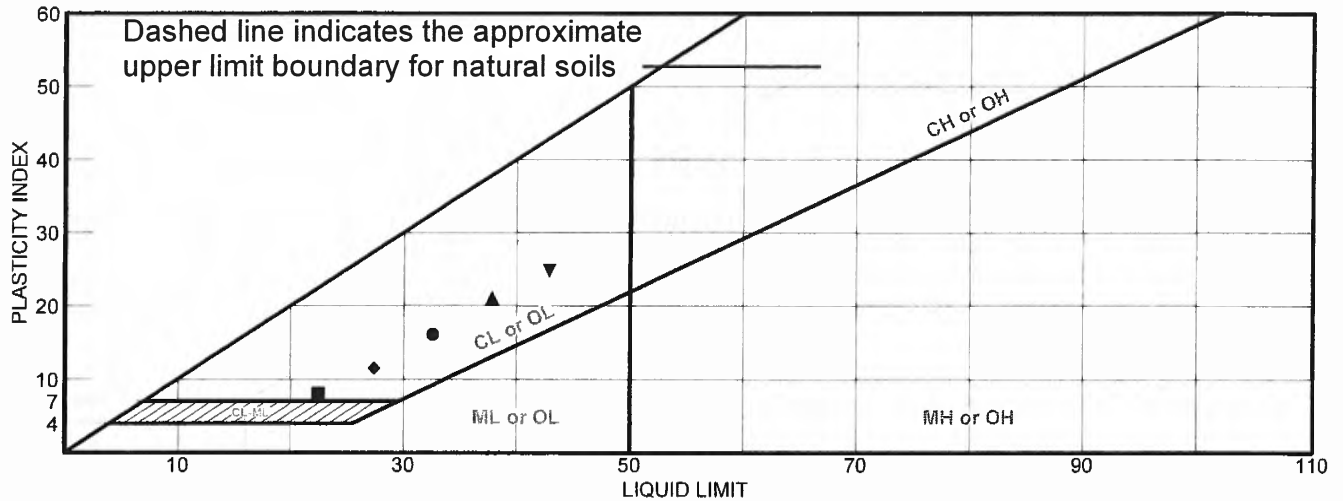


Chart Symbol	Boring Number	Sample Depth (feet)	Water Content (percent)	Liquid Limit (percent)	Plasticity Index (percent)	Liquidity Index (percent)	Passing No. 200 Sieve (percent)	USCS Soil Classification
■	EB-5	6-6.5	62	88	40	35	91	CH/OH
▲	EB-6	8.5-9	81	89	48	83	95	CH/OH
●	EB-7	12-12.5	32	53	32	34	66	CH
◆	EB-8	6-6.5	78	81	40	93	92	CH/OH

**PLASTICITY CHART**  
WU-CHUNG HOTEL COMPLEX  
PALO ALTO, CALIFORNIA

**FIGURE B-1**  
DECEMBER 2013  
PROJECT NO. 2317-1A

# LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Very Dark Brown Sandy Lean CLAY	32.6	16.5	16.1	76.5	51.2	CL
■	Very Dark Bluish Gray Lean Clayey SAND	22.4	14.4	8.0	86.7	27.8	SC
▲	Very Dark Brown Sandy Lean CLAY	37.8	16.8	21.0	74.8	55.7	CL
◆	Very Dark Brown Sandy Lean CLAY	27.4	15.9	11.5	83.7	61.3	CL
▼	Very Dark Brown Lean CLAY w/ Sand	42.9	18.1	24.8	84.5	70.8	CL

**Project No.** 192-170      **Client:** Romig Engineers, Inc.

**Project:** Wu-Chung Hotel Complex - 2317-1A

● **Source:** EB-5

**Elev./Depth:** 1.5-2'

■ **Source:** EB-5

**Elev./Depth:** 13.5-14'

▲ **Source:** EB-6

**Elev./Depth:** 2.5-4'

◆ **Source:** EB-7

**Elev./Depth:** 1.5-2'

▼ **Source:** EB-7

**Elev./Depth:** 6-6.5'

**Remarks:**

- 
- 
- ▲
- ◆
- ▼

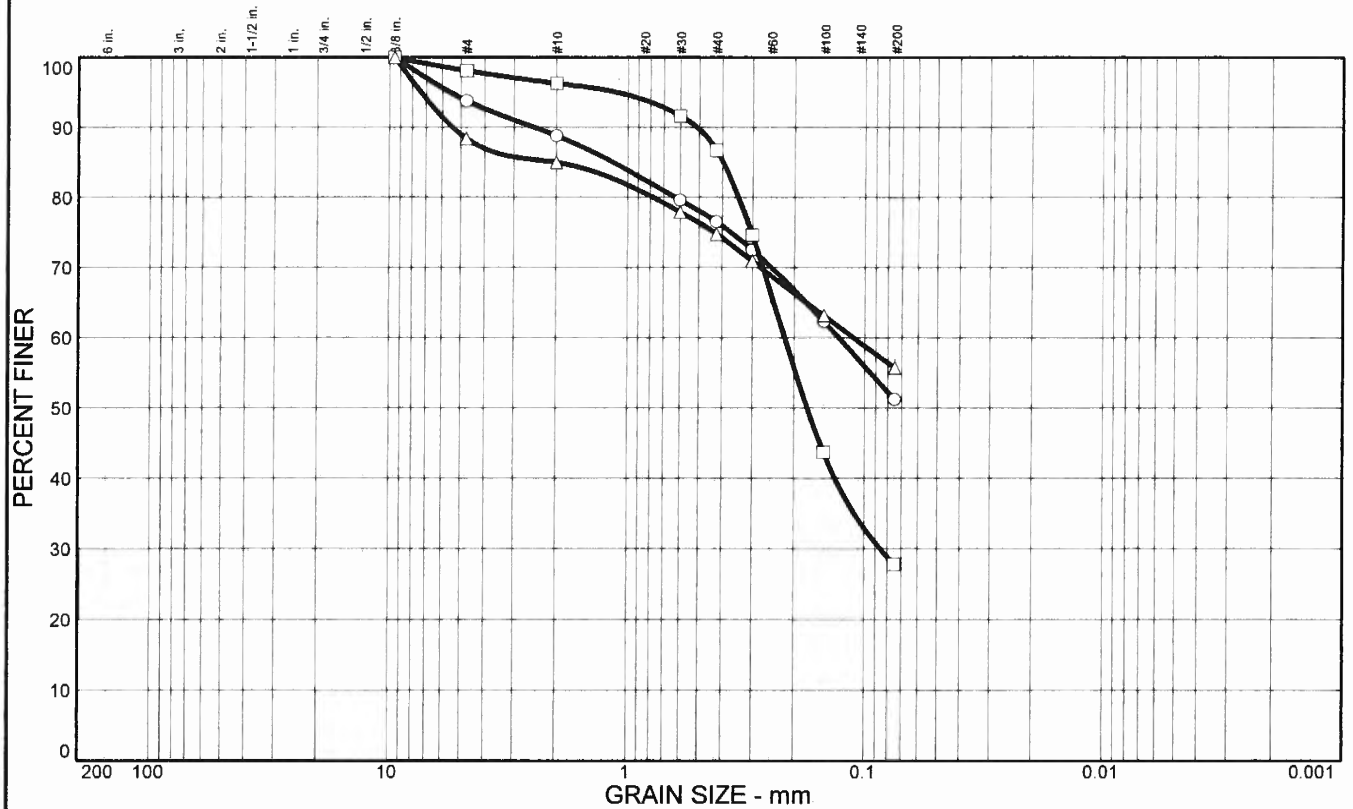
LIQUID AND PLASTIC LIMITS TEST REPORT

## COOPER TESTING LABORATORY

Figure **B-2**



# Particle Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		6.2	42.6	51.2		CL		16.5	32.6
□		1.9	70.3	27.8		SC		14.4	22.4
△		11.6	32.7	55.7		CL		16.8	37.8

SIEVE inches size	PERCENT FINER		
	○	□	△
3/8"	100.0	100.0	100.0
GRAIN SIZE			
D <sub>60</sub>	0.130	0.219	0.113
D <sub>30</sub>	0.0855		
D <sub>10</sub>	0.075		
COEFFICIENTS			
C <sub>c</sub>			
C <sub>u</sub>			

SIEVE number size	PERCENT FINER		
	○	□	△
#4	93.8	98.1	88.4
#10	88.8	96.3	85.0
#30	79.6	91.6	77.9
#40	76.5	86.7	74.8
#50	72.5	74.6	70.9
#100	62.3	43.7	63.1
#200	51.2	27.8	55.7

SOIL DESCRIPTION
○ Very Dark Brown Sandy Lean CLAY
□ Very Dark Bluish Gray Lean Clayey SAND
△ Very Dark Brown Sandy Lean CLAY

**REMARKS:**

○

□

△

- Source: EB-5
- Source: EB-5
- △ Source: EB-6

Elev./Depth: 1.5-2'  
 Elev./Depth: 13.5-14'  
 Elev./Depth: 2.5-4'





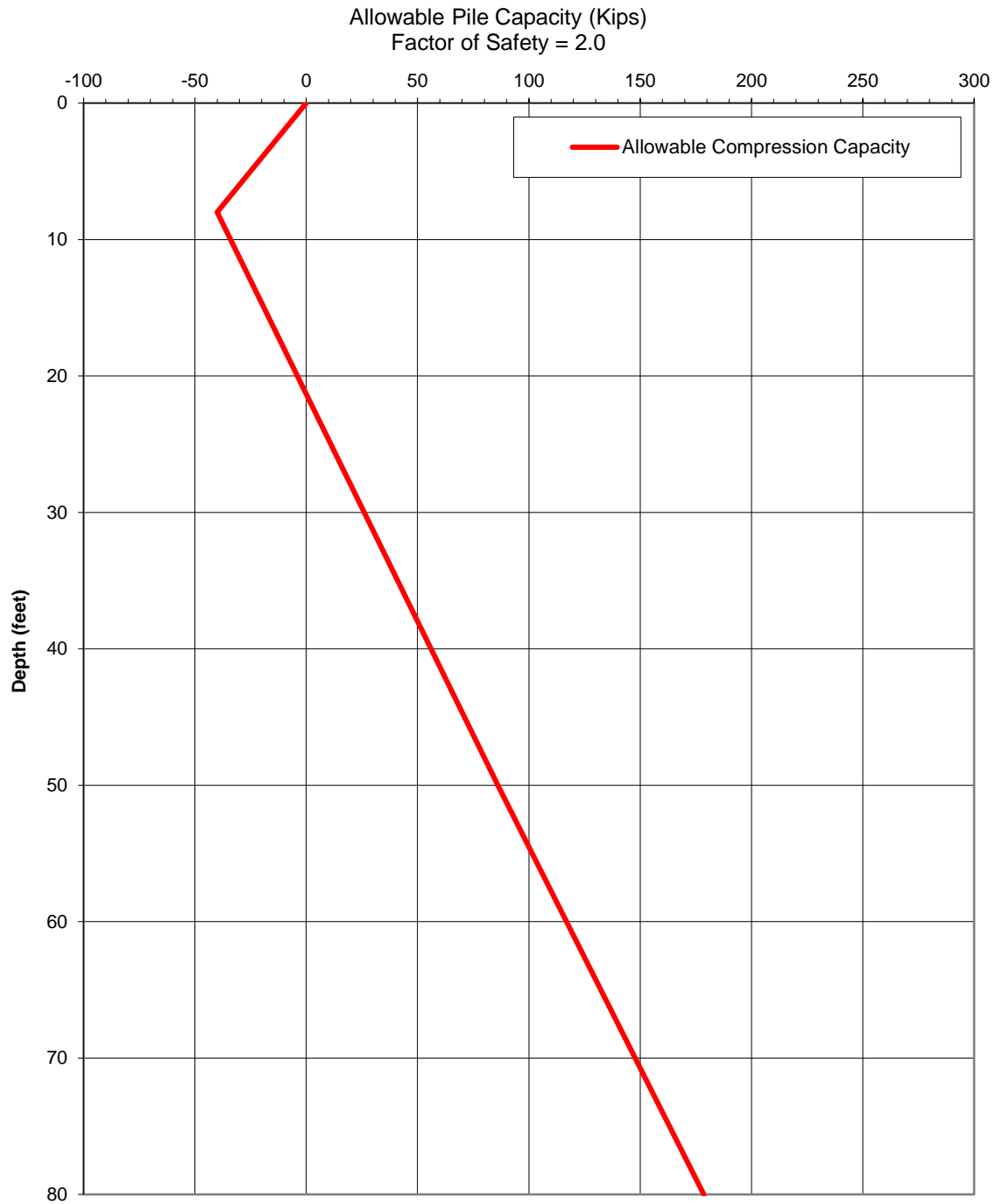


**APPENDIX C**

**PILE CAPACITY ANALYSIS RESULTS**



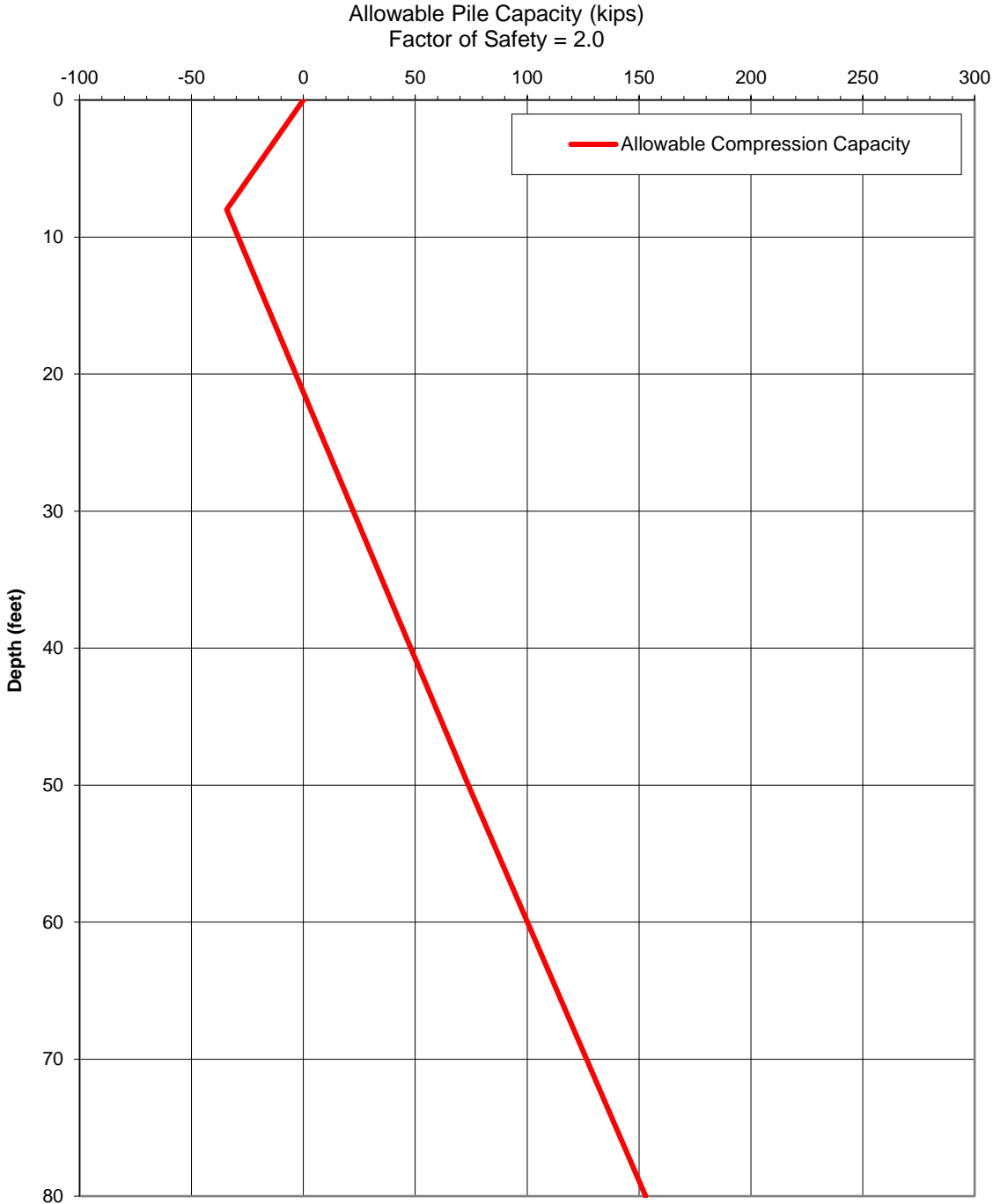
**ALLOWABLE CAPACITY FOR 14-INCH SQUARE CONCRETE PCPS PILE**



**ALLOWABLE 14-INCH SQUARE PCPS PILE CAPACITY**  
MERCEDES-BENZ DEALERSHIP  
PALO ALTO, CALIFORNIA

**FIGURE C-1**  
AUGUST 2015  
PROJECT NO. 3489-1

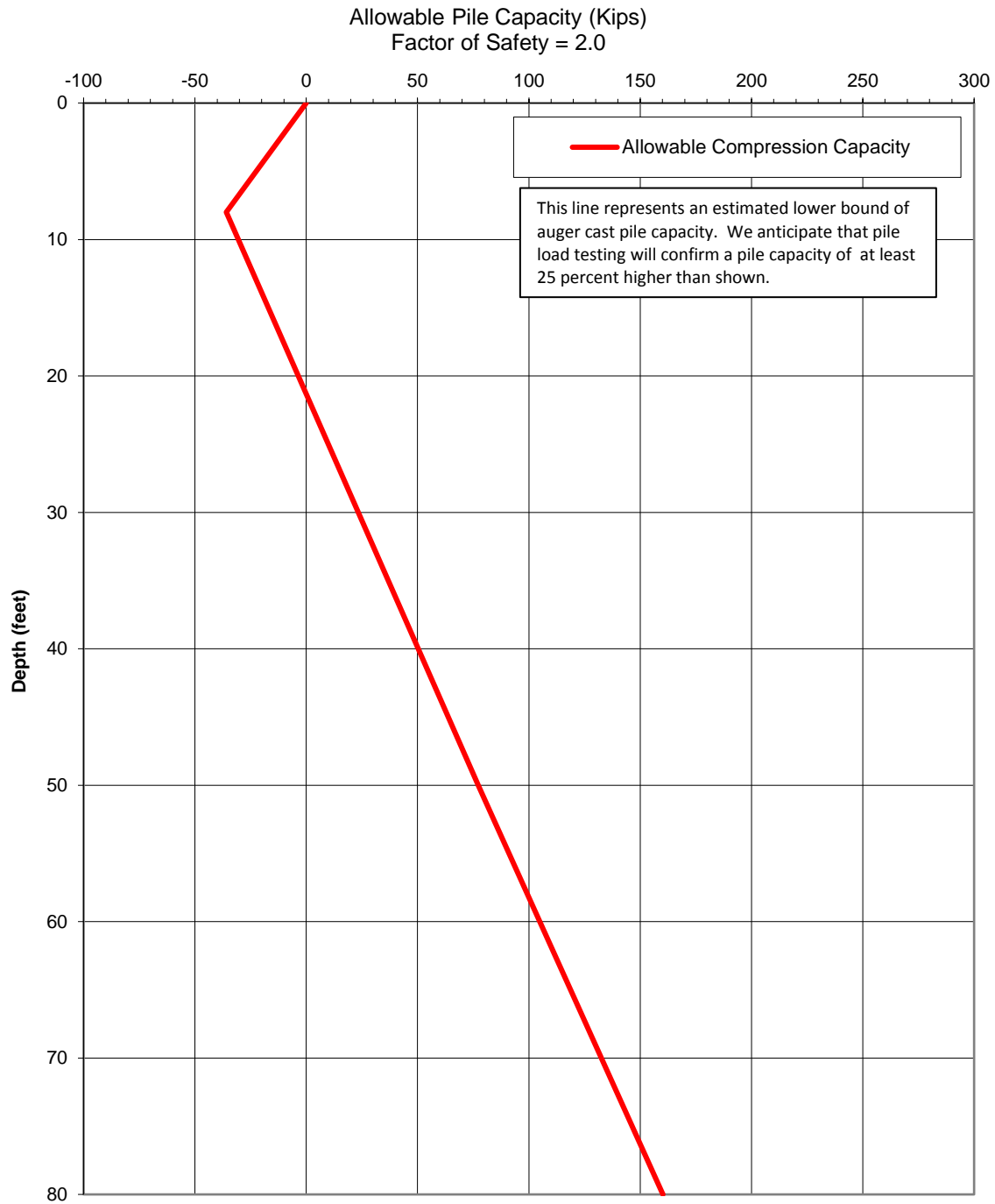
**ALLOWABLE CAPACITY FOR 12-INCH SQUARE CONCRETE PCPS PILE**



**ALLOWABLE 12-INCH SQUARE PCPS PILE CAPACITY**  
MERCEDES-BENZ DEALERSHIP  
PALO ALTO, CALIFORNIA

**FIGURE C-2**  
AUGUST 2015  
PROJECT NO. 3489-1

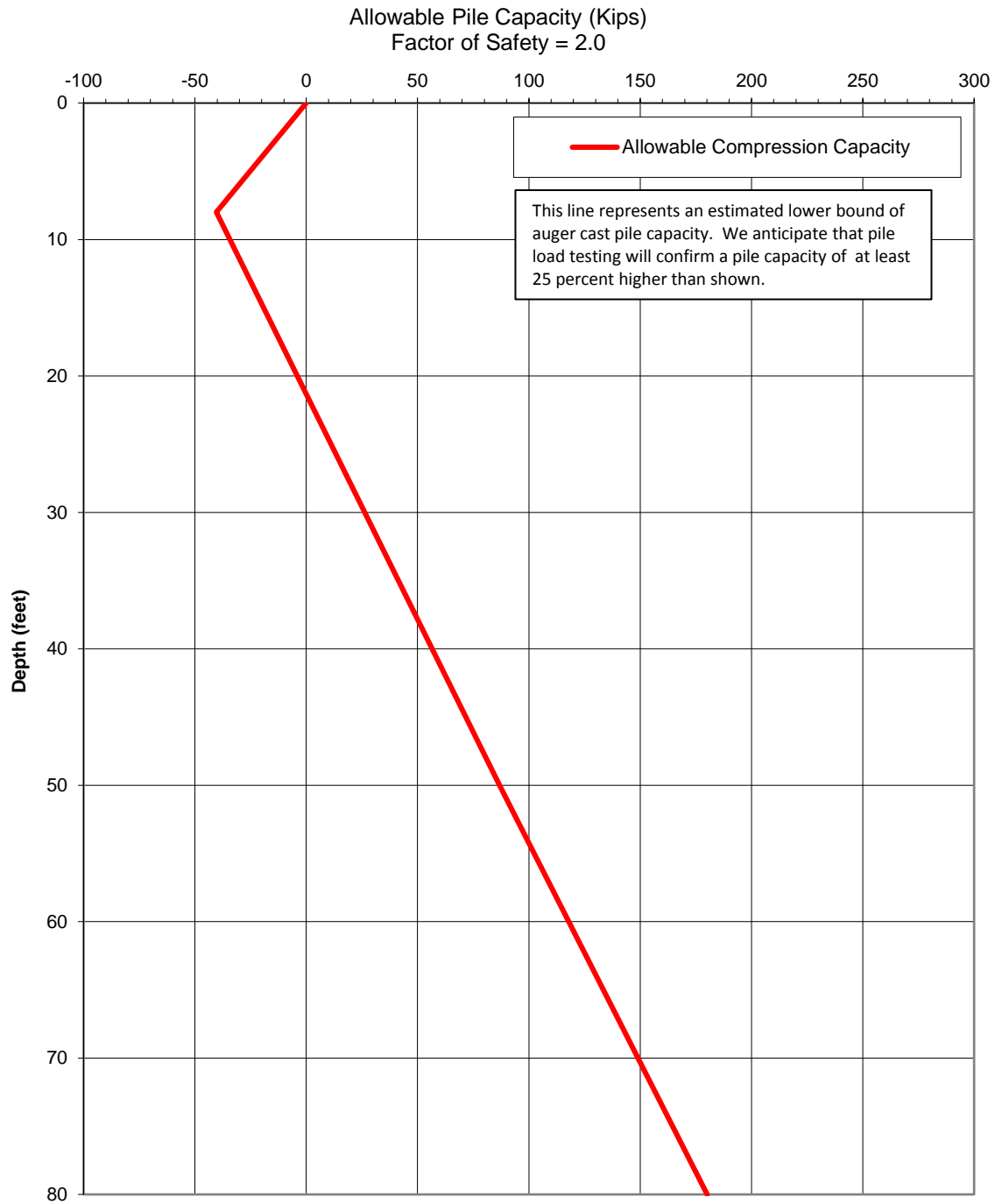
### ALLOWABLE CAPACITY FOR 16-INCH AUGER CAST PILE



**ALLOWABLE 16-INCH AUGER CAST PILE CAPACITY**  
MERCEDES-BENZ DEALERSHIP  
PALO ALTO, CALIFORNIA

**FIGURE C-3**  
AUGUST 2015  
PROJECT NO. 3489-1

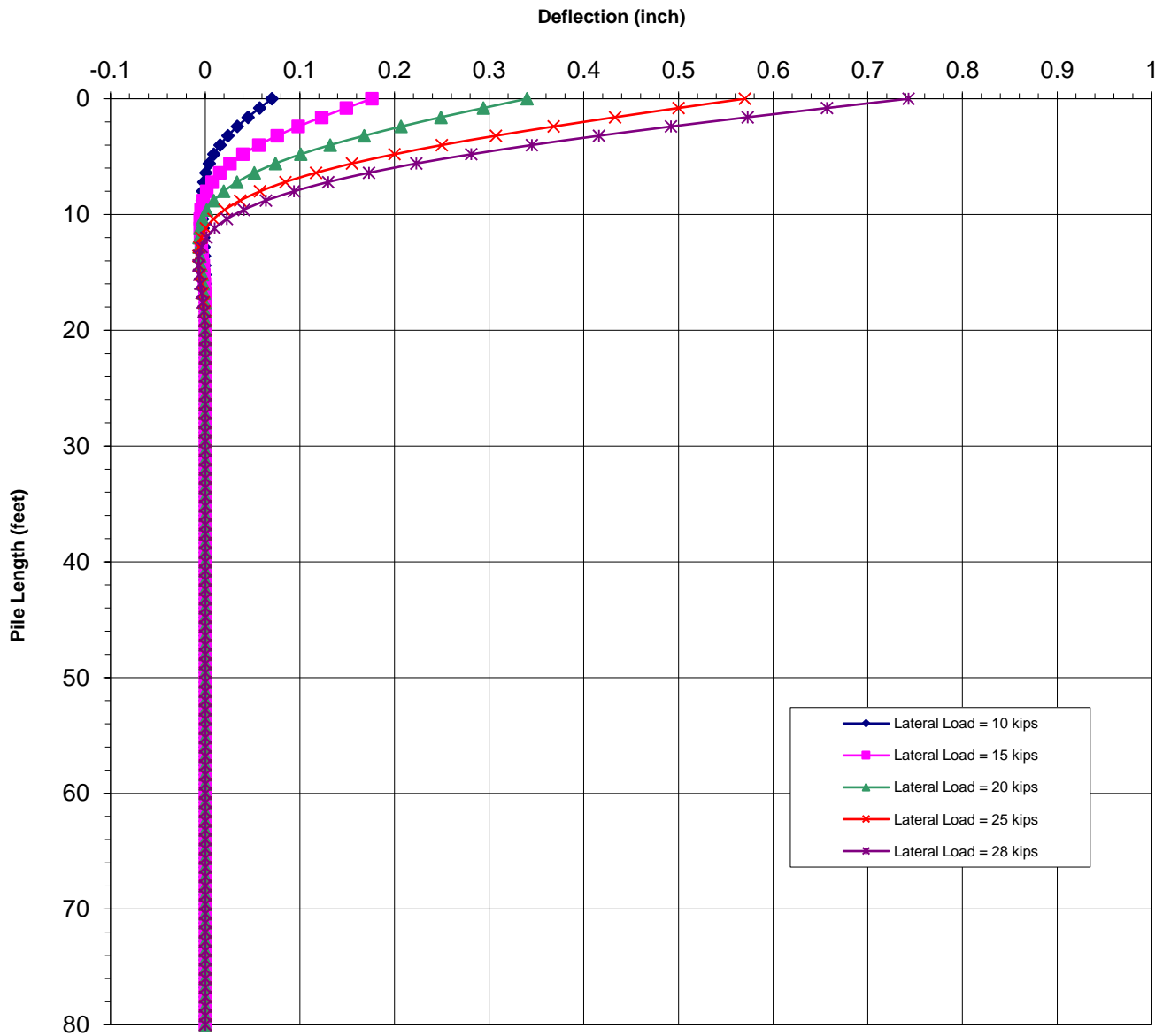
### ALLOWABLE CAPACITY FOR 18-INCH AUGER CAST PILE



**ALLOWABLE 18-INCH AUGER CAST PILE CAPACITY**  
MERCEDES-BENZ DEALERSHIP  
PALO ALTO, CALIFORNIA

**FIGURE C-4**  
AUGUST 2015  
PROJECT NO. 3489-1

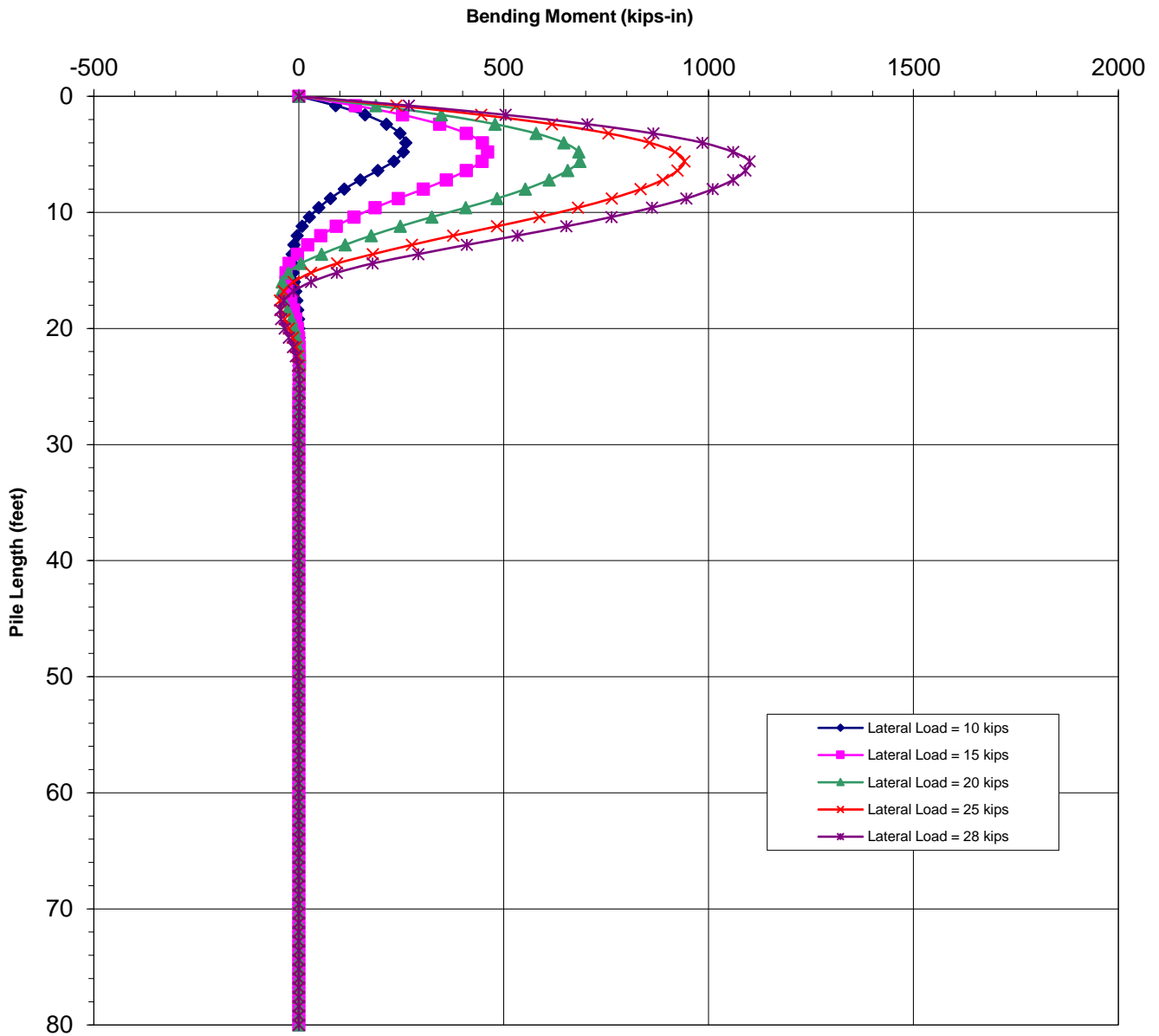
**LATERAL DEFLECTION VS. DEPTH**  
**16-inch Auger Cast Pile, Free Head Condition**



**LATERAL PILE DEFLECTION - FREE HEAD CONDITION**  
MERCEDES BENZ DEALERSHIP  
PALO ALTO, CALIFORNIA

**FIGURE C-5**  
AUGUST 2015  
PROJECT NO. 3498-1

**BENDING MOMENT VS. DEPTH**  
**16-inch Auger Cast Pile, Free Head Condition**

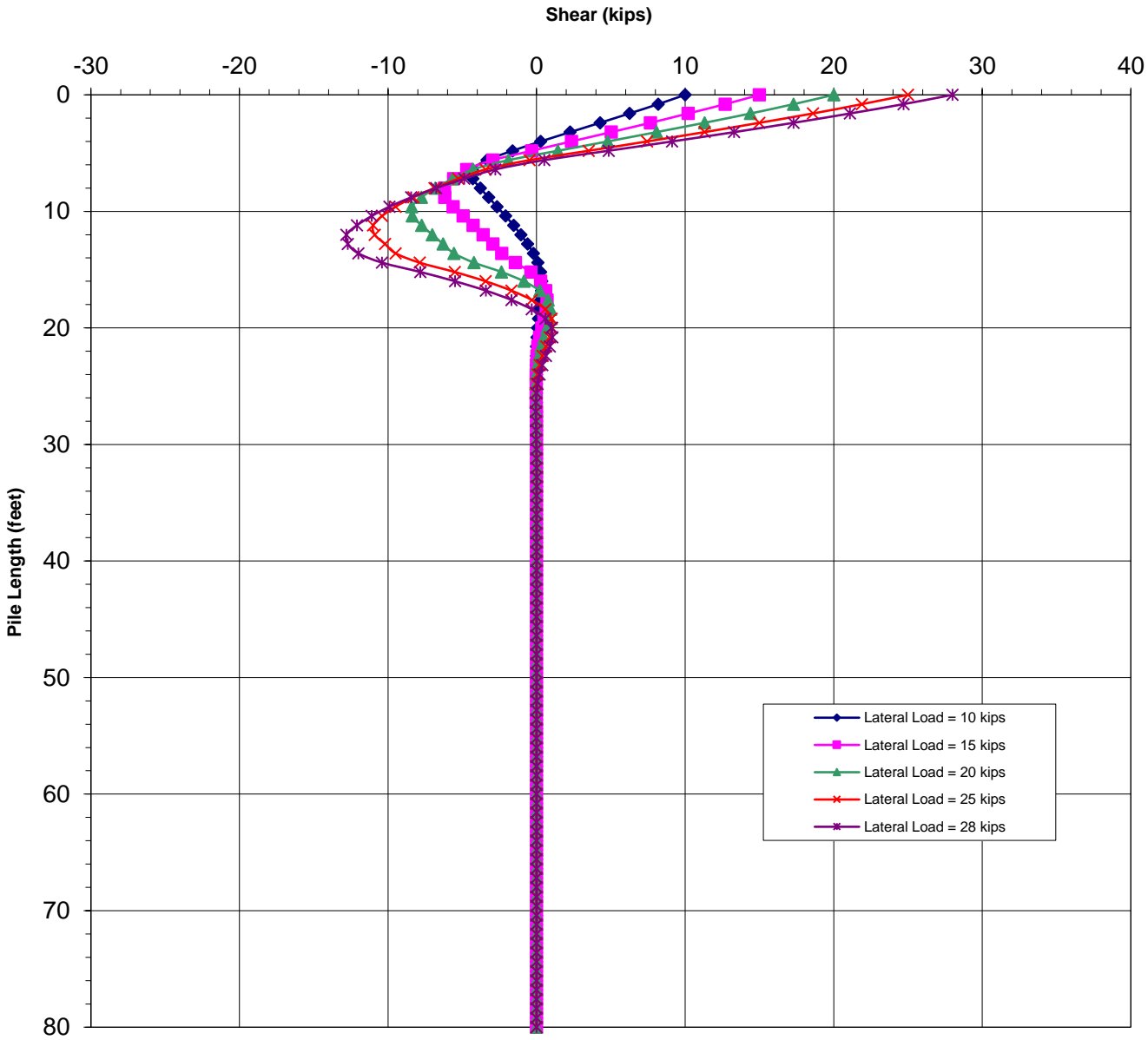


**PILE BENDING MOMENT - FREE HEAD CONDITION**  
 MERCEDES BENZ DEALERSHIP  
 PALO ALTO, CALIFORNIA

**FIGURE C-6**  
 AUGUST 2015  
 PROJECT NO. 3498-1



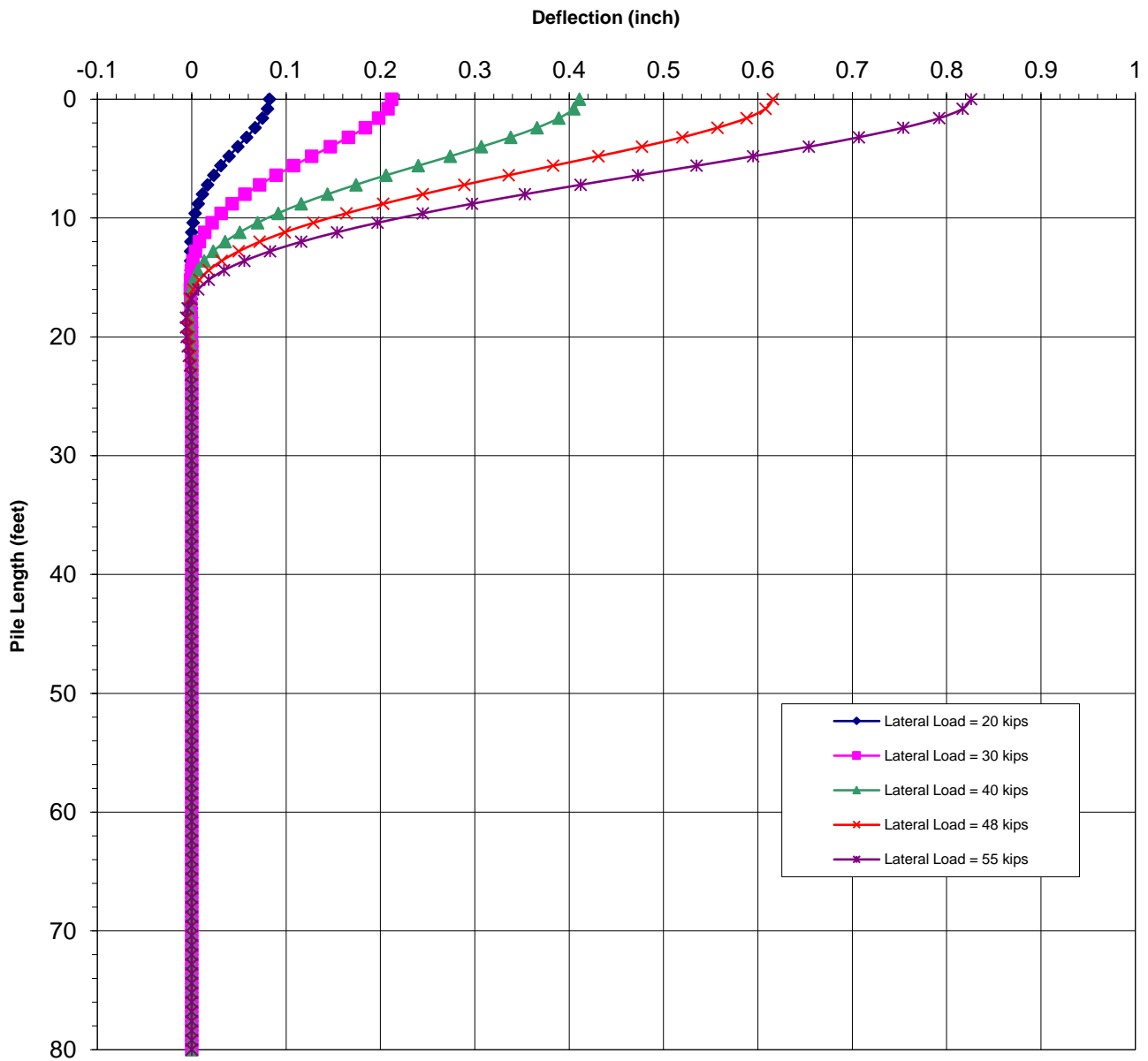
**SHEAR VS. DEPTH**  
**16-inch Auger Cast Pile, Free Head Condition**



**PILE SHEAR - FREE HEAD CONDITION**  
MERCEDES BENZ DEALERSHIP  
PALO ALTO, CALIFORNIA

**FIGURE C-7**  
AUGUST 2015  
PROJECT NO. 3498-1

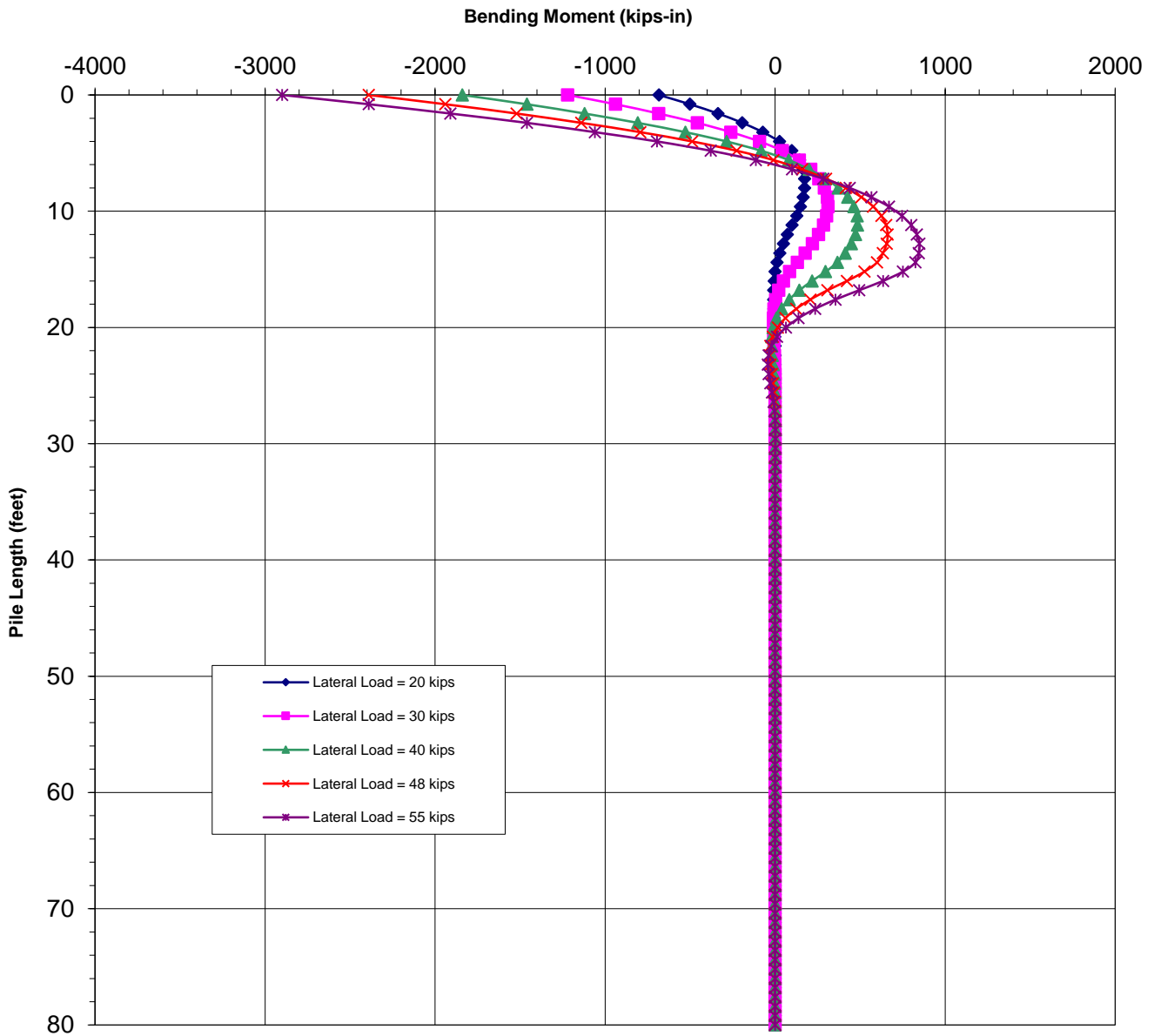
**LATERAL DEFLECTION VS. DEPTH**  
**16-inch Auger Cast Pile, Fixed Head Condition**



**LATERAL PILE DEFLECTION - FIXED HEAD CONDITION**  
 MERCEDES BENZ DEALERSHIP  
 PALO ALTO, CALIFORNIA

**FIGURE C-8**  
 AUGUST 2015  
 PROJECT NO. 3498-1

**BENDING MOMENT VS. DEPTH**  
**16-inch Auger Cast Pile, Fixed Head Condition**

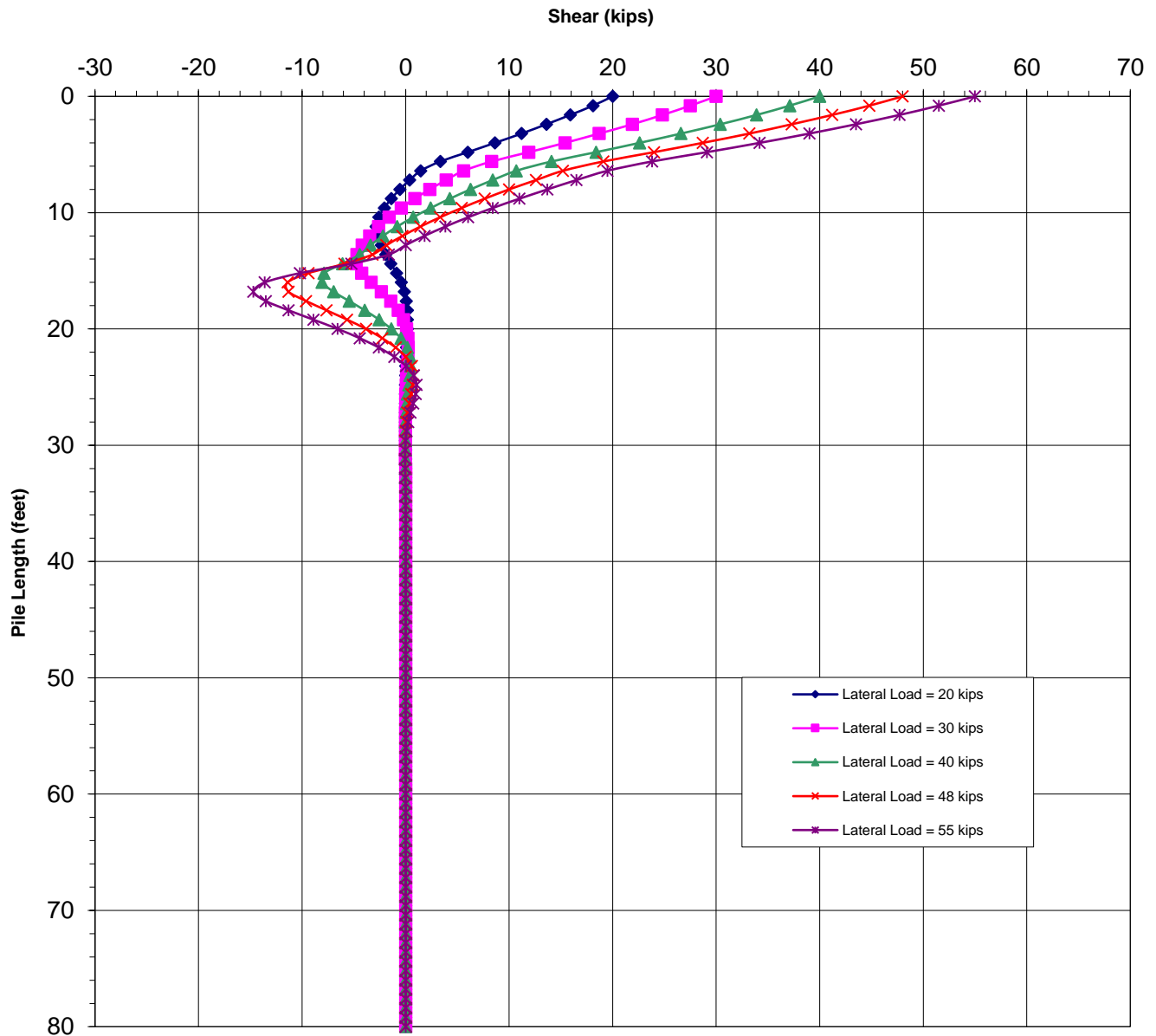


**PILE BENDING MOMENT - FIXED HEAD CONDITION**  
MERCEDES BENZ DEALERSHIP  
PALO ALTO, CALIFORNIA

**FIGURE C-9**  
AUGUST 2015  
PROJECT NO. 3498-1

# SHEAR VS. DEPTH

## 16-inch Auger Cast Pile, Fixed Head Condition



**PILE SHEAR - FIXED HEAD CONDITION**  
MERCEDES BENZ DEALERSHIP  
PALO ALTO, CALIFORNIA

**FIGURE C-10**  
AUGUST 2015  
PROJECT NO. 3498-1

## **Appendix D**

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*Phase I Environmental Site Assessment*



**PHASE I ENVIRONMENTAL SITE ASSESSMENT  
1700 EMBARCADERO ROAD  
(APN 008-03-084)  
PALO ALTO, CALIFORNIA 94303**

June 2013

Prepared for

**Mr. Wu-Chung Hsiang**  
c/o H. C. Associates Investments LP  
63 Crescent Drive  
Palo Alto, California 94301

Project No. 2317-2

**ROMIG ENGINEERS, INC.**

GEOTECHNICAL & ENVIRONMENTAL SERVICES

ROMIG ENGINEERS, INC.

June 11, 2013  
2317-2

**Mr. Wu-Chung Hsiang**  
c/o H. C. Associates Investments LP  
63 Crescent Drive  
Palo Alto, California 94301

**RE: PHASE I PRELIMINARY  
ENVIRONMENTAL SITE ASSESSMENT  
1700 EMBACADERO RD (APN 008-03-084)  
PALO ALTO, CALIFORNIA**

Dear Mr. Hsiang:



In accordance with your request we have performed a Phase I Preliminary Environmental Site Assessment for the above-referenced property in Palo Alto, California. The accompanying report summarizes the results of our field reconnaissance, regulatory and historical review, and presents our conclusions regarding the assessment.



This work was performed using guidance of the standard practice for phase one environmental assessments with the limitations noted in this report. We refer you to the report for detailed discussion of our study.

Thank you for the opportunity to work with you on this property. If you have any questions concerning our study, please call.

Very truly yours,

**ROMIG ENGINEERS, INC.**

  
  
Glenn A. Romig, P.E., G.E.

  
  
Christopher M. Palmer  
Senior Consulting Geologist C.E.G. 1262  
Qualified Environmental Professional

Copies: Addressee (3)

GAR: CMP

**PHASE I ENVIRONMENTAL SITE ASSESSMENT  
1700 EMBARCADERO ROAD  
(APN 008-03-084)  
PALO ALTO, CALIFORNIA 94303**

**PREPARED FOR:  
MR. WU-CHUNG HSIANG  
c/o H. C. ASSOCIATES INVESTMENTS LP  
63 CRESCENT DRIVE  
PALO ALTO, CALIFORNIA 94301**

**PREPARED BY:  
ROMIG ENGINEERS, INC.  
1390 EL CAMINO REAL, SECOND FLOOR  
PALO ALTO, CALIFORNIA 94070**

**JUNE 2013**



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**PHASE I ENVIRONMENTAL SITE ASSESSMENT**  
**1700 EMBARCADERO ROAD**  
**(APN 008-03-084)**  
**PALO ALTO, CALIFORNIA**

**1.0 INTRODUCTION**

We are pleased to present this Phase I Environmental Site Assessment (ESA) for the referenced property in Palo Alto, California. The site is located at 1700 Embarcadero Road in Palo Alto, California (APN 008-03-084), as shown on the Vicinity Map, Figure 1 and Site Sketch Map, Figure 2.

**1.1 Purpose**

The purpose of this ESA was to research the environmental setting of the property, site history, and contamination incidents reported at or near the site. The ESA may be used as a part of site inquiry to ascertain potential environmental problems that may be used to satisfy one of the requirements of CERCLA landowner liability (although it is our understanding that this site is not part of a specifically designated USEPA Brownfields Assessment). This work is performed using guidance of the standard practice for “all appropriate inquiry (AAI)” with the limitations noted in this report. Analysis of soil, soil vapor, ground water, lead paint, and mold or asbestos samples was not included in our scope of work. The purpose of the ESA was to ascertain whether a “recognized environmental concern” is present on the site property as outlined in the following definition;

**Excerpt from ASTM E-1527-05: Definition of Recognized Environmental Concern**

Excerpted from:

*ASTM E-1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* Published Nov. 2005, American Society of Testing and Materials.

### 3. Terminology

#### 3.3 Definition of terms specific to this standard:

**3.3.31 recognized environmental conditions** - the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water or the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not recognized environmental conditions.

### 1.2 Involved Parties

We have been retained by Mr. Wu-Chung Hsiang (Client) to perform an ESA for the referenced property. According to the EDR research, H. C. investment Associates LP currently owns the property.

### 1.3 Scope of Work

The scope of work of this study was presented in detail in our agreement with you, dated April 24, 2013. This work was performed using guidance of ASTM E1527-05 standard that includes practice for “all appropriate inquiry” (AAI), per the final rule issued November 1, 2005 and effective November 1, 2006 (modified as noted below). In order to accomplish this work, we have performed the following services:

- Observation of current conditions at the site, on the adjoining properties and in the immediate site vicinity.
- Review of available physical and historical setting records to help establish the site history and environmental setting. This included review of aerial photographs, topographic maps, and geologic and hydrogeologic literature. We were not provided a 50-year title search or review for this work.

- Review of selected government lists and databases to help establish whether contamination incidents have been reported at the site, or in the immediate vicinity. We also contacted and reviewed information as available from the City of Palo Alto Building Department, the Santa Clara County Department of Environmental Health, Building and Assessors offices, the State Regional Water Quality Control Board (RWQCB) and the State Department of Toxic Substances for relevant information relating to property.
- Review of environmental lien and activity use limitation (if any) information provided by EDR and other information as available from the Client.
- Preparation of this report as a summary of our findings.

The following limitations/deviations to the phase one scope were as follows:

- We spoke briefly to the property owner Mr. Hsiang and received an ESA questionnaire from the property owner, but we did not speak to the neighbors or the former tenants.

## **2.0 GENERAL SITE CHARACTERISTICS**

### **2.1 Site Location**

The property is a rectangular-shaped parcel of about 2.5 acres at 1700 Embarcadero Road in Palo Alto California. The Site Topographic Map, Figure 1, shows the general location of the site and adjoining properties.

### **2.2 Adjacent Properties**

The site is located in a mixed residential and commercial urban area in Palo Alto. The adjoining properties to the site include the Carlsen Audi automobile dealership and office buildings as shown on Figure 2.

### **2.3 Site Description and Current Site Uses**

At the time of our site visit, the subject property was a relatively flat rectangular-shaped parcel of about 2.5 acres. The property is developed with a two-story building, asphalt parking lot and perimeter landscaped areas. Ming's Restaurant occupies the building.

The approximate site layout is shown on the Site Sketch Map, Figure 2.

### **3.0 ENVIRONMENTAL SETTING**

#### **3.1 Regional Physiographic Conditions**

EDR provided a historic topographic map review for the property. Topographic maps were reviewed to gather physiographic information and included the 15-minute Palo Alto Quadrangle maps (1899, 1943, 1947, 1948, 1961); and the Santa Cruz 15-minute Quadrangle (1902). The 7.5-minute Palo Alto Quadrangle maps are either revised or photorevised in 1953, 1961, 1968 1973, 1991 and 1997. These topographic maps show that the site area is located at an elevation of about 8 feet above mean sea level and that the area gently slopes to the north-northeast toward the San Francisco Bay. The San Francisco Bay fringe is about 3,000 feet to the east-northeast. The subject property appears within a developed area beginning with the 1943 map. No other pertinent information was noted.

#### **3.2 Soil Conditions**

Geologic information for the area and our on-site experience (Romig, 2009) indicates the site is underlain by a layer of artificial fill about 6 feet thick that was placed prior to site development. Underlying the surface fill, approximately 6 feet of soft, compressible, younger Bay Mud is present. Below the fill and Bay Mud, Quaternary-age flood plain and bay deposits underlie the site region. The flood plain deposits are generally found to consist of silty clay, sandy clay and clayey sand. The site vicinity is almost completely covered by urban development.

#### **3.3 Regional Geologic Conditions**

The site is located near the fringe of San Francisco Bay in the eastern portion of San Francisco Peninsula, in the Coast Ranges. The region is underlain by thick sequences of Mesozoic and Cenozoic rocks, unconsolidated sand, gravel, silt and clay deposits that are cut by northwest-trending large, regional active fault systems that generate damaging earthquakes. Alluvium generated from the Coast Range hills has been deposited below the site. The San Andreas fault is about 7.5 miles southwest; the Hayward fault about 12 miles northeast; the Calaveras fault about 18 miles northeast and the San Gregorio fault is about 18 miles southwest of the property.

#### **3.4 Ground Water Conditions**

The site lies in the eastern portion of the Santa Clara Valley Ground Water Sub-basin along the San Francisco Bay fringe. Regional ground water flow direction in the area is estimated as northeasterly, toward the San Francisco Bay. The depth to shallow ground

water in the property was measured in boreholes at about 7 feet below the surface (Romig, 2009). Deeper large aquifers below about 150 to 300 feet supply quantities of groundwater for municipal, drinking water and industrial use.

The property occurs on relatively flat ground and is not listed within a 100-year flood plain and is not listed in a 500-flood zone (EDR-cited FEMA Flood Panel 060 7080001A; see EDR Radius Report).

We did not observe any water bodies or vegetation indicative of wetlands on the subject property. "Wetlands" is a general term used to describe a variety of ecosystems, which may include prairie potholes, marshes, fens, bogs, wet meadows, and swamps.

#### **4.0 RESULTS OF INVESTIGATION**

##### **4.1 Site Observations**

Our representative, Christopher Palmer visited the site on May 23, 2013 (see Figures 1 and 2). Mr. Wu-Chung Hsiang accompanied our representative on the ESA visit. Photographs taken during our site reconnaissance are presented in Figures 3 through 7. The subject property is developed with a two-story building. The building is divided into bar, restaurant and banquet spaces for patrons. A large kitchen and food preparation area is located at the rear of the building. Freezers and storage areas are located in the kitchen area. The building second floor is used for restaurant business office space.

A trash enclosure for dumpsters and a kitchen grease collector is located at the rear of the property. The building interior and exterior appeared well maintained. One concrete-pad mounted transformer is located in the rear parking lot. Suspect leakage was not observed.

We did not observe any pits, ponds, stains, odors or materials suggestive of hazardous storage or spills, and we did not observe any surface indications of underground storage tanks on the subject property.

##### **4.2 Adjacent Site and Vicinity Observations**

Our drive-by of the immediate site vicinity revealed that the general site vicinity is developed with office building development to the northwest, southwest and southeast. The Carlsen Audi dealership is located to the northeast. Please note that our site vicinity reconnaissance was limited to a visual observation of the exterior of the facilities in the immediate area around the site. Other facilities, which use hazardous materials, may exist in the general site vicinity.

### **4.3 Results of Regulatory Agency Review**

#### **City of Palo Alto**

The Palo Alto Building and Planning Department was visited on May 23, 2013 to review the permit information. The Building Department had permits for outdoor dining and interior improvements, roofing and HVAC on file. The earliest permit was permit number 94-1292 dated 5/25/94 for a new addition to the building (see permits copies and EDR Building Permit Report and Appendix B).

#### **Santa Clara County Environmental Health Department and Assessors Office**

We contacted the Santa Clara County Environmental Health Department by email request for file review regarding any underground tank or hazardous materials files for the property addresses. There were no underground tanks or hazardous materials information at the property address according to Santa Clara County.

We contacted the Assessors Office website to check the property APN and general information.

#### **Regional Water Quality Control Board (RWQCB)**

We contacted the San Francisco Bay Area Regional Water Quality Control Board GEOTRACKER website and there was no information on file for the property address.

#### **Department of Toxic Substances (DTSC)**

We contacted the Department of Toxic Substances (DTSC) ENVIROSTOR and website to check the property addresses for listing as a contaminant site. According to the DTSC information there were no files listed for the site address.

#### **Reported Spills**

Several United States Environmental Protection Agency (EPA) and State of California environmental record lists or databases were reviewed for information on reported contamination incidents, and hazardous materials generators, in the general site vicinity. EDR prepared a database review of a number of the lists reviewed, the search radius, and an explanation of the abbreviations used in the following text are presented in Table 1 below. A more complete explanation of the lists reviewed, and a map showing the location of identified sites, are presented in Appendix E. EDR maintains contact with those agencies and periodically updates the lists. In some cases agencies no longer use or update certain lists.

No spill incidents were reported by EDR for the subject site. The EDR search of available (“reasonably ascertainable”) government records did not reveal any mapped site for the following federal databases: National Priority List (NPL), Proposed National Priority List (Proposed NPL), nor the Emergency Response Notification System (ERNS). Selected regulatory database lists are shown below; please refer to the EDR database search in Appendix E for more information.

**Table 1. Summary of Selected Contamination, Generator and Other Lists Reviewed  
1700 Embarcadero Road  
Palo Alto, California**

**Federal Records**

List Name	Date rept active by EDR or Updated	Search Radius (mile/s)	Subject site Listed?	<1/8 mile	1/8-1/4 mile	1/4-1/2 mile	1/2-1 mile	Over 1 Mile	Total
NPL	3/13/13	1.0							0
Proposed NPL	3/13/13	1.0							0
Delisted NPL	3/13/13	1.0							0
NPL Liens	9/18/12	TP							0
CERCLIS	3/13/13	0.5							0
CERCLIS-NFRAP	3/13/13	1.0							0
CORRACTS	2/27/13	1.0					1		1
RCRA-TSD	2/27/13	0.5							0
RCRA-LQG	2/27/13	0.25							0
RCRA-SQG	2.27/13	0.25							0
RCRA-CESQG	2.27/13	0.25							0
RCRA-NON GEN	2/27/13	0.25		2	2				4
ERNS	2/15/13	TP							0
HMIRS	2/27/13	TP							0
US ENG CONTROLS	2/27/13	0.5							0
US INST CONTROL	2/27/13	0.5							0
DOD	4/30/12	1.0							0
FUDS	3/13/13	1.0							0
US BROWN-FIELDS	12/20/12	0.5							0
CONSENT	3/13/13	1.0							0
ROD	3/13/13	1.0							0
UMTRA	3/1/12	0.5							0
ODI	9/17/04	0.5							0
TRIS	9/17/04	TP							0
TSCA	3/21/11	TP							0
FTTS AND HIST FTTS	4/10/07	TP							0
SSTS	2/25/11	TP							0
US CDL	2/15/13	TP							0
PADS	2/16/11	TP							0
MLTS	9/13/11	0.25							0
MINES	9/29/11	TP							0
FINDS	3/1/12	TP							0
RAATS	8/7/95	1.0							0

TP = Target Property



**STATE RECORDS**

List Name	Date rept active by EDR or Updated	Search Radius (mile/s)	Subject site Listed?	<1/8 mile	1/8-1/4 mile	1/4-1/2 mile	1/2-1 mile	Over 1 Mile	Total
Hist Cal-sites	8/24/06	1.0		1					1
Toxic Pits	9/26/95	1.0							0
CDL	2/21/12	TP							0
CA Bond Exp. Plan	6/02/94	1.0							0
SCH	3/27/13	0.25							0
SWL/LF	12/13/11	0.5		1		1			2
CA WDS	6/29/07	TP							0
WMUDS/SWAT	5/10/00	0.5							0
NPDES	3/20/13	0.5							0
Cortese	2/22/13	0.5							0
Hist Cortese	4/8/09	0.5		2	1	6			9
Hist UST	2/18/10	0.5		2	1	7			10
LUST	1/2/12	0.5		2	1	12			15
SLIC	2/27/13	0.25		1	1	1			3
UST	2/27/13	0.25			1				1
CA FID UST	5/14/09	0.25		2	1				3
HIST UST	1/28/11	0.5							0
SWRCY	3/27/13	0.25			1				1
AST	10/1/09	1.0							0
WIP	8/3/09	0.25		2	1				3
SWEEPS UST	8/11/05	0.25							0
CHMIRS	3/19/13	TP							0
Notify 65	11/19/93	1.0							0
DEED	3/25/13	0.5							0
VCP	2/27/13	0.5							0
DRY CLEANERS	1/4/13	0.25							0
RESPONSE	2/27/13	TP							0
HAZNET	7/6/12	0.25							0
HWP	3/25/13	TP							0
EMI	10/18/10	TP				2			2
ENVIROSTAR	2/27/13	TP		3	2				5
Santa Clara Cnty	3/25/13	1.0							0

TP = Target Property

**EDR PROPRIETARY RECORDS**

List Name	Updated	Search Radius (mile/s)	Subject site Listed?	<1/8 mile	1/8-1/4 mile	1/4-1/2 mile	1/2-1 mile	Over 1 Mile	Total
MANUF. GAS PLANTS		1.0							0
EDR Hist. Auto Stations		0.5		1	1				2
EDR Hist. Cleaners		0.25							0

TP = Target Property X - Target Property address listed on database

\* - Date listed is date of activation of regulatory database by EDR for search or if list not updated, last date of EDR contact with agency. See EDR Radius report for more information.

The target property address is not listed on the databases by EDR (see Appendix E).

The area around the subject property has numerous listings for active and closed groundwater contaminant sites (see EDR report). The following sites were listed on databases prepared by EDR within about 1,700 feet of the subject property that may indicate a site use or site history that can be associated with ground water or soil vapor contamination:

<b>Listed Site</b>	<b>Distance from Subject Property as Plotted by EDR</b>	<b>Brief Summary</b>
Carlsen Porsche Audi Inc. 1730 Embarcadero Road	558 feet NE apparent side to down gradient	CA FID UST, HIST UST, SWEEPS UST, HIST CORTESE, HIST LUST, CUPA Listings: LUST Cleanup Site, completed case closed.
Stanford Honda 1766 Embarcadero Road	558 feet ESE apparent side to up gradient	HIST CORTESE, HIST LUST, SLIC, CUPA Listings: LUST Cleanup Site, completed case closed.
Collagen Inc., Angiotech Biomaterials Corp. 2500 Faber Place	820 feet ENE apparent side to up gradient	CA FID UST, RCRA Nongen/NLR, HIST UST, SWEEPS UST, HIST CORTESE, HIST LUST, CUPA Listings: LUST Cleanup Site, completed case closed.
Old Post Office Palo Alto 2197 E Bayshore Rd	1489 feet WNW apparent side to up gradient	HIST UST, SWEEPS UST, HIST CORTESE, HIST LUST, CUPA Listings, LUST: LUST Cleanup Site, completed case closed.

In our opinion, the remaining listed sites in the table above are either closed or in locations that should not affect the subject property by either soil vapor or groundwater contaminants. Several sites that are open are under regulatory review. No other spill incidents listed by EDR were noted which appear to have the potential to impact the subject property in our opinion. Several facilities that reportedly use, generate, store or treat hazardous materials in the area were also identified in the property area on databases searched. No active landfills or transfer stations were identified within the radius searched.

#### **Environmental Lien Report**

Environmental Data Resources (EDR) researched whether environmental liens had been filed on the property APN number. No liens or activity use limitations were found. The environmental lien report is presented in Appendix A.

#### **Preliminary Title Report**

A Preliminary Title report was not forwarded to us for review.

#### **4.4 Results of the Site History Review**

##### **Personnel Interviews**

Our representative briefly interviewed Mr. Wu-Chung Hsiang, the property owner, on May 23, 2013. Mr. Hsiang owns the property and his wife Ms. Vicky Ching runs the Ming's Restaurant. The restaurant has been in the building for over 40 years. Mr. Hsiang stated there were no hazardous materials or contaminant problems on the property.

##### **Aerial Photographs**

We reviewed historical aerial photographs supplied by the EDR-Aerial Photography Print Service to help establish prior land use. The photographs reviewed are listed in Table 2 below. No aerial photographs were reviewed prior to 1939 or after 2012 for the property.

The property appears undeveloped in 1939, 1948, and 1956 photographs and appears to be occasionally used for row crop agriculture. The 1968 photograph shows what appears to be the existing building under construction. The building appears completed in the 1974 photograph, and no changes are noted for the property on the 1982 through 2012 photographs.

**Table 2. Aerial Photographs Reviewed  
1700 Embarcadero Road  
Palo Alto, California**

<b><u>Date</u></b>	<b><u>Scale</u></b>	<b><u>Flyer</u></b>
1939	1"=500'	Fairchild
1948	1"=500'	USGS
1956	1"=500'	Aero
1968	1"=500'	USGS
1974	1"=500'	USGS
1982	1"=500'	WSA
1991	1"=500'	EDR
1998	1"=500'	WAC
2005	1"=500'	EDR
2009	1"=500'	EDR
2010	1"=500'	EDR
2012	1"=500'	EDR

### **Historical Maps**

The 15-minute Palo Alto Quadrangle map (1899, 1943, 1947, 1948, 1961) Santa Cruz map (1902) and the Palo Alto 7.5-minute Quadrangle maps prepared in 1953 and either revised or photorevised in 1953, 1961, 1968, 1973, 1991 and 1997 were reviewed. These topographic maps show that the site area is located at an elevation of about 8 feet above mean sea level. The maps show increasing urban development in the property area from about 1953.

### **Sanborn Maps**

Sanborn Mapping was researched through EDR, to establish whether historical Sanborn maps were available for the site. These maps were originally produced to show buildings in sufficient detail to allow insurance underwriters to estimate risks and premiums. EDR research showed that the property was not mapped.

### **City Directories**

EDR prepared a City Directory search from available editions of the Haines and Company, Pacific Bell White Pages, Pacific Telephone, and Polk City Directories from 1922 to 2010 with address listings by year as follows (see EDR report, Appendix F, for complete listings). EDR provides images of the directory in their report. The following listings for subject property address by directory source, listed by year and property address were found:

**1970** - Polk: Mings Restr.

**1978** - Polk: Mings Restr.

**1986** - Pacific Bell, Pacific Telephone: Mings of Palo Alto.

**1991** - Pacific Bell White pages: Mings Villa of Palo Alto.

**2001** - Haines: OCHING Vicky Mings of Palo Alto.

**2007** - Cole Information Services: Mings Chinese Cuisine & Bar.

**2012** - Cole Information Services: Mings Chinese Cuisine & Bar.

### **Asbestos-Containing Materials (ACM) and Lead Paint (LBP)**

A material is defined to be ACM, under California State regulations, if it contains greater than 0.1% asbestos by weight. When referring to asbestos, friable means the material, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Friable ACM are more likely than non-friable ACM to release fibers when disturbed or damaged. The level of the preliminary screening performed was designed solely to identify the presence of the most obvious and common ACM, not to comply with the survey requirements of the Asbestos Hazard Emergency Response Act (AHERA) of 1986. The Occupational Safety and Health Administration (OSHA) found the installation

of friable surfacing material and thermal system insulation after December 31, 1980 unlikely. The definition of suspect ACM and presumed asbestos containing material is taken from 29 CFR Parts 1910, et al. Occupational Exposure to Asbestos; Final Rule.

LBP, as defined in the department of Housing and Urban Development (HUD) regulations, are paints that contain greater than 0.5% or (5,000) ppm of lead, based on dry weight. Section 302 of the Lead-Based Paint Poison Prevention act requires public housing projects to be inspected for LBP. The sale of paints containing more than (600) ppm of lead to consumers was banned by the Consumer Product Safety Commission (CPSC) in 1978. The CPSC ban does not apply to structural steel building components, such as columns, beams, and decking, that are painted as part of the fabrication process.

The property building was constructed prior to 1970 so ACBM and LBP may be considered a potential concern for the property.

#### **ESA User Questionnaire**

Mr. Wu-Chung Hsiang the owner returned the ESA questionnaire and was not aware of any contaminant problems or hazardous materials issues with the property (Appendix B).

#### **Data Gaps**

In our opinion there are no data gaps in this study. The property was undeveloped according to topographic maps dating to 1899 and in aerial photographs dating from 1939 until about 1968. Ming's Restaurant has occupied the building since 1970. The property use appears verified by the historic research.

#### **4.5 Radon**

The California Department of Health Services has conducted radon testing of 2,858 sites in California. Of these sites, 3.8 percent had radon levels above 4 pCi/l (Pico curies per liter) with the highest level being 29 pCi/l. EPA recommends that action be taken to reduce levels with between 4 and 26 pCi/l over a period of a few years. The USEPA Radon Zone for Santa Clara County is 2. No radon was detected above 4 pCi/l for the sites tested for the County as reported in the EDR Radius report. Radon is not believed to be a concern at the subject property.

### **5.0 CONCLUSIONS AND RECOMMENDATIONS**

The purpose of our study was to briefly review the history and environmental setting of the property. Our history review revealed that the subject property was undeveloped until the late 1960s. The existing building was constructed by about 1970 and has been used by Ming's Restaurant since that time.

The State and local file review materials did not reveal any underground storage tanks, hazardous materials use or any contaminant problems reported for the property addresses. The City, County and State agency file reviews did not reveal the presence of an AST, motor oil or fuel UST, pits, lagoons or use or suspect disposal on the property or nearby sites with groundwater or soil vapor incidents that would likely impact the property.

Our review of federal and state environmental generator and spill lists revealed that several LUST and groundwater contaminant cases have been reported in the general site area and as discussed above. However, in our opinion the identified spills are being investigated or closed by the State or Federal agencies, or are located far enough from the site as to have little likelihood of impacting the site.

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 for the property at 1700 Embarcadero Road in Palo Alto California (APN 008-03-084). Any exceptions to, or deletions from, this practice are described in Section 1.3 and in text of this report.

This ESA did not reveal evidence of a recognized environmental condition in connection with the property. Romig recommends the following:

- The building was constructed prior to 1970 so ACBM and LBP may be a potential concern. If future building renovation or demolition is planned, a qualified consultant and/or contractor should be retained to evaluate and manage these materials so that they are properly disposed at the appropriate facility.

## **6.0 LIMITATIONS AND PROFESSIONAL DECLARATION**

As with all preliminary site assessments, the amount of information obtained is a function of both time and budgetary constraints. Our conclusions regarding the site are based on observation of existing conditions, review of selected agency files and data collected by third parties, and our interpretation of readily available site history and usage data. Any study such as this must be qualified in that no soil, soil vapor, or ground water analysis was performed. Soil, soil vapor, ground water, lead paint or asbestos analysis lead to a more reliable assessment of environmental conditions; conditions which often are not apparent during typical Phase I activities. If you desire a greater degree of confidence, soil, soil vapor, ground water or additional analysis could be performed to more definitively establish current environmental conditions.

This report has been prepared for the exclusive use of Mr. Wu-Chung Hsiang our Client. We make no warranty, expressed or implied, except that our services were performed in accordance with environmental engineering principles generally accepted at this time and location. The professional staff of Romig Engineers, Inc., in accordance with the generally accepted professional practices and from guidance with the standard practice of ASTM E 1527-05, has prepared the findings and analysis contained in this Phase I Environmental Site Assessment Report with the exceptions or limitations noted in the report. Please note that this report is valid for 180 days from the date of report issuance.

Some of the information provided in this Phase I Environmental Site Assessment report is based upon personal interviews and research of available documents, records and maps held by appropriate government and private agencies. This is subject to the limitations of the historical documentation, availability and accuracy of pertinent records, and the recollection of those persons contacted and interviewed. The information contained in this report has received appropriate technical and peer review. The findings and analysis represent professional judgments and are based upon the investigations conducted and the review and interpretation of such data based on our experience and expertise according to the existing standard. No warranty or guarantee is expressed or implied. The scope of services within this Phase I Environmental Site Assessment did not include sample collection and/or analysis for hazardous materials. In addition, it did not include a property title search or evaluation of mold/fungi, asbestos, lead paint, radon or seismic risk.

The findings and analysis set forth in this report are strictly limited in time and scope to the date of the evaluation(s), and for the use of our client.

The Qualified Environmental Professional preparing this report declares, to the best of his professional knowledge and belief, that he meets the definition of the Environmental Professional as defined in sec. 312.10 of 40 CFR 312 and has the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject property. We have developed and performed the All Appropriate Inquiries in conformance with the standards and practices set forth in 40 CFR part 312.

## 7.0 REFERENCES

California Department of Health Services, September 1991, "Annual Average Radon Concentrations in California Residences."

California Department of Water Resources, California's Groundwater Bulletin 118, Update 2003.

California Regional Water Quality Control Board.

California Department of Toxic Substances.

County of Santa Clara Department of Environmental Health and Assessors Office.

City of Palo Alto Building and Fire Departments.

EDR Radius Report, Property at 1700 Embarcadero Road, Palo Alto, CA 94063 dated May 20, 2013 Inquiry Number: 3611943.2s with Topographic Map, Aerial Photograph, City Directory, Sanborn Map and Environmental Lien coverage.

Google Earth web-based aerial photography.

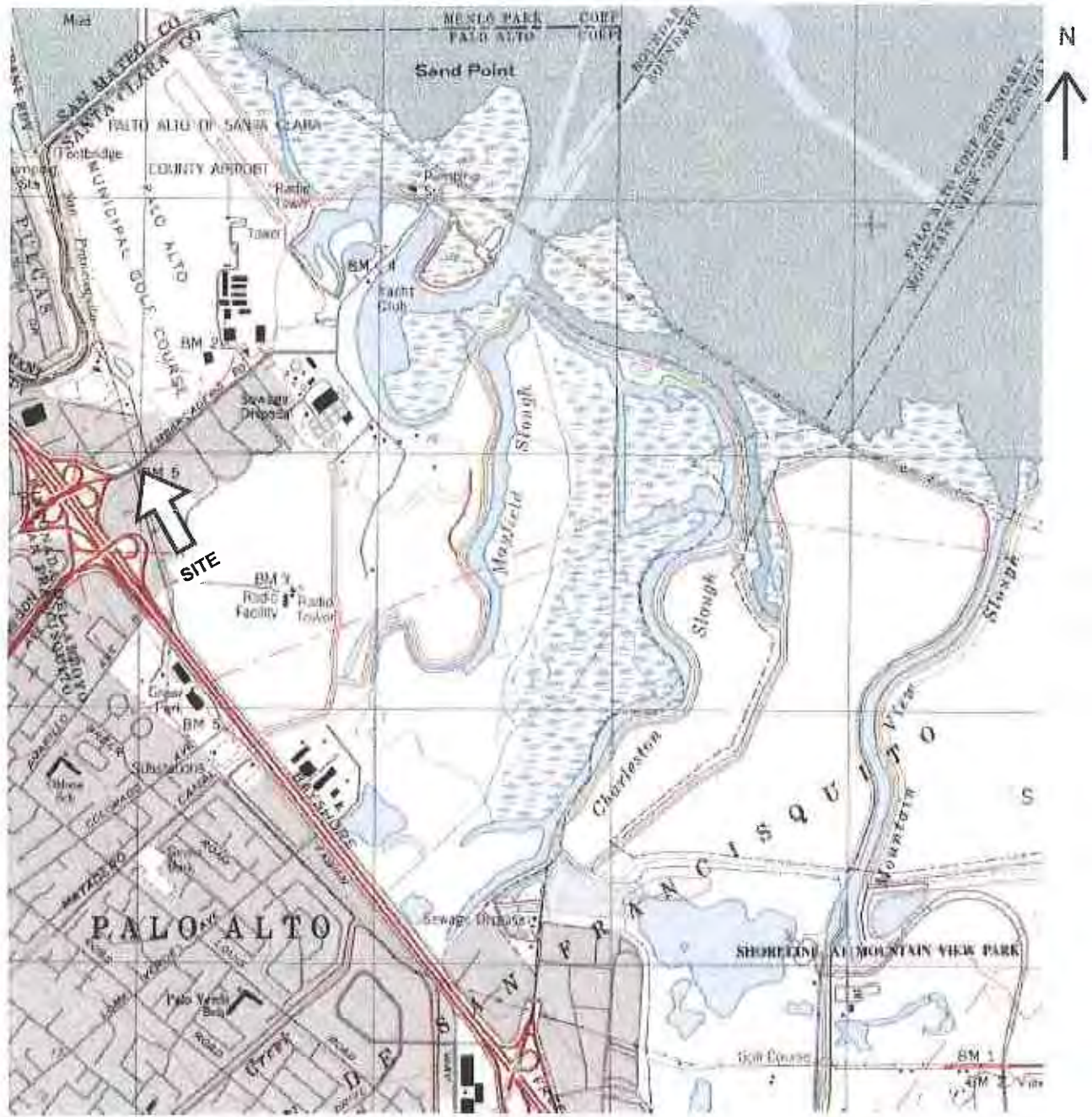
Jennings, C. W., 1994, California Division of Mines and Geology, Fault Activity Map of California and Adjacent Areas, Scale 1:750,000.

Romig Engineers, Inc., report dated July 2009, Geotechnical Investigation for Hotel Complex 1700 Embarcadero Road Palo Alto, CA; prepared for Mr. Wu-Chung Hsiang, Project No. 2317-1.

United States Geological Survey; 15-minute Palo Alto Quadrangle map (1899, 1943, 1947, 1948, 1961) Santa Cruz map (1902) and the Palo Alto 7.5-minute Quadrangle maps prepared in 1953 and either revised or photorevised in 1961, 1968, 1973, 1991 and 1997.







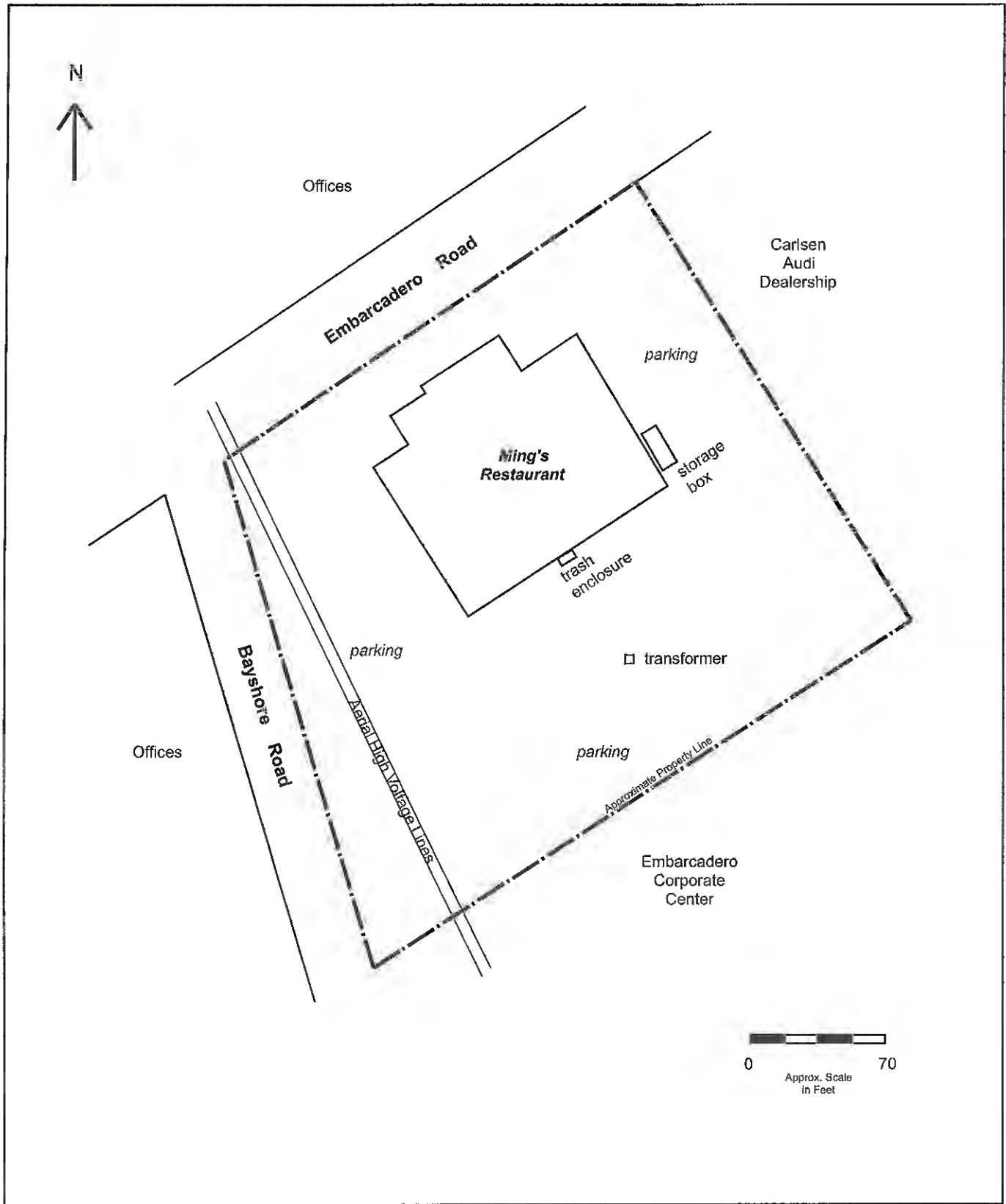
Scale: 1 inch = 2000 feet

Base U. S. Geological Survey 7.5 minute Mountain View Quadrangle

**SITE TOPOGRAPHIC MAP**  
 1700 EMBARCADERO ROAD (APN 008-03-084)  
 PALO ALTO, SANTA CLARA COUNTY, CA

**FIGURE 1**  
 JUNE 2013  
 PROJ. NO. 2317-2

**ROMIG ENGINEERS, INC.**



**SITE SKETCH MAP**  
 1700 EMBARCADERO ROAD  
 PALO ALTO, SANTA CLARA COUNTY, CA

**FIGURE 2**  
 JUNE 2013  
 PROJ. NO. 2317-2

**PHOTOGRAPH #1** – View of 1700 Embarcadero Road and Ming Restaurant building.



**PHOTOGRAPH #2** – View of Ming Restaurant rear parking lot.



SITE PHOTOGRAPHS  
1700 EMBARCADERO ROAD (APN 008-03-084)  
PALO ALTO, CALIFORNIA

FIGURE 3  
JUNE 2013  
PROJ. NO. 2317-2

**ROMIG ENGINEERS, INC.**

**PHOTOGRAPH #3** – View of transformer in rear parking lot.



**PHOTOGRAPH #4** – View of rear parking lot looking north with aerial power-line tower to left.



SITE PHOTOGRAPHS  
1700 EMBARCADERO ROAD (APN 008-03-084)  
PALO ALTO, CALIFORNIA

FIGURE 4  
JUNE 2013  
PROJ. NO. 2317-2

**ROMIG ENGINEERS, INC.**

**PHOTOGRAPH #5** – View of trash dumpster and dark green kitchen grease collector at rear of building.



**PHOTOGRAPH #6** – View of entry way and restaurant bar.



SITE PHOTOGRAPHS  
1700 EMBARCADERO ROAD (APN 008-03-084)  
PALO ALTO, CALIFORNIA

FIGURE 5  
JUNE 2013  
PROJ. NO. 2317-2

ROMIG ENGINEERS, INC.

**PHOTOGRAPH #7** – View of banquet room.



**PHOTOGRAPH #8** – View of kitchen and food preparation area.



SITE PHOTOGRAPHS  
1700 EMBARCADERO ROAD (APN 008-03-084)  
PALO ALTO, CALIFORNIA

FIGURE 6  
JUNE 2013  
PROJ. NO. 2317-2

**ROMIG ENGINEERS, INC.**

**PHOTOGRAPH #9** – View of cold storage and wash area sinks.



**PHOTOGRAPH #10** – View of attic storage area.



SITE PHOTOGRAPHS  
1700 EMBARCADERO ROAD (APN 008-03-084)  
PALO ALTO, CALIFORNIA

FIGURE 7  
JUNE 2013  
PROJ. NO. 2317-2

**ROMIG ENGINEERS, INC.**

**APPENDIX A**

**REGULATORY AGENCY SITE LIST DATA**

(EDR Environmental Lien Search Report, Sanborn Maps)



**Property At**

1700 Embarcadero Road  
Palo Alto, CA 94303

Inquiry Number: 3811943.7  
May 22, 2013

**EDR Environmental Lien and AUL Search**



440 Wheelers Farm Road  
Milford, CT 06461  
800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

## EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

***Thank you for your business.***  
Please contact EDR at 1-800-362-0050  
with any questions or comments.

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## EDR Environmental Lien and AUL Search

### TARGET PROPERTY INFORMATION

#### ADDRESS

1700 Embarcadero Road  
Property A1  
Palo Alto, CA 94303

#### RESEARCH SOURCE

Source 1:  
Santa Clara County  
Santa Clara, CA

#### PROPERTY INFORMATION

##### Deed 1:

Type of Deed: Grant Deed  
Title is vested in: HC Investment Associates LP  
Title received from: Vicky Kwok Ching, trustee  
Deed Dated: 4/27/2006  
Deed Recorded: 7/11/2006  
Book: NA  
Page: NA  
Volume: NA  
Instrument: 10010187  
Docket: NA  
Land Record Comments: See Exhibit  
Miscellaneous Comments: NA  
  
Legal Description: See Exhibit  
  
Legal Current Owner: HC Investment Associates LP  
  
Parcel # / Property Identifier: 008-03-084  
  
Comments: See Exhibit

#### ENVIRONMENTAL LIEN

Environmental Lien: Found  Not Found

#### OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found  Not Found

**Deed Exhibit 1**

RECORDING REQUESTED BY  
AND WHEN RECORDED MAIL TO:

ATTENTION: Jacob M. Glickman  
GLICKMAN ASSOCIATES PC  
2465 E. Bayshore Rd, Suite 302  
Palo Alto, California 94303-3227  
Tel. (650) 798-2400

DOCUMENT: 19010187

Pages: 2



Fees ... 20 00  
Taxes ...  
Copies ...  
AMT PAID 20 00

MAIL TAX STATEMENTS TO

HC Investment Associates LP  
1700 Embarcadero Road  
Palo Alto, CA 94303

BRENDA DAVIS  
SANTA CLARA COUNTY RECORDER  
Recorded at the request of  
Attorney

RDE # 008  
7/11/2006  
2:14 PM

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Grant Deed

APN: 008-03-061 & 008-03-065

The undersigned grantor(s) declare(s):  
Documentary transfer tax is \$ -0-

NO TRANSFER TAX DUE. NO CHANGE IN OWNERSHIP PERCENTAGES PURSUANT TO RTC §11925(d).

- computed on full value of property conveyed, or
- computed on full value less value of liens and encumbrances remaining at time of sale.
- Unincorporated area:  City of Palo Alto, and

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,  
VICKY KWON CHING as Trustee for Felicity Partnership, a California general partnership,

hereby GRANT(S) to HC INVESTMENT ASSOCIATES LP, a California limited partnership,  
the following described real property in the County of Santa Clara, State of California:

That real property situated in the City of Palo Alto, County of Santa Clara, State of California, described as follows:

A portion of Parcel One shown on map of Record of Survey filed October 23, 1967, Book 229 of Maps, page 24, Santa Clara County Records, described as follows:

BEGINNING at the most southerly corner of the parcel of land described in the Deed to CHYNA ASSOCIATES, INC., a corporation, recorded December 22, 1967, Book 7972 Official Records, page 286, in the northeast line of East Bayshore Road; thence from said Point of Beginning N. 16° 19' 50" W. along said line of said road, 248.83 feet; thence northeast along a curve to the right, with a radius of 50 feet, through an angle of 49° 05' 08" for an arc distance of 42.84 feet to the southeast line of Embarcadero Road 86 feet wide; thence N. 52° 42' 10" E. along said line, 251.52 feet to the most northerly corner of said Chyna Associates, Inc., Parcel; thence S. 37° 17' 50" E. along the northeast line of said parcel and the southeast prolongation of said line, 341.83 feet; thence S. 55° 41' 07" W. and parallel with the southeast line of said Chyna Associates, Inc., Parcel and the southwest prolongation of said line 393.67 feet to the said northeast line of East Bayshore Road; thence N. 16° 19' 50" W. 64.13 feet to the Point of Beginning.

Real Property Commonly Known As: 1700 Embarcadero Rd., Palo Alto, CA 94303.

Dated: April 27, 2006

Vicky Kwon Ching  
VICKY KWON CHING, Trustee

MAIL TAX STATEMENTS AS DIRECTED ABOVE

GRANT DEED  
APN: 008-03-064 &  
008-03-065

State of California )  
 ) SS  
County of Santa Clara )

On April 21, 2006, before me, Bonnie L. Fredrickson, a notary public in and for the State of California, personally appeared VICKY KWOH CHING, proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Bonnie L. Fredrickson



(SEAL)

**Property At**

1700 Embarcadero Road

Palo Alto, CA 94303

Inquiry Number: 3611943.3

May 20, 2013

**Certified Sanborn® Map Report**

## Certified Sanborn® Map Report

5/20/13

**Site Name:**

Property At  
1700 Embarcadero Road  
Palo Alto, CA 94303

**Client Name:**

Romig Consulting Engineers  
1390 El Camino Real  
San Carlos, CA 94070



EDR Inquiry # 3611943.3

Contact: Chris Palmer

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Romig Consulting Engineers were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn) and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

### Certified Sanborn Results:

**Site Name:** Property At  
**Address:** 1700 Embarcadero Road  
**City, State, Zip:** Palo Alto, CA 94303  
**Cross Street:**  
**P.O. #** NA  
**Project:** NA  
**Certification #** D032-4589-9949



Sanborn® Library search results  
Certification # D032-4589-9949

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

The Sanborn Library LLC Since 1866™

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**APPENDIX B**

**SELECTED BUILDING PERMITS AND/OR FILES, ESA QUESTIONNAIRE**



**CITY OF PALO ALTO**  
 DIVISION OF BUILDING INSPECTION  
 250 HAMILTON AVENUE  
 PALO ALTO, CA 94301 (415) 329-2496

I am a licensed contractor and that my license is in full force and effect.  
 I am a duly licensed contractor and that my license is in full force and effect.  
 I am a duly licensed contractor and that my license is in full force and effect.

1. I have a copy of the plans furnished.  
 2. I have a copy of the plans furnished.  
 3. I have a copy of the plans furnished.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 I certify that I have read the application and plans that the information given is true and correct. I agree to comply to all City ordinances and State laws relating to the building construction, and I make this statement under penalty of perjury.

Signature: \_\_\_\_\_ Date: 9-21-94  
 I certify that I have read the application and plans that the information given is true and correct. I agree to comply to all City ordinances and State laws relating to the building construction, and I make this statement under penalty of perjury.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 I certify that I have read the application and plans that the information given is true and correct. I agree to comply to all City ordinances and State laws relating to the building construction, and I make this statement under penalty of perjury.

NOTICE: This building permit was properly filed and signed and will remain in effect for 180 days. This permit shall be issued conditionally on the 20th day of the month of cover any construction until the work is completed and the inspection is completed on the back of this plan. All materials shall be replaced at least 24 hours in advance. This permit will expire if work is not started within 180 days of issuance. If work is not started within 180 days of issuance, the applicant must file for a new permit to continue or complete the work.

APPLYING PERMIT: 5/25/94 GS PERMIT NUMBER: 9-21-94 788  
 MAILING ADDRESS: 1700 EMBARCADERO RD, STOECKER & NORTEWAY, PALO ALTO, CA 94301  
 MAILING ADDRESS: 437 LAYTON AVENUE, PALO ALTO, CA 94301  
 MAILING ADDRESS: 1700 EMBARCADERO ROAD, PALO ALTO, CA 94301  
 MAILING ADDRESS: 852 JORDAN AVE., STOECKER & NORTEWAY ARCH, PALO ALTO, CA 94301  
 MAILING ADDRESS: 437 LAYTON AVENUE, STOECKER & NORTEWAY ARCH, PALO ALTO, CA 94301

MAILING ADDRESS: 105 ALFOS, PALO ALTO, CA 94022  
 MAILING ADDRESS: 437 LAYTON AVENUE, PALO ALTO, CA 94301  
 MAILING ADDRESS: 437 LAYTON AVENUE, PALO ALTO, CA 94301  
 MAILING ADDRESS: 437 LAYTON AVENUE, PALO ALTO, CA 94301

ADD 980 SF DECK OF OUTDOOR DINING & HANDICAP RAMP  
 ADDITION: 980 SQ. FT. 0 LOT AREA OCCUPIED  
 ADDITION: 0 NO. OF BEDROOMS 0 NO. OF BATHS 0 NO. OF STORIES 0 VALUATION  
 ADDITION: 0 NO. OF STORIES 0 VALUATION

MAILING ADDRESS: 437 LAYTON AVENUE, PALO ALTO, CA 94301  
 MAILING ADDRESS: 437 LAYTON AVENUE, PALO ALTO, CA 94301  
 MAILING ADDRESS: 437 LAYTON AVENUE, PALO ALTO, CA 94301

MECHANICAL PERMIT  
 MECHANICAL CONTRACTOR  
 MECHANICAL PERMIT  
 MECHANICAL CONTRACTOR  
 MECHANICAL PERMIT  
 MECHANICAL CONTRACTOR

Revision to Existing Permit

RECEIVED  
 JUL 29 1994  
 VALIDATION  
 TOTAL FEE: 693.10  
 MECHANICAL PERMIT: 6.00  
 ADDITIONAL: 387.95  
 MECHANICAL PERMIT: 290.96  
 MECHANICAL PERMIT: 8.19

**CITY OF PALO ALTO**  
 DIVISION OF BUILDING INSPECTION  
 250 HAMILTON AVENUE  
 PALO ALTO, CA 94301 (415) 328-2486

DATE: 5/25/94  
 PERMIT NO: 9-21-94  
 BUILDING ADDRESS: 1700 EMERCADE RO  
 APPLICANT: STOECCKER & NORTHWAY  
 CITY: PALO ALTO  
 OWNER: KINGS RESTAURANT  
 CITY: PALO ALTO  
 GENERAL CONTRACTOR: DENNIS STANLEY CONSTR.  
 MAILING ADDRESS: 437 LITTON AVENUE, CA 94022  
 STATE: CA ZIP: 94301  
 MAILING ADDRESS: 1700 EMERCADE ROAD, CA 94301  
 STATE: CA ZIP: 94301

MAILING ADDRESS: 437 LITTON AVENUE, CA 94022  
 STATE: CA ZIP: 94301  
 MAILING ADDRESS: 1700 EMERCADE ROAD, CA 94301  
 STATE: CA ZIP: 94301  
 MAILING ADDRESS: 852 JORDAN AVE., LOS ALTOS, CA 94022  
 ARCHITECT OR ENGINEER: STOECCKER & NORTHWAY ARCH  
 ADDRESS: 437 LITTON AVENUE, PALO ALTO, CA 94301  
 CONSTRUCTION LEADER NAME: N/A  
 NAME: Addr. City State Zip  
 TYPE OF CONSTRUCTION: BUILDING PERMIT  
 V-M-R: A3 PC N  
 FLOOR ZONE (YES OR NO): Y  
 DESCRIPTION OF WORK: ADD 800 SF DECK OF OUTDOOR DINING & HANDICAP RAMP

NO. OF CONSTRUCTION PERMITS: 980  
 NO. OF ROOMS: 0  
 LOT AREA: 0  
 HEIGHT: 0  
 LIVING UNITS: 0  
 TOTAL AREA SECURED: 0  
 LOT AREA: 0  
 LOT AREA OCCUPIED: 0

APPLICANT: Fred Heyman  
 SIGNATURE: [Signature]  
 TITLE: [Title]  
 CONTRACTOR: [Signature]  
 TITLE: [Title]

NOTICE TO APPLICANT: If, after making this Certificate of Examination, you determine that any provision of the Building Code, or any other law, ordinance, or regulation, shall not be complied with, you must forthwith comply with such provisions or the permit shall be void and revoked.  
 I certify that I have read this application and that the information given is true and correct. I agree to comply with all City ordinances and State laws relating to the building construction, and I make this statement under penalty of perjury.  
 NOTICE: This is a building permit. After property is filed, it is not to be used for any other purpose. This permit shall be subject to the terms and conditions of the permit. Do not remove or cover any excavation until the work is completed and the foundation is completed on the lot on this card. All excavations shall be returned at least 24 hours in advance.  
 This permit requires that work is not started until the date of issuance. If work is started before the date of issuance, the permit shall be void and the work shall be subject to the terms and conditions of the permit.

MECHANICAL PERMIT	6.00
ADDITIONAL	0
PLUMBING	387.95
ELECTRICAL	290.96
MECHANICAL	
ROOF	
OTHER	
TOTAL	693.10
FEE	8.19

RECEIVED  
 JUL 29 1994  
 VALIDATION

Revision to Existing Permit





# Application For Re-Roofing

**CITY OF PALO ALTO**  
 Building Inspection Division  
 Phone # (415) 329-2496  
 Permit Fax # (415) 617-3180

APPLICATION/PERMIT NUMBER: 03-2157  
 PERMIT FEE: \$ 824.02

The following information shall be provided for review and approval prior to issuance of a permit for re-roofing.

Job Address: 1700 EMBARCADERO RD Parcel# KEN SULESKY  
 PROPERTY OWNER: Vicky Ching CONTRACTOR: Above All Roofing  
 Name: "Mings Restaurant" Name: Bob Stodgett  
 Address: Palo Alto CA 94306 Address: 5702 El Camino Real, PA  
 City/Zip: Palo Alto CA 94306 City/Zip: Palo Alto CA 94306  
 Telephone #: 700 NORTH RUP ST. SJ. 95126 Telephone #: (650) 444-0074

Application Date: \_\_\_\_\_ Anticipated Start Date: \_\_\_\_\_  
 Residential  Commercial  Other/Specify: \_\_\_\_\_  
 New Roof Type: #4 GNC 4 ply minerals Number of Squares: 1700 Valuation: 59,000

Description: tear off new roof  
 Roof System Fire Classification: A  B \_\_\_\_\_ C \_\_\_\_\_ None \_\_\_\_\_  
 Basis for Roof System Approval if Applicable: ICBO ES# \_\_\_\_\_ U.L.# \_\_\_\_\_ ASTM# \_\_\_\_\_ Other 4GNC  
 Applied Weight of New Roofing Material per Square Foot: \_\_\_\_\_

Existing Roof Type: Tar & Gravel Number of Existing Roof Coverings: 1  
 Will all the Existing Roof Coverings be Removed? Yes  No  If Not, Explain: \_\_\_\_\_  
 Will New Sheathing be Added? Yes \_\_\_\_\_ No \_\_\_\_\_

If new plus existing roofing weighs more than 5 psf utilize UFG Rafter Span Tables or provide engineering calculations.

CREDIT CARD PAYMENT: VISA \_\_\_\_\_ MC \_\_\_\_\_ Card# \_\_\_\_\_ Expiration Date: \_\_\_\_\_  
 Name as it Appears on Card: \_\_\_\_\_ Signature: \_\_\_\_\_ (Authorizes Credit Card Payment of Fee)

**LICENSED CONTRACTORS DECLARATION:** I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 2 (commencing with Section 7000) of Division 2 of the Business and Professions Code, and my license is in full force and effect.  
 License Class: C-29 License Number: 794435 Date: 8-29-03 Contractor: Above All Roofing

**OWNER-BUILDER DECLARATION:** I hereby affirm under penalty of perjury that I am exempt from the Contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 2 commencing with Section 7000) of Division 2 of the Business and Professions Code or that he or she is exempt therefrom and the basis to the stated exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500).  
 I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvement is not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he or she did not build or improve for the purpose of sale.)  
 I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.)  
 I am exempt under Sec. \_\_\_\_\_, B.P.C. for this reason \_\_\_\_\_ Date: \_\_\_\_\_ Owner: \_\_\_\_\_

**WORKERS COMPENSATION DECLARATION:** I hereby affirm under penalty of perjury one of the following declarations:  
 I have and will maintain a certificate of coverage to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.  
 I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance and policy number are: CARRIER: State Farm POLICY# 571-02-0004875  
 (This section need not be completed if the permit is for one hundred dollars (\$100) or less.)  
 I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code. I shall forthwith comply with those provisions.  
 DATE: 8-29-03 APPLICANT: [Signature]

**NOTE:** Failure to secure workers' compensation coverage is unlawful, and shall subject an employer to criminal penalties and civil fines up to one hundred thousand dollars (\$100,000), in addition to the damages as provided for in Section 3706 of the Labor Code, interest, and attorney's fees.

**CONSTRUCTION LENDING AGENCY:**  
 I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C.).  
 Lender's Name: \_\_\_\_\_ Lender's Address: \_\_\_\_\_  
 I certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby representatives of this county to enter upon the above-mentioned property for inspection purposes.  
 DATE: 8-29-03

MAINTAINING AN APPLICANT OR AGENT: \_\_\_\_\_

1700 EMBARCADERO



X3. USER QUESTIONNAIRE

INTRODUCTION

In order to qualify for one of the *Landowner Liability Protections (LLPs)*<sup>35</sup> offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"),<sup>36</sup> the user must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

(1.) Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25). *No*  
Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

(2.) Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).  
Are you aware of any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law? *No*

(3.) Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).  
As the user of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business? *No*

(4.) Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).  
Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? *No*

(5.) Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).  
Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user:  
a.) Do you know the past uses of the property?  
b.) Do you know of specific chemicals that are present or once were present at the property?  
c.) Do you know of spills or other chemical releases that have taken place at the property?  
d.) Do you know of any environmental cleanups that have taken place at the property? *No*

(6.) The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).  
As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property? *No*

Project Site: 1700 Embassadors Rd

Owner: Mr. Wu-Chang Hsiang

Owner's Representative \_\_\_\_\_

Signature Wu-Chang Hsiang Date: May 23, 2013


<sup>35</sup> *Landowner Liability Protections, or LLPs*, is the term used to describe the three types of potential defenses to Superfund liability in EPA's *Interim Guidance Regarding Criteria Landowners Must Meet in Order for De minimis Prospective Purchaser, Contiguous Property Owner, or Innocent Landowner Exemptions on CERCLA Liability ("Common Elements" Guide)* issued on March 6, 2003.

<sup>36</sup> P.L. 107-118.



**APPENDIX C**

**HISTORICAL TOPOGRAPHIC AND TAX MAPS, AERIAL PHOTOGRAPHS**



**Property At**

1700 Embarcadero Road

Palo Alto, CA 94303

Inquiry Number: 3611943.4

May 20, 2013

## EDR Historical Topographic Map Report

# EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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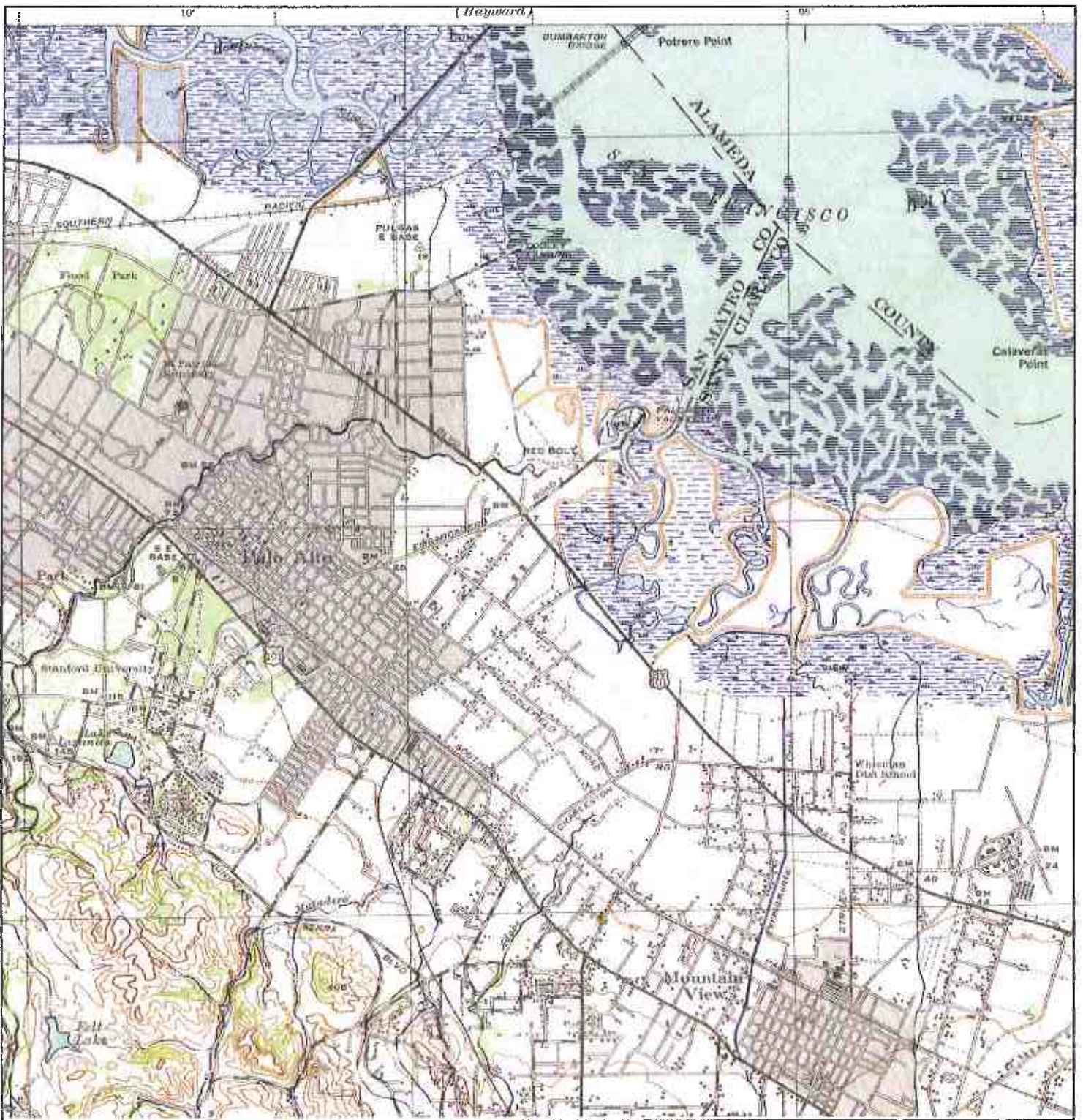
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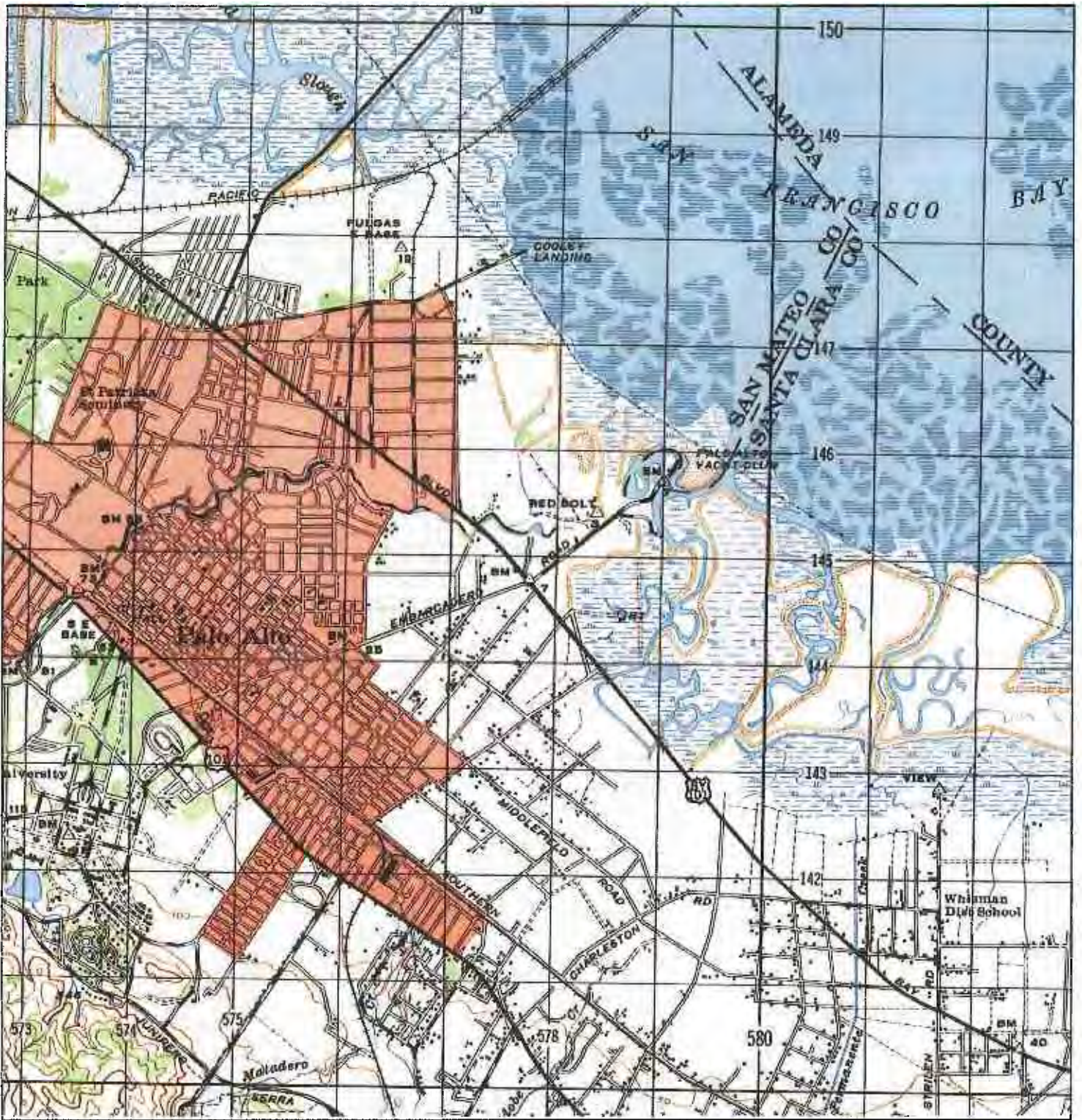



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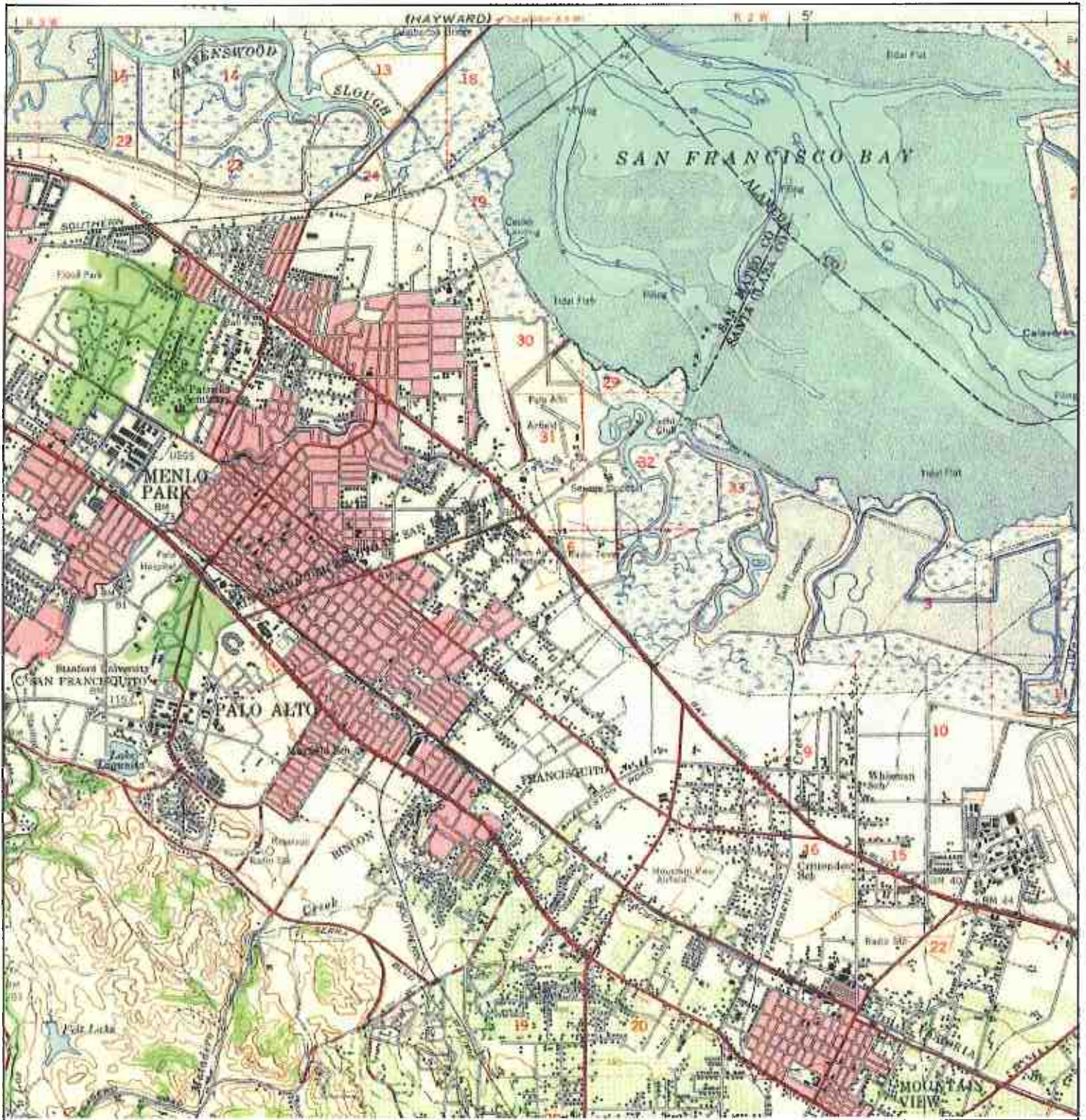
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	NAME: PALO ALTO	ADDRESS: 1700 Embarcadero Road	CONTACT: Chris Palmer
	MAP YEAR: 1943	Palo Alto, CA 94303	INQUIRY#: 3611943.4
	SERIES: 15	LAT/LONG: 37.4495 / -122.1191	RESEARCH DATE: 05/20/2013
	SCALE: 1:62500		


# Historical Topographic Map



	<b>TARGET QUAD</b> NAME: PALO ALTO MAP YEAR: 1947	<b>SITE NAME:</b> Property At <b>ADDRESS:</b> 1700 Embarcadero Road Palo Alto, CA 94303 <b>LAT/LONG:</b> 37.4495 / -122.1191	<b>CLIENT:</b> Romig Consulting Engineers <b>CONTACT:</b> Chris Palmer <b>INQUIRY#:</b> 3611943.4 <b>RESEARCH DATE:</b> 05/20/2013
	SERIES: 15 SCALE: 1:50000		

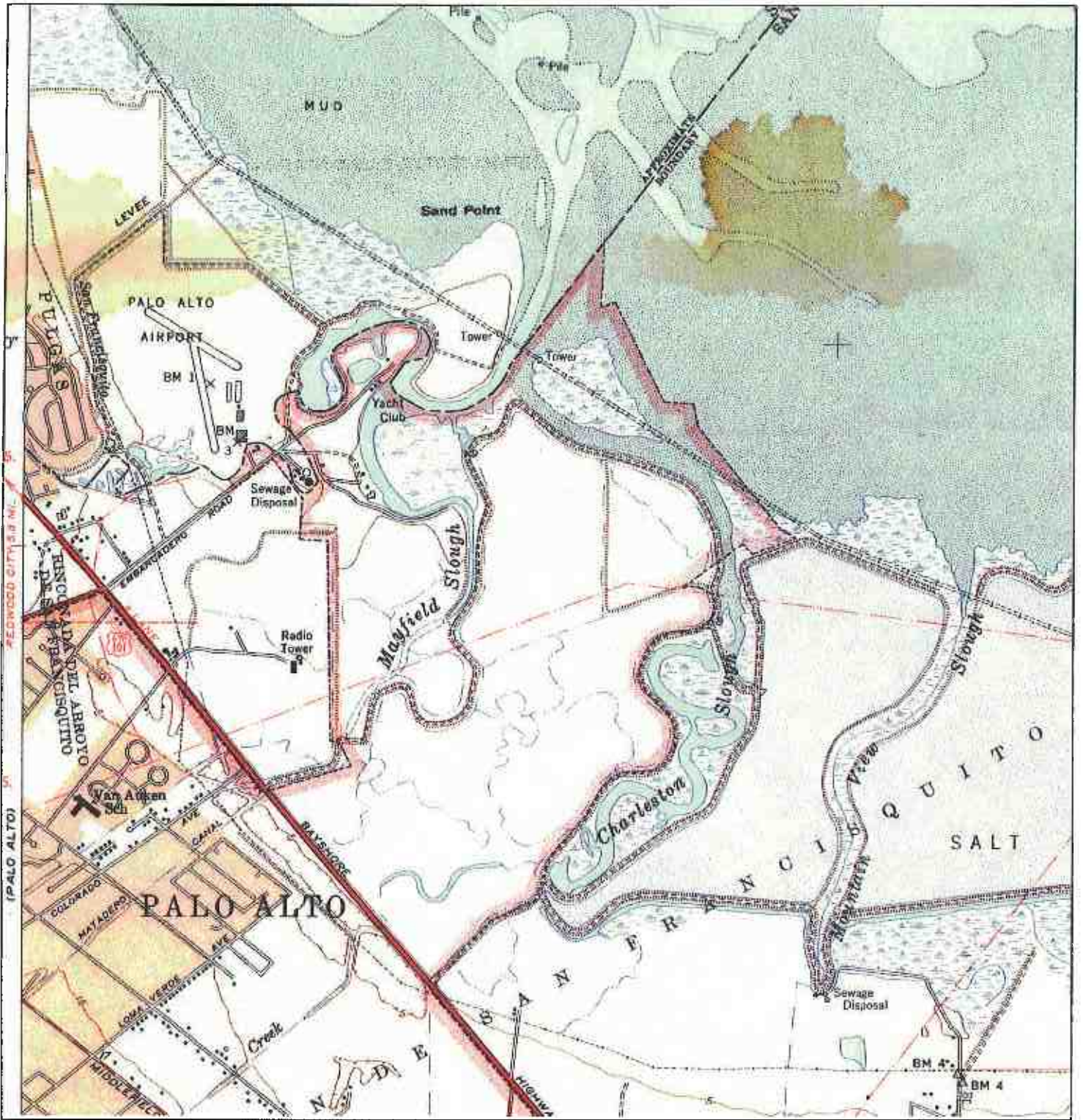
# Historical Topographic Map



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	<b>NAME:</b> PALO ALTO	<b>ADDRESS:</b> 1700 Embarcadero Road Palo Alto, CA 94303	<b>CONTACT:</b> Chris Palmer
	<b>MAP YEAR:</b> 1948	<b>LAT/LONG:</b> 37.4495 / -122.1191	<b>INQUIRY#:</b> 3611943.4
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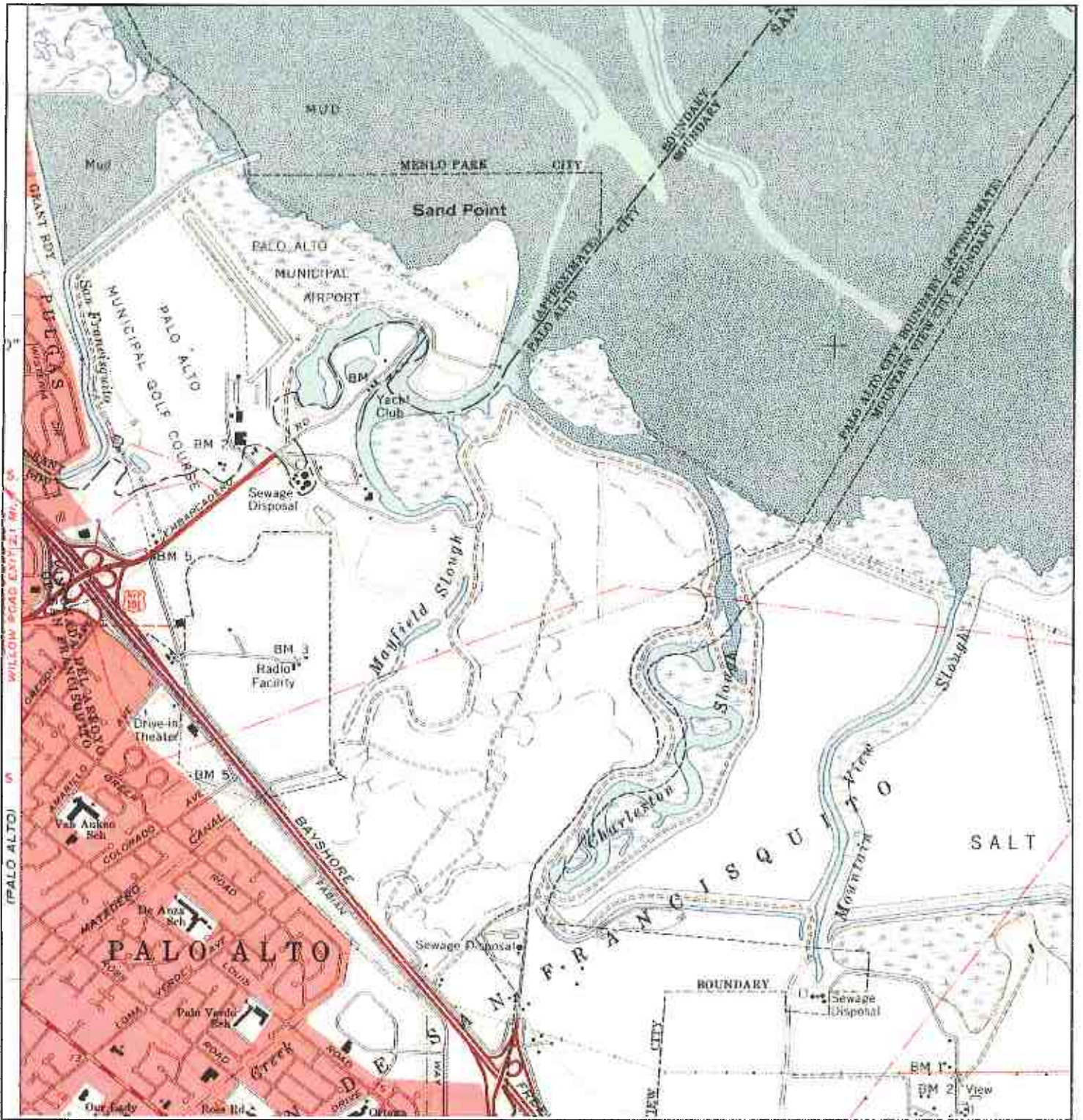



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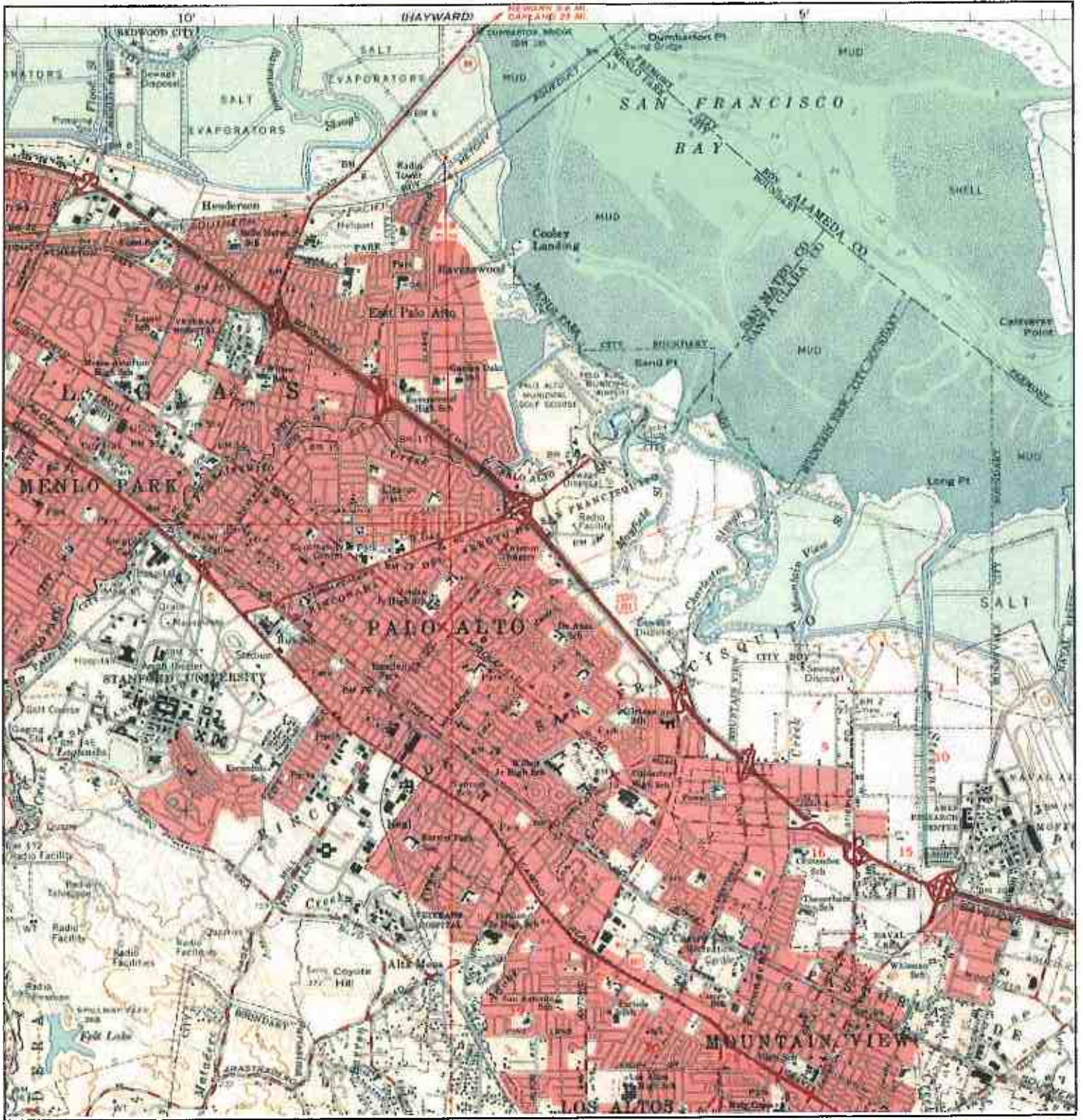
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	<b>NAME:</b> MOUNTAINVIEW	<b>ADDRESS:</b> 1700 Embarcadero Road	<b>CONTACT:</b> Chris Palmer
	<b>MAP YEAR:</b> 1953	<b>LAT/LONG:</b> 37.4495 / -122.1191	<b>INQUIRY#:</b> 3611943.4
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	<b>SCALE:</b> 1:24000		


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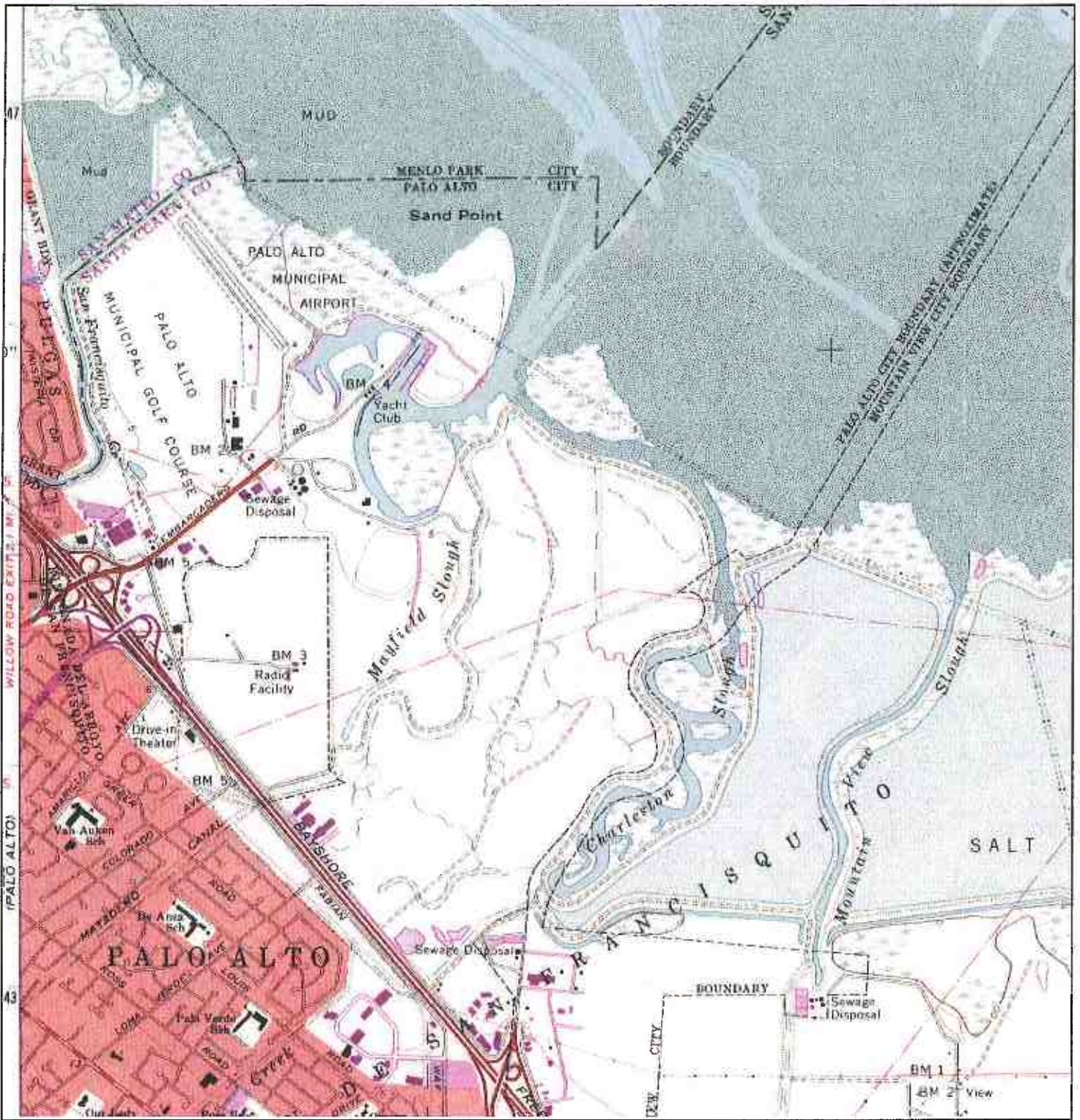
	<b>TARGET QUAD</b> NAME: MOUNTAINVIEW MAP YEAR: 1961	<b>SITE NAME:</b> Property At <b>ADDRESS:</b> 1700 Embarcadero Road Palo Alto, CA 94303 <b>LAT/LONG:</b> 37.4495 / -122.1191	<b>CLIENT:</b> Romig Consulting Engineers <b>CONTACT:</b> Chris Palmer <b>INQUIRY#:</b> 3611943.4 <b>RESEARCH DATE:</b> 05/20/2013
	SERIES: 7.5 SCALE: 1:24000		


# Historical Topographic Map



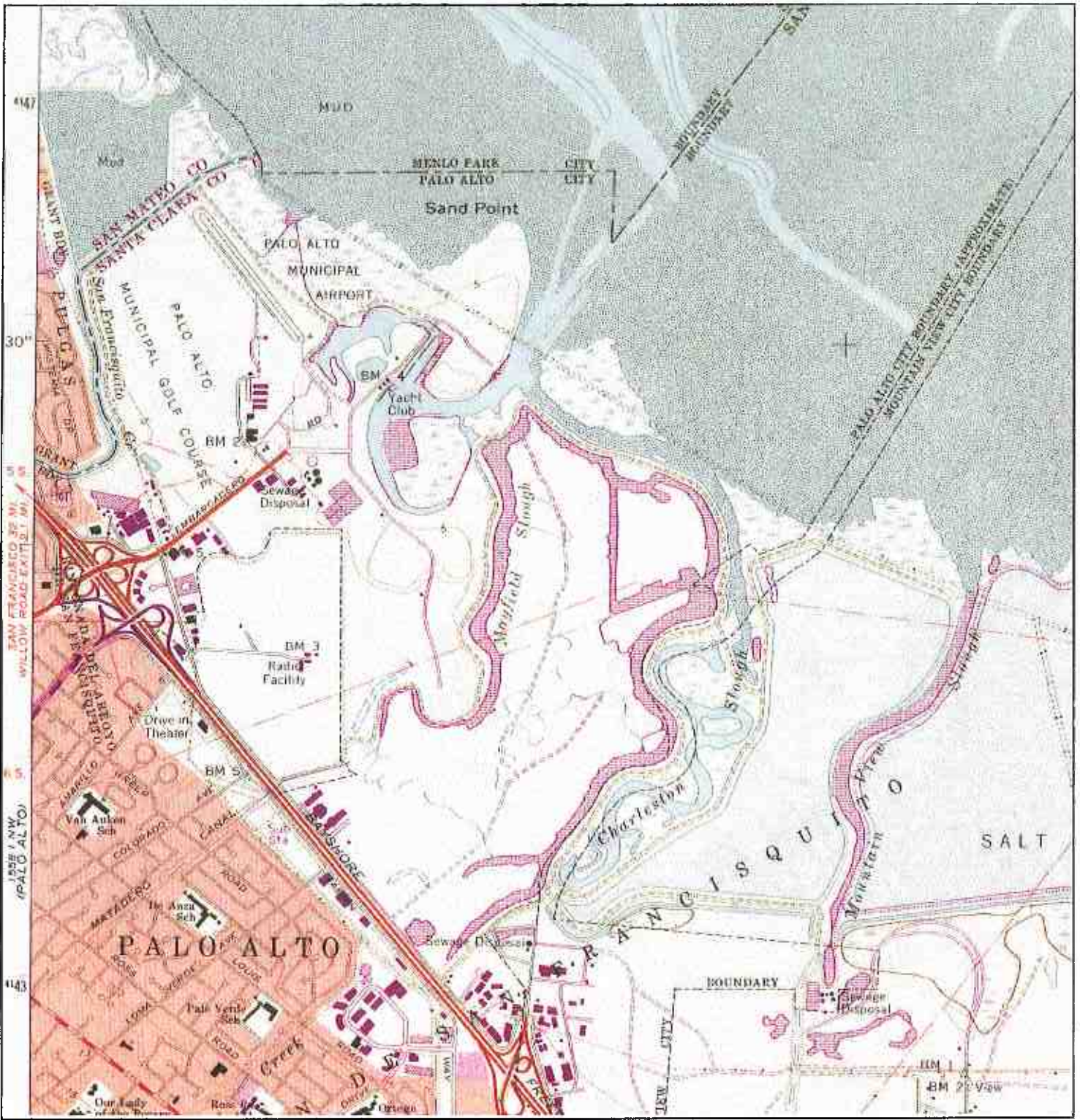
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	NAME: PALO ALTO	ADDRESS:	1700 Embarcadero Road	CONTACT:	Chris Palmer
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	SCALE: 1:62500				


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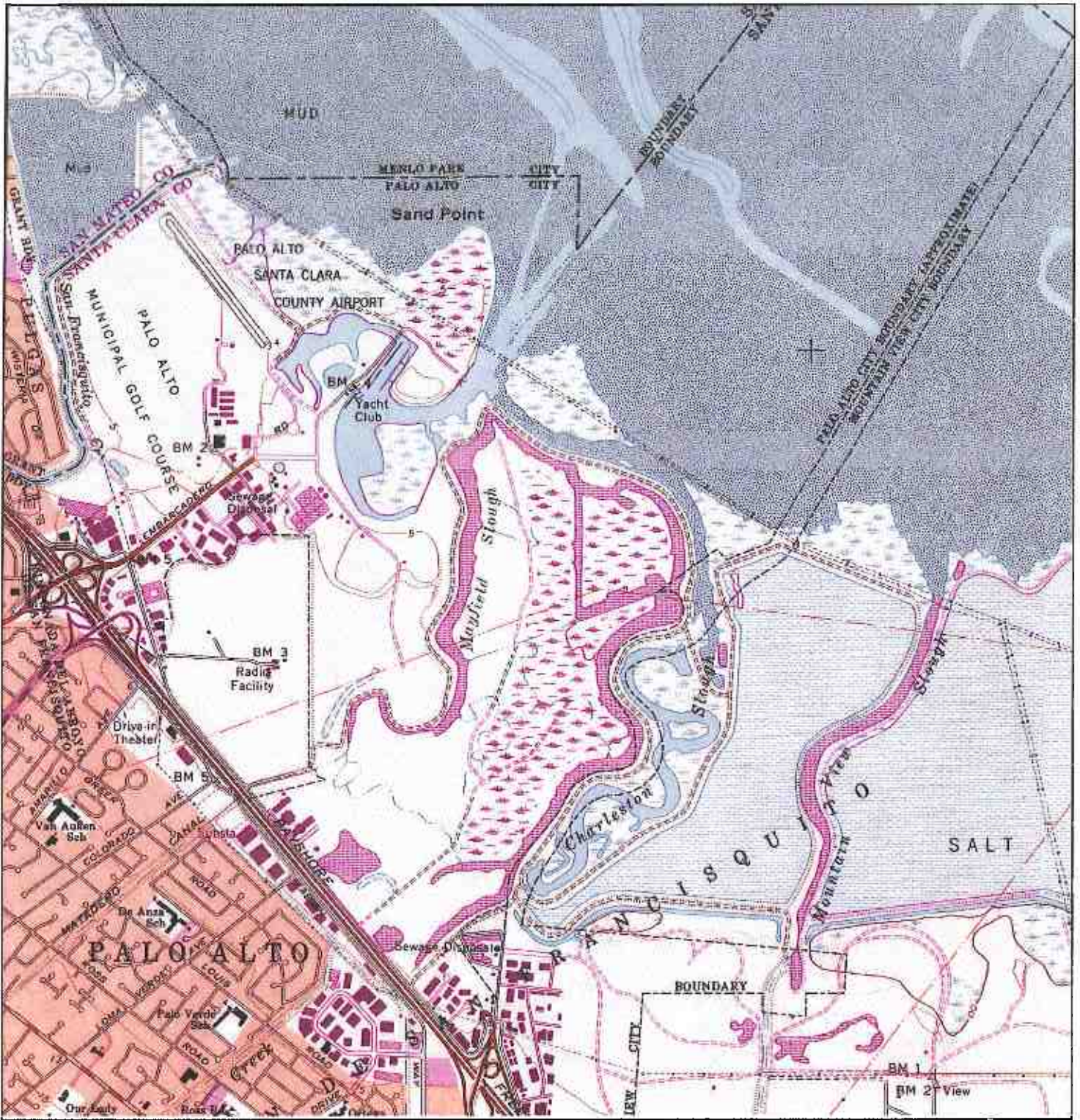
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	NAME: MOUNTAINVIEW	ADDRESS:	1700 Embarcadero Road	CONTACT:	Chris Palmer
	MAP YEAR: 1968		Palo Alto, CA 94303	INQUIRY#:	3611943.4
	PHOTOREVISED FROM :1961	LAT/LONG:	37.4495 / -122.1191	RESEARCH DATE:	05/20/2013
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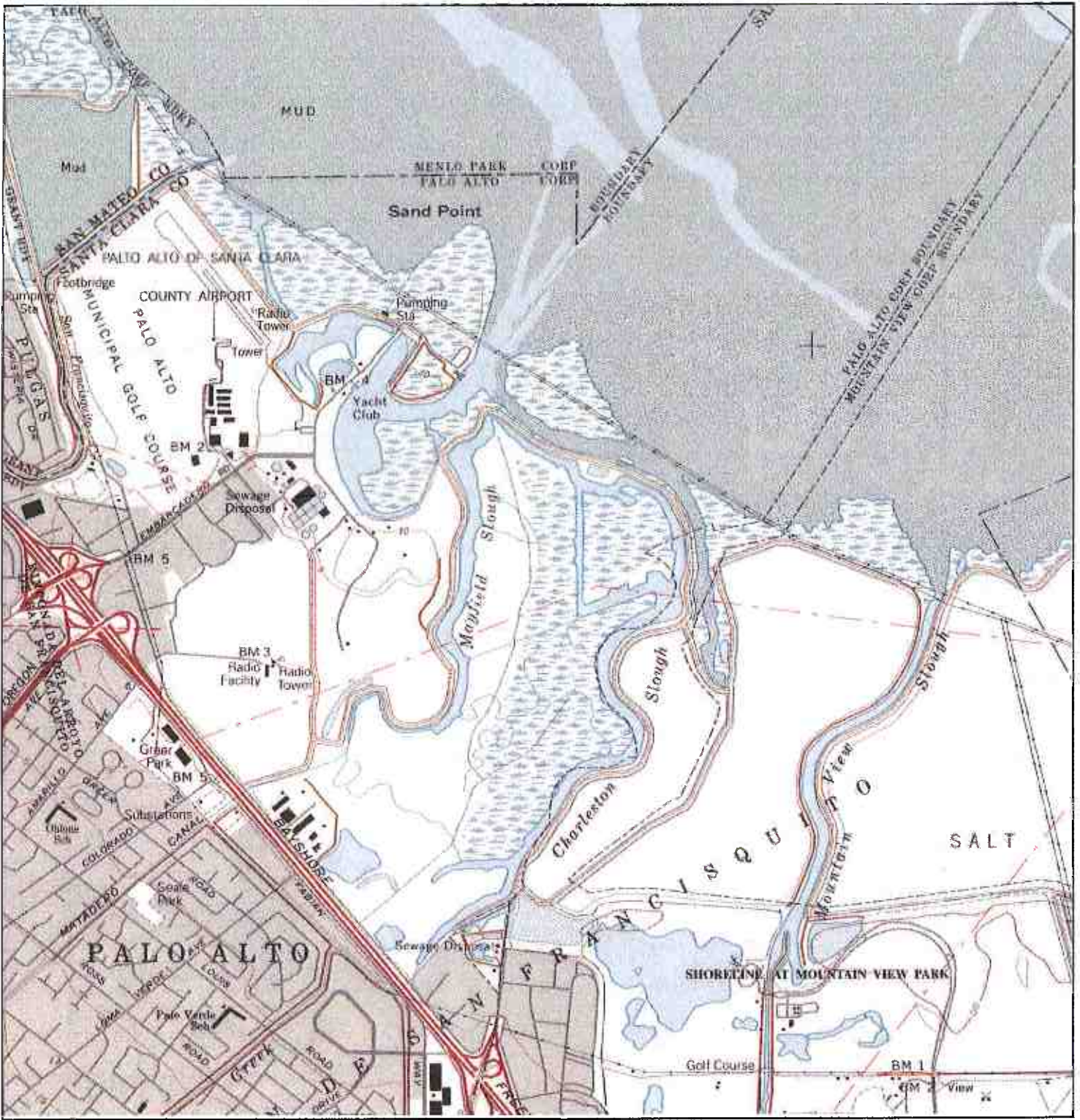
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	SERIES: 7.5				
	SCALE: 1:24000				


# Historical Topographic Map



	TARGET QUAD	SITE NAME:	Property At	CLIENT:	Romig Consulting Engineers
	NAME: MOUNTAIN VIEW	ADDRESS:	1700 Embarcadero Road	CONTACT:	Chris Palmer
	MAP YEAR: 1981	LAT/LONG:	Palo Alto, CA 94303	INQUIRY#:	3611943.4
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# Historical Topographic Map

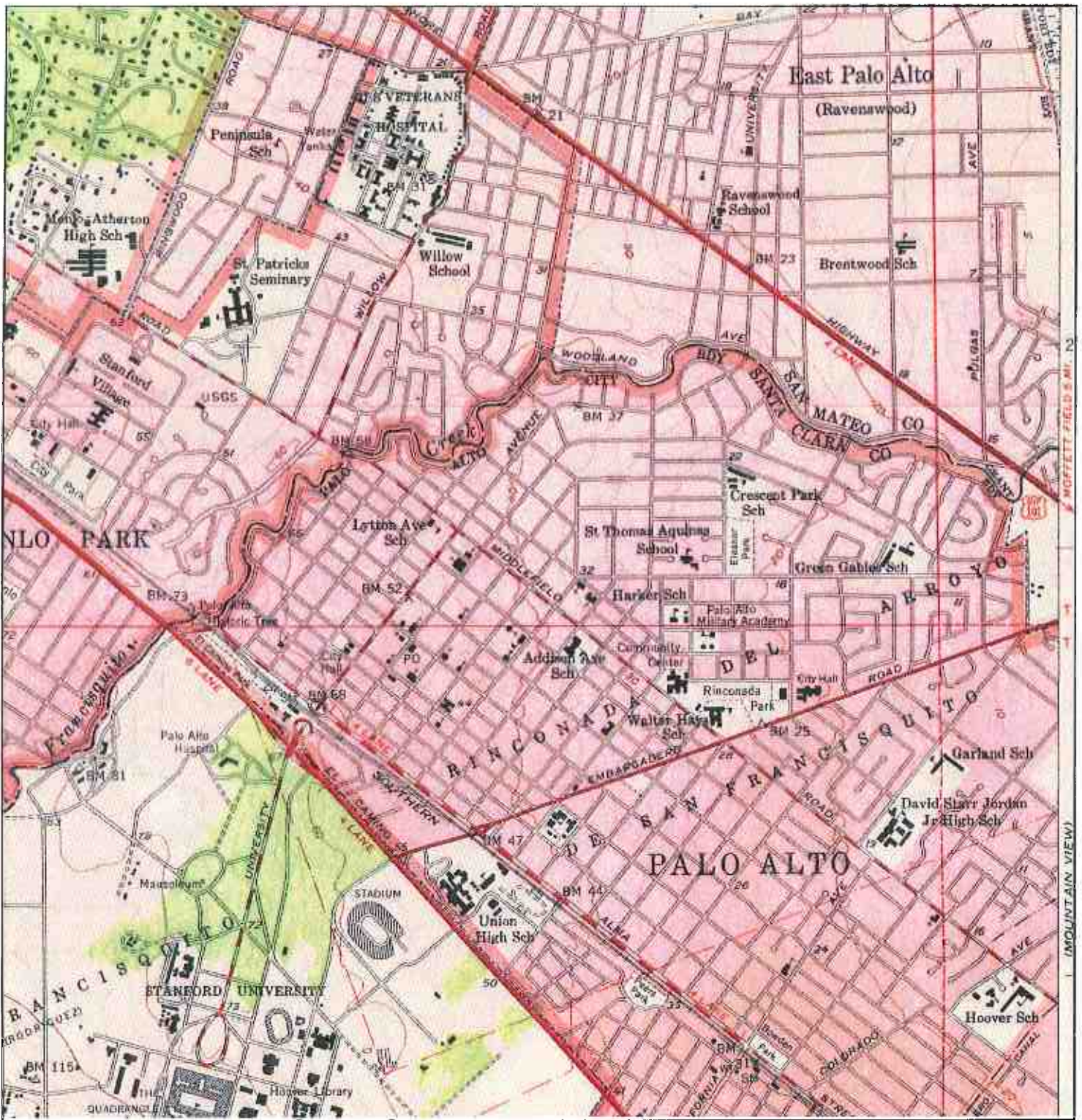



	<b>TARGET QUAD</b> NAME: MOUNTAINVIEW MAP YEAR: 1991	<b>SITE NAME:</b> Property At <b>ADDRESS:</b> 1700 Embarcadero Road Palo Alto, CA 94303 <b>LAT/LONG:</b> 37.4495 / -122.1191	<b>CLIENT:</b> Romig Consulting Engineers <b>CONTACT:</b> Chris Palmer <b>INQUIRY#:</b> 3611943.4 <b>RESEARCH DATE:</b> 05/20/2013
	SERIES: 7.5 SCALE: 1:24000		



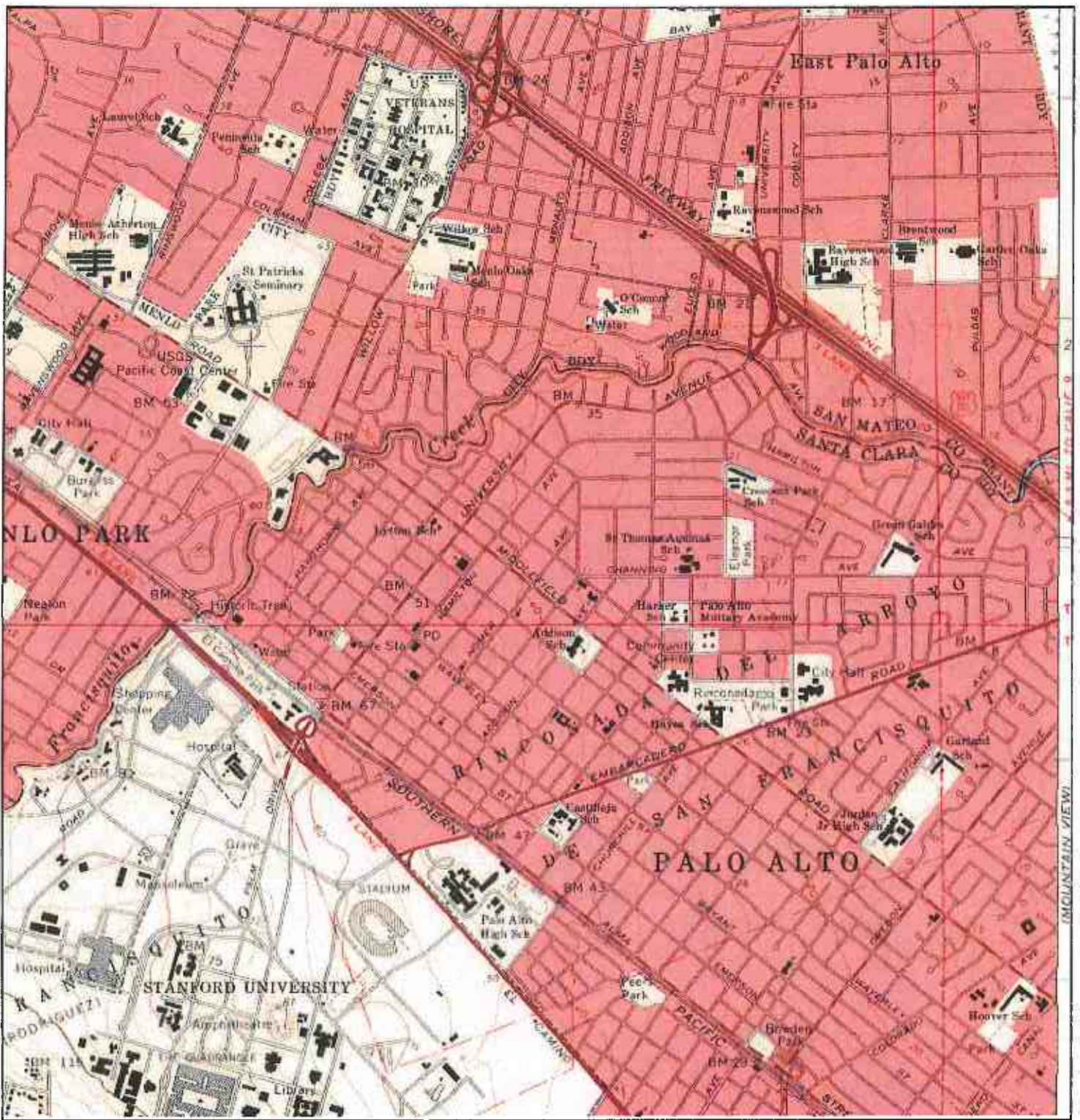


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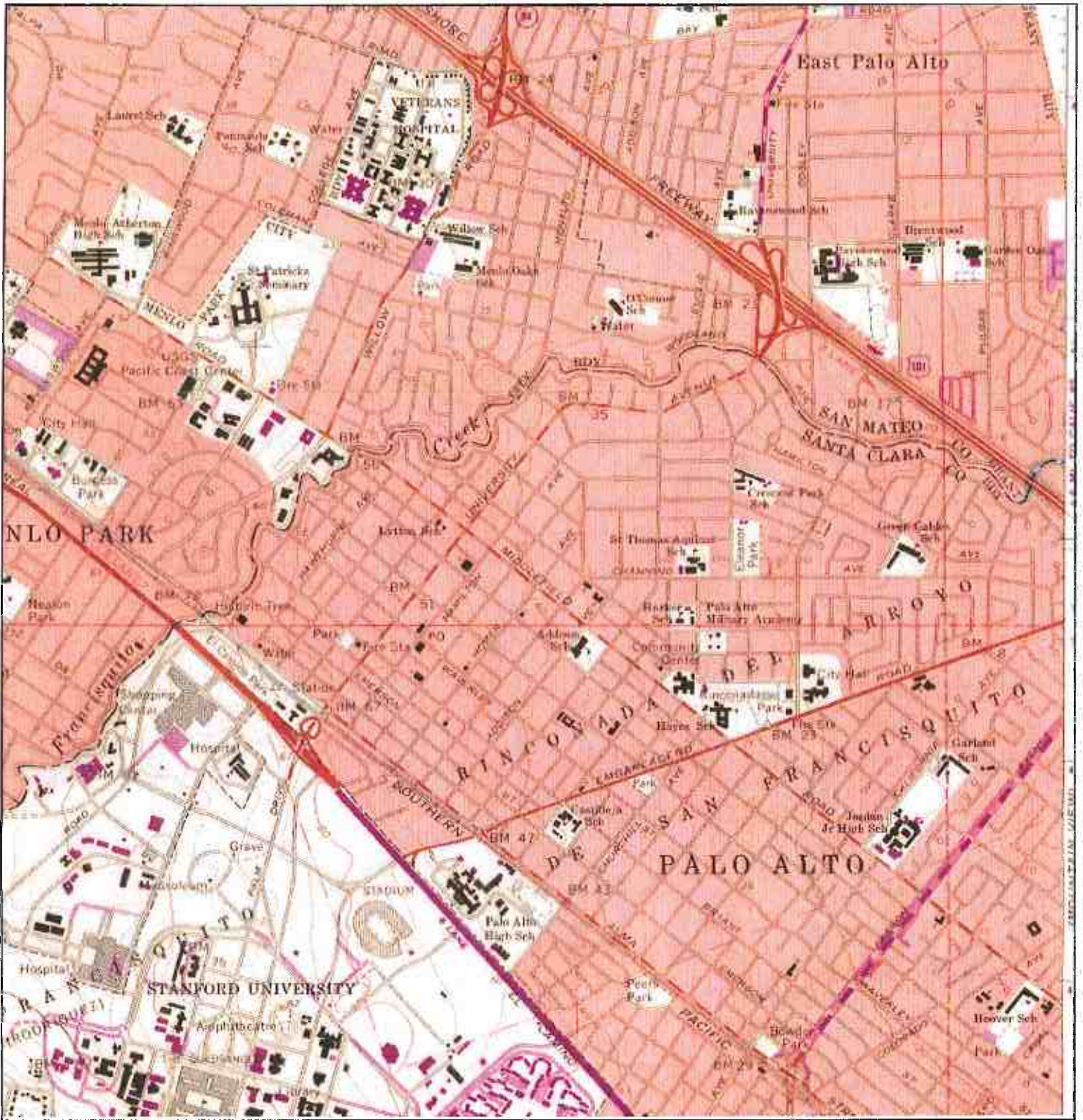
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	MAP YEAR: 1953	ADDRESS:	CONTACT:
		1700 Embarcadero Road	Chris Palmer
		Palo Alto, CA 94303	INQUIRY#: 3611943.4
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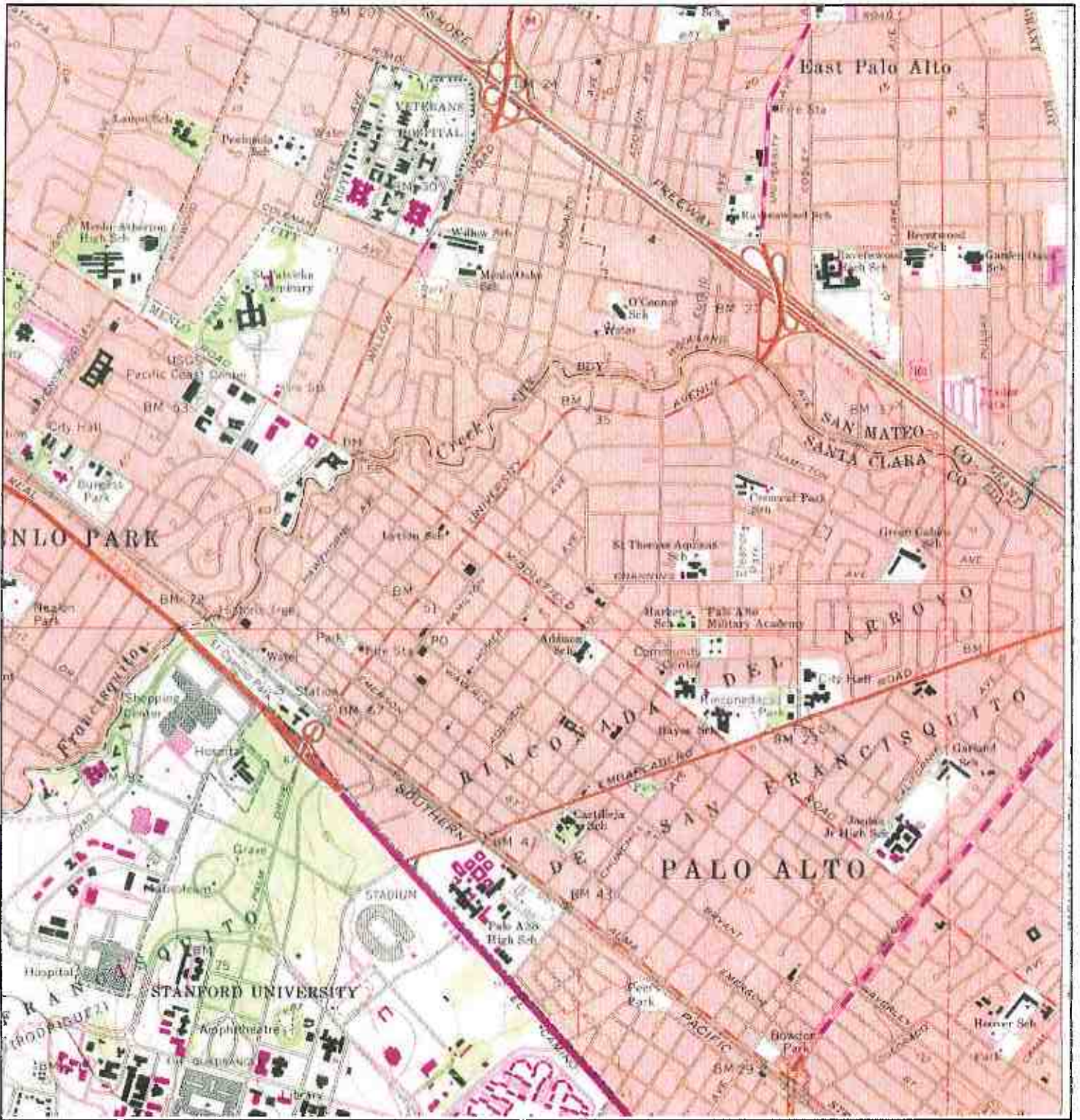
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	SERIES: 7.5	LAT/LONG: 37.4495 / -122.1191	INQUIRY#: 3611943.4
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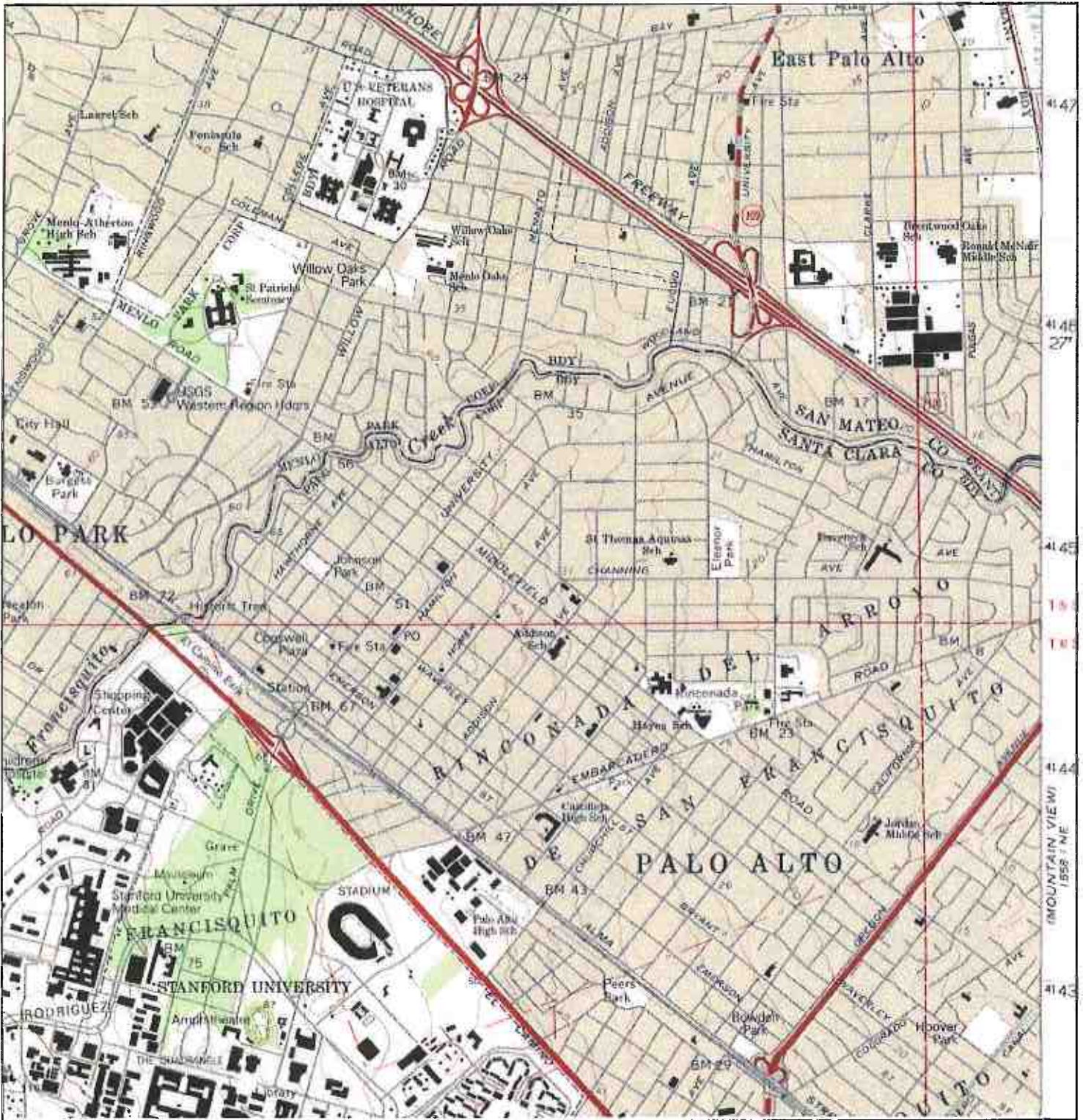
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# Historical Topographic Map



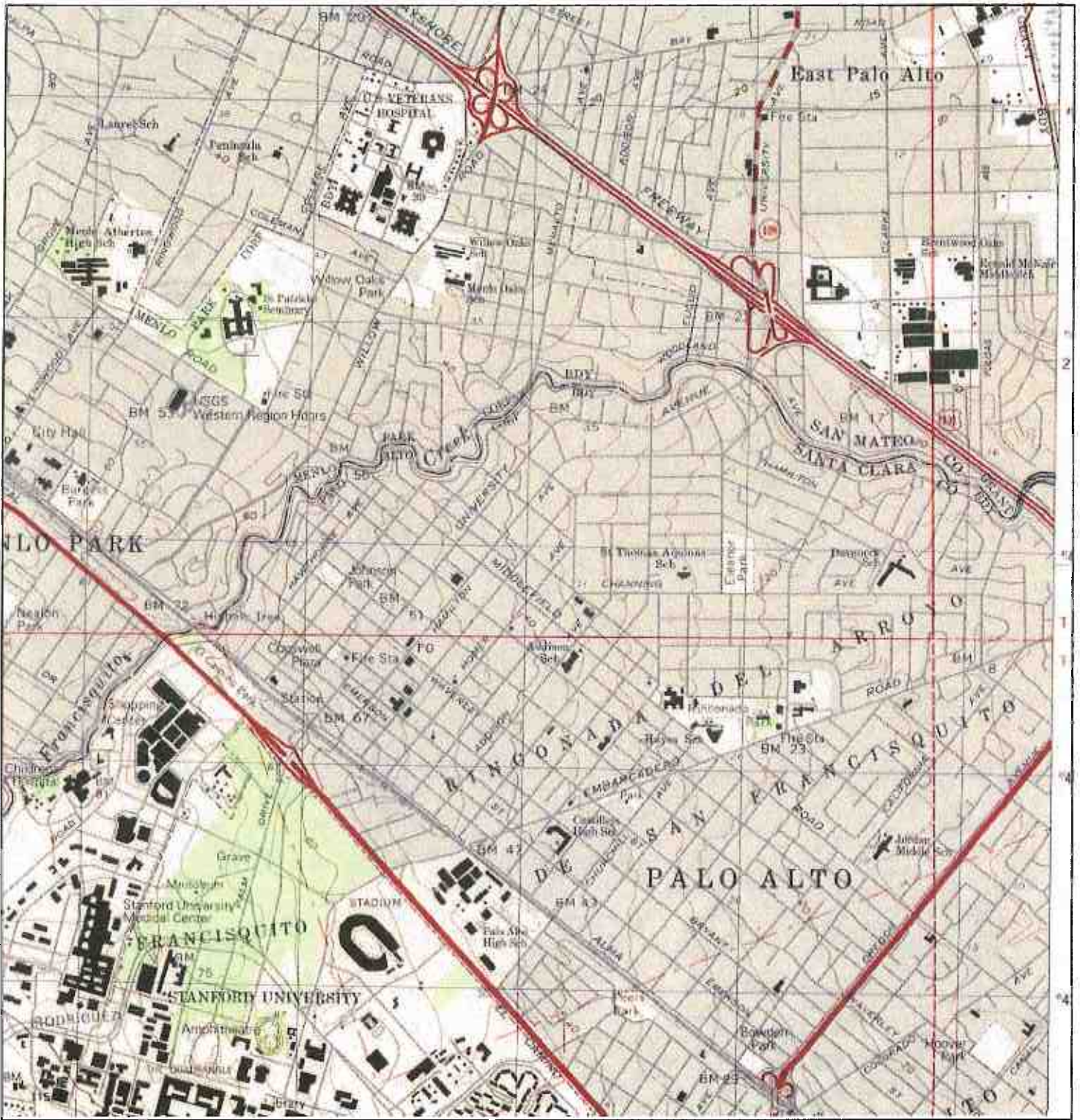
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	SERIES: 7.5	LAT/LONG: 37.4495 / -122.1191	RESEARCH DATE: 05/20/2013
	SCALE: 1:24000		

# Historical Topographic Map



	ADJOINING QUAD	SITE NAME:	CLIENT:
	NAME: PALO ALTO	Property At	Romig Consulting Engineers
	MAP YEAR: 1991	ADDRESS:	CONTACT:
		1700 Embarcadero Road	Chris Palmer
		Palo Alto, CA 94303	INQUIRY#: 3611943.4
SERIES: 7.5	LAT/LONG: 37.4495 / -122.1191	RESEARCH DATE: 05/20/2013	
SCALE: 1:24000			

# Historical Topographic Map



	<b>ADJOINING QUAD</b>						
	<b>NAME:</b>	PALO ALTO		<b>SITE NAME:</b>	Property At	<b>CLIENT:</b>	Romig Consulting Engineers
	<b>MAP YEAR:</b>	1997		<b>ADDRESS:</b>	1700 Embarcadero Road Palo Alto, CA 94303	<b>CONTACT:</b>	Chris Palmer
	<b>SERIES:</b>	7.5		<b>LAT/LONG:</b>	37.4495 / -122.1191	<b>INQUIRY#:</b>	3611943.4
	<b>SCALE:</b>	1:24000				<b>RESEARCH DATE:</b>	05/20/2013

**Property At**

1700 Embarcadero Road  
Palo Alto, CA 94303

Inquiry Number: 3611943.8  
May 20, 2013

## The EDR Property Tax Map Report



440 Wheelers Farms Road  
Milford, CT 06461  
800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

## EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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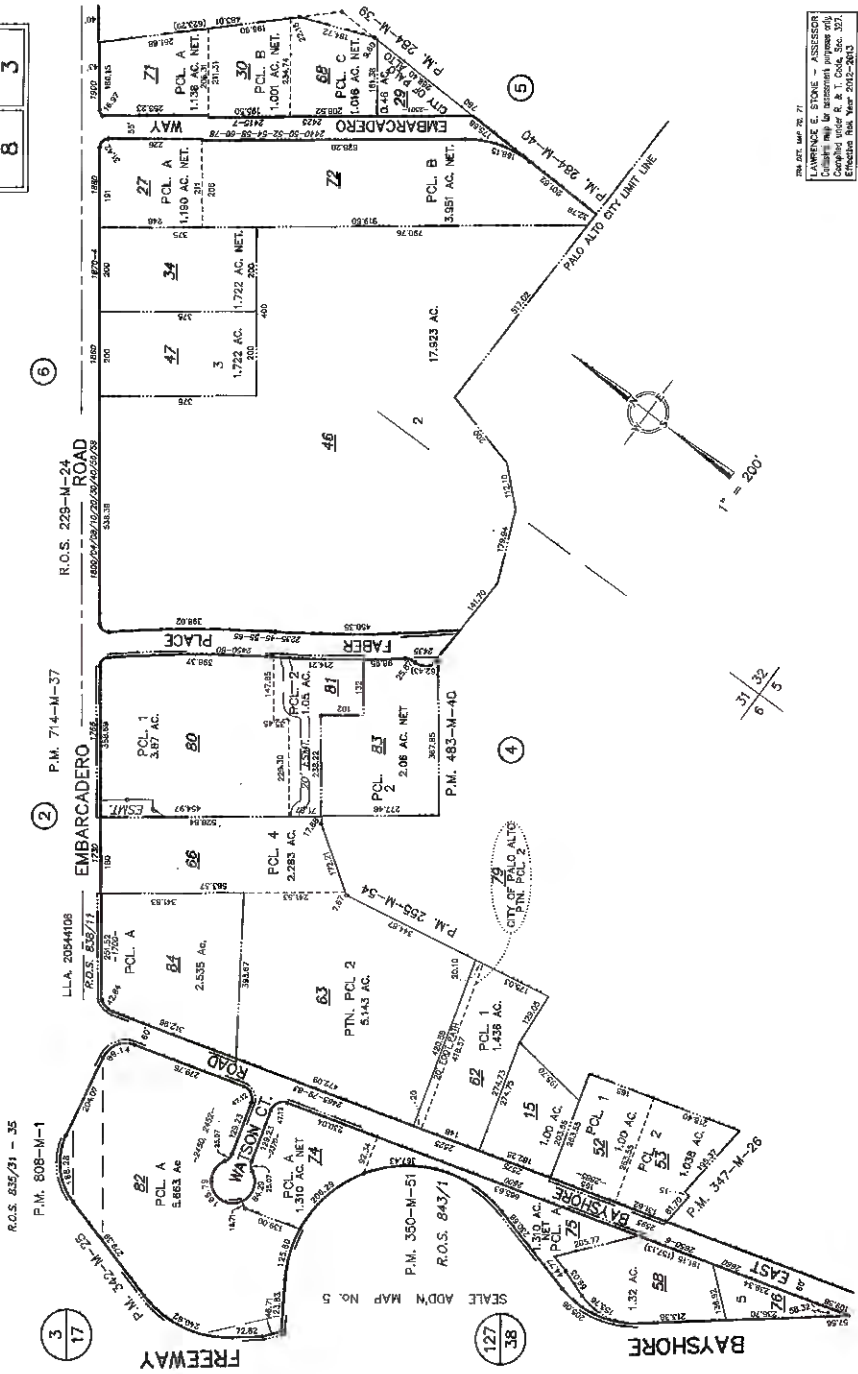
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BOOK **B** PAGE **3**





**Property At**

1700 Embarcadero Road

Palo Alto, CA 94303

Inquiry Number: 3611943.5

May 23, 2013



## The EDR Aerial Photo Decade Package

## EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Please contact EDR at 1-800-352-0050  
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**Date EDR Searched Historical Sources:**

Aerial Photography May 23, 2013

**Target Property:**

1700 Embarcadero Road

Palo Alto, CA 94303

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1939	Aerial Photograph. Scale: 1"=500'	Flight Year: 1939 Best Copy Available from original source	Fairchild
1948	Aerial Photograph. Scale: 1"=500'	Flight Year: 1948	USGS
1956	Aerial Photograph. Scale: 1"=500'	Flight Year: 1956	Aero
1968	Aerial Photograph. Scale: 1"=500'	Flight Year: 1968	USGS
1974	Aerial Photograph. Scale: 1"=500'	Flight Year: 1974	USGS
1982	Aerial Photograph. Scale: 1"=500'	Flight Year: 1982	WSA
1991	Aerial Photograph. Scale: 1"=500'	/DOQQ - acquisition dates: 1991	EDR
1999	Aerial Photograph. Scale: 1"=500'	Flight Year: 1999	WAC
2006	Aerial Photograph. Scale: 1"=500'	Flight Year: 2006	EDR
2009	Aerial Photograph. Scale: 1"=500'	Flight Year: 2009	EDR
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	EDR
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	EDR



INQUIRY #: 3611943.5

YEAR: 1939

— = 500'





INQUIRY #: 3611943.5

YEAR: 1948

| = 500'





INQUIRY #: 3611943.5

YEAR: 1956

| = 500'





INQUIRY #: 3611943.5

YEAR: 1968

| = 500'







INQUIRY #: 3611943.5

YEAR: 1974

 = 500'



 City of Los Angeles  
Department of Public Works



INQUIRY #: 3611943.5

YEAR: 1982

— = 500'





INQUIRY #: 3611943.5

YEAR: 1991

|—————| = 500'





INQUIRY #: 3611943.5

YEAR: 1999

|—————| = 500'





INQUIRY #: 3611943.5

YEAR: 2006

|—————| = 500'



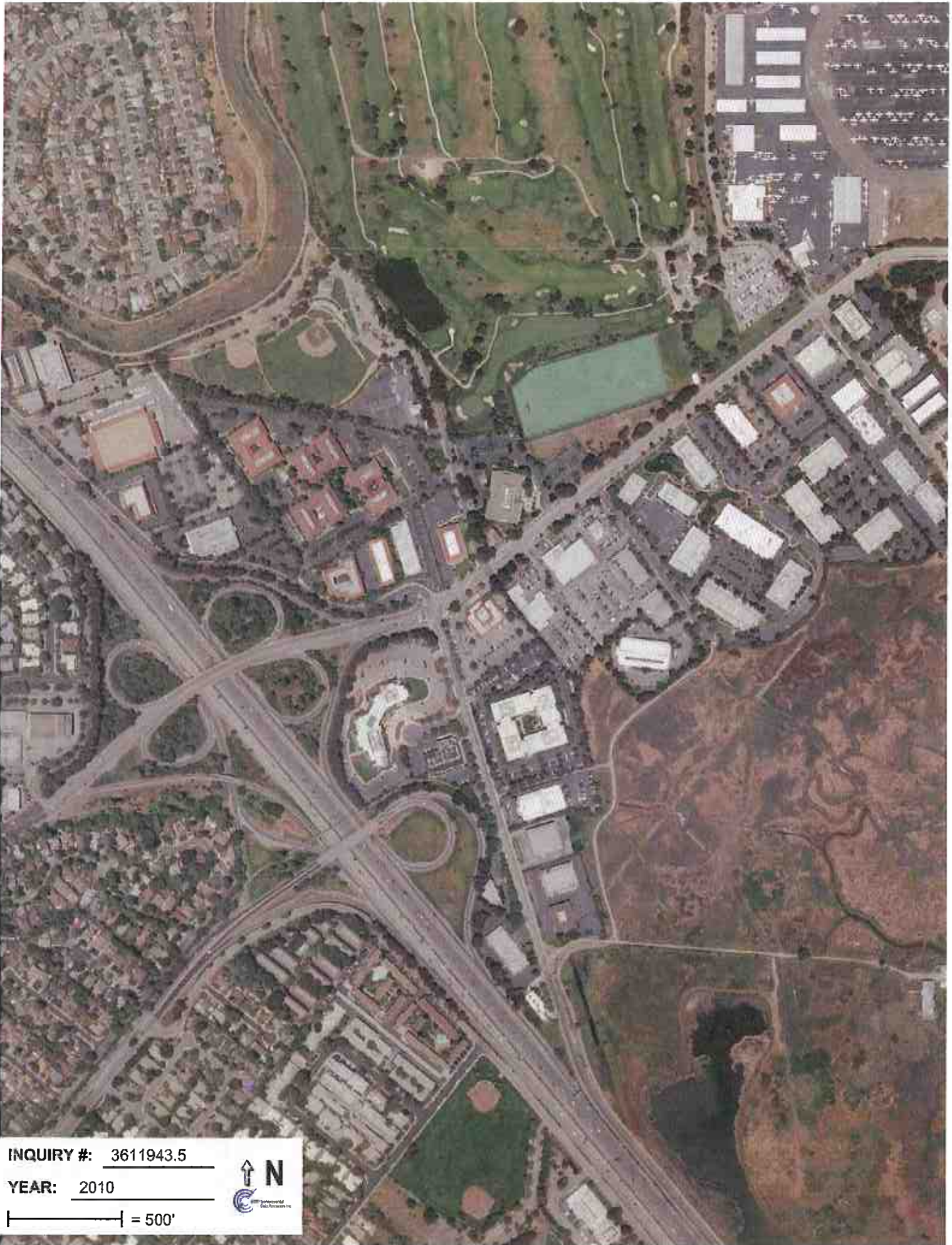


INQUIRY #: 3611943.5

YEAR: 2009

| = 500'





INQUIRY #: 3611943.5

YEAR: 2010


—|— = 500'





INQUIRY #: 3611943.5

YEAR: 2012

 = 500'





**APPENDIX D**

**QUALIFICATION OF ENVIRONMENTAL PROFESSIONAL**

## **RESUME OF QUALIFICATIONS**

### **REPRESENTATIVE EXPERIENCE**

Christopher M. Palmer has diversified experience in hydrogeologic and engineering geologic studies in California and other States. He has performed and supervised hundreds of investigations for contaminant soil and groundwater assessment, sampling, and groundwater monitoring well design and installation, and aquifer data analysis and report preparation. Additional work includes onsite sewage wastewater absorption system testing and Phase One Environmental Site Assessments and other geologic studies. Mr. Palmer is also experienced in regulatory negotiation and compliance for petroleum, solvent, and metals contamination, shallow soil pesticide contaminants, and development and implementation of work plans for soil and groundwater site cleanup and site "closure" (no further work required).

Project experience includes contaminant assessments at military and industrial sites, RCRA RI/FS studies, underground storage tanks, onsite wastewater disposal for residential and light commercial development, municipal landfill site investigations and expansion of municipal and hazardous waste disposal sites. Mr. Palmer has provided contaminant hydrogeology instruction through university extension classes and to professional societies and government agencies, and has authored professional journal publications and the book "Principles of Contaminant Hydrogeology (1991; 1996)."

### **EDUCATION**

California State University, Fresno, B. A. Geology, Jan. 1975.

California State University, Fresno, M. A. Geology, Dec. 1978.

Continuing Education Classes in hydrogeology, chemistry, regulations, 1981-present.

### **CERTIFICATIONS**

OSHA 29 CFR 1910.120 Hazardous Waste Training (40 hr., with 8 hr. updates).

### **PROFESSIONAL REGISTRATIONS**

State of California Professional Geologist No. 3989; Certified Engineering Geologist No. 1262; Certified Hydrogeologist No. 246.

State of Arkansas Registered Geologist No. 320.

State of Pennsylvania Registered Geologist No. 892.

### **PROFESSIONAL SOCIETIES**

National Groundwater Association.

Groundwater Resources Association of California

**APPENDIX E**

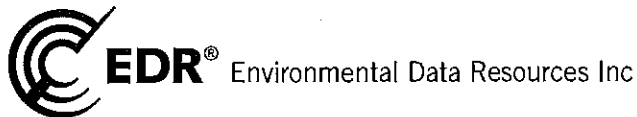
**EDR RADIUS REPORT**  
(Provided On Attached CD)

**Property At**

1700 Embarcadero Road  
Palo Alto, CA 94303

Inquiry Number: 3611943.2s  
May 20, 2013

**The EDR Radius Map™ Report with GeoCheck®**



440 Wheelers Farms Road  
Milford, CT 06461  
Toll Free: 800.352.0050  
www.edrnet.com

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*Thank you for your business.*  
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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

1700 EMBARCADERO ROAD  
PALO ALTO, CA 94303

#### COORDINATES

Latitude (North): 37.4495000 - 37° 26' 58.20"  
Longitude (West): 122.1191000 - 122° 7' 8.76"  
Universal Transverse Mercator: Zone 10  
UTM X (Meters): 577917.9  
UTM Y (Meters): 4144898.8  
Elevation: 8 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 37122-D1 MOUNTAIN VIEW, CA  
Most Recent Revision: 1999

West Map: 37122-D2 PALO ALTO, CA  
Most Recent Revision: 1999

### AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year: 2012  
Source: USDA

### TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

### STANDARD ENVIRONMENTAL RECORDS

#### *Federal NPL site list*

NPL..... National Priority List

## EXECUTIVE SUMMARY

Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System  
FEDERAL FACILITY..... Federal Facility Site Information listing

### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators  
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

### ***Federal Institutional controls / engineering controls registries***

US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROL..... Sites with Institutional Controls  
LUCIS..... Land Use Control Information System

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

### ***State- and tribal - equivalent NPL***

RESPONSE..... State Response Sites

### ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF..... Solid Waste Information System

### ***State and tribal leaking storage tank lists***

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

### ***State and tribal registered storage tank lists***

UST..... Active UST Facilities  
INDIAN UST..... Underground Storage Tanks on Indian Land  
FEMA UST..... Underground Storage Tank Listing

### ***State and tribal voluntary cleanup sites***

VCP..... Voluntary Cleanup Program Properties

## EXECUTIVE SUMMARY

INDIAN VCP..... Voluntary Cleanup Priority Listing

### ADDITIONAL ENVIRONMENTAL RECORDS

#### **Local Brownfield lists**

US BROWNFIELDS..... A Listing of Brownfields Sites

#### **Local Lists of Landfill / Solid Waste Disposal Sites**

ODI..... Open Dump Inventory  
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations  
WMUDS/SWAT..... Waste Management Unit Database  
SWRCY..... Recycler Database  
HAULERS..... Registered Waste Tire Haulers Listing  
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

#### **Local Lists of Hazardous waste / Contaminated Sites**

US CDL..... Clandestine Drug Labs  
HIST Cal-Sites..... Historical Calsites Database  
SCH..... School Property Evaluation Program  
Toxic Pits..... Toxic Pits Cleanup Act Sites  
CDL..... Clandestine Drug Labs  
US HIST CDL..... National Clandestine Laboratory Register

#### **Local Land Records**

LIENS 2..... CERCLA Lien Information  
LIENS..... Environmental Liens Listing  
DEED..... Deed Restriction Listing

#### **Records of Emergency Release Reports**

HMIRS..... Hazardous Materials Information Reporting System  
CHMIRS..... California Hazardous Material Incident Report System  
LDS..... Land Disposal Sites Listing  
MCS..... Military Cleanup Sites Listing  
SPILLS 90..... SPILLS 90 data from FirstSearch

#### **Other Ascertainable Records**

DOT OPS..... Incident and Accident Data  
DOD..... Department of Defense Sites  
FUDS..... Formerly Used Defense Sites  
CONSENT..... Superfund (CERCLA) Consent Decrees  
ROD..... Records Of Decision  
UMTRA..... Uranium Mill Tailings Sites  
US MINES..... Mines Master Index File  
TRIS..... Toxic Chemical Release Inventory System  
TSCA..... Toxic Substances Control Act  
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)  
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing



## EXECUTIVE SUMMARY

SSTS.....	Section 7 Tracking Systems
ICIS.....	Integrated Compliance Information System
PADS.....	PCB Activity Database System
MLTS.....	Material Licensing Tracking System
RADINFO.....	Radiation Information Database
FINDS.....	Facility Index System/Facility Registry System
RAATS.....	RCRA Administrative Action Tracking System
RMP.....	Risk Management Plans
CA BOND EXP. PLAN.....	Bond Expenditure Plan
NPDES.....	NPDES Permits Listing
UIC.....	UIC Listing
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
SAN JOSE HAZMAT.....	Hazardous Material Facilities
Notify 65.....	Proposition 65 Records
DRYCLEANERS.....	Cleaner Facilities
WIP.....	Well Investigation Program Case List
ENF.....	Enforcement Action Listing
HAZNET.....	Facility and Manifest Data
EML.....	Emissions Inventory Data
INDIAN RESERV.....	Indian Reservations
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
WDS.....	Waste Discharge System
PRP.....	Potentially Responsible Parties
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
LEAD SMELTERS.....	Lead Smelter Sites
2020 COR ACTION.....	2020 Corrective Action Program List
Financial Assurance.....	Financial Assurance Information Listing
EPA WATCH LIST.....	EPA WATCH LIST
US FIN ASSUR.....	Financial Assurance Information
PCB TRANSFORMER.....	PCB Transformer Registration Database
PROC.....	Certified Processors Database
MWMP.....	Medical Waste Management Program Listing
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
HWT.....	Registered Hazardous Waste Transporter Database
HWP.....	EnviroStor Permitted Facilities Listing

### EDR HIGH RISK HISTORICAL RECORDS

#### *EDR Exclusive Records*

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR US Hist Cleaners.....	EDR Exclusive Historic Dry Cleaners

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in *bold italics* are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

## EXECUTIVE SUMMARY

### STANDARD ENVIRONMENTAL RECORDS

#### ***Federal CERCLIS NFRAP site List***

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 02/05/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PALO ALTO MUNI REFUSE DSPL ARE	2380 EMBARCADERO RD	NE 1/4 - 1/2 (0.388 mi.)	G24	65

#### ***Federal RCRA generators list***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 02/12/2013 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
KAPTRON INC	2525 E BAYSHORE FRONTAGS 1/8 - 1/4 (0.154 mi.)		12	28

#### ***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 03/13/2013 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PALO ALTO MUNICIPAL SANITARY L Status: Refer: RWQCB	2380 EMBARCADERO RD	NE 1/4 - 1/2 (0.388 mi.)	G25	66

## EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
GEMFIRE CORPORATION Status: Inactive - Needs Evaluation	2440 EMBARCADERO WAY	ENE 1/4 - 1/2 (0.420 mi.)	28	73

### **State and tribal leaking storage tank lists**

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 03/18/2013 has revealed that there are 15 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CARLSEN MOTORS</b> Status: Completed - Case Closed	1730 EMBARCADERO RD	NNE 0 - 1/8 (0.063 mi.)	A2	10
<b>STANFORD HONDA</b> Status: Completed - Case Closed	1766 EMBARCADERO RD	NE 0 - 1/8 (0.106 mi.)	C7	16
<b>ANGIOTECH BIOMATERIALS CORP</b> Status: Completed - Case Closed	2500 FABER PL	ENE 1/8 - 1/4 (0.155 mi.)	D14	31
<b>GOPOWER</b> Status: Completed - Case Closed	1890 EMBARCADERO RD	NE 1/4 - 1/2 (0.357 mi.)	21	56
<b>PALO ALTO AIRPORT</b> Status: Completed - Case Closed	1901 EMBARCADERO RD	NE 1/4 - 1/2 (0.371 mi.)	G22	59
<b>DYNA BELL</b> Status: Completed - Case Closed	151 LAURA LN	WNW 1/4 - 1/2 (0.374 mi.)	23	63
<b>EQUILON ENTERPRISES</b>	1161 EMBARCADERO	WSW 1/4 - 1/2 (0.411 mi.)	H26	70
<b>SHELL</b> Status: Completed - Case Closed	1161 EMBARCADERO RD	WSW 1/4 - 1/2 (0.411 mi.)	H27	70
<b>PALO ALTO MAIN POST OFFICE</b> Status: Completed - Case Closed	2085 E BAYSHORE	WNW 1/4 - 1/2 (0.421 mi.)	I29	74
UNITED STATES POSTAL SERVICE ( Status: Completed - Case Closed	2085 EAST BAYSHORE ROAD	WNW 1/4 - 1/2 (0.421 mi.)	I30	75
<b>PALO ALTO POST OFFICE</b>	2085 E BAYSHORE RD	WNW 1/4 - 1/2 (0.421 mi.)	I31	76
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>OLD POST OFFICE PALO ALTO</b> Status: Completed - Case Closed	2197 E BAYSHORE RD	WNW 1/4 - 1/2 (0.282 mi.)	E16	47
OLD POST OFFICE PALO ALTO <b>PALO ALTO GOLF COURSE</b> Status: Completed - Case Closed	2197 E BAYSHORE RD 1875 EMBARCADERO RD	WNW 1/4 - 1/2 (0.282 mi.) NE 1/4 - 1/2 (0.323 mi.)	E17 F19	48 49
<b>PALO ALTO GOLF COURSE</b>	1875 EMBARCADERO RD	NE 1/4 - 1/2 (0.323 mi.)	F20	55

## EXECUTIVE SUMMARY

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 03/18/2013 has revealed that there are 3 SLIC sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>STANFORD HONDA</b> Facility Status: Open - Site Assessment	<b>1766 EMBARCADERO RD</b>	<b>NE 0 - 1/8 (0.106 mi.)</b>	<b>C7</b>	<b>16</b>
<b>PALO ALTO SANITATION CO</b> Facility Status: Open - Site Assessment	<b>2000 GENG RD</b>	<b>NNW 1/8 - 1/4 (0.224 mi.)</b>	<b>15</b>	<b>38</b>
<b>MOON DRY CLEANERS</b> Facility Status: Open - Remediation	<b>2125 SAINT FRANCIS DRIV</b>	<b>WSW 1/4 - 1/2 (0.425 mi.)</b>	<b>32</b>	<b>78</b>

HIST LUST: A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

A review of the HIST LUST list, as provided by EDR, and dated 03/29/2005 has revealed that there are 10 HIST LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CARLSEN MOTORS</b>	<b>1730 EMBARCADERO RD</b>	<b>NNE 0 - 1/8 (0.063 mi.)</b>	<b>A2</b>	<b>10</b>
<b>STANFORD HONDA</b>	<b>1766 EMBARCADERO RD</b>	<b>NE 0 - 1/8 (0.106 mi.)</b>	<b>C7</b>	<b>16</b>
<b>COLLAGEN INC.</b>	<b>2500 FABER PL</b>	<b>ENE 1/8 - 1/4 (0.155 mi.)</b>	<b>D13</b>	<b>31</b>
<b>GOPOWER</b>	<b>1890 EMBARCADERO RD</b>	<b>NE 1/4 - 1/2 (0.357 mi.)</b>	<b>21</b>	<b>56</b>
<b>PALO ALTO AIRPORT</b>	<b>1901 EMBARCADERO RD</b>	<b>NE 1/4 - 1/2 (0.371 mi.)</b>	<b>G22</b>	<b>59</b>
<b>DYNA BELL</b>	<b>151 LAURA LN</b>	<b>WNW 1/4 - 1/2 (0.374 mi.)</b>	<b>23</b>	<b>63</b>
<b>SHELL</b>	<b>1161 EMBARCADERO RD</b>	<b>WSW 1/4 - 1/2 (0.411 mi.)</b>	<b>H27</b>	<b>70</b>
<b>PALO ALTO POST OFFICE</b>	<b>2085 E BAYSHORE RD</b>	<b>WNW 1/4 - 1/2 (0.421 mi.)</b>	<b>I31</b>	<b>76</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>OLD POST OFFICE PALO ALTO</b>	<b>2197 E BAYSHORE RD</b>	<b>WNW 1/4 - 1/2 (0.282 mi.)</b>	<b>E16</b>	<b>47</b>
<b>PALO ALTO GOLF COURSE</b>	<b>1875 EMBARCADERO RD</b>	<b>NE 1/4 - 1/2 (0.323 mi.)</b>	<b>F20</b>	<b>55</b>

### **State and tribal registered storage tank lists**

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the AST list, as provided by EDR, and dated 08/01/2009 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>PALO ALTO SANITATION CO</b>	<b>2000 GENG RD</b>	<b>NNW 1/8 - 1/4 (0.224 mi.)</b>	<b>15</b>	<b>38</b>

## EXECUTIVE SUMMARY

### ADDITIONAL ENVIRONMENTAL RECORDS

#### **Local Lists of Registered Storage Tanks**

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 3 CA FID UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>CARLSEN PORSCHE AUDI, INC.</i>	<i>1730 EMBARCADERO RD</i>	<i>NNE 0 - 1/8 (0.063 mi.)</i>	<i>A1</i>	<i>8</i>
<i>CARL R. CARLSEN INC.</i>	<i>1766 EMBARCADERO RD</i>	<i>NE 0 - 1/8 (0.106 mi.)</i>	<i>C6</i>	<i>15</i>
<i>ANGIOTECH BIOMATERIALS CORP</i>	<i>2500 FABER PL</i>	<i>ENE 1/8 - 1/4 (0.155 mi.)</i>	<i>D14</i>	<i>31</i>

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>CARLSEN PORSCHE AUDI, INC.</i>	<i>1730 EMBARCADERO RD</i>	<i>NNE 0 - 1/8 (0.063 mi.)</i>	<i>A1</i>	<i>8</i>
<i>CARL R. CARLSEN INC.</i>	<i>1766 EMBARCADERO RD</i>	<i>NE 0 - 1/8 (0.106 mi.)</i>	<i>C5</i>	<i>14</i>
<i>ANGIOTECH BIOMATERIALS CORP</i>	<i>2500 FABER PL</i>	<i>ENE 1/8 - 1/4 (0.155 mi.)</i>	<i>D14</i>	<i>31</i>

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 3 SWEEPS UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>CARLSEN PORSCHE AUDI, INC.</i>	<i>1730 EMBARCADERO RD</i>	<i>NNE 0 - 1/8 (0.063 mi.)</i>	<i>A1</i>	<i>8</i>
<i>CARL R. CARLSEN INC.</i>	<i>1766 EMBARCADERO RD</i>	<i>NE 0 - 1/8 (0.106 mi.)</i>	<i>C6</i>	<i>15</i>
<i>ANGIOTECH BIOMATERIALS CORP</i>	<i>2500 FABER PL</i>	<i>ENE 1/8 - 1/4 (0.155 mi.)</i>	<i>D14</i>	<i>31</i>

#### **Other Ascertainable Records**

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 02/12/2013 has revealed that

## EXECUTIVE SUMMARY

there are 4 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MICROELECTRONICS TECHNOLOGY CO	2446 WATSON COURT	SSW 0 - 1/8 (0.093 mi.)	B3	12
ANDERSON HONDA ISUZU	1766 EMBARCADERO RD	NE 0 - 1/8 (0.106 mi.)	C8	20
ANGIOTECH BIOMATERIALS CORP	2500 FABER PL	ENE 1/8 - 1/4 (0.155 mi.)	D14	31
PALO ALTO SANITATION CO	2000 GENG RD	NNW 1/8 - 1/4 (0.224 mi.)	15	38

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 9 HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CARLSEN MOTORS	1730 EMBARCADERO RD	NNE 0 - 1/8 (0.063 mi.)	A2	10
STANFORD HONDA	1766 EMBARCADERO RD	NE 0 - 1/8 (0.106 mi.)	C7	16
ANGIOTECH BIOMATERIALS CORP	2500 FABER PL	ENE 1/8 - 1/4 (0.155 mi.)	D14	31
GOPOWER	1890 EMBARCADERO RD	NE 1/4 - 1/2 (0.357 mi.)	21	56
PALO ALTO AIRPORT	1901 EMBARCADERO RD	NE 1/4 - 1/2 (0.371 mi.)	G22	59
DYNA BELL	151 LAURA LN	WNW 1/4 - 1/2 (0.374 mi.)	23	63
SHELL	1161 EMBARCADERO RD	WSW 1/4 - 1/2 (0.411 mi.)	H27	70

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OLD POST OFFICE PALO ALTO	2197 BAYSHORE	WNW 1/4 - 1/2 (0.284 mi.)	E18	49
PALO ALTO GOLF COURSE	1875 EMBARCADERO RD	NE 1/4 - 1/2 (0.323 mi.)	F19	49

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 5 CUPA Listings sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CARLSEN MOTORS	1730 EMBARCADERO RD	NNE 0 - 1/8 (0.063 mi.)	A2	10
ST-EYE INSTITUTE	2452 WATSON CT	SSW 0 - 1/8 (0.094 mi.)	B4	13
STANFORD HONDA	1766 EMBARCADERO RD	NE 0 - 1/8 (0.106 mi.)	C7	16
MATHEWS CARLSEN BODY WORKS	2480 FABER PLACE	ENE 1/8 - 1/4 (0.152 mi.)	D11	23
ANGIOTECH BIOMATERIALS CORP	2500 FABER PL	ENE 1/8 - 1/4 (0.155 mi.)	D14	31

### EDR HIGH RISK HISTORICAL RECORDS

#### *EDR Exclusive Records*

## EXECUTIVE SUMMARY

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there are 2 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	1766 EMBARCADERO RD	NE 0 - 1/8 (0.107 mi.)	C9	21
Not reported	2480 FABER PL	ENE 1/8 - 1/4 (0.152 mi.)	D10	22

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

Site Name

CALMAC CHEMICAL  
AT & T MOBILITY-BAYSHORE RD 13328  
ACE FIRE EQUIPMENT & SVC CO INC  
PALO ALTO CITY OF

Database(s)

CERC-NFRAP  
San Mateo Co. BI  
San Mateo Co. BI  
MANIFEST



# OVERVIEW MAP - 3611943.2s



★ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

▲ Manufactured Gas Plants

▨ National Priority List Sites

▩ Dept. Defense Sites

▨ Indian Reservations BIA

— County Boundary

— Power transmission lines

— Oil & Gas pipelines from USGS

▨ 100-year flood zone

▨ 500-year flood zone

▨ National Wetland Inventory

▨ Areas of Concern

0 1/4 1/2 1 Miles

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Property At  
 ADDRESS: 1700 Embarcadero Road  
 Palo Alto CA 94303  
 LAT/LONG: 37.4495 / 122.1191

CLIENT: Romig Consulting Engineers  
 CONTACT: Chris Palmer  
 INQUIRY #: 3611943.2s  
 DATE: May 20, 2013 5:11 pm

# DETAIL MAP - 3611943.2s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- ★ Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- ▨ Indian Reservations BIA
- County Boundary
- Power transmission lines
- Oil & Gas pipelines from USGS
- ▨ 100-year flood zone
- ▨ 500-year flood zone
- ▨ National Wetland Inventory
- ▨ Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

<p><b>SITE NAME:</b> Property At  <b>ADDRESS:</b> 1700 Embarcadero Road                  Palo Alto CA 94303  <b>LAT/LONG:</b> 37.4495 / 122.1191</p>	<p><b>CLIENT:</b> Romig Consulting Engineers  <b>CONTACT:</b> Chris Palmer  <b>INQUIRY #:</b> 3611943.2s  <b>DATE:</b> May 20, 2013 5:18 pm</p>
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## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b><u>STANDARD ENVIRONMENTAL RECORDS</u></b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site List</i></b>								
CERC-NFRAP	0.500		0	0	1	NR	NR	1
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL</i></b>								
RESPONSE	1.000		0	0	0	0	NR	0
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
ENVIROSTOR	1.000		0	0	2	0	NR	2
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST	0.500		2	1	12	NR	NR	15

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC	0.500		1	1	1	NR	NR	3
HIST LUST	0.500		2	1	7	NR	NR	10
INDIAN LUST	0.500		0	0	0	NR	NR	0
<b>State and tribal registered storage tank lists</b>								
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
<b>Local Lists of Registered Storage Tanks</b>								
CA FID UST	0.250		2	1	NR	NR	NR	3
HIST UST	0.250		2	1	NR	NR	NR	3
SWEEPS UST	0.250		2	1	NR	NR	NR	3
<b>Local Land Records</b>								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		2	2	NR	NR	NR	4
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
HIST CORTESE	0.500		2	1	6	NR	NR	9
CUPA Listings	0.250		3	2	NR	NR	NR	5
SAN JOSE HAZMAT	0.250		0	0	NR	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0

### EDR HIGH RISK HISTORICAL RECORDS

#### *EDR Exclusive Records*

EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		1	1	NR	NR	NR	2
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

#### NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

A1  
NNE  
< 1/8  
0.063 mi.  
334 ft.

CARLSEN PORSCHE AUDI, INC.  
1730 EMBARCADERO RD  
PALO ALTO, CA 94303

CA FID UST 1000292290  
HIST UST N/A  
SWEEPS UST

Site 1 of 2 in cluster A

Relative:  
Higher

CA FID UST:

Facility ID: 43007072  
Regulated By: UTNKA  
Regulated ID: 00019810  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: 4158566300  
Mail To: Not reported  
Mailing Address: 1730 EMBARCADERO RD  
Mailing Address 2: Not reported  
Mailing City,St,Zip: PALO ALTO 94303  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

Actual:  
8 ft.

HIST UST:

Region: STATE  
Facility ID: 00000019810  
Facility Type: Other  
Other Type: CAR DEALER  
Total Tanks: 0004  
Contact Name: CHARLES A. BURTON  
Telephone: 4158566300  
Owner Name: CARL R.. CARLSEN  
Owner Address: 2480 FABER PLACE  
Owner City,St,Zip: PALO ALTO, CA 94303

Tank Num: 001  
Container Num: 1  
Year Installed: 1979  
Tank Capacity: 00010000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

Tank Num: 002  
Container Num: 2  
Year Installed: Not reported  
Tank Capacity: 00001000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

Tank Num: 003  
Container Num: 3  
Year Installed: Not reported  
Tank Capacity: 00001000

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

**CARLSEN PORSCHE AUDI, INC. (Continued)**

**1000292290**

Tank Used for: WASTE  
Type of Fuel: WASTE OIL  
Tank Construction: Not reported  
Leak Detection: Not reported

Tank Num: 004  
Container Num: 4  
Year Installed: Not reported  
Tank Capacity: 00000000  
Tank Used for: WASTE  
Type of Fuel: Not reported  
Tank Construction: Not reported  
Leak Detection: None

**SWEEPS UST:**

Status: Active  
Comp Number: 19810  
Number: 9  
Board Of Equalization: 44-026081  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Tank Status: A  
Owner Tank Id: 1  
Swrcb Tank Id: 43-006-019810-000001  
Actv Date: 07-01-85  
Capacity: 10000  
Tank Use: M.V. FUEL  
Stg: P  
Content: REG UNLEADED  
Number Of Tanks: 4

Status: Active  
Comp Number: 19810  
Number: 9  
Board Of Equalization: 44-026081  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Tank Status: A  
Owner Tank Id: 2  
Swrcb Tank Id: 43-006-019810-000002  
Actv Date: 07-01-85  
Capacity: 1000  
Tank Use: M.V. FUEL  
Stg: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19810  
Number: 9  
Board Of Equalization: 44-026081  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Tank Status: A



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CARLSEN PORSCHE AUDI, INC. (Continued)**

**1000292290**

Owner Tank Id: 3  
Swrcb Tank Id: 43-006-019810-000003  
Actv Date: 07-01-85  
Capacity: 1000  
Tank Use: OIL  
Stg: W  
Content: WASTE OIL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 19810  
Number: 9  
Board Of Equalization: 44-026081  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88

Tank Status: A  
Owner Tank Id: 4  
Swrcb Tank Id: 43-006-019810-000004  
Actv Date: 07-01-85  
Capacity: Not reported  
Tank Use: UNKNOWN  
Stg: W  
Content: Not reported  
Number Of Tanks: Not reported

A2  
NNE  
< 1/8  
0.063 mi.  
334 ft.

**CARLSEN MOTORS  
1730 EMBARCADERO RD  
PALO ALTO, CA**

**Site 2 of 2 in cluster A**

Relative:  
Higher

CORTESE:  
Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-2214

Actual:  
8 ft.

HIST CORTESE  
LUST  
HIST LUST  
CUPA Listings

S103177425  
N/A

**LUST:**

Region: STATE  
Global Id: T0608502032  
Latitude: 37.449859  
Longitude: -122.119257  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 01/30/1998  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: UST  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CARLSEN MOTORS (Continued)**

**S103177425**

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0608502032  
Contact Type: Regional Board Caseworker  
Contact Name: ZSC  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND  
Email: Not reported  
Phone Number: Not reported

Global Id: T0608502032  
Contact Type: Local Agency Caseworker  
Contact Name: UST CASE WORKER  
Organization Name: SANTA CLARA COUNTY LOP  
Address: 1555 Berger Drive, Suite 300  
City: SAN JOSE  
Email: Not reported  
Phone Number: 4089183400

Regulatory Activities:

Global Id: T0608502032  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Reported

Global Id: T0608502032  
Action Type: REMEDIATION  
Date: 01/01/1950  
Action: Excavation

Global Id: T0608502032  
Action Type: ENFORCEMENT  
Date: 11/12/1996  
Action: Notice of Responsibility - #39186

LUST REG 2:

Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed  
Case Number: 05S2W31R02f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: 10/8/1996  
Pollution Characterization Began: 10/8/1996  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: 5/1/1997

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CARLSEN MOTORS (Continued)**

**S103177425**

**LUST SANTA CLARA:**

Region: SANTA CLARA  
SCVWD ID: 05S2W31R02F  
Date Closed: 01/30/1998

**HIST LUST SANTA CLARA:**

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 05S2W31R02  
Oversite Agency: SCVWD  
Date Listed: 1996-11-12 00:00:00  
Closed Date: 1998-01-30 00:00:00

**CUPA SANTA CLARA:**

Region: SANTA CLARA  
Program Description: GENERATES 100 KG YR TO <5 TONS/YR

Region: SANTA CLARA  
Program Description: PALO ALTO FIRE-BUSINESS PLAN (HMBP)

**B3**  
**SSW**  
**< 1/8**  
**0.093 mi.**  
**491 ft.**

**MICROELECTRONICS TECHNOLOGY CORP**  
**2446 WATSON COURT**  
**PALO ALTO, CA 94303**

**RCRA NonGen / NLR 1000366875**  
**FINDS CAD085310928**

**Site 1 of 2 in cluster B**

**Relative:**  
**Higher**

**RCRA NonGen / NLR:**

Date form received by agency: 08/15/1980  
Facility name: MICROELECTRONICS TECHNOLOGY CORP  
Facility address: 2446 WATSON CT  
PALO ALTO, CA 94303  
EPA ID: CAD085310928  
Mailing address: 2446 WATSON COURT  
PALO ALTO, CA 94303  
Contact: ENVIRONMENTAL MANAGER  
Contact address: 2446 WATSON CT  
PALO ALTO, CA 94303  
Contact country: US  
Contact telephone: (415) 856-0300  
Contact email: Not reported  
EPA Region: 09  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

**Actual:**  
**8 ft.**

**Owner/Operator Summary:**

Owner/operator name: MICROELECTRONICS TECHNOLOGY CORPORATION  
Owner/operator address: NOT REQUIRED  
NOT REQUIRED, ME 99999  
Owner/operator country: Not reported  
Owner/operator telephone: (415) 555-1212  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported  
Owner/operator name: NOT REQUIRED

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MICROELECTRONICS TECHNOLOGY CORP (Continued)**

**1000366875**

Owner/operator address: NOT REQUIRED  
NOT REQUIRED, ME 99999  
Owner/operator country: Not reported  
Owner/operator telephone: (415) 555-1212  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

**FINDS:**

Registry ID: 110006467974

**Environmental Interest/Information System**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

B4  
SSW  
< 1/8  
0.094 mi.  
497 ft.  
  
Relative:  
Higher  
  
Actual:  
8 ft.

**ST-EYE INSTITUTE**  
**2452 WATSON CT**  
**PALO ALTO, CA 94303**  
  
**Site 2 of 2 in cluster B**

CUPA SANTA CLARA:  
Region: SANTA CLARA  
Program Description: PALO ALTO FIRE-BUSINESS PLAN (HMBP)

CUPA Listings S103645733  
N/A

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

C5  
NE  
< 1/8  
0.106 mi.  
558 ft.

CARL R. CARLSEN INC.  
1766 EMBARCADERO RD  
PALO ALTO, CA 94303

HIST UST U001595862  
N/A

Site 1 of 5 in cluster C

Relative:  
Higher

Actual:  
8 ft.

HIST UST:

Region: STATE  
Facility ID: 00000007431  
Facility Type: Other  
Other Type: NEW CAR DEALERSHIP  
Total Tanks: 0004  
Contact Name: GARY WHEELER  
Telephone: 4158566000  
Owner Name: CARL R. CARLSEN INC.  
Owner Address: 1766 EMBARCADERO ROAD  
Owner City,St,Zip: PALO ALTO, CA 94303

Tank Num: 001  
Container Num: 1  
Year Installed: 1976  
Tank Capacity: 00010000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Tank Construction: Not reported  
Leak Detection: None

Tank Num: 002  
Container Num: 4  
Year Installed: 1968  
Tank Capacity: 00000300  
Tank Used for: WASTE  
Type of Fuel: UNLEADED  
Tank Construction: Not reported  
Leak Detection: None

Tank Num: 003  
Container Num: 3  
Year Installed: 1968  
Tank Capacity: 00000550  
Tank Used for: PRODUCT  
Type of Fuel: 06  
Tank Construction: Not reported  
Leak Detection: None

Tank Num: 004  
Container Num: 2  
Year Installed: 1968  
Tank Capacity: 00001000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Tank Construction: Not reported  
Leak Detection: None

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

C6  
NE  
< 1/8  
0.106 mi.  
558 ft.

CARL R. CARLSEN INC.  
1766 EMBARCADERO RD  
PALO ALTO, CA 94303

CA FID UST S101623392  
SWEEPS UST N/A

Site 2 of 5 in cluster C

Relative:  
Higher

CA FID UST:

Facility ID: 43001388  
Regulated By: UTNKA  
Regulated ID: 00007431  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: 4158566000  
Mail To: Not reported  
Mailing Address: 1766 EMBARCADERO RD  
Mailing Address 2: Not reported  
Mailing City,St,Zip: PALO ALTO 94303  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

Actual:  
8 ft.

SWEEPS UST:

Status: Active  
Comp Number: 7431  
Number: 9  
Board Of Equalization: 44-026048  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Tank Status: A  
Owner Tank Id: 1  
Swrcb Tank Id: 43-006-007431-000001  
Actv Date: 07-01-85  
Capacity: 10000  
Tank Use: M.V. FUEL  
Stg: P  
Content: REG UNLEADED  
Number Of Tanks: 4

Status: Active  
Comp Number: 7431  
Number: 9  
Board Of Equalization: 44-026048  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Tank Status: A  
Owner Tank Id: 4  
Swrcb Tank Id: 43-006-007431-000002  
Actv Date: 07-01-85  
Capacity: 300  
Tank Use: M.V. FUEL  
Stg: W  
Content: REG UNLEADED  
Number Of Tanks: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)      EDR ID Number  
 EPA ID Number

**CARL R. CARLSEN INC. (Continued)**

**S101623392**

Status: Active  
 Comp Number: 7431  
 Number: 9  
 Board Of Equalization: 44-026048  
 Referral Date: 07-01-85  
 Action Date: Not reported  
 Created Date: 02-29-88  
 Tank Status: A  
 Owner Tank Id: 3  
 Swrcb Tank Id: 43-006-007431-000003  
 Actv Date: 07-01-85  
 Capacity: 550  
 Tank Use: UNKNOWN  
 Stg: P  
 Content: Not reported  
 Number Of Tanks: Not reported

Status: Active  
 Comp Number: 7431  
 Number: 9  
 Board Of Equalization: 44-026048  
 Referral Date: 07-01-85  
 Action Date: Not reported  
 Created Date: 02-29-88  
 Tank Status: A  
 Owner Tank Id: 2  
 Swrcb Tank Id: 43-006-007431-000004  
 Actv Date: 07-01-85  
 Capacity: 1000  
 Tank Use: M.V. FUEL  
 Stg: P  
 Content: DIESEL  
 Number Of Tanks: Not reported

C7  
 NE  
 < 1/8  
 0.106 mi.  
 558 ft.

**STANFORD HONDA**  
**1766 EMBARCADERO RD**  
**PALO ALTO, CA**

Site 3 of 5 in cluster C

**HIST CORTESE**      1000314835  
**LUST**              N/A  
**SLIC**  
**HIST LUST**  
**CUPA Listings**

Relative:  
 Higher

CORTESE:  
 Region: CORTESE  
 Facility County Code: 43  
 Reg By: LTNKA  
 Reg Id: 43-2107

Actual:  
 8 ft.

Region: CORTESE  
 Facility County Code: 43  
 Reg By: LTNKA  
 Reg Id: 43-1388

**LUST:**

Region: STATE  
 Global Id: T0608501363  
 Latitude: 37.4508259562855  
 Longitude: -122.117307186127  
 Case Type: LUST Cleanup Site

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

STANFORD HONDA (Continued)

1000314835

Status: Completed - Case Closed  
Status Date: 07/17/1995  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: UST  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating  
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0608501363  
Contact Type: Regional Board Caseworker  
Contact Name: ZSC  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND  
Email: Not reported  
Phone Number: Not reported

Global Id: T0608501363  
Contact Type: Local Agency Caseworker  
Contact Name: UST CASE WORKER  
Organization Name: SANTA CLARA COUNTY LOP  
Address: 1555 Berger Drive, Suite 300  
City: SAN JOSE  
Email: Not reported  
Phone Number: 4089183400

Regulatory Activities:

Global Id: T0608501363  
Action Type: ENFORCEMENT  
Date: 07/17/1995  
Action: Closure/No Further Action Letter

Global Id: T0608501363  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Reported

Global Id: T0608501363  
Action Type: RESPONSE  
Date: 04/28/1995  
Action: Other Report / Document

Global Id: T0608501363  
Action Type: ENFORCEMENT  
Date: 04/25/1991  
Action: Notice of Responsibility - #39181

Global Id: T0608501363  
Action Type: REMEDIATION  
Date: 01/01/1950



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)  
EDR ID Number  
EPA ID Number

STANFORD HONDA (Continued)

1000314835

Action: Excavation

Region: STATE  
Global Id: T0608502336  
Latitude: 37.4507578173723  
Longitude: -122.11754322052  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 01/12/1996  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: UST  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0608502336  
Contact Type: Regional Board Caseworker  
Contact Name: ZSC  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND  
Email: Not reported  
Phone Number: Not reported

Global Id: T0608502336  
Contact Type: Local Agency Caseworker  
Contact Name: UST CASE WORKER  
Organization Name: SANTA CLARA COUNTY LOP  
Address: 1555 Berger Drive, Suite 300  
City: SAN JOSE  
Email: Not reported  
Phone Number: 4089183400

Regulatory Activities:

Global Id: T0608502336  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Reported

LUST REG 2:

Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed  
Case Number: 05S2W31J01f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)  
EDR ID Number  
EPA ID Number

STANFORD HONDA (Continued)

1000314835

Oversight Program: LUST  
Prelim. Site Assessment Wokplan Submitted: Not reported  
Preliminary Site Assessment Began: 12/28/1990  
Pollution Characterization Began: Not reported  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed  
Case Number: 05S2W31J02f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Wokplan Submitted: Not reported  
Preliminary Site Assessment Began: Not reported  
Pollution Characterization Began: Not reported  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:

Region: SANTA CLARA  
SCVWD ID: 05S2W31J02F  
Date Closed: 01/12/1996

Region: SANTA CLARA  
SCVWD ID: 05S2W31J01F  
Date Closed: 07/17/1995

SLIC:

Region: STATE  
Facility Status: Open - Site Assessment  
Status Date: 11/25/2008  
Global Id: T10000000584  
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)  
Lead Agency Case Number: Not reported  
Latitude: 37.450534002603  
Longitude: -122.117414474487  
Case Type: Cleanup Program Site  
Case Worker: MBR  
Local Agency: Not reported  
RB Case Number: 43S1123  
File Location: Regional Board  
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil  
Potential Contaminants of Concern: Diesel, Waste Oil / Motor / Hydraulic / Lubricating  
Site History: Typical UST petroleum products have been used onsite. The USTs were removed in 1991 and case closure was granted in 1995/1996. Hydraulic lifts were removed from the site in 1994. 1 1996 Stanford Honda 2. 1995 Stanford Auto Plaza 3. 1986 - Carlson Volkswagon/Saab/Chrysler Plymouth 4. 1982 -Carlsen VW & Saab 5. 1978 - Carleen Carl R new cars 6. 1975 - Carson Carl R VW 7. 1970 - Mozart VW 8. 1968 - auto dealership 9. 1939-1965 - agricultural use

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

STANFORD HONDA (Continued)

1000314835

[Click here to access the California GeoTracker records for this facility:](#)

HIST LUST SANTA CLARA:

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 05S2W31J01  
Oversite Agency: SCVWD  
Date Listed: 1991-04-23 00:00:00  
Closed Date: 1995-07-17 00:00:00

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 05S2W31J02  
Oversite Agency: SCVWD  
Date Listed: 1996-01-12 00:00:00  
Closed Date: 1996-01-12 00:00:00

CUPA SANTA CLARA:

Region: SANTA CLARA  
Program Description: GENERATES 5 TO <25 TONS/YR

Region: SANTA CLARA  
Program Description: PALO ALTO FIRE-BUSINESS PLAN (HMBP)

C8  
NE  
< 1/8  
0.106 mi.  
558 ft.

ANDERSON HONDA ISUZU  
1766 EMBARCADERO RD  
PALO ALTO, CA 94303  
Site 4 of 5 in cluster C

RCRA NonGen / NLR 1000984883  
FINDS CAD982014227

Relative:  
Higher

RCRA NonGen / NLR:

Date form received by agency: 03/01/1995  
Facility name: ANDERSON HONDA ISUZU  
Facility address: 1766 EMBARCADERO RD  
PALO ALTO, CA 94303  
EPA ID: CAD982014227  
Contact: JOHN BISHOP  
Contact address: 1766 EMBARCADERO RD  
PALO ALTO, CA 94303  
Contact country: US  
Contact telephone: (415) 856-6000  
Contact email: Not reported  
EPA Region: 09  
Classification: Non-Generator  
Description: Handler; Non-Generators do not presently generate hazardous waste

Actual:  
8 ft.

Owner/Operator Summary:

Owner/operator name: JOHN M ANDERSON  
Owner/operator address: 1766 EMBARCADERO RD  
PALO ALTO, CA 94303  
Owner/operator country: Not reported  
Owner/operator telephone: (415) 856-6000  
Legal status: Other  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

ANDERSON HONDA ISUZU (Continued)

1000984883

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110006476330

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

C9  
NE  
< 1/8  
0.107 mi.  
567 ft.

1766 EMBARCADERO RD  
PALO ALTO, CA 94303

Site 5 of 5 in cluster C

Relative:  
Higher

EDR Historical Auto Stations:

Name: AR AUTOMOTIVE LLC  
Year: 2002

Actual:  
6 ft.

Address: 1766 EMBARCADERO RD

EDR US Hist Auto Stat 1015274356  
N/A

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

D10  
ENE  
1/8-1/4  
0.152 mi.  
801 ft.

2480 FABER PL  
PALO ALTO, CA 94303

EDR US Hist Auto Stat 1015360792  
N/A

Site 1 of 4 in cluster D

Relative:  
Higher

EDR Historical Auto Stations:

Actual:  
8 ft.

Name: MATHEWS CARLSEN BODY WORKS  
Year: 1999  
Address: 2480 FABER PL

Name: MATHEWS CARLSEN BODY WORKS  
Year: 2000  
Address: 2480 FABER PL

Name: MATHEWS CARLSEN BODY WORKS  
Year: 2001  
Address: 2480 FABER PL

Name: MATHEWS CARLSEN BODY WORKS  
Year: 2002  
Address: 2480 FABER PL

Name: MATHEWS CARLSEN BODY WORKS  
Year: 2005  
Address: 2480 FABER PL

Name: MATHEWS CARLSEN BODY WORKS INC  
Year: 2006  
Address: 2480 FABER PL

Name: MATHEWS CARLSEN BODY WORKS INC  
Year: 2007  
Address: 2480 FABER PL

Name: MATHEWS CARLSEN BODY WORKS INC  
Year: 2008  
Address: 2480 FABER PL

Name: MATHEWS CARLSEN BODY WORKS  
Year: 2009  
Address: 2480 FABER PL

Name: MATHEWS CARLSEN BODY WORKS  
Year: 2010  
Address: 2480 FABER PL

Name: MATHEWSCARLSEN BODY WORKS  
Year: 2011  
Address: 2480 FABER PL

Name: MATHEWSCARLSEN BODY WORKS  
Year: 2012  
Address: 2480 FABER PL

Map ID  
 Direction  
 Distance  
 Elevation

**MAP FINDINGS**

Site

Database(s)

EDR ID Number  
 EPA ID Number

**D11 MATHEWS CARLSEN BODY WORKS**  
**ENE 2480 FABER PLACE**  
**1/8-1/4 PALO ALTO, CA 94303**  
 0.152 mi.  
 801 ft. Site 2 of 4 in cluster D

**FINDS 1004440504**  
**CUPA Listings N/A**  
**EMI**

Relative:  
 Higher

FINDS:

Registry ID: 110001191852

Actual:  
 8 ft.

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

**CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY**

**CUPA SANTA CLARA:**

Region: SANTA CLARA  
 Program Description: GENERATES 100 KG YR TO <5 TONS/YR

**EMI:**

Year: 1987  
 County Code: 43  
 Air Basin: SF  
 Facility ID: 3762  
 Air District Name: BA  
 SIC Code: 7532  
 Air District Name: BAY AREA AQMD  
 Community Health Air Pollution Info System: Not reported  
 Consolidated Emission Reporting Rule: Not reported  
 Total Organic Hydrocarbon Gases Tons/Yr: 1  
 Reactive Organic Gases Tons/Yr: 1  
 Carbon Monoxide Emissions Tons/Yr: 0  
 NOX - Oxides of Nitrogen Tons/Yr: 0  
 SOX - Oxides of Sulphur Tons/Yr: 0  
 Particulate Matter Tons/Yr: 0  
 Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 1990  
 County Code: 43  
 Air Basin: SF  
 Facility ID: 3762  
 Air District Name: BA  
 SIC Code: 7532  
 Air District Name: BAY AREA AQMD  
 Community Health Air Pollution Info System: Not reported  
 Consolidated Emission Reporting Rule: Not reported  
 Total Organic Hydrocarbon Gases Tons/Yr: 1  
 Reactive Organic Gases Tons/Yr: 1  
 Carbon Monoxide Emissions Tons/Yr: 0  
 NOX - Oxides of Nitrogen Tons/Yr: 0  
 SOX - Oxides of Sulphur Tons/Yr: 0  
 Particulate Matter Tons/Yr: 0  
 Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 1995

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MATHEWS CARLSEN BODY WORKS (Continued)**

**1004440504**

County Code: 43  
Air Basin: SF  
Facility ID: 3762  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 1  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 1996  
County Code: 43  
Air Basin: SF  
Facility ID: 3762  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 1997  
County Code: 43  
Air Basin: SF  
Facility ID: 3762  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 1998  
County Code: 43  
Air Basin: SF  
Facility ID: 3762  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

**MATHEWS CARLSEN BODY WORKS (Continued)**

**1004440504**

Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 1999  
County Code: 43  
Air Basin: SF  
Facility ID: 3762  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2000  
County Code: 43  
Air Basin: SF  
Facility ID: 3762  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2001  
County Code: 43  
Air Basin: SF  
Facility ID: 3762  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

**MATHEWS CARLSEN BODY WORKS (Continued)**

1004440504

SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2002  
County Code: 43  
Air Basin: SF  
Facility ID: 3762  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2003  
County Code: 43  
Air Basin: SF  
Facility ID: 16315  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 3  
Reactive Organic Gases Tons/Yr: 2  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2004  
County Code: 43  
Air Basin: SF  
Facility ID: 16315  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 2.697  
Reactive Organic Gases Tons/Yr: 2.4460332  
Carbon Monoxide Emissions Tons/Yr: 0.001  
NOX - Oxides of Nitrogen Tons/Yr: 0.004  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2005  
County Code: 43

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

**MATHEWS CARLSEN BODY WORKS (Continued)**

**1004440504**

Air Basin: SF  
Facility ID: 16315  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 2.567  
Reactive Organic Gases Tons/Yr: 2.3201932  
Carbon Monoxide Emissions Tons/Yr: .001  
NOX - Oxides of Nitrogen Tons/Yr: .003  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2006  
County Code: 43  
Air Basin: SF  
Facility ID: 16315  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1.077  
Reactive Organic Gases Tons/Yr: 1.0272188  
Carbon Monoxide Emissions Tons/Yr: .001  
NOX - Oxides of Nitrogen Tons/Yr: .003  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2007  
County Code: 43  
Air Basin: SF  
Facility ID: 16315  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1.557  
Reactive Organic Gases Tons/Yr: 1.4918588  
Carbon Monoxide Emissions Tons/Yr: .001  
NOX - Oxides of Nitrogen Tons/Yr: .003  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2007  
County Code: 43  
Air Basin: SF  
Facility ID: 16315  
Air District Name: BA  
SIC Code: 7532  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MATHEWS CARLSEN BODY WORKS (Continued)**

1004440504

Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1.557  
Reactive Organic Gases Tons/Yr: 1.4918588  
Carbon Monoxide Emissions Tons/Yr: .001  
NOX - Oxides of Nitrogen Tons/Yr: .003  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

12  
South  
1/8-1/4  
0.154 mi.  
814 ft.

**KAPTRON INC**  
**2525 E BAYSHORE FRONTAGE**  
**PALO ALTO, CA 94003**

**RCRA-SQG 1000420303**  
**FINDS CAD982522005**  
**HAZNET**

Relative:  
Higher

**RCRA-SQG:**

Actual:  
8 ft.

Date form received by agency: 09/01/1996  
Facility name: KAPTRON INC  
Facility address: 2525 E BAYSHORE FRONTAGE  
PALO ALTO, CA 94003  
EPA ID: CAD982522005  
Contact: Not reported  
Contact address: Not reported  
Not reported  
Contact country: Not reported  
Contact telephone: Not reported  
Contact email: Not reported  
EPA Region: 09  
Classification: Small Small Quantity Generator  
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

**Owner/Operator Summary:**

Owner/operator name: KAPTRON INC  
Owner/operator address: NOT REQUIRED  
NOT REQUIRED, ME 99999  
Owner/operator country: Not reported  
Owner/operator telephone: (415) 555-1212  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED  
Owner/operator address: NOT REQUIRED  
NOT REQUIRED, ME 99999  
Owner/operator country: Not reported  
Owner/operator telephone: (415) 555-1212  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAPTRON INC (Continued)**

**1000420303**

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Historical Generators:

Date form received by agency: 11/21/1989  
Facility name: KAPTRON INC  
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110009547570

Environmental Interest/Information System

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY

HAZNET:

Year: 2000  
Gepaid: CAD982522005  
Contact: ENVIRONMENTAL MANAGER  
Telephona: 6508128603  
Mailing Name: Not reported  
Mailing Address: 2525 E BAYSHORE FRONTAGE  
Mailing City, St, Zip: PALO ALTO, CA 940033210  
Gen County: Not reported  
TSD EPA ID: CAT080014079  
TSD County: Not reported  
Waste Category: Off-specification, aged or surplus organics  
Disposal Method: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

KAPTRON INC (Continued)

1000420303

Tons: 0.22  
Facility County: Santa Clara  
  
Year: 2000  
Gepaid: CAD982522005  
Contact: ENVIRONMENTAL MANAGER  
Telephone: 6508128603  
Mailing Name: Not reported  
Mailing Address: 2525 E BAYSHORE FRONTAGE  
Mailing City,St,Zip: PALO ALTO, CA 940033210  
Gen County: Not reported  
TSD EPA ID: CAT080014079  
TSD County: Not reported  
Waste Category: Alkaline solution (pH >= 12.5) with metals  
Disposal Method: Transfer Station  
Tons: 0.24  
Facility County: Santa Clara

Year: 2000  
Gepaid: CAD982522005  
Contact: ENVIRONMENTAL MANAGER  
Telephone: 6508128603  
Mailing Name: Not reported  
Mailing Address: 2525 E BAYSHORE FRONTAGE  
Mailing City,St,Zip: PALO ALTO, CA 940033210  
Gen County: Not reported  
TSD EPA ID: CAT080014079  
TSD County: Not reported  
Waste Category: Other organic solids  
Disposal Method: Not reported  
Tons: 0.05  
Facility County: Santa Clara

Year: 2000  
Gepaid: CAD982522005  
Contact: ENVIRONMENTAL MANAGER  
Telephone: 6508128603  
Mailing Name: Not reported  
Mailing Address: 2525 E BAYSHORE FRONTAGE  
Mailing City,St,Zip: PALO ALTO, CA 940033210  
Gen County: Not reported  
TSD EPA ID: CAT080014079  
TSD County: Not reported  
Waste Category: Laboratory waste chemicals  
Disposal Method: Transfer Station  
Tons: 0.08  
Facility County: Santa Clara

Year: 2000  
Gepaid: CAD982522005  
Contact: ENVIRONMENTAL MANAGER  
Telephone: 6508128603  
Mailing Name: Not reported  
Mailing Address: 2525 E BAYSHORE FRONTAGE  
Mailing City,St,Zip: PALO ALTO, CA 940033210  
Gen County: Not reported  
TSD EPA ID: CAT080014079

**MAP FINDINGS**

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAPTRON INC (Continued)**

**1000420303**

TSD County: Not reported  
Waste Category: Alkaline solution (pH >= 12.5) with metals  
Disposal Method: Not reported  
Tons: 0.05  
Facility County: Santa Clara

[Click this hyperlink](#) while viewing on your computer to access  
31 additional CA\_HAZNET: record(s) in the EDR Site Report.

**D13**  
**ENE**  
**1/8-1/4**  
**0.155 mi.**  
**820 ft.**

**COLLAGEN INC.**  
**2500 FABER PL**  
**PALO ALTO, CA**

**HIST LUST** **S103880593**  
**N/A**

**Site 3 of 4 in cluster D**

**Relative:**  
**Higher**

**HIST LUST SANTA CLARA:**  
Region: SANTA CLARA  
Region Code: 2

**Actual:**  
**8 ft.**

SCVWD ID: 05S2W31R01  
Oversite Agency: SFRWQCB  
Date Listed: 1989-01-01 00:00:00  
Closed Date: 1994-07-20 00:00:00

**D14**  
**ENE**  
**1/8-1/4**  
**0.155 mi.**  
**820 ft.**

**ANGIOTECH BIOMATERIALS CORP**  
**2500 FABER PL**  
**PALO ALTO, CA 94303**

**RCRA NonGen / NLR** **1000276300**  
**HIST CORTESE** **CAD982006892**  
**LUST**  
**CA FID UST**  
**HIST UST**  
**CUPA Listings**  
**SWEEPS UST**

**Site 4 of 4 in cluster D**

**Relative:**  
**Higher**

**RCRA NonGen / NLR:**

**Actual:**  
**8 ft.**

Date form received by agency: 02/04/2005  
Facility name: ANGIOTECH BIOMATERIALS CORP  
Facility address: 2500 FABER PL  
PALO ALTO, CA 94303  
EPA ID: CAD982006892  
Mailing address: 1254 WILLO MAR DRIVE  
ENV AND SAFETY MGMT LLC  
SAN JOSE, CA 95118  
Contact: SCOTT RENDLEMAN  
Contact address: 1254 WILLO MAR DRIVE ENV AND SAFETY MGMT LLC  
SAN JOSE, CA 95118  
Contact country: US  
Contact telephone: 408-605-0322  
Contact email: Not reported  
EPA Region: 09  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

**Owner/Operator Summary:**

Owner/operator name: ANGIOTECH BIOMATERIALS CORP  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: US  
Owner/operator telephone: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

ANGIOTECH BIOMATERIALS CORP (Continued)

1000276300

Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 12/20/2004  
Owner/Op end date: Not reported

Owner/operator name: ANGIOTECH BIOMATERIALS CORP  
Owner/operator address: 2500 FABER PL  
PALO ALTO, CA 94303

Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 12/20/2004  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. Importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Historical Generators:

Date form received by agency: 08/04/1998  
Facility name: ANGIOTECH BIOMATERIALS CORP  
Site name: COHESION TECHNOLOGIES INC  
Classification: Small Quantity Generator

Hazardous Waste Summary:

Waste code: D001  
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002  
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

ANGIOTECH BIOMATERIALS CORP (Continued)

1000276300

Waste code: D009  
Waste name: MERCURY

Waste code: D035  
Waste name: METHYL ETHYL KETONE

Waste code: D038  
Waste name: PYRIDINE

Waste code: F003  
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005  
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

CORTESE:

Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-0392

LUST:

Region: STATE  
Global Id: T0608500443  
Latitude: 37.4501  
Longitude: -122.1155  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 10/01/1997  
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)  
Case Worker: UNK  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: 43-0392  
LOC Case Number: Not reported  
File Location: Not reported  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating  
Site History: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

ANGIOTECH BIOMATERIALS CORP (Continued)

1000276300

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0608500443  
Contact Type: Local Agency Caseworker  
Contact Name: UST CASE WORKER  
Organization Name: SANTA CLARA COUNTY LOP  
Address: 1555 Berger Drive, Suite 300  
City: SAN JOSE  
Email: Not reported  
Phone Number: 4089183400

Global Id: T0608500443  
Contact Type: Regional Board Caseworker  
Contact Name: RB 2  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND  
Email: Not reported  
Phone Number: Not reported

Regulatory Activities:

Global Id: T0608500443  
Action Type: ENFORCEMENT  
Date: 07/20/1994  
Action: Closure/No Further Action Letter

Global Id: T0608500443  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Reported

Global Id: T0608500443  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Stopped

Global Id: T0608500443  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Discovery

Global Id: T0608500443  
Action Type: RESPONSE  
Date: 08/14/1987  
Action: Other Report / Document

LUST REG 2:

Region: 2  
Facility Id: 43-0392  
Facility Status: Case Closed  
Case Number: 43-0392  
How Discovered: Tank Closure  
Leak Cause: Structure Failure  
Leak Source: Tank

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

ANGIOTECH BIOMATERIALS CORP (Continued)

1000276300

Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: Not reported  
Pollution Characterization Began: Not reported  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:

Region: SANTA CLARA  
SCVWD ID: 05S2W31R01F  
Date Closed: 07/20/1994

CA FID UST:

Facility ID: 43000578  
Regulated By: UTNKA  
Regulated ID: 00001818  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: 4158560200  
Mail To: Not reported  
Mailing Address: 2500 FABER PL  
Mailing Address 2: Not reported  
Mailing City,St,Zip: PALO ALTO 94303  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

HIST UST:

Region: STATE  
Facility ID: 00000001818  
Facility Type: Other  
Other Type: BIOMEDICAL RESEARCH  
Total Tanks: 0006  
Contact Name: PHIL KENT  
Telephone: 4158560200  
Owner Name: COLLAGEN CORPORATION  
Owner Address: 2500 FABER PLACE  
Owner City,St,Zip: PALO ALTO, CA 94303

Tank Num: 001  
Container Num: I  
Year Installed: 1982  
Tank Capacity: 00001000  
Tank Used for: WASTE  
Type of Fuel: Not reported  
Tank Construction: 2.5 inches  
Leak Detection: Visual

Tank Num: 002  
Container Num: SUMP2

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

ANGIOTECH BIOMATERIALS CORP (Continued)

1000276300

Year Installed: 1977  
Tank Capacity: 00001000  
Tank Used for: WASTE  
Type of Fuel: Not reported  
Tank Construction: 2.5 inches  
Leak Detection: Visual

Tank Num: 003  
Container Num: T204  
Year Installed: 1984  
Tank Capacity: 00005900  
Tank Used for: WASTE  
Type of Fuel: Not reported  
Tank Construction: 0.316 inches  
Leak Detection: Visual, 10

Tank Num: 004  
Container Num: T205  
Year Installed: 1984  
Tank Capacity: 00001480  
Tank Used for: WASTE  
Type of Fuel: Not reported  
Tank Construction: 0.268 inches  
Leak Detection: Visual, 10

Tank Num: 005  
Container Num: T206  
Year Installed: 1984  
Tank Capacity: 00002015  
Tank Used for: PRODUCT  
Type of Fuel: Not reported  
Tank Construction: 0.268 inches  
Leak Detection: Visual, Stock Inventor, 10

Tank Num: 006  
Container Num: TD  
Year Installed: 1983  
Tank Capacity: 00000971  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

CUPA SANTA CLARA:

Region: SANTA CLARA  
Program Description: GENERATES < 10 GAL/YR

SWEEPS UST:

Status: Active  
Comp Number: 1818  
Number: 9  
Board Of Equalization: 44-026037  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Tank Status: A

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

ANGIOTECH BIOMATERIALS CORP (Continued)

1000276300

Owner Tank Id: SUMP2  
Swrcb Tank Id: 43-006-001818-000001  
Actv Date: 07-01-85  
Capacity: 1000  
Tank Use: UNKNOWN  
Stg: W  
Content: Not reported  
Number Of Tanks: 5

Status: Active  
Comp Number: 1818  
Number: 9  
Board Of Equalization: 44-026037  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Tank Status: A  
Owner Tank Id: T204  
Swrcb Tank Id: 43-006-001818-000002  
Actv Date: 07-01-85  
Capacity: 5900  
Tank Use: UNKNOWN  
Stg: W  
Content: Not reported  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 1818  
Number: 9  
Board Of Equalization: 44-026037  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Tank Status: A  
Owner Tank Id: T205  
Swrcb Tank Id: 43-006-001818-000003  
Actv Date: 07-01-85  
Capacity: 1480  
Tank Use: UNKNOWN  
Stg: W  
Content: Not reported  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 1818  
Number: 9  
Board Of Equalization: 44-026037  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Tank Status: A  
Owner Tank Id: T206  
Swrcb Tank Id: 43-006-001818-000004  
Actv Date: 07-01-85  
Capacity: 2015  
Tank Use: UNKNOWN  
Stg: P

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

ANGIOTECH BIOMATERIALS CORP (Continued)

1000276300

Content: Not reported  
Number Of Tanks: Not reported  
  
Status: Active  
Comp Number: 1818  
Number: 9  
Board Of Equalization: 44-026037  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Tank Status: A  
Owner Tank Id: TD  
Swrcb Tank Id: 43-006-001818-000005  
Actv Date: 07-01-85  
Capacity: 971  
Tank Use: M.V. FUEL  
Stg: P  
Content: DIESEL  
Number Of Tanks: Not reported

15  
NNW  
1/8-1/4  
0.224 mi.  
1184 ft.

PALO ALTO SANITATION CO  
2000 GENG RD  
PALO ALTO, CA 94303

RCRA NonGen / NLR 1000324047  
FINDS CAD981688823  
SLIC  
AST  
HAZNET  
EMI  
WDS

Relative:  
Higher

Actual:  
8 ft.

RCRA NonGen / NLR:  
Date form received by agency: 10/28/1986  
Facility name: PALO ALTO SANITATION CO  
Facility address: 2000 GENG RD  
PALO ALTO, CA 94303  
EPA ID: CAD981688823  
Contact: ENVIRONMENTAL MANAGER  
Contact address: 2000 GENG RD  
PALO ALTO, CA 94303  
Contact country: US  
Contact telephone: (415) 493-4575  
Contact email: Not reported  
EPA Region: 09  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:  
Owner/operator name: PALO ALTO SANITATION  
Owner/operator address: NOT REQUIRED  
NOT REQUIRED, ME 99999  
Owner/operator country: Not reported  
Owner/operator telephone: (415) 555-1212  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED  
Owner/operator address: NOT REQUIRED

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number  
EPA ID Number

**PALO ALTO SANITATION CO (Continued)**

1000324047

Owner/operator country: NOT REQUIRED, ME 99999  
Owner/operator telephone: Not reported  
(415) 555-1212  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

**Handler Activities Summary:**

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground Injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

**FINDS:**

Registry ID: 110002410524

**Environmental Interest/Information System**

The NEI (National Emissions Inventory) database contains information on stationary and mobile sources that emit criteria air pollutants and their precursors, as well as hazardous air pollutants (HAPs).

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY**

**SLIC:**

Region: STATE  
Facility Status: Open - Site Assessment  
Status Date: 04/08/2011  
Global Id: T10000002964  
Lead Agency: SANTA CLARA COUNTY LOP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PALO ALTO SANITATION CO (Continued)**

**1000324047**

Lead Agency Case Number: 05S2W31J03s  
Latitude: 37.4522824107127  
Longitude: -122.120300531387  
Case Type: Cleanup Program Site  
Case Worker: LL  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil  
Potential Contaminants of Concern: Arsenic, Lead, Waste Oil / Motor / Hydraulic / Lubricating  
Site History: The site is bounded by Geng Road to the east, a parking lot to the north, a baseball field to the west and a commercial building complex to the south. Site was previously used as a maintenance area for refuse and recyclable collection vehicles and collection bins. Lease terminated in 2009 and facility closure was performed. During closure process, diesel AST, waste oil UST and oil/water separator were removed. Soil samples reported elevated concentrations of arsenic, lead, molybdenum, zinc and petroleum hydrocarbons (C10-C36).

[Click here to access the California GeoTracker records for this facility:](#)

**AST:**

Owner: PALO ALTO SANITATION CO  
Total Gallons: 8,220  
Certified Unified Program Agencies: Santa Clara County

**HAZNET:**

Year: 2011  
Gepaid: CAD981688823  
Contact: TIANNA NOUROT  
Telephone: 9254557325  
Mailing Name: Not reported  
Mailing Address: 10840 ALTAMONT PASS RD  
Mailing City,St,Zip: LIVERMORE, CA 945510000  
Gen County: Not reported  
TSD EPA ID: CAD980887418  
TSD County: Not reported  
Waste Category: Alkaline solution without metals pH >= 12.5  
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Tons: 0.1251  
Facility County: Santa Clara

Year: 2010  
Gepaid: CAD981688823  
Contact: TIANNA NOUROT  
Telephone: 9254557325  
Mailing Name: Not reported  
Mailing Address: 10840 ALTAMONT PASS RD  
Mailing City,St,Zip: LIVERMORE, CA 945510000  
Gen County: Not reported  
TSD EPA ID: CAD980887418  
TSD County: Not reported  
Waste Category: Unspecified oil-containing waste  
Disposal Method: Discharge To Sewer/Potw Or Npdes(With Prior Storage--With Or Without Treatment)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

PALO ALTO SANITATION CO (Continued)

1000324047

Tons: 7.17657  
Facility County: Santa Clara  
  
Year: 2009  
Gepaid: CAD981688823  
Contact: JIM CAHILL/MAINT MGR  
Telephone: 6504934575  
Mailing Name: Not reported  
Mailing Address: 2000 GENG RD  
Mailing City,St,Zip: PALO ALTO, CA 943033317  
Gen County: Not reported  
TSD EPA ID: NVT330010000  
TSD County: Not reported  
Waste Category: Other organic solids  
Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill( To Include On-Site Treatment And/Or Stabilization)  
  
Tons: 0.75  
Facility County: Santa Clara

Year: 2009  
Gepaid: CAD981688823  
Contact: JIM CAHILL/MAINT MGR  
Telephone: 6504934575  
Mailing Name: Not reported  
Mailing Address: 2000 GENG RD  
Mailing City,St,Zip: PALO ALTO, CA 943033317  
Gen County: Not reported  
TSD EPA ID: NVD982358483  
TSD County: Not reported  
Waste Category: Unspecified oil-containing waste  
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect  
  
Tons: 1.668  
Facility County: Santa Clara

Year: 2009  
Gepaid: CAD981688823  
Contact: JIM CAHILL/MAINT MGR  
Telephone: 6504934575  
Mailing Name: Not reported  
Mailing Address: 2000 GENG RD  
Mailing City,St,Zip: PALO ALTO, CA 943033317  
Gen County: Not reported  
TSD EPA ID: CAD980887418  
TSD County: Not reported  
Waste Category: Unspecified oil-containing waste  
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
  
Tons: 0.15  
Facility County: Santa Clara

[Click this hyperlink](#) while viewing on your computer to access 9 additional CA\_HAZNET: record(s) in the EDR Site Report.

EMI:  
Year: 1995  
County Code: 43



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PALO ALTO SANITATION CO (Continued)**

1000324047

Air Basin: SF  
Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 1996  
County Code: 43  
Air Basin: SF  
Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 1997  
County Code: 43  
Air Basin: SF  
Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 1998  
County Code: 43  
Air Basin: SF  
Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

EDR ID Number  
EPA ID Number

Site

Database(s)

**PALO ALTO SANITATION CO (Continued)**

**1000324047**

Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 1999  
County Code: 43  
Air Basin: SF  
Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 2000  
County Code: 43  
Air Basin: SF  
Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 2001  
County Code: 43  
Air Basin: SF  
Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PALO ALTO SANITATION CO (Continued)**

**1000324047**

Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0  
  
Year: 2002  
County Code: 43  
Air Basin: SF  
Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 2003  
County Code: 43  
Air Basin: SF  
Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 1  
Reactive Organic Gases Tons/Yr: 1  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 2004  
County Code: 43  
Air Basin: SF  
Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: 0.587  
Reactive Organic Gases Tons/Yr: 0.5636362  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 2005  
County Code: 43  
Air Basin: SF

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

PALO ALTO SANITATION CO (Continued)

1000324047

Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .587  
Reactive Organic Gases Tons/Yr: .5636362  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2008

County Code: 43  
Air Basin: SF  
Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .587  
Reactive Organic Gases Tons/Yr: .5636362  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2007

County Code: 43  
Air Basin: SF  
Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported  
Total Organic Hydrocarbon Gases Tons/Yr: .581  
Reactive Organic Gases Tons/Yr: .5578282  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 2007

County Code: 43  
Air Basin: SF  
Facility ID: 7276  
Air District Name: BA  
SIC Code: 4953  
Air District Name: BAY AREA AQMD  
Community Health Air Pollution Info System: Not reported  
Consolidated Emission Reporting Rule: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PALO ALTO SANITATION CO (Continued)**

**1000324047**

Total Organic Hydrocarbon Gases Tons/Yr: .581  
Reactive Organic Gases Tons/Yr: .5578282  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

**CA WDS:**

Facility ID: San Francisco Bay 431006654  
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.  
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.  
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board  
Subregion: 2  
Facility Telephone: 4154934894  
Facility Contact: JIM MOORE  
Agency Name: PALO ALTO SANITATION CO  
Agency Address: 2000 Geng Rd  
Agency City,St,Zip: Palo Alto 94303325  
Agency Contact: JIM MOORE  
Agency Telephone: 4154934894  
Agency Type: Private  
SIC Code: 0  
SIC Code 2: Not reported  
Primary Waste: Not reported  
Primary Waste Type: Not reported  
Secondary Waste: Not reported  
Secondary Waste Type: Not reported  
Design Flow: 0  
Baseline Flow: 0  
Reclamation: Not reported  
POTW: Not reported  
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.  
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

**E16** OLD POST OFFICE PALO ALTO  
**WNW** 2197 E BAYSHORE RD  
1/4-1/2 PALO ALTO, CA 94303  
0.282 mi.  
1489 ft. **Site 1 of 3 in cluster E**

**LUST** S103472945  
**HIST LUST** N/A

**Relative:**  
**Lower**

**Actual:**  
**6 ft.**

**LUST:**

Region: STATE  
Global Id: T0608500996  
Latitude: 37.450331  
Longitude: -122.12171  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 02/29/2000  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: UST  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

**Contact:**

Global Id: T0608500996  
Contact Type: Regional Board Caseworker  
Contact Name: ZSC  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND  
Email: Not reported  
Phone Number: Not reported

Global Id: T0608500996  
Contact Type: Local Agency Caseworker  
Contact Name: UST CASE WORKER  
Organization Name: SANTA CLARA COUNTY LOP  
Address: 1555 Berger Drive, Suite 300  
City: SAN JOSE  
Email: Not reported  
Phone Number: 4089183400

**Regulatory Activities:**

Global Id: T0608500996  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Reported

Global Id: T0608500996  
Action Type: RESPONSE  
Date: 12/09/1999  
Action: Soil and Water Investigation Report

Global Id: T0608500996  
Action Type: RESPONSE  
Date: 09/07/1999

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

EDR ID Number  
EPA ID Number

Site

Database(s)

OLD POST OFFICE PALO ALTO (Continued)

S103472945

Action: Soil and Water Investigation Workplan

Global Id: T0608500996  
Action Type: ENFORCEMENT  
Date: 05/03/1984  
Action: Notice of Responsibility - #39182

Global Id: T0608500996  
Action Type: ENFORCEMENT  
Date: 10/14/1999  
Action: Staff Letter - #18257

Global Id: T0608500996  
Action Type: ENFORCEMENT  
Date: 07/24/1999  
Action: Staff Letter - #18255

LUST REG 2:

Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed  
Case Number: 05S2W31K01f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assesment Wokplan Submitted: Not reported  
Preliminary Site Assesment Began: 5/3/1984  
Pollution Characterization Began: 8/13/1999  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 05S2W31K01  
Oversite Agency: SCVWD  
Date Listed: 1985-01-01 00:00:00  
Closed Date: 2000-02-29 00:00:00

E17  
WNW  
1/4-1/2  
0.282 mi.  
1489 ft.

OLD POST OFFICE PALO ALTO  
2197 E BAYSHORE RD  
PALO ALTO, CA

LUST S108223766  
N/A

Site 2 of 3 in cluster E

Relative:  
Lower

LUST SANTA CLARA:  
Region: SANTA CLARA  
SCVWD ID: 05S2W31K01F  
Date Closed: 02/29/2000

Actual:  
6 ft.

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

E18  
WNW  
1/4-1/2  
0.284 mi.  
1499 ft.

**OLD POST OFFICE PALO ALTO**  
2197 BAYSHORE  
PALO ALTO, CA

Site 3 of 3 in cluster E

HIST CORTESE

S101309065  
N/A

Relative:  
Lower

CORTESE:  
Region: CORTESE  
Facility County Code: 43

Actual:  
6 ft.

Reg By: LTNKA  
Reg Id: 43-0998

F19  
NE  
1/4-1/2  
0.323 mi.  
1708 ft.

**PALO ALTO GOLF COURSE**  
1875 EMBARCADERO RD  
PALO ALTO, CA

Site 1 of 2 in cluster F

HIST CORTESE

S102799516  
N/A

LUST  
CUPA Listings  
ENF

Relative:  
Lower

CORTESE:  
Region: CORTESE  
Facility County Code: 43

Actual:  
7 ft.

Reg By: LTNKA  
Reg Id: 43-2310

LUST:

Region: STATE  
Global Id: T0608502123  
Latitude: 37.4574053277139  
Longitude: -122.11493074894  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 12/19/2002  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: UST  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0608502123  
Contact Type: Local Agency Caseworker  
Contact Name: UST CASE WORKER  
Organization Name: SANTA CLARA COUNTY LOP  
Address: 1555 Berger Drive, Suite 300  
City: SAN JOSE  
Email: Not reported  
Phone Number: 4089183400

Global Id: T0608502123  
Contact Type: Regional Board Caseworker  
Contact Name: ZSC  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

PALO ALTO GOLF COURSE (Continued)

S102799516

Email: Not reported  
Phone Number: Not reported

Regulatory Activities:

Global Id: T0608502123  
Action Type: ENFORCEMENT  
Date: 09/19/1998  
Action: Notice of Responsibility - #39180

Global Id: T0608502123  
Action Type: ENFORCEMENT  
Date: 10/10/2002  
Action: Staff Letter - #38704

Global Id: T0608502123  
Action Type: ENFORCEMENT  
Date: 06/05/2002  
Action: Staff Letter - #38016

Global Id: T0608502123  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Reported

Global Id: T0608502123  
Action Type: RESPONSE  
Date: 12/16/2002  
Action: Soil and Water Investigation Report

Global Id: T0608502123  
Action Type: RESPONSE  
Date: 01/15/1999  
Action: Soil and Water Investigation Workplan

Global Id: T0608502123  
Action Type: ENFORCEMENT  
Date: 11/12/1998  
Action: Staff Letter - #18246

Global Id: T0608502123  
Action Type: RESPONSE  
Date: 07/30/2002  
Action: Soil and Water Investigation Workplan

LUST SANTA CLARA:

Region: SANTA CLARA  
SCVWD ID: 05S2W31H01F  
Date Closed: 12/19/2002

CUPA SANTA CLARA:

Region: SANTA CLARA  
Program Description: GENERATES < 100 KG/YR

Region: SANTA CLARA  
Program Description: PALO ALTO FIRE-BUSINESS PLAN (HMBP)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

PALO ALTO GOLF COURSE (Continued)

S102799516

Region: SANTA CLARA  
Program Description: PALO ALTO FIRE-PETROLEUM ABOVEGROUND STOR TAN

ENF:  
Region: 2  
Facility Id: 229020  
Agency Name: Palo Alto City  
Place Type: Facility  
Place Subtype: Not reported  
Facility Type: Municipal/Domestic  
Agency Type: City Agency  
# Of Agencies: 1  
Place Latitude: Not reported  
Place Longitude: Not reported  
SIC Code 1: Not reported  
SIC Desc 1: Not reported  
SIC Code 2: Not reported  
SIC Desc 2: Not reported  
SIC Code 3: Not reported  
SIC Desc 3: Not reported  
NAICS Code 1: Not reported  
NAICS Desc 1: Not reported  
NAICS Code 2: Not reported  
NAICS Desc 2: Not reported  
NAICS Code 3: Not reported  
NAICS Desc 3: Not reported  
# Of Places: 1  
Source Of Facility: Reg Meas  
Design Flow: Not reported  
Threat To Water Quality: Not reported  
Complexity: Not reported  
Pretreatment: Not reported  
Facility Waste Type: Not reported  
Facility Waste Type 2: Not reported  
Facility Waste Type 3: Not reported  
Facility Waste Type 4: Not reported  
Program: AGT  
# Of Programs: 1  
WDID: 2 43AGT244U  
Reg Measure Id: 169945  
Reg Measure Type: Unregulated  
Region: 2  
Order #: Not reported  
Npdes# CA#: Not reported  
Major-Minor: Not reported  
Npdes Type: Not reported  
Reclamation: Not reported  
Dredge Fill Fee: Not reported  
301H: Not reported  
Application Fee Amt Received: Not reported  
Status: Never Active  
Status Date: 02/20/2013  
Effective Date: Not reported  
Expiration/Review Date: Not reported  
Termination Date: Not reported  
WDR Review - Amend: Not reported  
WDR Review - Revise/Renew: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

PALO ALTO GOLF COURSE (Continued)

S102799516

WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	239273
Region:	2
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Oral Communication
Effective Date:	10/01/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 2 43AGT244U
Description:	Not reported
Program:	AGT
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability \$ Amount:	0
Project \$ Amount:	0
Liability \$ Paid:	0
Project \$ Completed:	0
Total \$ Paid/Completed Amount:	0
Region:	2
Facility Id:	229020
Agency Name:	Palo Alto City
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Municipal/Domestic
Agency Type:	City Agency
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	Not reported
SIC Desc 1:	Not reported
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

PALO ALTO GOLF COURSE (Continued)

S102799516

Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	AGT
# Of Programs:	1
WDID:	2 43AGT244U
Reg Measure Id:	169945
Reg Measure Type:	Unregulated
Region:	2
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Never Active
Status Date:	02/20/2013
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	239308
Region:	2
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Staff Enforcement Letter
Effective Date:	08/18/2000
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	Enforcement - 2 43AGT244U
Description:	Not reported
Program:	AGT
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability \$ Amount:	0
Project \$ Amount:	0
Liability \$ Paid:	0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

**PALO ALTO GOLF COURSE (Continued)**

**S102799516**

Project \$ Completed: 0  
Total \$ Paid/Completed Amount: 0  
  
Region: 2  
Facility Id: 229020  
Agency Name: Palo Alto City  
Place Type: Facility  
Place Subtype: Not reported  
Facility Type: Municipal/Domestic  
Agency Type: City Agency  
# Of Agencies: 1  
Place Latitude: Not reported  
Place Longitude: Not reported  
SIC Code 1: Not reported  
SIC Desc 1: Not reported  
SIC Code 2: Not reported  
SIC Desc 2: Not reported  
SIC Code 3: Not reported  
SIC Desc 3: Not reported  
NAICS Code 1: Not reported  
NAICS Desc 1: Not reported  
NAICS Code 2: Not reported  
NAICS Desc 2: Not reported  
NAICS Code 3: Not reported  
NAICS Desc 3: Not reported  
# Of Places: 1  
Source Of Facility: Reg Meas  
Design Flow: Not reported  
Threat To Water Quality: Not reported  
Complexity: Not reported  
Pretreatment: Not reported  
Facility Waste Type: Not reported  
Facility Waste Type 2: Not reported  
Facility Waste Type 3: Not reported  
Facility Waste Type 4: Not reported  
Program: AGT  
# Of Programs: 1  
WDID: 2 43AGT244U  
Reg Measure Id: 169945  
Reg Measure Type: Unregulated  
Region: 2  
Order #: Not reported  
Npdes# CA#: Not reported  
Major-Minor: Not reported  
Npdes Type: Not reported  
Reclamation: Not reported  
Dredge Fill Fee: Not reported  
301H: Not reported  
Application Fee Amt Received: Not reported  
Status: Never Active  
Status Date: 02/20/2013  
Effective Date: Not reported  
Expiration/Review Date: Not reported  
Termination Date: Not reported  
WDR Review - Amend: Not reported  
WDR Review - Revise/Renew: Not reported  
WDR Review - Rescind: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Database(s)      EDR ID Number  
 EPA ID Number

**PALO ALTO GOLF COURSE (Continued)**

**S102799516**

WDR Review - No Action Required: Not reported  
 WDR Review - Pending: Not reported  
 WDR Review - Planned: Not reported  
 Status Enrollea: N  
 Individual/General: I  
 Fee Code: Not reported  
 Direction/Voice: Passive  
 Enforcement Id(EID): 239309  
 Region: 2  
 Order / Resolution Number: UNKNOWN  
 Enforcement Action Typa: Notice of Violation  
 Effective Date: 10/11/2001  
 Adoplion/Issuance Date: Not reported  
 Achieve Date: Not reported  
 Termination Date: Not reported  
 ACL Issuance Date: Not reported  
 EPL Issuance Date: Not reported  
 Status: Historical  
 Title: Enforcement - 2 43AGT244U  
 Description: Not reported  
 Program: AGT  
 Latest Milestone Completion Date: Not reported  
 # Of Programs1: 1  
 Total Assessment Amount: 0  
 Initial Assessed Amount: 0  
 Liability \$ Amount: 0  
 Project \$ Amount: 0  
 Liability \$ Paid: 0  
 Project \$ Completed: 0  
 Total \$ Paid/Completed Amount: 0

F20  
 NE  
 1/4-1/2  
 0.323 mi.  
 1708 ft.

**PALO ALTO GOLF COURSE**  
**1875 EMBARCADERO RD**  
**PALO ALTO, CA 94301**  
 Site 2 of 2 in cluster F

LUST S103723198  
 HIST LUST N/A

Relative:  
 Lower

LUST REG 2:  
 Region: 2  
 Facility Id: Not reported  
 Facility Status: Case Closed  
 Case Number: 05S2W31H01f  
 How Discovered: Not reported  
 Leak Cause: Not reported  
 Leak Source: Not reported  
 Date Leak Confirmed: Not reported  
 Oversight Program: LUST  
 Prelim. Site Assesment Wokplan Submitted: Not reported  
 Preliminary Site Assesment Began: 8/14/1998  
 Pollution Characterization Began: 3/1/1999  
 Pollution Remediation Plan Submitted: Not reported  
 Date Remediation Action Underway: Not reported  
 Date Post Remedial Action Monitoring Began: Not reported

Actual:  
 7 ft.

HIST LUST SANTA CLARA:  
 Region: SANTA CLARA  
 Region Code: 2

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

PALO ALTO GOLF COURSE (Continued)

S103723198

SCVWD ID: 05S2W31H01  
Oversite Agency: SCVWD  
Date Listed: 1998-09-09 00:00:00  
Closed Date: 2002-12-19 00:00:00

21  
NE  
1/4-1/2  
0.357 mi.  
1883 ft.

GOPOWER  
1890 EMBARCADERO RD  
PALO ALTO, CA

HIST CORTESE S101309081  
LUST N/A  
HIST LUST

Relative:  
Higher

CORTESE:  
Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-0649

Actual:  
8 ft.

LUST:

Region: STATE  
Global Id: T0608500683  
Latitude: 37.452635  
Longitude: -122.113658  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 05/07/2008  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: LL  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: 05S2W32M01f  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0608500683  
Contact Type: Regional Board Caseworker  
Contact Name: ZSC  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND  
Email: Not reported  
Phone Number: Not reported

Global Id: T0608500683  
Contact Type: Local Agency Caseworker  
Contact Name: LANI LEE  
Organization Name: SANTA CLARA COUNTY LOP  
Address: 1555 BERGER DR, SUITE 300  
City: SAN JOSE  
Email: lanf.lee@deh.sccgov.org  
Phone Number: Not reported

Regulatory Activities:

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

GOPOWER (Continued)

S101309081

Global Id: T0608500683  
Action Type: ENFORCEMENT  
Date: 05/07/2008  
Action: Closure/No Further Action Letter

Global Id: T0608500683  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Reported

Global Id: T0608500683  
Action Type: ENFORCEMENT  
Date: 05/25/2007  
Action: Staff Letter - #70525

Global Id: T0608500683  
Action Type: ENFORCEMENT  
Date: 06/12/2007  
Action: Staff Letter - #70216

Global Id: T0608500683  
Action Type: ENFORCEMENT  
Date: 10/10/2006  
Action: Staff Letter - #600101

Global Id: T0608500683  
Action Type: RESPONSE  
Date: 04/10/2006  
Action: Preliminary Site Assessment Workplan

Global Id: T0608500683  
Action Type: RESPONSE  
Date: 09/07/2007  
Action: Monitoring Report - Quarterly

Global Id: T0608500683  
Action Type: RESPONSE  
Date: 06/15/2007  
Action: Soil and Water Investigation Report

Global Id: T0608500683  
Action Type: ENFORCEMENT  
Date: 12/18/2006  
Action: Staff Letter - #608121

Global Id: T0608500683  
Action Type: ENFORCEMENT  
Date: 12/10/2007  
Action: Staff Letter - #700121

Global Id: T0608500683  
Action Type: ENFORCEMENT  
Date: 12/10/2007  
Action: Staff Letter - #70121

Global Id: T0608500683  
Action Type: RESPONSE



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

GOPOWER (Continued)

S101309081

Date: 12/10/2007  
Action: Monitoring Report - Quarterly

Global Id: T0608500683  
Action Type: RESPONSE  
Date: 10/13/2006  
Action: Preliminary Site Assessment Report

Global Id: T0608500683  
Action Type: ENFORCEMENT  
Date: 11/19/1996  
Action: Notice of Responsibility - #39188

Global Id: T0608500683  
Action Type: ENFORCEMENT  
Date: 12/08/1998  
Action: Staff Letter

Global Id: T0608500683  
Action Type: ENFORCEMENT  
Date: 03/21/2001  
Action: Staff Letter

Global Id: T0608500683  
Action Type: ENFORCEMENT  
Date: 09/30/2005  
Action: Warning Letter

Global Id: T0608500683  
Action Type: ENFORCEMENT  
Date: 04/12/2006  
Action: Staff Letter - #06124

Global Id: T0608500683  
Action Type: RESPONSE  
Date: 12/15/2006  
Action: Soil and Water Investigation Workplan

Global Id: T0608500683  
Action Type: REMEDIATION  
Date: 01/01/1950  
Action: Monitored Natural Attenuation

LUST REG 2:

Region: 2  
Facility Id: Not reported  
Facility Status: Preliminary site assessment underway  
Case Number: 05S2W32M01f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: 10/7/1987  
Pollution Characterization Began: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

GOPOWER (Continued)

S101309081

Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:

Region: SANTA CLARA  
SCVWD ID: 05S2W32M01F  
Date Closed: 05/07/2008

HIST LUST SANTA CLARA:

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 05S2W32M01  
Oversite Agency: SCCDEH  
Date Listed: 1988-08-23 00:00:00  
Closed Date: Not reported

G22  
NE  
1/4-1/2  
0.371 mi.  
1961 ft.

PALO ALTO AIRPORT  
1901 EMBARCADERO RD  
PALO ALTO, CA

Site 1 of 3 in cluster G

HIST CORTESE S101303784  
LUST N/A  
HIST LUST  
CUPA Listings

Relative:  
Higher

CORTESE:  
Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-1027

Actual:  
8 ft.

LUST:

Region: STATE  
Global Id: T0608599114  
Latitude: 37.4551528501631  
Longitude: -122.11531162262  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 03/12/2013  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: MJ  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: 08-099  
LOC Case Number: 05S2W32E01f  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Aviation, Waste Oil / Motor / Hydraulic / Lubricating  
Site History: 1988 In August, 3 underground storage tanks (USTs) were removed from the site. The USTs had been used to store gasoline and then waste oil. 2 soil samples (MA1 and MA2) were collected from the sidewall of the excavations at 4 feet below the ground surface (ft bgs). These samples were reported to have maximum concentrations of 990 parts per million (ppm) Total Petroleum Hydrocarbons (TPH) as Gasoline (TPHg), 4,300 ppm TPH as Oil (TPHo), 5,700 ppm Total Oil and Grease (TOG), 400 ppm Stoddard Solvent (does not match chromatographic pattern), 0.9 ppm Benzene, 3.4 ppm Toluene, 1.7 ppm Ethylbenzene, 11 ppm Xylenes, and 0.035 ppm Acetone. The third tank (2,000-gallon) was not removed right away due to elevated flammable vapors. The tank was not

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

PALO ALTO AIRPORT (Continued)

S101303784

removed until February 1989. Floating product was noted to be present on the groundwater in the excavation. The excavation was pumped out and stored in a tank onsite. Groundwater was encountered during tank removal at 5 ft bgs. A grab groundwater sample was collected and reported to contain 380,000 parts per billion (ppb) TPHg, 260,000 ppb TPHd, 410,000 ppb TPHo, 520,000 ppb TOG, 350 ppb Benzene, 240 ppb Toluene, 230 ppb Ethylbenzene, and 440 ppb Xylenes. 10 soil borings (B1 through B10) were advanced to 3.5 ft bgs. Soil samples were screened using a Photo-ionization detector (PID). It was not reported that soil samples collected during this investigation were submitted for laboratory analysis. 8 soil borings (B11 through B18) were advanced to 5-7 ft bgs. Grab groundwater samples were collected from borings B11 through B14; groundwater was not encountered in the other borings. The samples were noted to have a petroleum hydrocarbon odor and sheen. It was not reported that soil or groundwater samples collected during this investigation were submitted for laboratory analysis. 3 monitoring wells (MW1 through MW3) were installed to 13.5-13.75 ft bgs. Grab groundwater samples were collected from these new wells and reported to contain maximum concentrations of 630 ppb TPHg, 270 ppb TPHd, 4,200 ppb TOG, 13 ppb Benzene, 18 ppb Toluene, 2 ppb Ethylbenzene, and 7 ppb Xylenes. 1989 In February, the third tank was removed. 1990 In January, 3 soil borings (SB1 through SB3) were advanced to 3 ft bgs. 3 soil samples were collected and reported to contain maximum concentrations of 590 ppm TPHg, 61 ppm TPH as Mineral Spirits (TPHms), 9.6 ppm Benzene, 0.9 ppm Ethylbenzene, 3.5 ppm Xylenes, and 6.8 ppm Lead. 15 CPT borings were advanced to 12 ft bgs for the collection of groundwater samples. The site is underlain by Bay Mud, which has very low permeability. Sufficient groundwater for sampling was only present in borings CPT1, CPT4, CPT5, CPT11, CPT14 and CPT15. Grab groundwater samples were reported to contain maximum concentrations of 1,700 ppb TPHg, 1,400 ppb TOG, 270 ppb TPHms, 110 ppb TPHd, 8 ppb Ethylbenzene, and 0.039 ppb Lead. Benzene was not reported to be present in any of the samples analyzed. Also around this time, depth to water readings were taken in the monitoring wells at different times relative to the preceding low tides and it was concluded that the effect of tidal fluctuations on groundwater elevations and flow direction at the site is negligible. In July, 4 monitoring wells (MW4 through MW7) were installed on and offsite to 14.5 ft bgs. It was not reported that soil samples were submitted for laboratory analysis. The new wells were incorporated into the groundwater monitoring program. In November, 3 monitoring wells (MW8 through MW10) were installed offsite to 14.5 ft bgs. It was not reported that soil samples were submitted for laboratory analysis. The new wells were incorporated into the groundwater monitoring program. 1991 In October, 2 monitoring wells (MW11 and MW12) were installed adjacent to the former UST excavation. MW12 was installed as a deeper well to approximately 35 ft bgs. The initial sampling of well MW12 reported I

[Click here to access the California GeoTracker records for this facility:](#)

Contact:  
Global Id: T0608599114  
Contact Type: Regional Board Caseworker  
Contact Name: NATHAN KING  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY ST., SUITE 1400  
City: OAKLAND

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

PALO ALTO AIRPORT (Continued)

S101303784

Email: nking@waterboards.ca.gov  
Phone Number: Not reported  
  
Global Id: T0608599114  
Contact Type: Local Agency Caseworker  
Contact Name: LANI LEE  
Organization Name: SANTA CLARA COUNTY LOP  
Address: 1555 BERGER DR, SUITE 300  
City: SAN JOSE  
Email: lani.lee@deh.sccgov.org  
Phone Number: Not reported

Regulatory Activities:

Global Id: T0608599114  
Action Type: ENFORCEMENT  
Date: 12/20/2012  
Action: Staff Letter  
  
Global Id: T0608599114  
Action Type: RESPONSE  
Date: 04/30/2009  
Action: Monitoring Report - Quarterly  
  
Global Id: T0608599114  
Action Type: ENFORCEMENT  
Date: 03/27/2009  
Action: Staff Letter  
  
Global Id: T0608599114  
Action Type: ENFORCEMENT  
Date: 05/11/1990  
Action: Notice of Responsibility - #39187  
  
Global Id: T0608599114  
Action Type: ENFORCEMENT  
Date: 04/14/1992  
Action: Staff Letter - #17976  
  
Global Id: T0608599114  
Action Type: ENFORCEMENT  
Date: 03/13/2001  
Action: Staff Letter - #17979  
  
Global Id: T0608599114  
Action Type: RESPONSE  
Date: 10/31/2009  
Action: Monitoring Report - Semi-Annually  
  
Global Id: T0608599114  
Action Type: RESPONSE  
Date: 04/30/2010  
Action: Monitoring Report - Semi-Annually  
  
Global Id: T0608599114  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

PALO ALTO AIRPORT (Continued)

S101303784

Global Id: T0608599114  
Action Type: ENFORCEMENT  
Date: 07/26/2012  
Action: Staff Letter

Global Id: T0608599114  
Action Type: ENFORCEMENT  
Date: 03/12/2013  
Action: Closure/No Further Action Letter

Global Id: T0608599114  
Action Type: ENFORCEMENT  
Date: 08/07/2009  
Action: Staff Letter

Global Id: T0608599114  
Action Type: RESPONSE  
Date: 06/30/1992  
Action: Monitoring Report - Quarterly

Global Id: T0608599114  
Action Type: ENFORCEMENT  
Date: 08/20/2012  
Action: Staff Letter

Global Id: T0608599114  
Action Type: RESPONSE  
Date: 03/16/2001  
Action: Monitoring Report - Quarterly

Global Id: T0608599114  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Discovery

Global Id: T0608599114  
Action Type: RESPONSE  
Date: 02/28/2013  
Action: Well Destruction Report

Global Id: T0608599114  
Action Type: REMEDIATION  
Date: 01/01/1950  
Action: Excavation

Global Id: T0608599114  
Action Type: ENFORCEMENT  
Date: 03/25/2011  
Action: Site Visit / Inspection / Sampling

LUST REG 2:

Region: 2  
Facility Id: Not reported  
Facility Status: Pollution Characterization  
Case Number: 05S2W32E01f  
How Discovered: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PALO ALTO AIRPORT (Continued)**

**S101303784**

Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Wokplan Submitted: Not reported  
Preliminary Site Assessment Began: 8/4/1988  
Pollution Characterization Began: 6/7/1990  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

**LUST SANTA CLARA:**

Region: SANTA CLARA  
SCVWD ID: 05S2W32E01F  
Date Closed: Not reported

**HIST LUST SANTA CLARA:**

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 05S2W32E01  
Oversite Agency: SCCDEH  
Date Listed: 1990-01-01 00:00:00  
Closed Date: Not reported

**CUPA SANTA CLARA:**

Region: SANTA CLARA  
Program Description: PALO ALTO FIRE-BUSINESS PLAN (HMBP)

Region: SANTA CLARA  
Program Description: PALO ALTO FIRE-PETROLEUM ABOVEGROUND STOR TAN

23  
WNW  
1/4-1/2  
0.374 ml.  
1974 ft.

**DYNA BELL**  
151 LAURA LN  
PALO ALTO, CA

**HIST CORTESE** 1001610539  
LUST N/A  
HIST LUST  
CUPA Listings

Relative:  
Higher

**CORTESE:**  
Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-0488

Actual:  
8 ft.

**LUST:**

Region: STATE  
Global Id: T0608500534  
Latitude: 37.4523760997927  
Longitude: -122.125160694122  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 08/16/1991  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: UST  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

DYNA BELL (Continued)

1001610539

File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0608500534  
Contact Type: Regional Board Caseworker  
Contact Name: ZSC  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND  
Email: Not reported  
Phone Number: Not reported

Global Id: T0608500534  
Contact Type: Local Agency Caseworker  
Contact Name: UST CASE WORKER  
Organization Name: SANTA CLARA COUNTY LOP  
Address: 1555 Berger Drive, Suite 300  
City: SAN JOSE  
Email: Not reported  
Phone Number: 4089183400

Regulatory Activities:

Global Id: T0608500534  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Reported

Global Id: T0608500534  
Action Type: RESPONSE  
Date: 03/29/1990  
Action: Other Report / Document

Global Id: T0608500534  
Action Type: ENFORCEMENT  
Date: 03/13/1991  
Action: Notice of Responsibility - #39183

Global Id: T0608500534  
Action Type: REMEDIATION  
Date: 01/01/1950  
Action: Excavation

Global Id: T0608500534  
Action Type: ENFORCEMENT  
Date: 08/16/1991  
Action: Closure/No Further Action Letter

LUST REG 2:

Region: 2  
Facility Id: Not reported  
Facility Status: Case Closed

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

DYNA BELL (Continued)

1001610539

Case Number: 05S2W31L01f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Wokplan Submitted: Not reported  
Preliminary Site Assessment Began: 3/28/1990  
Pollution Characterization Began: 3/28/1990  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:

Region: SANTA CLARA  
SCVWD ID: 05S2W31L01F  
Date Closed: 08/16/1991

HIST LUST SANTA CLARA:

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 05S2W31L01  
Oversite Agency: SCVWD  
Date Listed: 1991-01-01 00:00:00  
Closed Date: 1991-08-16 00:00:00

CUPA SANTA CLARA:

Region: SANTA CLARA  
Program Description: GENERATES < 100 KG/YR

G24  
NE  
1/4-1/2  
0.388 mi.  
2051 ft.

PALO ALTO MUNI REFUSE DSPL AREA  
2380 EMBARCADERO RD  
PALO ALTO, CA 94303

CERC-NFRAP 1002851015  
CAD980637029

Site 2 of 3 in cluster G

Relative:  
Higher

CERC-NFRAP:  
Site ID: 0901865  
Federal Facility: Not a Federal Facility  
NPL Status: Not on the NPL  
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Actual:  
8 ft.

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 13053533.00000  
Person ID: 9271184.00000

Contact Sequence ID: 13287737.00000  
Person ID: 13003854.00000

Contact Sequence ID: 13293332.00000  
Person ID: 13003858.00000

Contact Sequence ID: 13299190.00000  
Person ID: 13004003.00000



Map ID  
Direction  
Distance  
Elevation

**MAP FINDINGS**

Site

Database(s)  
EDR ID Number  
EPA ID Number

**PALO ALTO MUNI REFUSE DSPL AREA (Continued)**

**1002851015**

CERCLIS-NFRAP Site Alias Name(s):

Alias Name: PALO ALTO MUNI SAN LDFL  
Alias Address: Not reported  
CA

Alias Name: PALO ALTO REFUSE DSPL AREA  
Alias Address: Not reported  
CA

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY  
Date Started: / /  
Date Completed: 06/01/81  
Priority Level: Not reported

Action: ARCHIVE SITE  
Date Started: / /  
Date Completed: 09/01/87  
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT  
Date Started: 08/01/86  
Date Completed: 09/01/87  
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

**G25  
NE  
1/4-1/2  
0.388 mi.  
2051 ft.**

**PALO ALTO MUNICIPAL SANITARY LANDFILL  
2380 EMBARCADERO RD  
PALO ALTO, CA 94303  
Site 3 of 3 in cluster G**

**NPDES S103980888  
LDS N/A  
ENF  
ENVIROSTOR**

**Relative:  
Higher**

**Actual:  
8 ft.**

**NPDES:**

Npdes Number: CAS000001  
Facility Status: Active  
Agency Id: 0  
Region: 2  
Regulatory Measure Id: 183969  
Order No: 97-03-DWQ  
Regulatory Measure Type: Enrollee  
Place Id: Not reported  
WDID: 2 431007026  
Program Type: Industrial  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 05/27/1992  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Discharge Name: Palo Alto City Dept PW  
Discharge Address: PO Box 10250  
Discharge City: Palo Alto  
Discharge State: California  
Discharge Zip: 94303

**LDS:**

Global Id: L10008699117  
Latitude: 37.44585

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

**PALO ALTO MUNICIPAL SANITARY LANDFILL (Continued)**

**S103980888**

Longitude: -122.1301  
Case Type: Land Disposal Site  
Status: Open  
Status Date: 01/01/2001  
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)  
Caseworker: KER  
Local Agency: Not reported  
RB Case Number: 2 438070260  
LOC Case Number: Not reported  
File Location: Not reported  
Potential Media Affect: Not reported  
Potential Contaminants of Concern: Not reported  
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

**ENF:**

Region: 2  
Facility Id: 257681  
Agency Name: Palo Alto City  
Place Type: Waste Management Unit  
Place Subtype: Land fill  
Facility Type: Solid Waste Class III - nonhazardous solid wastes  
Agency Type: City Agency  
# Of Agencies: 1  
Place Latitude: Not reported  
Place Longitude: Not reported  
SIC Code 1: 112  
SIC Desc 1: Rice  
SIC Code 2: 4953  
SIC Desc 2: Refuse Systems  
SIC Code 3: Not reported  
SIC Desc 3: Not reported  
NAICS Code 1: Not reported  
NAICS Desc 1: Not reported  
NAICS Code 2: Not reported  
NAICS Desc 2: Not reported  
NAICS Code 3: Not reported  
NAICS Desc 3: Not reported  
# Of Places: 1  
Source Of Facility: Reg Meas  
Design Flow: 0.0001  
Threat To Water Quality: 2  
Complexity: B  
Pretreatment: N - POTW does not have EPA approved pretreatment prog.  
Facility Waste Type: Inert solid wastes  
Facility Waste Type 2: Solid wastes, NEC  
Facility Waste Type 3: Not reported  
Facility Waste Type 4: Not reported  
Program: LNDISP  
# Of Programs: 1  
WDID: 2 438070001  
Reg Measure Id: 142512  
Reg Measure Type: WDR  
Region: 2  
Order #: 99-026

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

PALO ALTO MUNICIPAL SANITARY LANDFILL (Continued)

S103980888

Npdes# CA#: Not reported  
Major-Minor: Not reported  
Npdes Type: Not reported  
Reclamation: N - No  
Dredge Fill Fee: Not reported  
301H: Not reported  
Application Fee Amt Received: Not reported  
Status: Active  
Status Date: 09/30/2009  
Effective Date: 05/25/1999  
Expiration/Review Date: 05/22/2014  
Termination Date: Not reported  
WDR Review - Amend: Not reported  
WDR Review - Revise/Renew: Not reported  
WDR Review - Rescind: Not reported  
WDR Review - No Action Required: Not reported  
WDR Review - Pending: Not reported  
WDR Review - Planned: Not reported  
Status Enrollee: N  
Individual/General: I  
Fee Code: 50 - Land Disposal Site paying tipping fee  
Direction/Voice: Passive  
Enforcement Id(EID): 222806  
Region: 2  
Order / Resolution Number: 95-215  
Enforcement Action Type: Admin Civil Liability  
Effective Date: 02/21/1996  
Adoption/Issuance Date: Not reported  
Achieve Date: Not reported  
Termination Date: Not reported  
ACL Issuance Date: Not reported  
EPL Issuance Date: Not reported  
Status: Withdrawn  
Title: Enforcement - 2 438070001  
Description: ACL-  
Program: LNDISP  
Latest Milestone Completion Date: 3/4/1996  
# Of Programs1: 1  
Total Assessment Amount: 0  
Initial Assessed Amount: 0  
Liability \$ Amount: 0  
Project \$ Amount: 0  
Liability \$ Paid: 0  
Project \$ Completed: 0  
Total \$ Paid/Completed Amount: 0

ENVIROSTOR:

Site Type: Historical  
Site Type Detailed: \* Historical  
Acres: Not reported  
NPL: NO  
Regulatory Agencies: NONE SPECIFIED  
Lead Agency: NONE SPECIFIED  
Program Manager: Not reported  
Supervisor: Referred - Not Assigned  
Division Branch: Cleanup Berkeley  
Facility ID: 43490053

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

**PALO ALTO MUNICIPAL SANITARY LANDFILL (Continued)**

**S103980888**

Site Code: Not reported  
Assembly: 21  
Senate: 11  
Special Program: \* Site Char & Assess Grant (CERCLA 104)  
Status: Refer: RWQCB  
Status Date: 06/08/1994  
Restricted Use: NO  
Site Mgmt. Req.: NONE SPECIFIED  
Funding: Not reported  
Latitude: 0  
Longitude: 0  
APN: NONE SPECIFIED  
Past Use: NONE SPECIFIED  
Potential COC: 10119, 10120, 10176, 10180, 10194, 10198, 20001, 20009, 20017, 30013, 30108, 30153, 30357, 30407  
Confirmed COC: NONE SPECIFIED  
Potential Description: NONE SPECIFIED  
Alias Name: PALO ALTO REFUSE DISPOSAL AREA  
Alias Type: Alternate Name  
Alias Name: CAD009447871  
Alias Type: EPA Identification Number  
Alias Name: CAD980637029  
Alias Type: EPA Identification Number  
Alias Name: 43490053  
Alias Type: Envirostor ID Number

**Completed Info:**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Discovery  
Completed Date: 10/12/1983  
Comments: FACILITY IDENTIFIED ID FROM ERRIS - 3280 EMBARCADERO RD,

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Discovery  
Completed Date: 08/20/1981  
Comments: FACILITY IDENTIFIED SUPERFUND NOTIFICATION (REFUSE DISP)- 3280 EMBARCADERO RD.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Screening  
Completed Date: 07/02/1987  
Comments: SITE SCREENING DONE

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Assessment Report  
Completed Date: 01/01/1985  
Comments: PRELIM ASSESS DONE ON CERCLIS. STATE PA DONE 1/85.

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PALO ALTO MUNICIPAL SANITARY LANDFILL (Continued)**

**S103980888**

Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

H28  
WSW  
1/4-1/2  
0.411 mi.  
2170 ft.

**EQUILON ENTERPRISES  
1161 EMBARCADERO  
PALO ALTO, CA 94303**

**FINDS 1007737850  
LUST N/A**

Site 1 of 2 in cluster H

Relative:  
Higher

FINDS:

Registry ID: 110018975224

Actual:  
10 ft.

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LUST SANTA CLARA:

Region: SANTA CLARA  
SCVWD ID: 05S2W31P01F  
Date Closed: 12/21/2004

H27  
WSW  
1/4-1/2  
0.411 mi.  
2170 ft.

**SHELL  
1161 EMBARCADERO RD  
PALO ALTO, CA 94303**

**HIST CORTESE S103962967  
LUST N/A  
HIST LUST**

Site 2 of 2 in cluster H

Relative:  
Higher

CORTESE:

Region: CORTESE  
Facility County Code: 43  
Reg By: LTNKA  
Reg Id: 43-1270

Actual:  
10 ft.

LUST:

Region: STATE  
Global Id: T0608501248  
Latitude: 37.4473167215427  
Longitude: -122.125954627991  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 12/21/2004  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: UST

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHELL (Continued)**

**S103962967**

Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

**Contact:**

Global Id: T0608501248  
Contact Type: Local Agency Caseworker  
Contact Name: UST CASE WORKER  
Organization Name: SANTA CLARA COUNTY LOP  
Address: 1555 Berger Drive, Suite 300  
City: SAN JOSE  
Email: Not reported  
Phone Number: 4089183400

Global Id: T0608501248  
Contact Type: Regional Board Caseworker  
Contact Name: ZSC  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND  
Email: Not reported  
Phone Number: Not reported

**Regulatory Activities:**

Global Id: T0608501248  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Reported

Global Id: T0608501248  
Action Type: RESPONSE  
Date: 08/31/1996  
Action: Monitoring Report - Quarterly

Global Id: T0608501248  
Action Type: RESPONSE  
Date: 04/28/1997  
Action: Monitoring Report - Quarterly

Global Id: T0608501248  
Action Type: ENFORCEMENT  
Date: 06/19/1991  
Action: Notice of Responsibility - #39185

Global Id: T0608501248  
Action Type: ENFORCEMENT  
Date: 08/23/1999  
Action: Staff Letter - #17959

Global Id: T0608501248  
Action Type: ENFORCEMENT

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

SHELL (Continued)

S103962967

Date: 08/28/1996  
Action: Staff Letter - #18262

Global Id: T0608501248  
Action Type: ENFORCEMENT  
Date: 04/25/1997  
Action: Staff Letter - #18265

Global Id: T0608501248  
Action Type: REMEDIATION  
Date: 01/01/1950  
Action: Pump & Treat (P&T) Groundwater

Global Id: T0608501248  
Action Type: REMEDIATION  
Date: 01/01/1950  
Action: Pump & Treat (P&T) Groundwater

Global Id: T0608501248  
Action Type: RESPONSE  
Date: 08/26/1999  
Action: Monitoring Report - Quarterly

LUST REG 2:

Region: 2  
Facility Id: Not reported  
Facility Status: Pollution Characterization  
Case Number: 05S2W31P01f  
How Discovered: Not reported  
Leak Cause: Not reported  
Leak Source: Not reported  
Date Leak Confirmed: Not reported  
Oversight Program: LUST  
Prelim. Site Assessment Workplan Submitted: Not reported  
Preliminary Site Assessment Began: 2/20/1987  
Pollution Characterization Began: 9/29/1987  
Pollution Remediation Plan Submitted: Not reported  
Date Remediation Action Underway: Not reported  
Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:

Region: SANTA CLARA  
Region Code: 2  
SCVWD ID: 05S2W31P01  
Oversite Agency: SCVWD  
Date Listed: 1988-01-01 00:00:00  
Closed Date: 2004-12-21 00:00:00

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

28  
ENE  
1/4-1/2  
0.420 mi.  
2216 ft.

GEMFIRE CORPORATION  
2440 EMBARCADERO WAY  
PALO ALTO, CA 94303

ENVIROSTOR S108751571  
N/A

Relative:  
Higher

Actual:  
8 ft.

ENVIROSTOR:  
Site Type: Tiered Permit  
Site Type Detailed: Tiered Permit  
Acres: Not reported  
NPL: NO  
Regulatory Agencies: NONE SPECIFIED  
Lead Agency: NONE SPECIFIED  
Program Manager: Not reported  
Supervisor: Not reported  
Division Branch: Cleanup Berkeley  
Facility ID: 71003672  
Site Code: Not reported  
Assembly: 24  
Senate: 13  
Special Program: Not reported  
Status: Inactive - Needs Evaluation  
Status Date: Not reported  
Restricted Use: NO  
Site Mgmt. Req.: NONE SPECIFIED  
Funding: Not reported  
Latitude: 37.45096  
Longitude: -122.1118  
APN: NONE SPECIFIED  
Past Use: NONE SPECIFIED  
Potential COC: NONE SPECIFIED  
Confirmed COC: NONE SPECIFIED  
Potential Description: NONE SPECIFIED  
Alias Name: CAL000078053  
Alias Type: EPA Identification Number  
Alias Name: 71003672  
Alias Type: Envirostor ID Number

Completed Info:  
Completed Area Name: Not reported  
Completed Sub Area Name: Not reported  
Completed Document Type: Not reported  
Completed Date: Not reported  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

**I29** PALO ALTO MAIN POST OFFICE  
**WNW** 2085 E BAYSHORE  
1/4-1/2 PALO ALTO, CA 94303  
0.421 mi.  
2223 ft. Site 1 of 3 in cluster I

LUST S101623412  
CA FID UST N/A

Relative:  
Higher

Actual:  
12 ft.

LUST:  
Region: STATE  
Global Id: T0608501852  
Latitude: 37.450499  
Longitude: -122.122886  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 05/29/1996  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: UST  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Stored electronically as an E-file  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0608501852  
Contact Type: Regional Board Caseworker  
Contact Name: ZSC  
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
Address: 1515 CLAY STREET, SUITE 1400  
City: OAKLAND  
Email: Not reported  
Phone Number: Not reported

Global Id: T0608501852  
Contact Type: Local Agency Caseworker  
Contact Name: UST CASE WORKER  
Organization Name: SANTA CLARA COUNTY LOP  
Address: 1555 Berger Drive, Suite 300  
City: SAN JOSE  
Email: Not reported  
Phone Number: 4089183400

Regulatory Activities:

Global Id: T0608501852  
Action Type: Other  
Date: 01/01/1950  
Action: Leak Reported

Global Id: T0608501852  
Action Type: ENFORCEMENT  
Date: 11/16/1995  
Action: Notice of Responsibility - #39184

LUST SANTA CLARA:

Region: SANTA CLARA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

**PALO ALTO MAIN POST OFFICE (Continued)**

**S101623412**

SCVWD ID: 05S2W31L02F  
Date Closed: 05/29/1996

Region: SANTA CLARA  
SCVWD ID: 05S2W31L03F  
Date Closed: 07/14/2005

**CA FID UST:**

Facility ID: 43005651  
Regulated By: UTNKA  
Regulated ID: 00065899  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: 4153214310  
Mail To: Not reported  
Mailing Address: 2085 E BAYSHORE  
Mailing Address 2: Not reported  
Mailing City,St,Zip: PALO ALTO 943039998  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

I30  
WNW  
1/4-1/2  
0.421 mi.  
2223 ft.

**UNITED STATES POSTAL SERVICE (USPS)**  
2085 EAST BAYSHORE ROAD  
PALO ALTO, CA 94301

**LUST S107138466**  
N/A

**Site 2 of 3 in cluster I**

**Relative:  
Higher**

**Actual:  
12 ft.**

**LUST:**  
Region: STATE  
Global Id: T0608547252  
Latitude: 37.451955  
Longitude: -122.12596  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 07/14/2005  
Lead Agency: SANTA CLARA COUNTY LOP  
Case Worker: UST  
Local Agency: SANTA CLARA COUNTY LOP  
RB Case Number: Not reported  
LOC Case Number: Not reported  
File Location: Not reported  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

**Contact:**

Global Id: T0608547252  
Contact Type: Local Agency Caseworker  
Contact Name: UST CASE WORKER  
Organization Name: SANTA CLARA COUNTY LOP  
Address: 1555 Berger Drive, Suite 300

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**UNITED STATES POSTAL SERVICE (USPS) (Continued)**

**S107138466**

City: SAN JOSE  
 Email: Not reported  
 Phone Number: 4089183400

Global Id: T0608547252  
 Contact Type: Regional Board Caseworker  
 Contact Name: BARBARA SIEMINSKI  
 Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
 Address: 1515 CLAY STREET, SUITE 1400  
 City: OAKLAND  
 Email: bsieminski@waterboards.ca.gov  
 Phone Number: Not reported

**Regulatory Activities:**

Global Id: T0608547252  
 Action Type: Other  
 Date: 01/01/1950  
 Action: Leak Reported

Global Id: T0608547252  
 Action Type: Other  
 Date: 01/01/1950  
 Action: Leak Discovery

Global Id: T0608547252  
 Action Type: REMEDIATION  
 Date: 01/01/1950  
 Action: Not reported

I31  
 WNW  
 1/4-1/2  
 0.421 mi.  
 2223 ft.

**PALO ALTO POST OFFICE**  
 2085 E BAYSHORE RD  
 PALO ALTO, CA 94303

**LUST S103880592**  
**HIST LUST N/A**  
**WDS**

Site 3 of 3 in cluster I

Relative:  
 Higher

**LUST REG 2:**

Region: 2  
 Facility Id: Not reported  
 Facility Status: Case Closed  
 Case Number: 05S2W31L02f  
 How Discovered: Not reported  
 Leak Cause: Not reported  
 Leak Source: Not reported  
 Date Leak Confirmed: Not reported  
 Oversight Program: LUST  
 Prelim. Site Assessment Wokplan Submitted: Not reported  
 Preliminary Site Assessment Began: 3/17/1994  
 Pollution Characterization Began: 4/6/1994  
 Pollution Remediation Plan Submitted: Not reported  
 Date Remediation Action Underway: Not reported  
 Date Post Remedial Action Monitoring Began: Not reported

Actual:  
 12 ft.

**HIST LUST SANTA CLARA:**

Region: SANTA CLARA  
 Region Code: 2  
 SCVWD ID: 05S2W31L02

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PALO ALTO POST OFFICE (Continued)**

**S103880592**

Oversite Agency: SCVWD  
Date Listed: 1994-08-29 00:00:00  
Closed Date: 1996-05-29 00:00:00

**CA WDS:**

Facility ID: San Francisco Bay 431013018  
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.  
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.  
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board  
Subregion: 2  
Facility Telephone: 6503273856  
Facility Contact: POSTMASTER  
Agency Name: US POSTAL SER  
Agency Address: 2085 E Bayshore Rd  
Agency City,St,Zip: Palo Alto 943033218  
Agency Contact: POSTMASTER  
Agency Telephone: 6503211423  
Agency Type: ?  
SIC Code: 0  
SIC Code 2: Not reported  
Primary Waste: Not reported  
Primary Waste Type: Not reported  
Secondary Waste: Not reported  
Secondary Waste Type: Not reported  
Design Flow: 0  
Baseline Flow: 0  
Reclamation: Not reported  
POTW: Not reported  
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.  
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s) EDR ID Number  
EPA ID Number

32  
WSW  
1/4-1/2  
0.425 mi.  
2243 ft.

**MOON DRY CLEANERS**  
**2125 SAINT FRANCIS DRIVE**  
**PALO ALTO, CA 94303**

**SLIC S112142832**  
**N/A**

Relative:  
Higher

SLIC:

Actual:  
13 ft.

Region:	STATE
<b>Facility Status:</b>	<b>Open - Remediation</b>
Status Date:	11/05/2012
Global Id:	T10000004214
Lead Agency:	SANTA CLARA COUNTY LOP
Lead Agency Case Number:	05S2W31P02s
Latitude:	37.4480492453022
Longitude:	-122.126383781433
Case Type:	Cleanup Program Site
Case Worker:	LL
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
File Location:	Stored electronically as an E-file
Potential Media Affected:	Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	Tetrachloroethylene (PCE)
Site History:	Dry cleaners have operated on this site from at least 1965 to late 2011. The last dry cleaner did not perform dry cleaning onsite from around 1998. The site has been vacant since January 2012. Redevelopment plans have been filed with the City for commercial development onsite. Phase II investigations have found soil and groundwater impacted with PCE at the site. Excavated PCE impacted soil above the groundwater.

Click here to access the California GeoTracker records for this facility:

Count: 4 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
E PALO ALTO	S110653866	AT & T MOBILITY-BAYSHORE RD 13328	1438 BAYSHORE	94303	San Mateo Co. BI
EAST PALO ALTO	1003879293	CALMAC CHEMICAL	END OF WEEKS ST	94303	CERC-NFRAP
PALO ALTO	S113407659	ACE FIRE EQUIPMENT & SVC CO INC	1870 BAYSHORE	94303	San Mateo Co. BI
PALO ALTO	1009219039	PALO ALTO CITY OF	E BAYSHORE RD	94303	MANIFEST

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## STANDARD ENVIRONMENTAL RECORDS

### *Federal NPL site list*

#### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 02/01/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: N/A
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 05/09/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Quarterly

#### NPL Site Boundaries

##### Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

#### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 02/01/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: N/A
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 05/09/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Quarterly

#### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## *Federal Delisted NPL site list*

### DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 02/01/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: N/A
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 05/09/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Quarterly

## *Federal CERCLIS list*

### CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/04/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: 703-412-9810
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 04/05/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 06/10/2013
	Data Release Frequency: Quarterly

### FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 07/31/2012	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/09/2012	Telephone: 703-603-8704
Date Made Active in Reports: 12/20/2012	Last EDR Contact: 04/10/2013
Number of Days to Update: 72	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Varies

## *Federal CERCLIS NFRAP site List*

### CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 02/05/2013	Source: EPA
Date Data Arrived at EDR: 03/01/2013	Telephone: 703-412-9810
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 04/05/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 03/11/2013
	Data Release Frequency: Quarterly

## *Federal RCRA CORRACTS facilities list*

### CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/21/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 6

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 05/02/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Quarterly

## ***Federal RCRA non-CORRACTS TSD facilities list***

### **RCRA-TSDF: RCRA - Treatment, Storage and Disposal**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/15/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 05/02/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Quarterly

## ***Federal RCRA generators list***

### **RCRA-LQG: RCRA - Large Quantity Generators**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/15/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 05/02/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Quarterly

### **RCRA-SQG: RCRA - Small Quantity Generators**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/15/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 05/02/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Quarterly

### **RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators**

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/15/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 05/02/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## *Federal institutional controls / engineering controls registries*

### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or affect human health.

Date of Government Version: 03/14/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/29/2013	Telephone: 703-603-0695
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 03/11/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 06/24/2013
	Data Release Frequency: Varies

### US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/14/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/29/2013	Telephone: 703-603-0695
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 03/11/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 06/24/2013
	Data Release Frequency: Varies

### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005	Source: Department of the Navy
Date Data Arrived at EDR: 12/11/2006	Telephone: 843-820-7326
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 05/20/2013
Number of Days to Update: 31	Next Scheduled EDR Contact: 09/02/2013
	Data Release Frequency: Varies

## *Federal ERNS list*

### ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2012	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 01/17/2013	Telephone: 202-267-2180
Date Made Active in Reports: 02/15/2013	Last EDR Contact: 04/02/2013
Number of Days to Update: 29	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Annually

## *State- and tribal - equivalent NPL*

### RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 03/13/2013	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 03/14/2013	Telephone: 916-323-3400
Date Made Active in Reports: 03/27/2013	Last EDR Contact: 05/07/2013
Number of Days to Update: 13	Next Scheduled EDR Contact: 08/19/2013
	Data Release Frequency: Quarterly

## *State- and tribal - equivalent CERCLIS*

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 03/13/2013	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 03/14/2013	Telephone: 916-323-3400
Date Made Active in Reports: 03/27/2013	Last EDR Contact: 05/07/2013
Number of Days to Update: 13	Next Scheduled EDR Contact: 08/19/2013
	Data Release Frequency: Quarterly

### *State and tribal landfill and/or solid waste disposal site lists*

#### SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/18/2013	Source: Department of Resources Recycling and Recovery
Date Data Arrived at EDR: 02/18/2013	Telephone: 916-341-6320
Date Made Active in Reports: 03/20/2013	Last EDR Contact: 02/18/2013
Number of Days to Update: 30	Next Scheduled EDR Contact: 06/03/2013
	Data Release Frequency: Quarterly

### *State and tribal leaking storage tank lists*

#### LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 909-782-4496
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 08/15/2011
Number of Days to Update: 41	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: Varies

#### LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-776-8943
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 08/01/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

#### LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

## LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calaveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008	Source: California Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 07/22/2008	Telephone: 916-464-4834
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 07/01/2011
Number of Days to Update: 9	Next Scheduled EDR Contact: 10/17/2011
	Data Release Frequency: No Update Planned

## LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004	Source: California Regional Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 09/07/2004	Telephone: 213-576-6710
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

## LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/19/2003	Telephone: 805-542-4786
Date Made Active in Reports: 06/02/2003	Last EDR Contact: 07/18/2011
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: No Update Planned

## LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-622-2433
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: Quarterly

## LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-3769
Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 03/18/2013	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/19/2013	Telephone: see region list
Date Made Active in Reports: 03/27/2013	Last EDR Contact: 05/02/2013
Number of Days to Update: 8	Next Scheduled EDR Contact: 07/01/2013
	Data Release Frequency: Quarterly

### LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-637-5595
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 09/26/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: No Update Planned

### SLIC: Statewide SLIC Ceses

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 03/18/2013	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/19/2013	Telephone: 866-480-1028
Date Made Active in Reports: 03/27/2013	Last EDR Contact: 05/02/2013
Number of Days to Update: 8	Next Scheduled EDR Contact: 07/01/2013
	Data Release Frequency: Varies

### SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003	Source: California Regional Water Quality Control Board, North Coast Region (1)
Date Data Arrived at EDR: 04/07/2003	Telephone: 707-576-2220
Date Made Active in Reports: 04/25/2003	Last EDR Contact: 08/01/2011
Number of Days to Update: 18	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

### SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004	Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-286-0457
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: Quarterly

### SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/18/2006	Telephone: 805-549-3147
Date Made Active in Reports: 06/15/2006	Last EDR Contact: 07/18/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: Semi-Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004	Source: Region Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 11/18/2004	Telephone: 213-576-6600
Date Made Active in Reports: 01/04/2005	Last EDR Contact: 07/01/2011
Number of Days to Update: 47	Next Scheduled EDR Contact: 10/17/2011
	Data Release Frequency: Varies

### SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005	Source: Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 04/05/2005	Telephone: 916-464-3291
Date Made Active in Reports: 04/21/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 16	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: Semi-Annually

### SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005	Source: Regional Water Quality Control Board, Victorville Branch
Date Data Arrived at EDR: 05/25/2005	Telephone: 619-241-6583
Date Made Active in Reports: 06/16/2005	Last EDR Contact: 08/15/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: Semi-Annually

### SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004	Source: California Regional Water Quality Control Board, Lahontan Region
Date Data Arrived at EDR: 09/07/2004	Telephone: 530-542-5574
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 08/15/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

### SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004	Source: California Regional Quality Control Board, Colorado River Basin Region
Date Data Arrived at EDR: 11/29/2004	Telephone: 760-346-7491
Date Made Active in Reports: 01/04/2005	Last EDR Contact: 08/01/2011
Number of Days to Update: 36	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

### SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008	Source: California Region Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 04/03/2008	Telephone: 951-782-3298
Date Made Active in Reports: 04/14/2008	Last EDR Contact: 09/12/2011
Number of Days to Update: 11	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: Semi-Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 09/11/2007	Telephone: 858-467-2980
Date Made Active in Reports: 09/28/2007	Last EDR Contact: 08/08/2011
Number of Days to Update: 17	Next Scheduled EDR Contact: 11/21/2011
	Data Release Frequency: Annually

### INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/05/2013	Source: EPA Region 10
Date Data Arrived at EDR: 02/06/2013	Telephone: 206-553-2857
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 65	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Quarterly

### INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 09/28/2012	Source: EPA Region 1
Date Data Arrived at EDR: 11/01/2012	Telephone: 617-918-1313
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 05/01/2013
Number of Days to Update: 162	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

### INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012	Source: EPA Region 8
Date Data Arrived at EDR: 08/28/2012	Telephone: 303-312-6271
Date Made Active in Reports: 10/16/2012	Last EDR Contact: 04/29/2013
Number of Days to Update: 49	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Quarterly

### INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011	Source: EPA Region 6
Date Data Arrived at EDR: 09/13/2011	Telephone: 214-665-6597
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 04/29/2013
Number of Days to Update: 59	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

### INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/06/2013	Source: EPA Region 4
Date Data Arrived at EDR: 02/08/2013	Telephone: 404-562-8677
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 63	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Semi-Annually

### INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 12/31/2012	Source: EPA Region 7
Date Data Arrived at EDR: 02/28/2013	Telephone: 913-551-7003
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 43	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2013	Telephone: 415-972-3372
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Quarterly

### *State and tribal registered storage tank lists*

#### UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/18/2013	Source: SWRCB
Date Data Arrived at EDR: 03/19/2013	Telephone: 916-341-5851
Date Made Active in Reports: 04/18/2013	Last EDR Contact: 05/02/2013
Number of Days to Update: 30	Next Scheduled EDR Contact: 07/01/2013
	Data Release Frequency: Semi-Annually

#### AST: Aboveground Petroleum Storage Tank Facilities Registered Aboveground Storage Tanks.

Date of Government Version: 08/01/2009	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/10/2009	Telephone: 916-327-5092
Date Made Active in Reports: 10/01/2009	Last EDR Contact: 04/08/2013
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Quarterly

#### INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013	Source: EPA Region 10
Date Data Arrived at EDR: 02/06/2013	Telephone: 206-553-2857
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 65	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Quarterly

#### INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013	Source: EPA Region 9
Date Data Arrived at EDR: 02/26/2013	Telephone: 415-972-3368
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 45	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Quarterly

#### INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/27/2012	Source: EPA Region 8
Date Data Arrived at EDR: 08/28/2012	Telephone: 303-312-6137
Date Made Active in Reports: 10/16/2012	Last EDR Contact: 04/29/2013
Number of Days to Update: 49	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Quarterly



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012	Source: EPA Region 7
Date Data Arrived at EDR: 02/28/2013	Telephone: 913-551-7003
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 43	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

### INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011	Source: EPA Region 6
Date Data Arrived at EDR: 05/11/2011	Telephone: 214-665-7591
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 04/29/2013
Number of Days to Update: 34	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Semi-Annually

### INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/02/2012	Source: EPA Region 5
Date Data Arrived at EDR: 08/03/2012	Telephone: 312-886-6136
Date Made Active in Reports: 11/05/2012	Last EDR Contact: 04/29/2013
Number of Days to Update: 94	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

### INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/06/2013	Source: EPA Region 4
Date Data Arrived at EDR: 02/08/2013	Telephone: 404-562-9424
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 63	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Semi-Annually

### INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012	Source: EPA, Region 1
Date Data Arrived at EDR: 11/07/2012	Telephone: 617-918-1313
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 156	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 04/18/2013
Number of Days to Update: 55	Next Scheduled EDR Contact: 07/29/2013
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## *State and tribal voluntary cleanup sites*

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

### VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 03/13/2013	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 03/14/2013	Telephone: 916-323-3400
Date Made Active in Reports: 03/27/2013	Last EDR Contact: 05/07/2013
Number of Days to Update: 13	Next Scheduled EDR Contact: 08/19/2013
	Data Release Frequency: Quarterly

### INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012	Source: EPA, Region 1
Date Data Arrived at EDR: 10/02/2012	Telephone: 617-918-1102
Date Made Active in Reports: 10/16/2012	Last EDR Contact: 04/05/2013
Number of Days to Update: 14	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Varies

## ADDITIONAL ENVIRONMENTAL RECORDS

### *Local Brownfield lists*

#### US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/10/2012	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/11/2012	Telephone: 202-566-2777
Date Made Active in Reports: 12/20/2012	Last EDR Contact: 03/26/2013
Number of Days to Update: 9	Next Scheduled EDR Contact: 07/08/2013
	Data Release Frequency: Semi-Annually

### *Local Lists of Landfill / Solid Waste Disposal Sites*

#### OD: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 04/29/2013
Number of Days to Update: 137	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: No Update Planned

### WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000	Source: State Water Resources Control Board
Date Data Arrived at EDR: 04/10/2000	Telephone: 916-227-4448
Date Made Active in Reports: 05/10/2000	Last EDR Contact: 05/10/2013
Number of Days to Update: 30	Next Scheduled EDR Contact: 08/26/2013
	Data Release Frequency: No Update Planned

### SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/18/2013	Source: Department of Conservation
Date Data Arrived at EDR: 03/19/2013	Telephone: 916-323-3836
Date Made Active in Reports: 03/27/2013	Last EDR Contact: 03/19/2013
Number of Days to Update: 8	Next Scheduled EDR Contact: 07/01/2013
	Data Release Frequency: Quarterly

### HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 04/26/2013	Source: Integrated Waste Management Board
Date Data Arrived at EDR: 04/26/2013	Telephone: 916-341-6422
Date Made Active in Reports: 05/16/2013	Last EDR Contact: 05/20/2013
Number of Days to Update: 20	Next Scheduled EDR Contact: 09/02/2013
	Data Release Frequency: Varies

### INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 05/03/2013
Number of Days to Update: 52	Next Scheduled EDR Contact: 08/19/2013
	Data Release Frequency: Varies

### Local Lists of Hazardous waste / Contaminated Sites

#### US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/04/2013  
Date Data Arrived at EDR: 03/12/2013  
Date Made Active in Reports: 05/10/2013  
Number of Days to Update: 59

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 03/04/2013  
Next Scheduled EDR Contact: 06/17/2013  
Data Release Frequency: Quarterly

### HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005  
Date Data Arrived at EDR: 08/03/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 21

Source: Department of Toxic Substance Control  
Telephone: 916-323-3400  
Last EDR Contact: 02/23/2009  
Next Scheduled EDR Contact: 05/25/2009  
Data Release Frequency: No Update Planned

### SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 03/13/2013  
Date Data Arrived at EDR: 03/14/2013  
Date Made Active in Reports: 03/27/2013  
Number of Days to Update: 13

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 05/07/2013  
Next Scheduled EDR Contact: 08/19/2013  
Data Release Frequency: Quarterly

### TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995  
Date Data Arrived at EDR: 08/30/1995  
Date Made Active in Reports: 09/26/1995  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 916-227-4364  
Last EDR Contact: 01/26/2009  
Next Scheduled EDR Contact: 04/27/2009  
Data Release Frequency: No Update Planned

### CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2012  
Date Data Arrived at EDR: 04/03/2013  
Date Made Active in Reports: 05/14/2013  
Number of Days to Update: 41

Source: Department of Toxic Substances Control  
Telephone: 916-255-6504  
Last EDR Contact: 04/01/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Varies

### US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007  
Date Data Arrived at EDR: 11/19/2008  
Date Made Active in Reports: 03/30/2009  
Number of Days to Update: 131

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 03/23/2009  
Next Scheduled EDR Contact: 06/22/2009  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Local Lists of Registered Storage Tanks

### CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/05/1995	Telephone: 916-341-5851
Date Made Active in Reports: 09/29/1995	Last EDR Contact: 12/28/1998
Number of Days to Update: 24	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009	Source: Department of Public Health
Date Data Arrived at EDR: 09/23/2009	Telephone: 707-463-4466
Date Made Active in Reports: 10/01/2009	Last EDR Contact: 03/04/2013
Number of Days to Update: 8	Next Scheduled EDR Contact: 06/17/2013
	Data Release Frequency: Annually

### HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/25/1991	Telephone: 916-341-5851
Date Made Active in Reports: 02/12/1991	Last EDR Contact: 07/26/2001
Number of Days to Update: 18	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/2005	Telephone: N/A
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/03/2005
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## Local Land Records

### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/25/2013	Telephone: 202-564-6023
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 04/29/2013
Number of Days to Update: 15	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

### LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/15/2013	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 03/15/2013	Telephone: 916-323-3400
Date Made Active in Reports: 03/27/2013	Last EDR Contact: 03/11/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 06/24/2013
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/11/2013  
Date Data Arrived at EDR: 03/12/2013  
Date Made Active in Reports: 03/25/2013  
Number of Days to Update: 13

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 03/12/2013  
Next Scheduled EDR Contact: 06/24/2013  
Data Release Frequency: Semi-Annually

### Records of Emergency Release Reports

#### HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2012  
Date Data Arrived at EDR: 01/03/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 55

Source: U.S. Department of Transportation  
Telephone: 202-366-4555  
Last EDR Contact: 04/02/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Annually

#### CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/06/2012  
Date Data Arrived at EDR: 01/29/2013  
Date Made Active in Reports: 03/19/2013  
Number of Days to Update: 49

Source: Office of Emergency Services  
Telephone: 916-845-8400  
Last EDR Contact: 05/01/2013  
Next Scheduled EDR Contact: 08/12/2013  
Data Release Frequency: Varies

#### LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 03/18/2013  
Date Data Arrived at EDR: 03/19/2013  
Date Made Active in Reports: 03/27/2013  
Number of Days to Update: 8

Source: State Water Quality Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 05/02/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: Quarterly

#### MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 03/18/2013  
Date Data Arrived at EDR: 03/19/2013  
Date Made Active in Reports: 03/27/2013  
Number of Days to Update: 8

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 05/02/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## Other Ascertainable Records

### RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/12/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/15/2013	Telephone: (415) 495-8895
Date Made Active in Reports: 02/27/2013	Last EDR Contact: 05/02/2013
Number of Days to Update: 12	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Varies

### DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 05/07/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 08/19/2013
	Data Release Frequency: Varies

### DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 04/19/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: 07/29/2013
	Data Release Frequency: Semi-Annually

### FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 02/26/2013	Telephone: 202-528-4285
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 03/11/2013
Number of Days to Update: 15	Next Scheduled EDR Contact: 06/24/2013
	Data Release Frequency: Varies

### CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 01/15/2013  
Date Made Active in Reports: 03/13/2013  
Number of Days to Update: 57

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 04/01/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Varies

### ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/18/2012  
Date Data Arrived at EDR: 03/13/2013  
Date Made Active in Reports: 04/12/2013  
Number of Days to Update: 30

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 03/13/2013  
Next Scheduled EDR Contact: 06/24/2013  
Data Release Frequency: Annually

### UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010  
Date Data Arrived at EDR: 10/07/2011  
Date Made Active in Reports: 03/01/2012  
Number of Days to Update: 146

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 02/25/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Varies

### US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/05/2013  
Date Data Arrived at EDR: 04/18/2013  
Date Made Active in Reports: 05/10/2013  
Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 03/06/2013  
Next Scheduled EDR Contact: 06/17/2013  
Data Release Frequency: Semi-Annually

### TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2009  
Date Data Arrived at EDR: 09/01/2011  
Date Made Active in Reports: 01/10/2012  
Number of Days to Update: 131

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 02/26/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Annually

### TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006  
Date Data Arrived at EDR: 09/29/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 64

Source: EPA  
Telephone: 202-260-5521  
Last EDR Contact: 03/28/2013  
Next Scheduled EDR Contact: 07/08/2013  
Data Release Frequency: Every 4 Years



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 02/25/2013
Number of Days to Update: 25	Next Scheduled EDR Contact: 06/10/2013
	Data Release Frequency: Quarterly

**FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**  
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 02/25/2013
Number of Days to Update: 25	Next Scheduled EDR Contact: 06/10/2013
	Data Release Frequency: Quarterly

**HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing**

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

**HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing**

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

**SSTS: Section 7 Tracking Systems**

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009	Source: EPA
Date Data Arrived at EDR: 12/10/2010	Telephone: 202-564-4203
Date Made Active in Reports: 02/25/2011	Last EDR Contact: 04/29/2013
Number of Days to Update: 77	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement end compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/10/2011	Telephone: 202-564-5088
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 04/15/2013
Number of Days to Update: 61	Next Scheduled EDR Contact: 07/29/2013
	Data Release Frequency: Quarterly

### PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2012	Source: EPA
Date Data Arrived at EDR: 01/16/2013	Telephone: 202-566-0500
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 04/19/2013
Number of Days to Update: 114	Next Scheduled EDR Contact: 07/29/2013
	Data Release Frequency: Annually

### MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/21/2011	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 07/15/2011	Telephone: 301-415-7169
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 03/11/2013
Number of Days to Update: 60	Next Scheduled EDR Contact: 06/24/2013
	Data Release Frequency: Quarterly

### RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/09/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/11/2013	Telephone: 202-343-9775
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 04/11/2013
Number of Days to Update: 29	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Quarterly

### FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/23/2011	Source: EPA
Date Data Arrived at EDR: 12/13/2011	Telephone: (415) 947-8000
Date Made Active in Reports: 03/01/2012	Last EDR Contact: 03/12/2013
Number of Days to Update: 79	Next Scheduled EDR Contact: 06/24/2013
	Data Release Frequency: Quarterly

### RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/17/1995  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 06/02/2008  
Next Scheduled EDR Contact: 09/01/2008  
Data Release Frequency: No Update Planned

### RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g. the fire department) should an accident occur.

Date of Government Version: 05/08/2012  
Date Data Arrived at EDR: 05/25/2012  
Date Made Active in Reports: 07/10/2012  
Number of Days to Update: 46

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 04/29/2013  
Next Scheduled EDR Contact: 08/12/2013  
Data Release Frequency: Varies

### BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 02/26/2013  
Date Made Active in Reports: 04/19/2013  
Number of Days to Update: 52

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 02/26/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Biennially

### CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989  
Date Data Arrived at EDR: 07/27/1994  
Date Made Active in Reports: 08/02/1994  
Number of Days to Update: 6

Source: Department of Health Services  
Telephone: 916-255-2118  
Last EDR Contact: 05/31/1994  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/18/2013  
Date Data Arrived at EDR: 02/18/2013  
Date Made Active in Reports: 03/20/2013  
Number of Days to Update: 30

Source: State Water Resources Control Board  
Telephone: 916-445-9379  
Last EDR Contact: 02/18/2013  
Next Scheduled EDR Contact: 06/03/2013  
Data Release Frequency: Quarterly

### UIC: UIC Listing

A listing of underground control injection wells.

Date of Government Version: 03/05/2013  
Date Data Arrived at EDR: 03/19/2013  
Date Made Active in Reports: 03/27/2013  
Number of Days to Update: 8

Source: Department of Conservation  
Telephone: 916-445-2408  
Last EDR Contact: 03/19/2013  
Next Scheduled EDR Contact: 12/31/2012  
Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 04/01/2013	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 04/02/2013	Telephone: 916-323-3400
Date Made Active in Reports: 05/14/2013	Last EDR Contact: 04/02/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Quarterly

### HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CAL SITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/22/2009	Telephone: 916-323-3400
Date Made Active in Reports: 04/08/2009	Last EDR Contact: 01/22/2009
Number of Days to Update: 76	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/01/1993	Telephone: 916-445-3846
Date Made Active in Reports: 11/19/1993	Last EDR Contact: 03/25/2013
Number of Days to Update: 18	Next Scheduled EDR Contact: 07/08/2013
	Data Release Frequency: No Update Planned

### DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial laundriers; laundry and garment services.

Date of Government Version: 12/11/2012	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 12/12/2012	Telephone: 916-327-4498
Date Made Active in Reports: 01/04/2013	Last EDR Contact: 03/11/2013
Number of Days to Update: 23	Next Scheduled EDR Contact: 12/24/2012
	Data Release Frequency: Annually

### WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 04/01/2013
Number of Days to Update: 13	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Varies

### ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/26/2013	Source: State Water Resources Control Board
Date Data Arrived at EDR: 04/29/2013	Telephone: 916-445-9379
Date Made Active in Reports: 05/16/2013	Last EDR Contact: 04/26/2013
Number of Days to Update: 17	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2011	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 06/22/2012	Telephone: 916-255-1136
Date Made Active in Reports: 07/06/2012	Last EDR Contact: 04/19/2013
Number of Days to Update: 14	Next Scheduled EDR Contact: 07/29/2013
	Data Release Frequency: Annually

### EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2008	Source: California Air Resources Board
Date Data Arrived at EDR: 09/29/2010	Telephone: 916-322-2990
Date Made Active in Reports: 10/18/2010	Last EDR Contact: 03/29/2013
Number of Days to Update: 19	Next Scheduled EDR Contact: 07/08/2013
	Data Release Frequency: Varies

### INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 12/08/2006	Telephone: 202-208-3710
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 04/19/2013
Number of Days to Update: 34	Next Scheduled EDR Contact: 07/29/2013
	Data Release Frequency: Semi-Annually

### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2011	Telephone: 615-532-8599
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 05/06/2013
Number of Days to Update: 54	Next Scheduled EDR Contact: 08/05/2013
	Data Release Frequency: Varies

### US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/15/2013	Telephone: 202-566-1917
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 05/20/2013
Number of Days to Update: 56	Next Scheduled EDR Contact: 09/02/2013
	Data Release Frequency: Quarterly

### PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 05/03/2013
Number of Days to Update: 83	Next Scheduled EDR Contact: 08/12/2013
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/18/2013  
Date Data Arrived at EDR: 03/19/2013  
Date Made Active in Reports: 03/27/2013  
Number of Days to Update: 8

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 03/19/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: Quarterly

### MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 03/06/2013  
Date Data Arrived at EDR: 03/12/2013  
Date Made Active in Reports: 03/25/2013  
Number of Days to Update: 13

Source: Department of Public Health  
Telephone: 916-558-1784  
Last EDR Contact: 03/11/2013  
Next Scheduled EDR Contact: 06/24/2013  
Data Release Frequency: Varies

### COAL ASH DOE: Steam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 08/07/2009  
Date Made Active in Reports: 10/22/2009  
Number of Days to Update: 76

Source: Department of Energy  
Telephone: 202-586-8719  
Last EDR Contact: 04/18/2013  
Next Scheduled EDR Contact: 07/29/2013  
Data Release Frequency: Varies

### COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010  
Date Data Arrived at EDR: 01/03/2011  
Date Made Active in Reports: 03/21/2011  
Number of Days to Update: 77

Source: Environmental Protection Agency  
Telephone: N/A  
Last EDR Contact: 03/15/2013  
Next Scheduled EDR Contact: 06/24/2013  
Data Release Frequency: Varies

### HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/15/2013  
Date Data Arrived at EDR: 04/16/2013  
Date Made Active in Reports: 05/17/2013  
Number of Days to Update: 31

Source: Department of Toxic Substances Control  
Telephone: 916-440-7145  
Last EDR Contact: 04/16/2013  
Next Scheduled EDR Contact: 07/29/2013  
Data Release Frequency: Quarterly

### HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/25/2013  
Date Data Arrived at EDR: 02/26/2013  
Date Made Active in Reports: 03/25/2013  
Number of Days to Update: 27

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 02/26/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Quarterly

### Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/19/2013  
Date Data Arrived at EDR: 02/20/2013  
Date Made Active in Reports: 03/20/2013  
Number of Days to Update: 28

Source: California Integrated Waste Management Board  
Telephone: 916-341-6066  
Last EDR Contact: 05/20/2013  
Next Scheduled EDR Contact: 09/02/2013  
Data Release Frequency: Varies

## Financial Assurance 1: Financial Assurance Information Listing Financial Assurance information

Date of Government Version: 03/01/2007  
Date Data Arrived at EDR: 06/01/2007  
Date Made Active in Reports: 06/29/2007  
Number of Days to Update: 28

Source: Department of Toxic Substances Control  
Telephone: 916-255-3628  
Last EDR Contact: 05/03/2013  
Next Scheduled EDR Contact: 08/12/2013  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013  
Date Data Arrived at EDR: 02/14/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 13

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 04/08/2013  
Next Scheduled EDR Contact: 07/22/2013  
Data Release Frequency: Varies

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011  
Date Data Arrived at EDR: 05/18/2012  
Date Made Active in Reports: 05/25/2012  
Number of Days to Update: 7

Source: Environmental Protection Agency  
Telephone: 703-308-4044  
Last EDR Contact: 05/17/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Varies

## FEDLAND: Federal and Indian Lands

Federally and Indian administered lands of the United States. Lands included are administered by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 02/06/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 339

Source: U.S. Geological Survey  
Telephone: 888-275-8747  
Last EDR Contact: 04/19/2013  
Next Scheduled EDR Contact: 07/29/2013  
Data Release Frequency: N/A

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 12/02/2012	Source: EPA
Date Data Arrived at EDR: 01/03/2013	Telephone: 202-564-6023
Date Made Active in Reports: 03/13/2013	Last EDR Contact: 04/04/2013
Number of Days to Update: 69	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Quarterly

## WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 02/25/2013
Number of Days to Update: 9	Next Scheduled EDR Contact: 06/10/2013
	Data Release Frequency: Quarterly

## US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013	Source: EPA
Date Data Arrived at EDR: 01/30/2013	Telephone: 202-564-5962
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 04/01/2013
Number of Days to Update: 100	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 01/23/2013	Source: EPA
Date Data Arrived at EDR: 01/30/2013	Telephone: 202-564-5962
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 04/01/2013
Number of Days to Update: 100	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Annually

## EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 12/31/2012	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/18/2013	Telephone: 617-520-3000
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 05/10/2013
Number of Days to Update: 81	Next Scheduled EDR Contact: 08/26/2013
	Data Release Frequency: Quarterly

## EDR HIGH RISK HISTORICAL RECORDS

### *EDR Exclusive Records*



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

### EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

### EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A	Source: N/A
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

### EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A	Source: N/A
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## COUNTY RECORDS

### ALAMEDA COUNTY:

#### Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/15/2013  
Date Data Arrived at EDR: 04/16/2013  
Date Made Active in Reports: 05/16/2013  
Number of Days to Update: 30

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 04/01/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Semi-Annually

#### Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/15/2013  
Date Data Arrived at EDR: 04/16/2013  
Date Made Active in Reports: 05/16/2013  
Number of Days to Update: 30

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 04/01/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Semi-Annually

### AMADOR COUNTY:

#### CUPA Facility List

Cupa Facility List

Date of Government Version: 03/13/2013  
Date Data Arrived at EDR: 03/14/2013  
Date Made Active in Reports: 04/04/2013  
Number of Days to Update: 21

Source: Amador County Environmental Health  
Telephone: 209-223-6439  
Last EDR Contact: 03/11/2013  
Next Scheduled EDR Contact: 06/24/2013  
Data Release Frequency: Varies

### BUTTE COUNTY:

#### CUPA Facility Listing

Cupa facility list.

Date of Government Version: 10/16/2012  
Date Data Arrived at EDR: 10/17/2012  
Date Made Active in Reports: 11/13/2012  
Number of Days to Update: 27

Source: Public Health Department  
Telephone: 530-538-7149  
Last EDR Contact: 04/26/2013  
Next Scheduled EDR Contact: 04/29/2013  
Data Release Frequency: Varies

### CALVERAS COUNTY:

#### CUPA Facility Listing

Cupa Facility Listing

Date of Government Version: 04/16/2013  
Date Data Arrived at EDR: 04/17/2013  
Date Made Active in Reports: 05/16/2013  
Number of Days to Update: 29

Source: Calveras County Environmental Health  
Telephone: 209-754-6399  
Last EDR Contact: 04/15/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Quarterly

### COLUSA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

Cupa facility list.

Date of Government Version: 01/04/2013  
Date Data Arrived at EDR: 01/14/2013  
Date Made Active in Reports: 03/01/2013  
Number of Days to Update: 46

Source: Health & Human Services  
Telephone: 530-458-0396  
Last EDR Contact: 05/13/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Varies

## CONTRA COSTA COUNTY:

### Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 04/09/2013  
Date Data Arrived at EDR: 04/10/2013  
Date Made Active in Reports: 05/14/2013  
Number of Days to Update: 34

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 05/06/2013  
Next Scheduled EDR Contact: 08/19/2013  
Data Release Frequency: Semi-Annually

## DEL NORTE COUNTY:

### CUPA Facility List

Cupa Facility list

Date of Government Version: 01/09/2013  
Date Data Arrived at EDR: 01/10/2013  
Date Made Active in Reports: 02/25/2013  
Number of Days to Update: 46

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426  
Last EDR Contact: 05/06/2013  
Next Scheduled EDR Contact: 08/19/2013  
Data Release Frequency: Varies

## EL DORADO COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 02/27/2013  
Date Data Arrived at EDR: 02/28/2013  
Date Made Active in Reports: 03/25/2013  
Number of Days to Update: 25

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-6623  
Last EDR Contact: 05/06/2013  
Next Scheduled EDR Contact: 08/19/2013  
Data Release Frequency: Varies

## FRESNO COUNTY:

### CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 03/31/2013  
Date Data Arrived at EDR: 04/16/2013  
Date Made Active in Reports: 05/16/2013  
Number of Days to Update: 30

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 04/15/2013  
Next Scheduled EDR Contact: 07/29/2013  
Data Release Frequency: Semi-Annually

## HUMBOLDT COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

CUPA facility list.

Date of Government Version: 03/15/2013  
Date Data Arrived at EDR: 03/19/2013  
Date Made Active in Reports: 03/27/2013  
Number of Days to Update: 8

Source: Humboldt County Environmental Health  
Telephone: N/A  
Last EDR Contact: 02/25/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Varies

## IMPERIAL COUNTY:

### CUPA Facility List

Cupa facility list.

Date of Government Version: 05/01/2012  
Date Data Arrived at EDR: 05/02/2012  
Date Made Active in Reports: 06/11/2012  
Number of Days to Update: 40

Source: San Diego Border Field Office  
Telephone: 760-339-2777  
Last EDR Contact: 04/29/2013  
Next Scheduled EDR Contact: 08/12/2013  
Data Release Frequency: Varies

## INYO COUNTY:

### CUPA Facility List

Cupa facility list.

Date of Government Version: 06/26/2012  
Date Data Arrived at EDR: 06/27/2012  
Date Made Active in Reports: 08/17/2012  
Number of Days to Update: 51

Source: Inyo County Environmental Health Services  
Telephone: 760-878-0238  
Last EDR Contact: 02/25/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Varies

## KERN COUNTY:

### Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010  
Date Data Arrived at EDR: 09/01/2010  
Date Made Active in Reports: 09/30/2010  
Number of Days to Update: 29

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 05/10/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Quarterly

## KINGS COUNTY:

### CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/13/2013  
Date Made Active in Reports: 03/21/2013  
Number of Days to Update: 36

Source: Kings County Department of Public Health  
Telephone: 559-584-1411  
Last EDR Contact: 02/12/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Varies

## LAKE COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

Cupa facility list

Date of Government Version: 01/23/2013  
Date Data Arrived at EDR: 01/25/2013  
Date Made Active in Reports: 02/27/2013  
Number of Days to Update: 33

Source: Lake County Environmental Health  
Telephone: 707-263-1164  
Last EDR Contact: 04/19/2013  
Next Scheduled EDR Contact: 08/05/2013  
Data Release Frequency: Varies

## LOS ANGELES COUNTY:

### San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009  
Date Data Arrived at EDR: 03/31/2009  
Date Made Active in Reports: 10/23/2009  
Number of Days to Update: 206

Source: EPA Region 9  
Telephone: 415-972-3178  
Last EDR Contact: 05/10/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: No Update Planned

### HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/31/2012  
Date Data Arrived at EDR: 12/28/2012  
Date Made Active in Reports: 01/25/2013  
Number of Days to Update: 28

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 04/15/2013  
Next Scheduled EDR Contact: 07/29/2013  
Data Release Frequency: Semi-Annually

### List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/24/2013  
Date Data Arrived at EDR: 04/24/2013  
Date Made Active in Reports: 05/17/2013  
Number of Days to Update: 23

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 04/24/2013  
Next Scheduled EDR Contact: 08/05/2013  
Data Release Frequency: Varies

### City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009  
Date Data Arrived at EDR: 03/10/2009  
Date Made Active in Reports: 04/08/2009  
Number of Days to Update: 29

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 05/20/2013  
Next Scheduled EDR Contact: 09/02/2013  
Data Release Frequency: Varies

### Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/30/2013  
Date Data Arrived at EDR: 02/21/2013  
Date Made Active in Reports: 03/25/2013  
Number of Days to Update: 32

Source: Community Health Services  
Telephone: 323-890-7806  
Last EDR Contact: 04/19/2013  
Next Scheduled EDR Contact: 08/05/2013  
Data Release Frequency: Annually

### City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/22/2013  
Date Data Arrived at EDR: 04/29/2013  
Date Made Active in Reports: 05/17/2013  
Number of Days to Update: 18

Source: City of El Segundo Fire Department  
Telephone: 310-524-2236  
Last EDR Contact: 04/19/2013  
Next Scheduled EDR Contact: 08/05/2013  
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank  
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003  
Date Data Arrived at EDR: 10/23/2003  
Date Made Active in Reports: 11/26/2003  
Number of Days to Update: 34

Source: City of Long Beach Fire Department  
Telephone: 562-570-2563  
Last EDR Contact: 04/26/2013  
Next Scheduled EDR Contact: 08/12/2013  
Data Release Frequency: Annually

City of Torrance Underground Storage Tank  
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/15/2013  
Date Data Arrived at EDR: 04/16/2013  
Date Made Active in Reports: 05/17/2013  
Number of Days to Update: 31

Source: City of Torrance Fire Department  
Telephone: 310-618-2973  
Last EDR Contact: 04/15/2013  
Next Scheduled EDR Contact: 07/29/2013  
Data Release Frequency: Semi-Annually

## MADERA COUNTY:

### CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 04/15/2013  
Date Data Arrived at EDR: 04/16/2013  
Date Made Active in Reports: 05/17/2013  
Number of Days to Update: 31

Source: Madera County Environmental Health  
Telephone: 559-675-7823  
Last EDR Contact: 04/01/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Varies

## MARIN COUNTY:

Underground Storage Tank Sites  
Currently permitted USTs in Marin County.

Date of Government Version: 11/26/2012  
Date Data Arrived at EDR: 11/28/2012  
Date Made Active in Reports: 01/21/2013  
Number of Days to Update: 54

Source: Public Works Department Waste Management  
Telephone: 415-499-6647  
Last EDR Contact: 04/08/2013  
Next Scheduled EDR Contact: 07/22/2013  
Data Release Frequency: Semi-Annually

## MERCED COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 02/25/2013  
Date Data Arrived at EDR: 02/26/2013  
Date Made Active in Reports: 03/25/2013  
Number of Days to Update: 27

Source: Merced County Environmental Health  
Telephone: 209-381-1094  
Last EDR Contact: 02/25/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Varies

## MONO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

### CUPA Facility List

Date of Government Version: 03/04/2013  
Date Data Arrived at EDR: 03/08/2013  
Date Made Active in Reports: 03/25/2013  
Number of Days to Update: 17

Source: Mono County Health Department  
Telephone: 760-932-5580  
Last EDR Contact: 03/04/2013  
Next Scheduled EDR Contact: 06/17/2013  
Data Release Frequency: Varies

## MONTEREY COUNTY:

### CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 03/14/2013  
Date Data Arrived at EDR: 03/15/2013  
Date Made Active in Reports: 03/27/2013  
Number of Days to Update: 12

Source: Monterey County Health Department  
Telephone: 831-796-1297  
Last EDR Contact: 02/25/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Varies

## NAPA COUNTY:

### Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011  
Date Data Arrived at EDR: 12/06/2011  
Date Made Active in Reports: 02/07/2012  
Number of Days to Update: 63

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 03/04/2013  
Next Scheduled EDR Contact: 06/17/2013  
Data Release Frequency: No Update Planned

### Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008  
Date Data Arrived at EDR: 01/16/2008  
Date Made Active in Reports: 02/08/2008  
Number of Days to Update: 23

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 03/04/2013  
Next Scheduled EDR Contact: 06/17/2013  
Data Release Frequency: No Update Planned

## NEVADA COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 03/08/2013  
Date Data Arrived at EDR: 03/08/2013  
Date Made Active in Reports: 03/25/2013  
Number of Days to Update: 17

Source: Community Development Agency  
Telephone: 530-265-1467  
Last EDR Contact: 05/17/2013  
Next Scheduled EDR Contact: 08/19/2013  
Data Release Frequency: Varies

## ORANGE COUNTY:

### List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/04/2013  
Date Data Arrived at EDR: 02/26/2013  
Date Made Active in Reports: 03/20/2013  
Number of Days to Update: 22

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 05/10/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Annually

## List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/04/2013  
Date Data Arrived at EDR: 02/19/2013  
Date Made Active in Reports: 03/20/2013  
Number of Days to Update: 29

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 05/10/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Quarterly

## List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/04/2013  
Date Data Arrived at EDR: 02/18/2013  
Date Made Active in Reports: 03/27/2013  
Number of Days to Update: 37

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 05/10/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Quarterly

## PLACER COUNTY:

### Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/12/2013  
Date Data Arrived at EDR: 03/13/2013  
Date Made Active in Reports: 03/27/2013  
Number of Days to Update: 14

Source: Placer County Health and Human Services  
Telephone: 530-745-2363  
Last EDR Contact: 03/11/2013  
Next Scheduled EDR Contact: 06/24/2013  
Data Release Frequency: Semi-Annually

## RIVERSIDE COUNTY:

### Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/23/2013  
Date Data Arrived at EDR: 04/24/2013  
Date Made Active in Reports: 05/17/2013  
Number of Days to Update: 23

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 03/25/2013  
Next Scheduled EDR Contact: 07/08/2013  
Data Release Frequency: Quarterly

### Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 04/23/2013  
Date Data Arrived at EDR: 04/24/2013  
Date Made Active in Reports: 05/16/2013  
Number of Days to Update: 22

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 03/25/2013  
Next Scheduled EDR Contact: 07/08/2013  
Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/04/2013  
Date Data Arrived at EDR: 04/11/2013  
Date Made Active in Reports: 05/14/2013  
Number of Days to Update: 33

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 04/08/2013  
Next Scheduled EDR Contact: 07/22/2013  
Data Release Frequency: Quarterly

## Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/04/2013  
Date Data Arrived at EDR: 04/12/2013  
Date Made Active in Reports: 05/16/2013  
Number of Days to Update: 34

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 04/08/2013  
Next Scheduled EDR Contact: 07/22/2013  
Data Release Frequency: Quarterly

## SAN BERNARDINO COUNTY:

### Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 03/04/2013  
Date Data Arrived at EDR: 03/05/2013  
Date Made Active in Reports: 03/25/2013  
Number of Days to Update: 20

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 05/13/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

### Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 08/17/2012  
Date Data Arrived at EDR: 08/20/2012  
Date Made Active in Reports: 10/03/2012  
Number of Days to Update: 44

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 04/29/2013  
Next Scheduled EDR Contact: 06/24/2013  
Data Release Frequency: Quarterly

### Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2012  
Date Data Arrived at EDR: 11/06/2012  
Date Made Active in Reports: 11/30/2012  
Number of Days to Update: 24

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 04/26/2013  
Next Scheduled EDR Contact: 08/12/2013  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010  
Date Data Arrived at EDR: 06/15/2010  
Date Made Active in Reports: 07/09/2010  
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health  
Telephone: 619-338-2371  
Last EDR Contact: 03/12/2013  
Next Scheduled EDR Contact: 06/24/2013  
Data Release Frequency: No Update Planned

## SAN FRANCISCO COUNTY:

### Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008  
Date Data Arrived at EDR: 09/19/2008  
Date Made Active in Reports: 09/29/2008  
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920  
Last EDR Contact: 05/10/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Quarterly

### Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010  
Date Data Arrived at EDR: 03/10/2011  
Date Made Active in Reports: 03/15/2011  
Number of Days to Update: 5

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 05/10/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:

### San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/25/2013  
Date Data Arrived at EDR: 03/25/2013  
Date Made Active in Reports: 04/18/2013  
Number of Days to Update: 24

Source: Environmental Health Department  
Telephone: N/A  
Last EDR Contact: 03/25/2013  
Next Scheduled EDR Contact: 07/08/2013  
Data Release Frequency: Semi-Annually

## SAN LUIS OBISPO COUNTY:

### CUPA Facility List

Cupa Facility List.

Date of Government Version: 02/26/2013  
Date Data Arrived at EDR: 02/26/2013  
Date Made Active in Reports: 03/25/2013  
Number of Days to Update: 27

Source: San Luis Obispo County Public Health Department  
Telephone: 805-781-5596  
Last EDR Contact: 02/25/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Varies

## SAN MATEO COUNTY:

### Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/09/2013  
Date Data Arrived at EDR: 04/10/2013  
Date Made Active in Reports: 05/14/2013  
Number of Days to Update: 34

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 03/18/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: Annually

## Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/18/2013  
Date Data Arrived at EDR: 03/19/2013  
Date Made Active in Reports: 03/27/2013  
Number of Days to Update: 8

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 03/18/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: Semi-Annually

## SANTA BARBARA COUNTY:

### CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011  
Date Data Arrived at EDR: 09/09/2011  
Date Made Active in Reports: 10/07/2011  
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department  
Telephone: 805-686-8167  
Last EDR Contact: 05/20/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Varies

## SANTA CLARA COUNTY:

### Cupa Facility List

Cupa facility list

Date of Government Version: 03/04/2013  
Date Data Arrived at EDR: 03/05/2013  
Date Made Active in Reports: 03/25/2013  
Number of Days to Update: 20

Source: Department of Environmental Health  
Telephone: 408-918-1973  
Last EDR Contact: 03/04/2013  
Next Scheduled EDR Contact: 06/17/2013  
Data Release Frequency: Varies

### HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005  
Date Data Arrived at EDR: 03/30/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 22

Source: Santa Clara Valley Water District  
Telephone: 408-265-2600  
Last EDR Contact: 03/23/2009  
Next Scheduled EDR Contact: 06/22/2009  
Data Release Frequency: No Update Planned

### LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/04/2013  
Date Data Arrived at EDR: 03/06/2013  
Date Made Active in Reports: 03/25/2013  
Number of Days to Update: 19

Source: Department of Environmental Health  
Telephone: 408-918-3417  
Last EDR Contact: 03/04/2013  
Next Scheduled EDR Contact: 06/17/2013  
Data Release Frequency: Annually

### Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/12/2013  
Date Data Arrived at EDR: 02/14/2013  
Date Made Active in Reports: 03/20/2013  
Number of Days to Update: 34

Source: City of San Jose Fire Department  
Telephone: 408-535-7694  
Last EDR Contact: 05/13/2013  
Next Scheduled EDR Contact: 08/26/2013  
Data Release Frequency: Annually

### SANTA CRUZ COUNTY:

#### CUPA Facility List CUPA facility listing.

Date of Government Version: 02/26/2013  
Date Data Arrived at EDR: 02/26/2013  
Date Made Active in Reports: 03/20/2013  
Number of Days to Update: 22

Source: Santa Cruz County Environmental Health  
Telephone: 831-464-2761  
Last EDR Contact: 02/25/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Varies

### SHASTA COUNTY:

#### CUPA Facility List Cupa Facility List.

Date of Government Version: 03/15/2013  
Date Data Arrived at EDR: 03/15/2013  
Date Made Active in Reports: 03/27/2013  
Number of Days to Update: 12

Source: Shasta County Department of Resource Management  
Telephone: 530-225-5789  
Last EDR Contact: 02/25/2013  
Next Scheduled EDR Contact: 06/10/2013  
Data Release Frequency: Varies

### SOLANO COUNTY:

#### Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/20/2013  
Date Data Arrived at EDR: 03/28/2013  
Date Made Active in Reports: 05/14/2013  
Number of Days to Update: 47

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 03/18/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: Quarterly

#### Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 03/20/2013  
Date Data Arrived at EDR: 03/28/2013  
Date Made Active in Reports: 05/13/2013  
Number of Days to Update: 46

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 03/18/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: Quarterly

### SONOMA COUNTY:

#### Cupa Facility List Cupa Facility list

Date of Government Version: 04/01/2013  
Date Data Arrived at EDR: 04/03/2013  
Date Made Active in Reports: 05/14/2013  
Number of Days to Update: 41

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-565-1174  
Last EDR Contact: 04/01/2013  
Next Scheduled EDR Contact: 07/15/2013  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/02/2013	Source: Department of Health Services
Date Data Arrived at EDR: 04/03/2013	Telephone: 707-565-6565
Date Made Active in Reports: 05/14/2013	Last EDR Contact: 04/01/2013
Number of Days to Update: 41	Next Scheduled EDR Contact: 07/15/2013
	Data Release Frequency: Quarterly

## SUTTER COUNTY:

### Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 03/13/2013	Source: Sutter County Department of Agriculture
Date Data Arrived at EDR: 03/14/2013	Telephone: 530-822-7500
Date Made Active in Reports: 03/27/2013	Last EDR Contact: 03/11/2013
Number of Days to Update: 13	Next Scheduled EDR Contact: 06/24/2013
	Data Release Frequency: Semi-Annually

## TUOLUMNE COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 01/14/2013	Source: Division of Environmental Health
Date Data Arrived at EDR: 01/16/2013	Telephone: 209-533-5633
Date Made Active in Reports: 02/27/2013	Last EDR Contact: 05/15/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 07/29/2013
	Data Release Frequency: Varies

## VENTURA COUNTY:

### Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/30/2012	Source: Ventura County Environmental Health Division
Date Data Arrived at EDR: 05/25/2012	Telephone: 805-654-2813
Date Made Active in Reports: 07/06/2012	Last EDR Contact: 05/20/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 09/02/2013
	Data Release Frequency: Quarterly

### Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011	Source: Environmental Health Division
Date Data Arrived at EDR: 12/01/2011	Telephone: 805-654-2813
Date Made Active in Reports: 01/19/2012	Last EDR Contact: 04/08/2013
Number of Days to Update: 49	Next Scheduled EDR Contact: 07/22/2013
	Data Release Frequency: Annually

### Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008	Source: Environmental Health Division
Date Data Arrived at EDR: 06/24/2008	Telephone: 805-654-2813
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 02/18/2013
Number of Days to Update: 37	Next Scheduled EDR Contact: 06/03/2013
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 01/28/2013  
Date Data Arrived at EDR: 02/01/2013  
Date Made Active in Reports: 03/20/2013  
Number of Days to Update: 47

Source: Ventura County Resource Management Agency  
Telephone: 805-654-2813  
Last EDR Contact: 01/29/2013  
Next Scheduled EDR Contact: 05/13/2013  
Data Release Frequency: Quarterly

## Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 03/01/2013  
Date Data Arrived at EDR: 03/28/2013  
Date Made Active in Reports: 05/13/2013  
Number of Days to Update: 46

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 03/18/2013  
Next Scheduled EDR Contact: 07/01/2013  
Data Release Frequency: Quarterly

## YOLO COUNTY:

### Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 03/25/2013  
Date Data Arrived at EDR: 03/29/2013  
Date Made Active in Reports: 05/13/2013  
Number of Days to Update: 45

Source: Yolo County Department of Health  
Telephone: 530-666-8646  
Last EDR Contact: 03/25/2013  
Next Scheduled EDR Contact: 07/08/2013  
Data Release Frequency: Annually

## YUBA COUNTY:

### CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 03/05/2013  
Date Data Arrived at EDR: 03/06/2013  
Date Made Active in Reports: 03/25/2013  
Number of Days to Update: 19

Source: Yuba County Environmental Health Department  
Telephone: 530-749-7523  
Last EDR Contact: 05/20/2013  
Next Scheduled EDR Contact: 08/19/2013  
Data Release Frequency: Varies

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

### CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/18/2013  
Date Data Arrived at EDR: 02/18/2013  
Date Made Active in Reports: 03/21/2013  
Number of Days to Update: 31

Source: Department of Energy & Environmental Protection  
Telephone: 860-424-3375  
Last EDR Contact: 02/18/2013  
Next Scheduled EDR Contact: 06/03/2013  
Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2011

Date Data Arrived at EDR: 07/19/2012

Date Made Active in Reports: 08/28/2012

Number of Days to Update: 40

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 04/19/2013

Next Scheduled EDR Contact: 07/29/2013

Data Release Frequency: Annually

### NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 02/01/2013

Date Data Arrived at EDR: 02/07/2013

Date Made Active in Reports: 03/15/2013

Number of Days to Update: 36

Source: Department of Environmental Conservation

Telephone: 518-402-8651

Last EDR Contact: 05/09/2013

Next Scheduled EDR Contact: 08/19/2013

Data Release Frequency: Annually

### PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2011

Date Data Arrived at EDR: 07/23/2012

Date Made Active in Reports: 09/18/2012

Number of Days to Update: 57

Source: Department of Environmental Protection

Telephone: 717-783-8990

Last EDR Contact: 04/23/2013

Next Scheduled EDR Contact: 08/05/2013

Data Release Frequency: Annually

### RI MANIFEST: Manifest Information

Hazardous waste manifest information

Date of Government Version: 12/31/2011

Date Data Arrived at EDR: 06/22/2012

Date Made Active in Reports: 07/31/2012

Number of Days to Update: 39

Source: Department of Environmental Management

Telephone: 401-222-2797

Last EDR Contact: 02/25/2013

Next Scheduled EDR Contact: 06/10/2013

Data Release Frequency: Annually

### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2011

Date Data Arrived at EDR: 07/19/2012

Date Made Active in Reports: 09/27/2012

Number of Days to Update: 70

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 03/18/2013

Next Scheduled EDR Contact: 07/01/2013

Data Release Frequency: Annually

**Oil/Gas Pipelines:** This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

### Electric Power Transmission Line Data

Source: Rextag Strategies Corp.

Telephone: (281) 769-2247

U.S. Electric Transmission and Power Plants Systems Digital GIS Data

**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

### Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

### STREET AND ADDRESS INFORMATION

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## **GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM**

### **TARGET PROPERTY ADDRESS**

PROPERTY AT  
1700 EMBARCADERO ROAD  
PALO ALTO, CA 94303

### **TARGET PROPERTY COORDINATES**

Latitude (North):	37.4495 - 37° 26' 58.20"
Longitude (West):	122.1191 - 122° 7' 8.76"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	577917.9
UTM Y (Meters):	4144898.8
Elevation:	8 ft. above sea level

### **USGS TOPOGRAPHIC MAP**

Target Property Map:	37122-D1 MOUNTAIN VIEW, CA
Most Recent Revision:	1999
West Map:	37122-D2 PALO ALTO, CA
Most Recent Revision:	1999

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

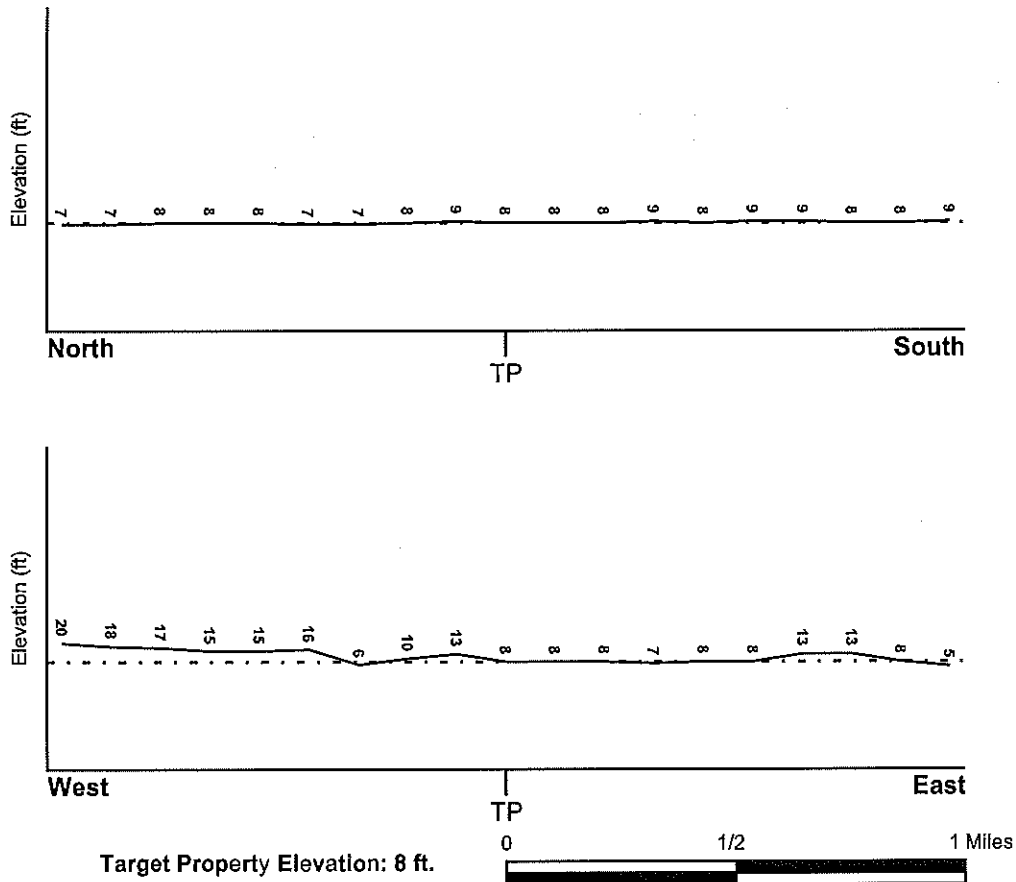
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NE

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## FEMA FLOOD ZONE

Target Property County  
SANTA CLARA, CA

FEMA Flood Electronic Data  
YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06085C - FEMA DFIRM Flood data

Additional Panels in search area: 0607080001A - FEMA Q3 Flood data

## NATIONAL WETLAND INVENTORY

NWI Quad at Target Property  
MOUNTAIN VIEW

NWI Electronic Data Coverage  
YES - refer to the Overview Map and Detail Map

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### *Site-Specific Hydrogeological Data\*:*

Search Radius: 1.25 miles  
Status: Not found

## AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
2	1/2 - 1 Mile NW	NE

For additional site information, refer to Physical Setting Source Map Findings.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### ROCK STRATIGRAPHIC UNIT

Era: Cenozoic  
System: Quaternary  
Series: Quaternary  
Code: Q (decoded above as Era, System & Series)

#### GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: REYES  
Soil Surface Texture: clay  
Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.  
Soil Drainage Class: Somewhat poorly. Soils commonly have a layer with low hydraulic conductivity, wet state high in profile, etc. Depth to water table is 1 to 3 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 0.20 Min: 0.06	Max: 6.50 Min: 3.60
2	14 inches	63 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 0.20 Min: 0.06	Max: 6.00 Min: 3.60

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: mucky - clay  
silty clay loam  
loam  
clay loam  
silt loam

Surficial Soil Types: mucky - clay  
silty clay loam  
loam  
clay loam  
silt loam

Shallow Soil Types: clay

Deeper Soil Types: mucky - clay  
cobbly - clay loam  
clay loam  
stratified  
silty clay loam

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	USGS40000183265	1/8 - 1/4 Mile NNW
A3	USGS40000183192	1/2 - 1 Mile SE
A4	USGS40000183182	1/2 - 1 Mile SE
A5	USGS40000183188	1/2 - 1 Mile SE
A6	USGS40000183181	1/2 - 1 Mile SE
B7	USGS40000183191	1/2 - 1 Mile SE
A8	USGS40000183186	1/2 - 1 Mile SE
A9	USGS40000183187	1/2 - 1 Mile SE
B10	USGS40000183194	1/2 - 1 Mile SE
A11	USGS40000183180	1/2 - 1 Mile SE
A12	USGS40000183175	1/2 - 1 Mile SE
B13	USGS40000183185	1/2 - 1 Mile SE
A14	USGS40000183178	1/2 - 1 Mile SE
A15	USGS40000183179	1/2 - 1 Mile SE
B16	USGS40000183177	1/2 - 1 Mile SE
B20	USGS40000183174	1/2 - 1 Mile SE
B21	USGS40000183173	1/2 - 1 Mile SE

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

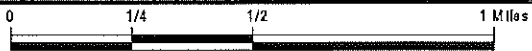
## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
C17	CADW50000028901	1/2 - 1 Mile ESE
C18	CADW50000028900	1/2 - 1 Mile ESE
C19	CADW50000028899	1/2 - 1 Mile ESE

# PHYSICAL SETTING SOURCE MAP - 3611943.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons



- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



**SITE NAME:** Property At  
**ADDRESS:** 1700 Embarcadero Road  
 Palo Alto CA 94303  
**LAT/LONG:** 37.4495 / 122.1191

**CLIENT:** Romig Consulting Engineers  
**CONTACT:** Chris Palmer  
**INQUIRY #:** 3611943.2s  
**DATE:** May 20, 2013 5:18 pm

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**1**  
**NNW**  
**1/8 - 1/4 Mile**  
**Higher**

**FED USGS      USGS40000183265**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372708122070801		
Monloc name:	005S002W31K001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4521611
Longitude:	-122.1199635	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Hortz coord refsys:	NAD83	Vert measure val:	5.00
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19800125	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1980-07-03	10.75	

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

**2**  
**NW**  
**1/2 - 1 Mile**  
**Higher**

Site ID:	890015	<b>AQUIFLOW</b>	<b>50008</b>
Groundwater Flow:	NE		
Shallow Water Depth:	8		
Deep Water Depth:	12		
Average Water Depth:	Not Reported		
Date:	11/1998		

**A3**  
**SE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000183192**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372629122062301		
Monloc name:	006S002W05F001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4413281
Longitude:	-122.1074631	Sourcemap scale:	24000



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19800430	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

A4  
SE  
1/2 - 1 Mile  
Lower

FED USGS USGS40000183182

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372627122062301		
Monloc name:	006S002W05F002M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4407726
Longitude:	-122.1074631	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19800424	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
------	-----------------------	---------------------

-----  
1980-08-06 4.14

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

A5  
SE  
1/2 - 1 Mile  
Lower

FED USGS USGS40000183188

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier: USGS-CA  
 Formal name: USGS California Water Science Center  
 Monloc Identifier: USGS-372628122062001  
 Monloc name: 006S002W05F003M  
 Monloc type: Well  
 Monloc desc: Not Reported  
 Huc code: 18050003  
 Drainagearea Units: Not Reported  
 Contrib drainagearea units: Not Reported  
 Longitude: -122.1066298  
 Horiz Acc measure: 1  
 Horiz Collection method: Interpolated from map  
 Horiz coord refsys: NAD83  
 Vert measure units: feet  
 Vert accmeasure units: feet  
 Vertcollection method: Interpolated from topographic map  
 Vert coord refsys: NGVD29  
 Aquifername: California Coastal Basin aquifers  
 Formation type: Not Reported  
 Aquifer type: Not Reported  
 Construction date: 19800428  
 Welldepth units: Not Reported  
 Wellholedepth units: Not Reported  
 Drainagearea value: Not Reported  
 Contrib drainagearea: Not Reported  
 Latitude: 37.4410504  
 Sourcemap scale: 24000  
 Horiz Acc measure units: seconds  
 Vert measure val: 5  
 Vertacc measure val: 2.5  
 Countrycode: US  
 Welldepth: Not Reported  
 Wellholedepth: Not Reported

Ground-water levels, Number of Measurements: 1

Date	Feet below	
	Surface	Sealevel

1980-08-04 3.25

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

**A6**  
**SE**  
**1/2 - 1 Mile**  
**Lower**

FED USGS USGS40000183181

Org. Identifier: USGS-CA  
 Formal name: USGS California Water Science Center  
 Monloc Identifier: USGS-372627122062101  
 Monloc name: 006S002W05F008M  
 Monloc type: Well  
 Monloc desc: Not Reported  
 Huc code: 18050003  
 Drainagearea Units: Not Reported  
 Contrib drainagearea units: Not Reported  
 Longitude: -122.1069076  
 Horiz Acc measure: 1  
 Horiz Collection method: Interpolated from map  
 Horiz coord refsys: NAD83  
 Vert measure units: Not Reported  
 Vert accmeasure units: Not Reported  
 Vertcollection method: Not Reported  
 Vert coord refsys: Not Reported  
 Aquifername: California Coastal Basin aquifers  
 Formation type: Not Reported  
 Drainagearea value: Not Reported  
 Contrib drainagearea: Not Reported  
 Latitude: 37.4407726  
 Sourcemap scale: 24000  
 Horiz Acc measure units: seconds  
 Vert measure val: Not Reported  
 Vertacc measure val: Not Reported  
 Countrycode: US

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	Not Reported
Construction date:	19800501	Wellholeddepth:	Not Reported
Welldepth units:	Not Reported		
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
------	--------------------	------------------

-----  
1980-07-28 3.17

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

**B7**  
**SE**  
1/2 - 1 Mile  
Lower

FED USGS USGS40000183191

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372629122061801		
Monloc name:	006S002W05F005M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4413281
Longitude:	-122.1060742	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19800509	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholeddepth:	Not Reported
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
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-----  
1980-07-31 3.84

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

**A8**  
**SE**  
1/2 - 1 Mile  
Lower

FED USGS USGS40000183186

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372628122061901		
Monloc name:	006S002W05F011M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4410504
Longitude:	-122.106352	Sourcemap scale:	24000

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19800519	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
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-----  
1980-07-21 2.27

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

**A9**  
**SE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS USGS40000183187**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372628122061902		
Monloc name:	006S002W05F012M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4410504
Longitude:	-122.106352	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19800513	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
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-----  
1980-07-22 2.53

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**B10**  
**SE**  
 1/2 - 1 Mile  
 Lower

FED USGS      USGS40000183194

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372630122061701		
Monloc name:	006S002W05F006M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4416059
Longitude:	-122.1057964	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83		
Vert measure units:	Not Reported	Vert measure val:	Not Reported
Vert accmeasure units:	Not Reported	Vertacc measure val:	Not Reported
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19800508	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----	-----	-----

1980-07-30    2.96

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

**A11**  
**SE**  
 1/2 - 1 Mile  
 Lower

FED USGS      USGS40000183180

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372627122062001		
Monloc name:	006S002W05F009M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4407726
Longitude:	-122.1066298	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83		
Vert measure units:	Not Reported	Vert measure val:	Not Reported
Vert accmeasure units:	Not Reported	Vertacc measure val:	Not Reported
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	Not Reported
Construction date:	19800505	Wellholeddepth:	Not Reported
Welldepth units:	Not Reported		
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
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-----  
1980-07-31 3.15

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

**A12**  
**SE**  
**1/2 - 1 Mile**  
**Lower**

FED USGS USGS40000183175

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372626122062101		
Monloc name:	006S002W05F007M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4404948
Longitude:	-122.1069076	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19800502	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholeddepth:	Not Reported
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
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-----  
1980-07-29 3.99

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

**B13**  
**SE**  
**1/2 - 1 Mile**  
**Lower**

FED USGS USGS40000183185

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372628122061801		
Monloc name:	006S002W05F004M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4410504
Longitude:	-122.1060742	Sourcemap scale:	24000

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refs:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19800512	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----		
1980-07-29	3.50	

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

**A14**  
SE  
1/2 - 1 Mile  
Lower

FED USGS USGS40000183178

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372627122061901		
Monloc name:	006S002W05F015M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4407726
Longitude:	-122.106352	Sourcemap scale:	Not Reported
Horiz Acc measure:	Unknown	Horiz Acc measure units:	Unknown
Horiz Collection method:	Interpolated from map		
Horiz coord refs:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refs:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Alluvial Fan Deposits		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**A15**  
SE  
1/2 - 1 Mile  
Lower

FED USGS USGS40000183179

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372627122061902		
Monloc name:	006S002W05F010M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4407726
Longitude:	-122.106352	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19800515	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholeddepth:	Not Reported
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Seallevel
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1980-07-21 3.77

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

**B16**  
**SE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS USGS40000183177**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372627122061701		
Monloc name:	006S002W05F013M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4407726
Longitude:	-122.1057964	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	Not Reported
Construction date:	19800520	Wellholeddepth:	Not Reported
Welldepth units:	Not Reported		
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
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1980-07-24	3.28	

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

<b>C17</b>				<b>CA WELLS</b>	<b>CADW50000028901</b>
<b>ESE</b>					
<b>1/2 - 1 Mile</b>					
<b>Lower</b>					
Latitude :	37.44288				
Longitude :	122.10388				
Site code:	374429N1221039W003	Casgem sta:	06S02W05F003M		
Local well:	06S02W05F003	Casgem s 1:	Observation		
County id:	43				
Basin cd:	2-9.02	Basin desc:	Santa Clara		
Org unit n:	North Central Region Office	Site id:	CADW50000028901		

<b>C18</b>				<b>CA WELLS</b>	<b>CADW50000028900</b>
<b>ESE</b>					
<b>1/2 - 1 Mile</b>					
<b>Lower</b>					
Latitude :	37.44288				
Longitude :	122.10388				
Site code:	374429N1221039W001	Casgem sta:	06S02W05F001M		
Local well:	06S02W05F001	Casgem s 1:	Observation		
County id:	43				
Basin cd:	2-9.02	Basin desc:	Santa Clara		
Org unit n:	North Central Region Office	Site id:	CADW50000028900		

<b>C19</b>				<b>CA WELLS</b>	<b>CADW50000028899</b>
<b>ESE</b>					
<b>1/2 - 1 Mile</b>					
<b>Lower</b>					
Latitude :	37.44287				
Longitude :	122.10388				
Site code:	374429N1221039W002	Casgem sta:	06S02W05F002M		
Local well:	06S02W05F002	Casgem s 1:	Observation		
County id:	43				
Basin cd:	2-9.02	Basin desc:	Santa Clara		
Org unit n:	North Central Region Office	Site id:	CADW50000028899		

<b>B20</b>				<b>FED USGS</b>	<b>USGS40000183174</b>
<b>SE</b>					
<b>1/2 - 1 Mile</b>					
<b>Lower</b>					

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier: USGS-CA  
 Formal name: USGS California Water Science Center  
 Monloc Identifier: USGS-372626122061701  
 Monloc name: 006S002W05F014M  
 Monloc type: Well  
 Monloc desc: Not Reported  
 Huc code: 18050003  
 Drainagearea Units: Not Reported  
 Contrib drainagearea units: Not Reported  
 Longitude: -122.1057964  
 Horiz Acc measure: 1  
 Horiz Collection method: Interpolated from map  
 Horiz coord refsys: NAD83  
 Vert measure units: Not Reported  
 Vert accmeasure units: Not Reported  
 Vertcollection method: Not Reported  
 Vert coord refsys: Not Reported  
 Aquifername: California Coastal Basin aquifers  
 Formation type: Not Reported  
 Aquifer type: Not Reported  
 Construction date: 19800521  
 Welldepth units: Not Reported  
 Wellholeddepth units: Not Reported  
 Drainagearea value: Not Reported  
 Contrib drainagearea: Not Reported  
 Latitude: 37.4404948  
 Sourcemap scale: 24000  
 Horiz Acc measure units: seconds  
 Vert measure val: Not Reported  
 Vertacc measure val: Not Reported  
 Countrycode: US  
 Welldepth: Not Reported  
 Wellholeddepth: Not Reported

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1980-07-23	3.14	

1980-07-23 3.14

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

**B21**  
**SE**  
**1/2 - 1 Mile**  
**Lower**

FED USGS USGS40000183173

Org. Identifier: USGS-CA  
 Formal name: USGS California Water Science Center  
 Monloc Identifier: USGS-372626122061601  
 Monloc name: 006S002W05G001M  
 Monloc type: Well  
 Monloc desc: Not Reported  
 Huc code: 18050003  
 Drainagearea Units: Not Reported  
 Contrib drainagearea units: Not Reported  
 Longitude: -122.1055186  
 Horiz Acc measure: 1  
 Horiz Collection method: Interpolated from map  
 Horiz coord refsys: NAD83  
 Vert measure units: Not Reported  
 Vert accmeasure units: Not Reported  
 Vertcollection method: Not Reported  
 Vert coord refsys: Not Reported  
 Aquifername: California Coastal Basin aquifers  
 Formation type: Not Reported  
 Drainagearea value: Not Reported  
 Contrib drainagearea: Not Reported  
 Latitude: 37.4404948  
 Sourcemap scale: 24000  
 Horiz Acc measure units: seconds  
 Vert measure val: Not Reported  
 Vertacc measure val: Not Reported  
 Countrycode: US

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	Not Reported
Construction date:	19800523	Wellholedepth:	Not Reported
Welldepth units:	Not Reported		
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
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1980-07-17 2.76

Note: Injector site monitor (a nearby site that taps the same aquifer was injecting recharge water).

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94303	20	0

Federal EPA Radon Zone for SANTA CLARA County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L..

Federal Area Radon Information for Zip Code: 94303

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.300 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Belkman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water  
Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water  
Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### Water Well Database

Source: Department of Water Resources  
Telephone: 916-651-9648

#### California Drinking Water Quality Database

Source: Department of Health Services  
Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

## OTHER STATE DATABASE INFORMATION

#### California Oil and Gas Well Locations

Source: Department of Conservation  
Telephone: 916-323-1779  
Oil and Gas well locations in the state.

### RADON

#### State Database: CA Radon

Source: Department of Health Services  
Telephone: 916-324-2208  
Radon Database for California

#### Area Radon Information

Source: USGS  
Telephone: 703-356-4020  
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### EPA Radon Zones

Source: EPA  
Telephone: 703-356-4020  
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### OTHER

Airport Landing Facilities: Private and public use landing facilities  
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater  
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

### STREET AND ADDRESS INFORMATION

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**APPENDIX F**

**EDR CITY DIRECTORY ABSTRACT REPORT**

(Provided on attached CD)



**Property At**

1700 Embarcadero Road  
Palo Alto, CA 94303

Inquiry Number: 3611943.6

May 21, 2013

## The EDR-City Directory Abstract

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*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

### DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1922 through 2012. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

### RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
2012	Cole Information Services	-	X	X	-
	Cole Information Services	X	X	X	-
2007	Cole Information Services	-	X	X	-
	Cole Information Services	X	X	X	-
2006	Haines Company, Inc.	-	-	-	-
2001	Haines & Company, Inc.	X	X	X	-
2000	Haines & Company	-	-	-	-
1996	Pacific Bell	-	-	-	-
1991	PACIFIC BELL WHITE PAGES	X	X	X	-
1986	Pacific Bell	X	X	X	-
	Pacific Telephone	X	X	X	-
1985	Pacific Bell	-	X	X	-
1982	Pacific Telephone	-	X	X	-
1980	Pacific Telephone	-	X	X	-
1978	R. L. Polk & Co.	X	X	X	-
1975	Pacific Telephone	-	X	X	-
1974	R. L. Polk & Co.	-	-	-	-
1970	R. L. Polk & Co.	X	X	X	-
1968	R. L. Polk & Co.	-	-	-	-
1966	R. L. Polk & Co.	-	-	-	-
1965	R. L. Polk & Co.	-	X	X	-
1964	R. L. Polk & Co.	-	-	-	-
1963	Pacific Telephone	-	-	-	-
1962	R. L. Polk & Co.	-	X	X	-
1960	R. L. Polk & Co.	-	X	X	-

## EXECUTIVE SUMMARY

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
1957	Pacific Telephone	-	X	X	-
1955	R.L. Polk and Co Publishers	-	-	-	-
1950	R. L. Polk Co.	-	-	-	-
1946	R.L. Polk	-	-	-	-
1945	R. L. Polk & Co.	-	-	-	-
1942	R.L. Polk	-	-	-	-
1940	R. L. Polk & Co.	-	-	-	-
1936	R. L. Polk & Co.	-	-	-	-
1935	R. L. Polk & Co. of California	-	-	-	-
1931	R. L. Polk & Co.	-	-	-	-
1930	R. L. Polk & Co. of California	-	-	-	-
1926	R. L. Polk Co.	-	-	-	-
1925	R. L. Polk & Co.	-	-	-	-
1922	R. L. Polk Co.	-	-	-	-

## FINDINGS

### TARGET PROPERTY INFORMATION

#### ADDRESS

1700 Embarcadero Road  
Palo Alto, CA 94303

#### FINDINGS DETAIL

Target Property research detail.

#### EMBARCADERO RD

1700 EMBARCADERO RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2012	MINGS CHINESE CUISINE & BAR	Cole Information Services
2007	MING S CHINESE CUISINE & BAR	Cole Information Services
	MINGS VILLA INC	Cole Information Services
2001	OCHINGVicky MINGS OF PALO ALTO	Haines & Company, Inc.
1991	MINGS VILLA OF PALO ALTO	PACIFIC BELL WHITE PAGES
1986	Mings Of Palo Alto	Pacific Bell
	MING S OF PALO ALTO	Pacific Telephone
1978	Mings Restr	R. L. Polk & Co.
1970	Mings Restr	R. L. Polk & Co.

## FINDINGS

### ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

#### BAYSHORE RD E

##### 2275 BAYSHORE RD E

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	BENEFIT DESIGNS INC	PACIFIC BELL WHITE PAGES

##### 2300 BAYSHORE RD E

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	SCOTTS SEAFOOD GRILL & BAR INC	PACIFIC BELL WHITE PAGES
1978	Tomfoolerys Bayshore Hall restr	R. L. Polk & Co.

#### E BAYSHORE BLVD

##### 2351 E BAYSHORE BLVD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1962	HANEY RICK L (GAYLE) EMP UNIVERSAL TITLE INS	R. L. Polk & Co.

##### 2353 E BAYSHORE BLVD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1962	COOPER CELESTE	R. L. Polk & Co.

#### E BAYSHORE HWY

##### 2352 E BAYSHORE HWY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1962	VANCE LAVEETA OFC SEC	R. L. Polk & Co.
	DERISLO DIANE	R. L. Polk & Co.
	DERISIO LORRAINE MRS EMP MACY S	R. L. Polk & Co.
	DERISIO MARY STUDD	R. L. Polk & Co.

##### 2353 E BAYSHORE HWY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1962	SMITH JAS A (KAREN) WRITER	R. L. Polk & Co.

## FINDINGS

### 2354 E BAYSHORE HWY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1962	MCCRACKEN KENNETH M	R. L. Polk & Co.
	WRIGHT ALF W	R. L. Polk & Co.

### 2355 E BAYSHORE HWY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1962	VIEGAS JOHN (CELESTE)	R. L. Polk & Co.

### 2356 E BAYSHORE HWY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1962	HEFNER JAS (DORIS)	R. L. Polk & Co.

### 2357 E BAYSHORE HWY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1962	ROSANIS MICHI (IVA)	R. L. Polk & Co.

### 2358 E BAYSHORE HWY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1962	BRUTON DALE (CAROLYN)	R. L. Polk & Co.

### 2359 E BAYSHORE HWY

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1962	SHRADER ROBT (HARRIET) USN	R. L. Polk & Co.

### E BAYSHORE RD

#### 2275 E BAYSHORE RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2012	INTELLECT PARTNERS	Cole Information Services
	KELLY FOR ATTORNEY GENERAL TWO ZERO	Cole Information Services
	MAYFIELD INVESTMENT COMPANY INC	Cole Information Services
	STANZLER LAW GROUP	Cole Information Services
	MICRO MOBIO	Cole Information Services
	OROPRO INC	Cole Information Services
2007	INTELLECTUAL PARTNERS	Cole Information Services
	THE BELLA MONTE	Cole Information Services
	SEANCE SOFTWARE	Cole Information Services
	TECHFARM INC	Cole Information Services
	MICRO MOBIO	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2007	OROPRO INC	Cole Information Services
	ALLIANCE VENTURE	Cole Information Services
	MADISON PLACE ASSOCIATES LLC	Cole Information Services
	ORCAL MANAGEMENT INC	Cole Information Services
	CURATIVE LLC	Cole Information Services
	MAYFIELD INVESTMENT CO INC	Cole Information Services
2001	ASSET MANAGEMENT	Haines & Company, Inc.
	CO CBYONINC	Haines & Company, Inc.
	EARTHSYSTEMSINC	Haines & Company, Inc.
	INTELLECT PARTNERS	Haines & Company, Inc.
	SLEEBStuard	Haines & Company, Inc.
1986	Alchemia	Pacific Bell
	Interlife	Pacific Bell
	Alexander Paul Heller Ehrman White & Mc Auliffe attys	Pacific Bell
	Arevalo Alberto Heller Ehrman White & Me Auliffe attys	Pacific Bell
	Everett Michael T Heller Ehrman White & Me Auliffe attys	Pacific Bell
	Knee Martina W Heller Ehrman White & Mc Auliffe attys	Pacific Bell
	attys	Pacific Bell
	Moralti August J Heller Ehrman White & Mc Auliffe	Pacific Bell
	ODowd Sarah A Heller Ehrman White & Me Auliffe attys	Pacific Bell
	Petree Daniel H Heller Ehrman White & Mc Altte attys	Pacific Bell
	Smith Glenn A Heller Ehrman White & Me Auliffe attys	Pacific Bell
	Stein Isaac Heller Ehrman White & Me Auliffe attys	Pacific Bell
	Witte Derek P Heller Ehrman White & Me Auliffe attys	Pacific Bell
	Witte Derek P Heller Ehrman White & Me Auliffe attys	Pacific Bell
	Armstrong Don & Associates	Pacific Bell
	Heller Ehrman White & Me Auliffe attys	Pacific Bell
	Marken Communications	Pacific Bell
	Watt Peterson Inc	Pacific Bell
	ALEXANDER PAUL HELLER EHRMAN WHITE & MC AULIFFE ATTYS	Pacific Telephone



## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	AREVALO ALBERTO HELLER EHRMAN WHITE & ME AULIFFE ATTYS	Pacific Telephone
	HELLER EHRMAN WHITE & ME AULIFFE ATTYS	Pacific Telephone
	KAUFMAN CHRISTOPHER L HELLER EHRMAN WHITE & ME AULIFFE ATTYS	Pacific Telephone
	KNEE MARTINA W HELLER EHRMAN WHITE & MC AULIFFE ATTYS	Pacific Telephone
	ODOM WM G MD INC	Pacific Telephone
	SMITH GLENN A HELLER EHRMAN WHITE & ME AULIFFE ATTYS	Pacific Telephone
	STEIN ISAAC HELLER EHRMAN WHITE & ME AULIFFE ATTYS	Pacific Telephone
	WITTE DEREK P HELLER EHRMAN WHITE & ME AULIFFE ATTYS	Pacific Telephone
	WITTE DEREK P HELLER EHRMAN WHITE & ME AULIFFE ATTYS	Pacific Telephone
	ALCHEMIA	Pacific Telephone
	INTERLIFE	Pacific Telephone
1985	MORETTI AUGUST J HELLER EHRMAN WHITE & MC AULIFFE ATTYS	Pacific Bell
	DOWD SARAH A HELLER EHRMAN WHITE & ME AULIFFE ATTYS	Pacific Bell
	STEIN ISAAC HELLER EHRMAN WHITE & ME AULIFFE ATTYS	Pacific Bell
1982	ADDS APPLIED DIGITAL DATA SYSTEMS INC	Pacific Telephone
	Applied Digital Data Systems Inc	Pacific Telephone
	Electronics Div N Cau Field Sales	Pacific Telephone
	RAYCHEM CORPORATION Corporafion Haaerquarters	Pacific Telephone
<b>2300 E BAYSHORE RD</b>		
<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	SCOTTSSEAFOOD	Haines & Company, Inc.
1986	SCOTTS SEAFOOD GRILL & BAR INC	Pacific Bell
1982	SCOTr S SEAFOOD GRILL & BAR INC	Pacific Telephone
<b>2413 E BAYSHORE RD</b>		
<u>Year</u>	<u>Uses</u>	<u>Source</u>
1982	Center For Planning & Research Inc	Pacific Telephone

## FINDINGS

### 2450 E BAYSHORE RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.

### EMBARCADERO RD

#### 1703 EMBARCADERO RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1982	Altruk Freight Systems	Pacific Telephone
	Rocor International	Pacific Telephone
1978	Vacant	R. L. Polk & Co.
1975	Cal Ag Farms	Pacific Telephone
	Interlog Corp	Pacific Telephone

#### 1717 EMBARCADERO RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2012	SIGNOSTICS MEDICAL	Cole Information Services
	ACSTEENS COUNSELING	Cole Information Services
	ROYSE LAW FIRM	Cole Information Services
	DORSEY	Cole Information Services
2007	RITCHEY FISHER WHITMAN & KLEIN	Cole Information Services
2001	BLASE GUY ATTY	Haines & Company, Inc.
	CROW PAULAS	Haines & Company, Inc.
	DEWJENNIFER	Haines & Company, Inc.
	EMBARCADERORD 94303 CONT FISHER GEORGE C	Haines & Company, Inc.
	HAYSGILLIANG	Haines & Company, Inc.
	HURSHJOHNG	Haines & Company, Inc.
	KAYSDAVID	Haines & Company, Inc.
	KELLYTERENCEM	Haines & Company, Inc.
	KLEINLAWRENCEA	Haines & Company, Inc.
	KOEGLER KEITHS	Haines & Company, Inc.
	LAUHERPAULK	Haines & Company, Inc.
	LEEAYLEENITO	Haines & Company, Inc.
	LIDAKENJI	Haines & Company, Inc.
	LUEMERSMARTHAC	Haines & Company, Inc.
	MCCOWNJEAN	Haines & Company, Inc.
	MELLBERG BYRON	Haines & Company, Inc.
	R 1 B 6 WEBBER CO	Haines & Company, Inc.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	RITCHESONSTEVEM	Haines & Company, Inc.
	RITCHEYCRAIGS	Haines & Company, Inc.
	R 8 TCHEY FISHER	Haines & Company, Inc.
	WHITMAN 8 KLEI N SINCLAIR BRYAN	Haines & Company, Inc.
	SPAETH C GRANT ATTY	Haines & Company, Inc.
	VALENTINEPAULC	Haines & Company, Inc.
	An TY WELCH PATRICIA A	Haines & Company, Inc.
	WENTZEL KAREN	Haines & Company, Inc.
	WHITMAN PETER	Haines & Company, Inc.
1991	REAM CHRISTOPHER LEGAL COUNSEL	PACIFIC BELL WHITE PAGES
1986	Blase Guy Blase Valentine & Klein A Professional Corporation attys	Pacific Bell
	Blase Valentine & Klein A Professional Corporation attys	Pacific Bell
	Dong Nelson Blase Valentine & Klein A Professional Corporation attys	Pacific Bell
	Klein Lawrence A Blase Valentine & Klein A Professional Corporation attys	Pacific Bell
	Mc Cown Jean Blase Valentine & Klein A Professional Corporation attys	Pacific Bell
	Ritchey Craig S Blase Valentine & Klein A Professional Corporation attys	Pacific Bell
	Turbow Ellen B Blase Valentine & Klein A Professional Corporation attys	Pacific Bell
	Valentine Paul C Blase Valentine & Klein A Professional Corporation attys	Pacific Bell
	Ware James Blase Valentine & Klein A Professional Corporation attys	Pacific Bell
	BLASE GUY BLASE VALENTINE & KLEIN A PROFESSIONAL CORPORATION ATTYS	Pacific Telephone
	BLASE VALENTINE & KLEIN A PROFESSIONAL CORPORATION ATTYS	Pacific Telephone
	DONG NELSON BLASE VALENTINE & KLEIN A PROFESSIONAL CORPORATION ATTYS	Pacific Telephone
	KLEIN LAWRENCE A BLASE VALENTINE & KLEIN A PROFESSIONAL CORPORATION ATTYS	Pacific Telephone
	LEE AYLEEN ITO BLASE VALENTINE & KLEIN A PROFESSIONAL CORPORATION ATTYS	Pacific Telephone
MC COWN JEAN BLASE VALENTINE & KLEIN A PROFESSIONAL CORPORATION ATTYS	Pacific Telephone	

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	RITCHEY CRAIG S BLASE VALENTINE & KLEIN A PROFESSIONAL CORPORATION ATTYS	Pacific Telephone
	TURBOW ELLEN B BLASE VALENTINE & KLEIN A PROFESSIONAL CORPORATION ATTYS	Pacific Telephone
	VALENTINE PAUL C BLASE VALENTINE & KLEIN A PROFESSIONAL CORPORATION ATTYS	Pacific Telephone
	WARE JAMES BLASE VALENTINE & KLEIN A PROFESSIONAL CORPORATION ATTYS	Pacific Telephone
<b>1730 EMBARCADERO RD</b>		
<u>Year</u>	<u>Uses</u>	<u>Source</u>
2012	CARLSEN AUDI	Cole Information Services
2007	CARLSEN MOTOR CARS INC	Cole Information Services
2001	CARLSENAUDI	Haines & Company, Inc.
	ELY Leonard TARGA LEASING	Haines & Company, Inc.
1991	TARGA LEASING	PACIFIC BELL WHITE PAGES
	CARLSEN PORSCHE INC	PACIFIC BELL WHITE PAGES
	INTERNATIONAL AUTO DETAIL	PACIFIC BELL WHITE PAGES
1986	Targa Leasing	Pacific Bell
	Carlsen Porsche Audi Inc	Pacific Bell
	CARLSEN PORSCHE AUDI INC	Pacific Telephone
	TARGA LEASING	Pacific Telephone
1978	Carlsen Porsche Audi auto sis	R. L. Polk & Co.
1975	CARLSEN PORSCHE AUDI INC	Pacific Telephone
1970	Mozart Porsche Audi	R. L. Polk & Co.
<b>1731 EMBARCADERO RD</b>		
<u>Year</u>	<u>Uses</u>	<u>Source</u>
2012	THIN MULTIMEDIA INC	Cole Information Services
	CL SIGLER & ASSOCIATES INC	Cole Information Services
	ROBINS & PASTERNAK LLP	Cole Information Services
	IDENTITY MIND INCORPORATED	Cole Information Services
	MERRILL CORPORATION	Cole Information Services
	FARMERS INSURANCE GROUP	Cole Information Services
2007	DIRECT MARKETING RESEARCH ASSOCIATES	Cole Information Services
	SANYIKA MORTGAGE GROUP	Cole Information Services
	ROBINS & PASTERNAK LLP	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2007	MEIOSYS INC	Cole Information Services
	MATCHKEY CORP	Cole Information Services
	ACCET NETWORK	Cole Information Services
	MERRILL CORP	Cole Information Services
2001	ALTOWEB	Haines & Company, Inc.
	FELL 8 NICHOLSON	Haines & Company, Inc.
	TECH LOUTHAUTOMATION	Haines & Company, Inc.
1991	CATS SOFTWARE	PACIFIC BELL WHITE PAGES
	ENGLERT KARL P	PACIFIC BELL WHITE PAGES
1986	TFB PUBULIC RELATIONS	Pacific Telephone
	TYCER FULTZ BELLACK	Pacific Telephone
	Tycer Associates Inc	Pacific Bell
	TFB PUBULIC RELATIONS	Pacific Bell
	TYCER FULTZ BELLACK	Pacific Bell
1985	CONTROL DATA BUSINESS INFORMATION SERVICES	Pacific Bell
1982	Bray & Associates	Pacific Telephone
	Brostrom Edward Hins	Pacific Telephone
	Marine Yacht insurance Underwriters	Pacific Telephone
	Miller John A	Pacific Telephone
	Schwartz Michael Sylvester & Schwartz Ins Brokers	Pacific Telephone
	Service Bureau Company The A Control Data Company	Pacific Telephone
	Sylvester John Sylvester & Schwart Ins Brokers	Pacific Telephone
	SYLVESTER & SCHWARTZ INS BROKERS	Pacific Telephone
	WESTERN SURETY COMPANY	Pacific Telephone
	Wright Edwin C CLU ins	Pacific Telephone
	1978	Western Surety Company bond undwrtrs
1975	Me Rae Bryan	Pacific Telephone
	Mc Rae Audie	Pacific Telephone
1970	Kumagai Nursery whol florist	R. L. Polk & Co.
	Kumagai Torn	R. L. Polk & Co.
	Shoshido Jimmy	R. L. Polk & Co.
1965	KUMAGAI NURSERY WHOL FLORIST	R. L. Polk & Co.
	KUMAGAI TOYOTSUGU	R. L. Polk & Co.
	FUKUI r EROUO T	R. L. Polk & Co.
1960	Kumagai Tom T whol florist da	R. L. Polk & Co.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1957	K(U NAGAL TOM	Pacific Telephone
<b>1735 EMBARCADERO RD</b>		
<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Takamoto Harry T whol florist da	R. L. Polk & Co.
1957	TAKAMOTO HARRY NRSRY	Pacific Telephone
<b>1741 EMBARCADERO RD</b>		
<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Nagatoishi Chuda	R. L. Polk & Co.
	Nagatoishi Ben	R. L. Polk & Co.
1957	NAGATOISHI CHUDA	Pacific Telephone
<b>1755 EMBARCADERO RD</b>		
<u>Year</u>	<u>Uses</u>	<u>Source</u>
2012	JONES DAY	Cole Information Services
2007	DAVID COBB ATTORNEY	Cole Information Services
2001	PETTY KEITH ATTY	Haines & Company, Inc.
	CORPORATION TRUEX	Haines & Company, Inc.
	RESILIENCE	Haines & Company, Inc.
	CHRISTOPHER LEGAL COUNSEL REGISMCKENNAINC	Haines & Company, Inc.
	PHELPSJB JUDGE	Haines & Company, Inc.
	MINDEN SCOTT D	Haines & Company, Inc.
	EATTY MCKENNA GROUP THE	Haines & Company, Inc.
	MCCLINTOCK GORDON	Haines & Company, Inc.
	GROUP THE MAROULIS JAMES C	Haines & Company, Inc.
	MARKET RELATIONS	Haines & Company, Inc.
	NEMEROVSKICANABY KOPF DAVID G	Haines & Company, Inc.
	HOWARD RICE	Haines & Company, Inc.
	ATTORNEY AT LAW HETTIG DAVID W LAW	Haines & Company, Inc.
	HARMON 1 GRANTS	Haines & Company, Inc.
	GRIFRFTHS JOHN R	Haines & Company, Inc.
	GRECO JOSEPHA	Haines & Company, Inc.
	DEALCUAZ ANTHONY 650 842e GEMINIMCKENNA	Haines & Company, Inc.
	CULLEN W ROBERT	Haines & Company, Inc.
	BUILDING COTE FRANK P	Haines & Company, Inc.
1991	REGIS MCKENNA INC	PACIFIC BELL WHITE PAGES
	KPMG PEAT MARWICK	PACIFIC BELL WHITE PAGES

## FINDINGS

### 1766 EMBARCADERO RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2012	ANDERSON HONDAISUZU	Cole Information Services
2007	AR AUTOMOTIVE LLC	Cole Information Services
	ANDERSON HONDA PARTS	Cole Information Services
	ANDERSON HONDA SERVICE	Cole Information Services
1991	MID PENINSULA MOTORS	PACIFIC BELL WHITE PAGES
	AUTO PLAZA INC	PACIFIC BELL WHITE PAGES
	AUTO PLAZA INC	PACIFIC BELL WHITE PAGES
	AUTO PLAZA INC	PACIFIC BELL WHITE PAGES
1986	CARLISEN VOLKSWAGEN SAAB CHRYSLER PLYMOUTH	Pacific Telephone
	CARLSEN SAAB	Pacific Telephone
	CARLSEN CHRYSLER PLYMOUTH FLEET DEPARTMENT	Pacific Telephone
	CARLSEN CHRYSLER PLYMOUTH	Pacific Telephone
	CARLSEN CHRYSLER PLYMOUTH	Pacific Telephone
	CARDINAL SALES & LEASING	Pacific Telephone
	Cardinal Sales & Leasing	Pacific Bell
	Carlsen Chrysler Plymouth Fleet Department	Pacific Bell
	Carlsen Volkswagen Saab Chrysler Plymouth	Pacific Bell
	Carlsen Saab	Pacific Bell
	Carlsen Chrysler Plymouth	Pacific Bell
	Carlsen Chrysler Plymouth	Pacific Bell
1982	CARLSEN CARL R VOLKSWAGEN INC	Pacific Telephone
	Carlsen Saab	Pacific Telephone
1978	Carleen Carl R Inc new cars	R. L. Polk & Co.
1975	CARLSEN CARL R VOLKSWAGEN INC	Pacific Telephone
1970	Mozart Leasing	R. L. Polk & Co.
	Mozart Gus Volkswagen new cars	R. L. Polk & Co.

### 1770 EMBARCADERO RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1978	V W Used Cars	R. L. Polk & Co.
1970	Mozart Gus Used Cars	R. L. Polk & Co.

### 1775 EMBARCADERO RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	PASCO Debris Box Service	Pacific Bell
	PALO ALTO SANITATION CO	Pacific Bell
	PASCO DEBRIS BOX SERVICE	Pacific Telephone
	PALO ALTO SANITATION CO	Pacific Telephone
1982	PASCO Debris Box Service	Pacific Telephone
1978	Palo Alto Sanitation Co garbage colln serv	R. L. Polk & Co.
1970	Palo Alto Sanitation Co garbage colln serv	R. L. Polk & Co.
1965	PALO ALTO SANITATION CO GARBAGE COLLN SERV	R. L. Polk & Co.

### GENG RD

#### 2280 GENG RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Wilson David C atty Brobeck Phleger & Harrison	Pacific Bell

#### 2300 GENG RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2012	GILFIX MICHAEL ATTORNEY	Cole Information Services
	XENSOURCE	Cole Information Services
	EASTMAN KODAK	Cole Information Services
	GILFIX & LA POLL ASSOCIATES	Cole Information Services
	ZOOVE CORP	Cole Information Services
2007	FORTIFY SOFTWARE INC	Cole Information Services
	GILFIX & LA POLL ASSOCIATES	Cole Information Services
	APPSTREAM INC	Cole Information Services
	XEN SOURCE	Cole Information Services
2001	ADMINOFC	Haines & Company, Inc.
	PRIMUS	Haines & Company, Inc.
	ETRADESECURITIES	Haines & Company, Inc.
1991	SYSTEMS CONTROL TECHNOLOGY INC	PACIFIC BELL WHITE PAGES

#### 2400 GENG RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2012	FROST & SULLIVAN	Cole Information Services
	HEALTH HERO NETWORKS	Cole Information Services
	LAKIN SPEARS	Cole Information Services
	YMCA	Cole Information Services
2007	YMCA OF THE MID PENINSULA	Cole Information Services



## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2007	E TRADE CAPITAL INC	Cole Information Services
	NORA IMPORT & EXPORT	Cole Information Services
	ITERRA COMMUNICATIONS	Cole Information Services
	E TRADE	Cole Information Services
1991	INTERGRAPH CORP	PACIFIC BELL WHITE PAGES
	INTERGRAPH CORP	PACIFIC BELL WHITE PAGES

### 2401 GENG RD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1991	PORTOLA SYSTEMS INC	PACIFIC BELL WHITE PAGES

### WATSON CT

#### 2370 WATSON CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2012	RUSHER LOSCAVIO	Cole Information Services
	BOARDWALKTECH INC	Cole Information Services
	APV TECHNOLOGY PARTNERS	Cole Information Services
	VUCAST MEDIA	Cole Information Services
	SEROS MEDICAL	Cole Information Services
	DORSEY HAZELTINE & WYNNE	Cole Information Services
	STANFORD HOSPITAL & CLINICS	Cole Information Services
2007	JACK NADEL INC	Cole Information Services
	FINANCIAL CROSSING INC	Cole Information Services
	APV TECHNOLOGY PARTNERS	Cole Information Services
	ARTIMAN VENTURES	Cole Information Services
	G V DINC	Cole Information Services
	GVO INC	Cole Information Services
2001	WALLSTREET ANALYTICS	Haines & Company, Inc.
	PLAN A	Haines & Company, Inc.
	GVO INC	Haines & Company, Inc.
	STANFRD HSP PHYSICALTHERAPY	Haines & Company, Inc.
1991	WIDMANN RANDALL M	PACIFIC BELL WHITE PAGES
	AMES TIMOTHY	PACIFIC BELL WHITE PAGES
	RUSSELL & MOLTZEN ATTORNEYS AT LAW	PACIFIC BELL WHITE PAGES
1986	PALO ALTO SUPREME COURT	Pacific Telephone
	SUPERFIT NAUTILUS AEROBIC CENTER	Pacific Telephone

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	SUPREME COURT PALO ALTO	Pacific Telephone
	Palo Alto Supreme Court	Pacific Bell
	Supreme Court Palo Alto	Pacific Bell
1982	SUPREME COURT PALO ALTO	Pacific Telephone
1978	Supreme Court Of Palo Alto racquet ball ct	R. L. Polk & Co.

### 2446 WATSON CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1986	Dyn Digital Controls	Pacific Bell
	DYN DIGITAL CONTROLS	Pacific Telephone
1982	Microelectronic Technology Corp	Pacific Telephone
	Quadracast Systems Inc	Pacific Telephone
1978	Micro Electronics Technology Corp electronics co	R. L. Polk & Co.

### 2448 WATSON CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1991	ENVIRONMENTAL VOLUNTEERS	PACIFIC BELL WHITE PAGES
	COMMITTEE FOR GREEN FOOTHILLS	PACIFIC BELL WHITE PAGES
	PENINSULA CONSERVATION CENTER	PACIFIC BELL WHITE PAGES
	SIERRA CLUB LOMA PRIETA CHAPTER	PACIFIC BELL WHITE PAGES
	SIERRA CLUB LOMA PRIETA CHAPTER OFC	PACIFIC BELL WHITE PAGES
	CONSERVATION CENTER-PENINSULA	PACIFIC BELL WHITE PAGES
	CALIFORNIA NATIVE PLANT SOCIETY	PACIFIC BELL WHITE PAGES
	CAMP UNALAYEE	PACIFIC BELL WHITE PAGES
1986	TRANSPORT INFORMATION SYSTEMS	Pacific Telephone
	TRANSPORT INFORMATION SYSTEM	Pacific Telephone
	TRAIL BLAZER SYSTEMS	Pacific Telephone
	Transport Information Systems	Pacific Bell
	Transport Information Systems	Pacific Bell
	Trail Blazer Systems	Pacific Bell
1985	TRAIL BLAZER SYSTEMS	Pacific Bell
1978	Allan Consulting Associates consulting firm	R. L. Polk & Co.

## FINDINGS

### 2450 WATSON CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2012	PERRY ARRILLAGE	Cole Information Services
2007	PALO ALTO MEDICAL FOUNDATION	Cole Information Services
1978	Palo Alto Medical Clinic business ofc	R. L. Polk & Co.
1975	International Timesharing Corp	Pacific Telephone
1970	I B M	R. L. Polk & Co.
	Service Bureau Corp The data processing	R. L. Polk & Co.
1965	SERVICE BUREAU CORP THE DATA PROCESSING	R. L. Polk & Co.
	BERNSTEIN HAROLD M	R. L. Polk & Co.

### 2452 WATSON CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	XXXX	Haines & Company, Inc.
1991	SELLECTEK	PACIFIC BELL WHITE PAGES
1986	Identix Incorporated	Pacific Bell
	Thermo Energy Corp	Pacific Bell
	IDENTIX INCORPORATED	Pacific Telephone
	THERMO ENERGY CORP	Pacific Telephone
1978	Argonaut Insurance	R. L. Polk & Co.

### 2459 WATSON CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2001	HECKERSYDNEY F	Haines & Company, Inc.

### WOODSON CT

#### 2482 WOODSON CT

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Gray NWry Gertrude	Pacific Telephone
	Gvay Michael C	Pacific Telephone

## FINDINGS

### TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

#### Address Researched

1700 Embarcadero Road

#### Address Not Identified in Research Source

2006, 2000, 1996, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

### ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

#### Address Researched

1703 EMBARCADERO RD

#### Address Not Identified in Research Source

2012, 2007, 2006, 2000, 1996, 1991, 1986, 1985, 1980, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

1717 EMBARCADERO RD

2012, 2007, 2006, 2000, 1996, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

1717 EMBARCADERO RD

2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

1730 EMBARCADERO RD

2012, 2007, 2006, 2000, 1996, 1985, 1982, 1980, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

1730 EMBARCADERO RD

2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

1731 EMBARCADERO RD

2012, 2007, 2006, 2000, 1996, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

1731 EMBARCADERO RD

2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

1735 EMBARCADERO RD

2012, 2007, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

1741 EMBARCADERO RD

2012, 2007, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

1755 EMBARCADERO RD

2012, 2007, 2006, 2000, 1996, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

1755 EMBARCADERO RD

2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922





## FINDINGS

### Address Researched

2459 WATSON CT

2482 WOODSON CT

### Address Not Identified in Research Source

2012, 2007, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

2012, 2007, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

**APPENDIX G**

**EDR VAPOR ENCROACHMENT SCREEN REPORT**

(Provided on attached CD)



**Property At**

1700 Embarcadero Road  
Palo Alto, CA 94303

Inquiry Number: 3611943.10s  
May 21, 2013

## EDR Vapor Encroachment Screen

Prepared using EDR's Vapor Encroachment Worksheet

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Primary Map .....	2
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Map Findings .....	5
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*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600-10).

STANDARD ENVIRONMENTAL RECORDS	Maximum Search Distance*	Summary		
		property	1/10	1/10 - 1/3
Federal NPL	0.333	0	0	0
Federal CERCLIS	0.333	0	0	0
Federal RCRA CORRACTS facilities list	0.333	0	0	0
Federal RCRA TSD facilities list	0.333	0	0	0
Federal RCRA generators list	property	0	-	-
Federal institutional controls / engineering controls registries	0.333	0	0	0
Federal ERNS list	property	0	-	-
State and tribal - equivalent NPL	0.333	0	0	0
State and tribal - equivalent CERCLIS	0.333	0	0	0
State and tribal landfill / solid waste disposal	0.333	0	0	0
State and tribal leaking storage tank lists	0.333	0	1	5
State and tribal registered storage tank lists	property	0	-	-
State and tribal institutional control / engineering control registries	not searched	-	-	-
State and tribal voluntary cleanup sites	0.333	0	0	0
State and tribal Brownfields sites	not searched	-	-	-
Other Standard Environmental Records	0.333	0	1	2
<b>HISTORICAL USE RECORDS</b>				
Former manufactured Gas Plants	0.333	0	0	0
Historical Gas Stations	0.25	0	0	0
Historical Dry Cleaners	0.25	0	0	0

\*Each category may include several separate databases, each having a different search distance. For each category, the table reports the maximum search distance applied. See the section 'Record Sources and Currency' for information on individual databases.

## EXECUTIVE SUMMARY

### TARGET PROPERTY INFORMATION

#### ADDRESS

PROPERTY AT  
1700 EMBARCADERO ROAD  
PALO ALTO, CA 94303

#### COORDINATES

Latitude (North):	37.4495 - 37° 26' 58.203735"
Longitude (West):	122.1191 - 122° 7' 8.768921"
Elevation:	8 ft. above sea level

# EXECUTIVE SUMMARY

## PHYSICAL SETTING INFORMATION

Flood Zone: YES  
 NWI Wetlands: YES

## **AQUIFLOW<sup>®</sup>**

Search Radius: 0.333 Mile.

No Aquiflow sites reported.

## **DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: REYES  
 Soil Surface Texture: clay  
 Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.  
 Soil Drainage Class: Somewhat poorly. Soils commonly have a layer with low hydraulic conductivity, wet state high in profile, etc. Depth to water table is 1 to 3 feet.  
 Hydric Status: Hydric Status: Soil does not meet the requirements for a hydric soil.  
 Corrosion Potential - Uncoated Steel: HIGH  
 Depth to Bedrock Min: > 60 inches  
 Depth to Bedrock Max: > 60 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 0.20 Min: 0.06	Max: 6.50 Min: 3.00

## EXECUTIVE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	14 inches	63 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Silts.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 0.20 Min: 0.06	Max: 6.00 Min: 3.00

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinate soil types may appear within the general area of target property.

Soil Surface Textures: mucky - clay  
silty clay loam  
loam  
clay loam  
silt loam

Surficial Soil Types: mucky - clay  
silty clay loam  
loam  
clay loam  
silt loam

Shallow Soil Types: clay

Deeper Soil Types: mucky - clay  
cobbly - clay loam  
clay loam  
stratified  
silty clay loam

# EXECUTIVE SUMMARY

## SEARCH RESULTS

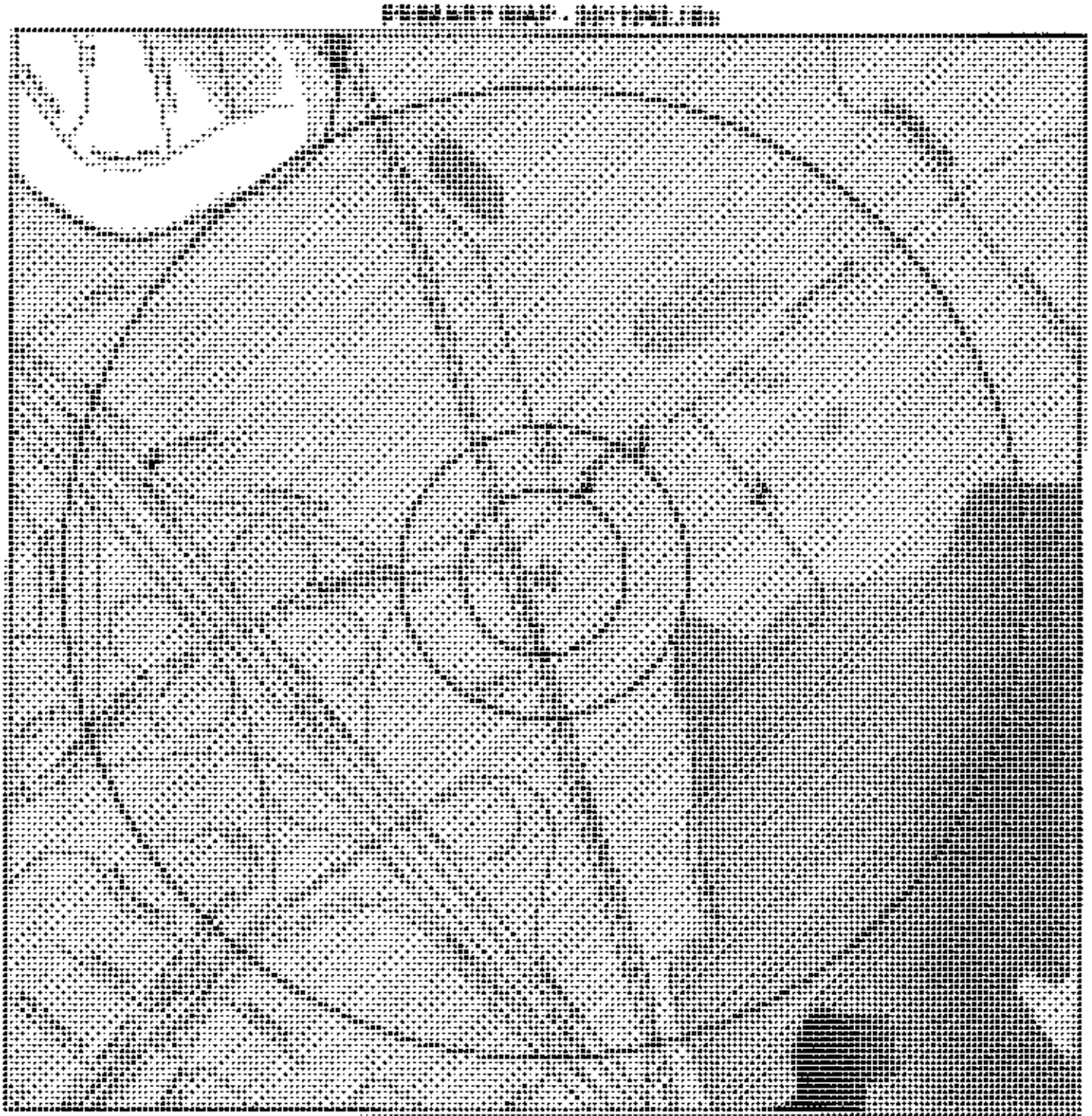
Unmappable (orphan) sites are not considered in the foregoing analysis.

## STANDARD ENVIRONMENTAL RECORDS

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
<b>CARLSEN MOTORS</b> LUST: State and tribal leaking storage tank lists CUPA Listings: Other Standard Environmental Records HIST CORTESE: Other Standard Environmental Records HIST LUST: State and tribal leaking storage tank lists	1730 EMBARCADERO RD	<1/10 NNE	▲ 1	10
<b>STANFORD HONDA</b> LUST: State and tribal leaking storage tank lists CUPA Listings: Other Standard Environmental Records HIST CORTESE: Other Standard Environmental Records SLIC: State and tribal leaking storage tank lists HIST LUST: State and tribal leaking storage tank lists	1766 EMBARCADERO RD	1/10 - 1/3 NE	▲ 2	13
<b>COLLAGEN INC.</b> HIST LUST: State and tribal leaking storage tank lists	2500 FABER PL	1/10 - 1/3 ENE	▲ A3	18
<b>ANGIOTECH BIOMATERIALS CORP</b> RCRA NonGen / NLR: Other Standard Environmental Records SWEEPS UST: State and tribal registered storage tank lists LUST: State and tribal leaking storage tank lists CA FID UST: State and tribal registered storage tank lists HIST CORTESE: Other Standard Environmental Records CUPA Listings: Other Standard Environmental Records HIST UST: State and tribal registered storage tank lists	2500 FABER PL	1/10 - 1/3 ENE	▲ A4	19
<b>OLD POST OFFICE PALO ALTO</b> LUST: State and tribal leaking storage tank lists	2197 E BAYSHORE RD	1/10 - 1/3 WNW	▼ B5	28
<b>OLD POST OFFICE PALO ALTO</b> LUST: State and tribal leaking storage tank lists HIST LUST: State and tribal leaking storage tank lists	2197 E BAYSHORE RD	1/10 - 1/3 WNW	▼ B6	29

## HISTORICAL USE RECORDS

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
Not Reported				



- ✖ Sites at elevations higher than or equal to the target property
- ▼ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- ⊕ Sensitive Receptors
- ☑ National Priority List Sites
- ⊞ Dept. Defense Sites

- ☐ Indian Reservations BIA
- ▭ County Boundary
- ⚡ Power transmission lines
- ⚡ Oil & Gas pipelines from USGS
- ▨ 100-year flood zone
- ▧ 500-year flood zone
- 🌿 National Wetland Inventory

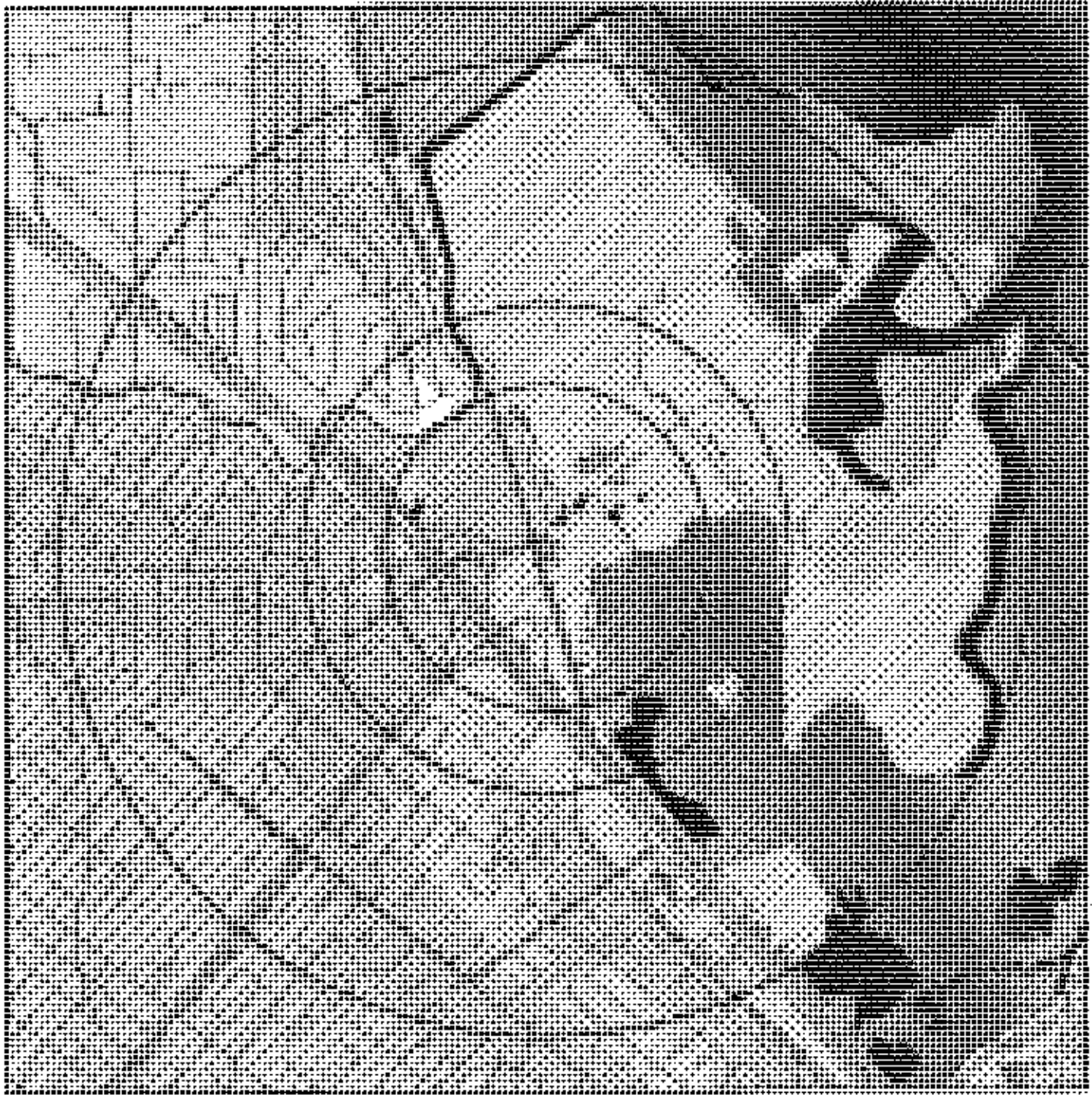
- ➔ Groundwater Flow Direction
- ⓪ Indeterminate Groundwater Flow at Location
- ⓪ Groundwater Flow Varies at Location
- ▦ Areas of Concern



**SITE NAME:** Property At  
**ADDRESS:** 1700 Embarcadero Road  
 Palo Alto CA 94303  
**LAT/LONG:** 37.4495 / 122.1191

**CLIENT:** Romig Consulting Engineers  
**CONTACT:** Chris Palmer  
**INQUIRY #:** 3611943.10s  
**DATE:** May 20, 2013 5:17 pm





- ▲ Sites at elevations higher than or equal to the target property
- ▼ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- ~ Contour Lines
- ~ County Boundary
- ~ Power transmission lines
- ~ Oil & Gas pipelines from USGS
- ▨ 100-year flood zone
- ▨ 500-year flood zone
- ▨ National Wetland Inventory
- Upgradient Area
- Areas of Concern

**SITE NAME:** Property At  
**ADDRESS:** 1700 Embarcadero Road  
 Palo Alto CA 94303  
**LAT/LONG:** 37.4495 / 122.1181

**CLIENT:** Ramig Consulting Engineers  
**CONTACT:** Chris Palmer  
**INQUIRY #:** 3611943.10s  
**DATE:** May 20, 2013 5:12 pm

AERIAL PHOTOGRAPHY - 3611943.10s



2

SITE NAME: Property At  
ADDRESS: 1700 Embarcadero Road  
Palo Alto CA 94303  
LAT/LONG: 37.4495 / 122.1191

CLIENT: Romig Consulting Engineers  
CONTACT: Chris Palmer  
INQUIRY #: 3611943.10s  
DATE: May 20, 2013 5:23 pm

**MAP FINDINGS**

**LEGEND**

<b>FACILITY NAME</b> <b>FACILITY ADDRESS, CITY, ST, ZIP</b>		<b>EDR SITE ID NUMBER</b>
<b>▼ MAP ID#</b>	Direction Distance Range (Distance feet / miles) Relative Elevation Feet Above Sea Level	ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency.
<b>Worksheet:</b>		
<b>Comments:</b> Comments may be added on the online Vapor Encroachment Worksheet.		

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

<b>CARLSEN MOTORS</b> <b>1730 EMBARCADERO RD, PALO ALTO, CA</b>		<b>S103177426</b>
<b>▲ 1</b>	NNE <1/10 (334 ft. / 0.063 mi.) Equal Elevation 8 ft. Above Sea Level	State and tribal leaking storage tank lists Other Standard Environmental Records

**Worksheet:**

**Impact on Target Property:** VEC Can Be Ruled Out

**Comments:** The site is closed by Santa Clara LUST cleanup site completed case closed.

Soil characteristics would make vapor migration from the source or plume unlikely.

**Conditions:**

Petroleum Hydrocarbon Chemicals of Concern: YES

**Groundwater Flow Gradient:**

Downgradient: YES

Hydrogeologically: YES

**Geological Attributes - Hydraulic Barrier:**

Wetlands: YES

**Geological Attributes - Physical Barrier:**

Impermeable soil layer: YES

**Geological Attributes - Soil Geology:**

Silty-clay, low-permeability soil: YES

**LUST: State and tribal leaking storage tank lists**

Region:	STATE
Global Id:	T0608502032
Latitude:	37.449059
Longitude:	-122.119257
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/30/1998

**MAP FINDINGS**

**CARLSEN MOTORS, 1730 EMBARCADERO RD, PALO ALTO, CA (Continued)**

Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not Reported
LOC Case Number:	Not Reported
File Location:	Stored electronically as an E-file
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	<a href="http://www.web.edmet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&amp;global_id=T0608502032">http://www.web.edmet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&amp;global_id=T0608502032</a>

**Contact:**

Global Id:	T0608502032
Contact Type:	Regional Board Caseworker
Contact Name:	ZSC
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY STREET, SUITE 1400
City:	OAKLAND
Email:	Not Reported
Phone Number:	Not Reported

Global Id:	T0608502032
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not Reported
Phone Number:	4089183400

**Regulatory Activities:**

Global Id:	T0608502032
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T0608502032
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Excavation
Global Id:	T0608502032
Action Type:	ENFORCEMENT
Date:	11/12/1996
Action:	Notice of Responsibility - #39186

**LUST REG 2:**

Region:	2
---------	---

MAP FINDINGS

**CARLSEN MOTORS, 1730 EMBARCADERO RD, PALO ALTO, CA (Continued)**

Facility Id: Not Reported  
 Facility Status: Case Closed  
 Case Number: 05S2W31R02F  
 How Discovered: Not Reported  
 Leak Cause: Not Reported  
 Leak Source: Not Reported  
 Date Leak Confirmed: Not Reported  
 Oversight Program: LUST  
 Prelim. Site Assessment Workplan Submitted: Not Reported  
 Preliminary Site Assessment Began: 10/8/1996  
 Pollution Characterization Began: 10/8/1996  
 Pollution Remediation Plan Submitted: Not Reported  
 Date Remediation Action Underway: Not Reported  
 Date Post Remedial Action Monitoring Began: 5/1/1997

**LUST SANTA CLARA:**

Region: SANTA CLARA  
 SCVWD ID: 05S2W31R02F  
 Date Closed: 01/30/1998

**CUPA SANTA CLARA: Other Standard Environmental Records**

Region: SANTA CLARA  
 Program Description: GENERATES 100 KG YR TO <5 TONS/YR  
 Region: SANTA CLARA  
 Program Description: PALO ALTO FIRE-BUSINESS PLAN (HMBP)

**CORTESE: Other Standard Environmental Records**

Region: CORTESE  
 Facility County Code: 43  
 Reg By: LTNKA  
 Reg Id: 43-2214

**HIST LUST SANTA CLARA: State and tribal leaking storage tank lists**

Region: SANTA CLARA  
 Region Code: 2  
 SCVWD ID: 05S2W31R02  
 Oversight Agency: SCVWD  
 Date Listed: 1996-11-12 03:00:00  
 Closed Date: 1998-01-30 00:00:00

MAP FINDINGS

STANFORD HONDA 1768 EMBARCADERO RD, PALO ALTO, CA,			1000314835
▲ 2	NE 1/10 - 1/3	(558 ft. / 0.106 mi.)	State and tribal leaking storage tank lists Other Standard Environmental Records
	Equal Elevation	8 ft. Above Sea Level	

**Worksheet:**

**Impact on Target Property:** VEC Can Be Ruled Out

**Comments:** The source is not within the area of concern, based on its distance, gradient and suspected chemical of concern.

The site is closed by Santa Clara LOP LUST cleanup site case closed.

Soil characteristics would make vapor migration from the source or plume unlikely.

**Conditions:**

Petroleum Hydrocarbon Chemicals of Concern: YES

**Groundwater Flow Gradient:**

Downgradient: YES

Hydrogeologically: YES

**Geological Attributes - Hydraulic Barrier:**

Wetlands: YES

**Geological Attributes - Physical Barrier:**

Impermeable soil layer: YES

**Geological Attributes - Soil Geology:**

Silty-clay, low-permeability soil: YES

**LUST: State and tribal leaking storage tank lists**

Region: STATE  
 Global Id: T0608501363  
 Latitude: 37.4508259562855  
 Longitude: -122.117307186427  
 Case Type: LUST Cleanup Site  
 Status: Completed - Case Closed  
 Status Date: 07/17/1995  
 Lead Agency: SANTA CLARA COUNTY LOP  
 Case Worker: UST  
 Local Agency: SANTA CLARA COUNTY LOP  
 RB Case Number: Not Reported  
 LOC Case Number: Not Reported  
 File Location: Stored electronically as an E-file  
 Potential Media Affect: Other Groundwater (uses other than drinking water)  
 Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating  
 Site History: Not Reported  
 Click here to access the California GeoTracker records for this facility: [http://www.wob.cdnet.com/ordering/switchboard/redirect.aspx?s=GRR\\_CA\\_LUST\\_ST&global\\_id=T0608501363](http://www.wob.cdnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0608501363)

**Contact:**

Global Id: T0608501363  
 Contact Type: Regional Board Caseworker  
 Contact Name: ZSC

MAP FINDINGS

**STANFORD HONDA, 1766 EMBARCADERO RD, PALO ALTO, CA (Continued)**

Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
 Address: 1515 CLAY STREET, SUITE 1400  
 City: OAKLAND  
 Email: Not Reported  
 Phone Number: Not Reported

Global Id: T0608501363  
 Contact Type: Local Agency Caseworker  
 Contact Name: UST CASE WORKER  
 Organization Name: SANTA CLARA COUNTY LOP  
 Address: 1555 Berger Drive, Suite 300  
 City: SAN JOSE  
 Email: Not Reported  
 Phone Number: 4089183400

**Regulatory Activities:**

Global Id: T0608501363  
 Action Type: ENFORCEMENT  
 Date: 07/17/1995  
 Action: Closure/No Further Action Letter

Global Id: T0608501363  
 Action Type: Other  
 Date: 01/01/1950  
 Action: Leak Reported

Global Id: T0608501363  
 Action Type: RESPONSE  
 Date: 04/28/1995  
 Action: Other Report / Document

Global Id: T0808501303  
 Action Type: ENFORCEMENT  
 Date: 04/25/1991  
 Action: Notice of Responsibility - #3918f

Global Id: T0608501363  
 Action Type: REMEDIATION  
 Date: 01/01/1950  
 Action: Excavation

Region: STATE  
 Global Id: T0608502336  
 Latitude: 37.4507578173723  
 Longitude: -122.11754322052  
 Case Type: LUST Cleanup Site  
 Status: Completed - Case Closed  
 Status Date: 01/12/1996  
 Lead Agency: SANTA CLARA COUNTY LOP  
 Case Worker: UST

MAP FINDINGS

**STANFORD HONDA, 1766 EMBARCADERO RD, PALO ALTO, CA (Continued)**

Local Agency: SANTA CLARA COUNTY LOP  
 RB Case Number: Not Reported  
 LOC Case Number: Not Reported  
 File Location: Stored electronically as an E-file  
 Potential Media Affect: Other Groundwater (uses other than drinking water)  
 Potential Contaminants of Concern: Gasoline  
 Site History: Not Reported  
 Click here to access the California GeoTracker records for this facility: [http://www.wab.adn.net/ordering/switchboard/redirect.aspx?s=GRR\\_CA\\_LUST\\_ST&global\\_id=T0608502336](http://www.wab.adn.net/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0608502336)

**Contact:**

Global Id: T0008502336  
 Contact Type: Regional Board Caseworker  
 Contact Name: ZSC  
 Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)  
 Address: 1515 CLAY STREET, SUITE 1400  
 City: OAKLAND  
 Email: Not Reported  
 Phone Number: Not Reported

Global Id: T0608502336  
 Contact Type: Local Agency Caseworker  
 Contact Name: LUST CASE WORKER  
 Organization Name: SANTA CLARA COUNTY LOP  
 Address: 1555 Berger Drive, Suite 300  
 City: SAN JOSE  
 Email: Not Reported  
 Phone Number: 4089183400

**Regulatory Activities:**

Global Id: T0608502336  
 Action Type: Other  
 Date: 01/01/1950  
 Action: Leak Reported

**LUST REG 2:**

Region: 2  
 Facility Id: Not Reported  
 Facility Status: Case Closed  
 Case Number: 05S2W31J01f  
 How Discovered: Not Reported  
 Leak Cause: Not Reported  
 Leak Source: Not Reported  
 Date Leak Confirmed: Not Reported  
 Oversight Program: LUST  
 Prelim. Site Assessment Workplan Submitted: Not Reported  
 Preliminary Site Assessment Began: 12/28/1990



MAP FINDINGS

**STANFORD HONDA, 1766 EMBARCADERO RD, PALO ALTO, CA (Continued)**

Pollution Characterization Began:	Not Reported
Pollution Remediation Plan Submitted:	Not Reported
Date Remediation Action Underway:	Not Reported
Date Post Remedial Action Monitoring Began:	Not Reported
Region:	2
Facility Id:	Not Reported
Facility Status:	Case Closed
Case Number:	05S2W31J02F
Flow Discovered:	Not Reported
Leak Cause:	Not Reported
Leak Source:	Not Reported
Date Leak Confirmed:	Not Reported
Oversight Program:	LUST
Prelim. Site Assessment Wdclplan Submitted:	Not Reported
Preliminary Site Assessment Began:	Not Reported
Pollution Characterization Began:	Not Reported
Pollution Remediation Plan Submitted:	Not Reported
Date Remediation Action Underway:	Not Reported
Date Post Remedial Action Monitoring Began:	Not Reported

**LUST SANTA CLARA:**

Region:	SANTA CLARA
SCVWD ID:	05S2W31J02F
Date Closed:	01/12/1998
Region:	SANTA CLARA
SCVWD ID:	05S2W31J01F
Date Closed:	07/17/1995

**CUPA SANTA CLARA: Other Standard Environmental Records**

Region:	SANTA CLARA
Program Description:	GENERATES 5 TO <25 TONS/YR
Region:	SANTA CLARA
Program Description:	PALO ALTO FIRE-BUSINESS PLAN (HMBP)

**CORTESE: Other Standard Environmental Records**

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-2107
Region:	CORTESE
Facility County Code:	43

MAP FINDINGS

**STANFORD HONDA, 1766 EMBARCADERO RD, PALO ALTO, CA (Continued)**

Reg By: LTNKA  
 Reg Id: 43-1388

**SLIC: State and Tribal leaking storage tank lists**

Region: STATE  
 Facility Status: Open - Site Assessment  
 Status Date: 11/25/2008  
 Global Id: T10000000684  
 Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)  
 Lead Agency Case Number: Not Reported  
 Latitude: 37.4505534002603  
 Longitude: -122.117414474487  
 Case Type: Cleanup Program Site  
 Case Worker: MBR  
 Local Agency: Not Reported  
 RB Case Number: 43S1123  
 File Location: Regional Board  
 Potential Media Affected: Other Groundwater (uses other than drinking water), Soil  
 Potential Contaminants of Concern: Diesel, Waste Oil / Motor / Hydraulic / Lubricating  
 Site History: Typical UST petroleum products have been used onsite. The USTs were removed in 1991 and case closure was granted in 1995/1996. Hydraulic lifts were removed from the site in 1994. 1. 1996 Stanford Honda 2. 1995 Stanford Auto Plaza 3. 1988 - Carlson Volkswagen/Saab/Chrysler Plymouth 4. 1982 - Carlson VW & Saab 5. 1978 - Carleen Carl R new cars 6. 1975 - Carlson Carl R VW 7. 1970 - Mozart VW 8. 1968 - auto dealership 9. 1930-1985 - agricultural use

Click here to access the California GeoTracker records for this facility: [http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR\\_CA\\_SLIC\\_ST&global\\_id=T10000000684](http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_SLIC_ST&global_id=T10000000684)

**HIST LUST SANTA CLARA: State and Tribal leaking storage tank lists**

Region: SANTA CLARA  
 Region Code: 2  
 SCVWD ID: 05S2W31J01  
 Oversight Agency: SCVWD  
 Date Listed: 1991-04-23 00:00:00  
 Closed Date: 1995-07-17 00:00:00

Region: SANTA CLARA  
 Region Code: 2  
 SCVWD ID: 05S2W31J02  
 Oversight Agency: SCVWD  
 Date Listed: 1996-01-12 00:00:00  
 Closed Date: 1996-01-12 00:00:00

MAP FINDINGS

COLLAGEN INC. 2560 FABER PL, PALO ALTO, CA		S103880593
▲ A3	ENE 1/10 - 1/3 (820 ft. / 0.155 mi.)	State and tribal leaking storage tank lists
	Equal Elevation 8 ft. Above Sea Level	

**Worksheet:**

**Groundwater Flow Gradient:**

Downgradient: YES

**HIST LUST SANTA CLARA: State and tribal leaking storage tank lists**

Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	05S2W31R01
Oversite Agency:	SFRWQCB
Date Listed:	1989-01-01 03:00:00
Closed Date:	1994-07-20 00:00:00

MAP FINDINGS

ANGIOTECH BIOMATERIALS CORP 2500 FABER PL, PALO ALTO, CA, 94303			1040276300
▲ A4	ENE 1/10 - 1/3	(820 ft. / 0.155 mi.)	State and tribal leaking storage tank lists
	Equal Elevation	8 ft. Above Sea Level	State and tribal registered storage tank lists Other Standard Environmental Records

**Worksheet:**

**Impact on Target Property:** VEC Can Be Ruled Out

**Comments:** The site is listed as Closure/no further action letter by RWQCB, case closed for waste oil/motor oil/hydraulic fluid.

Soil characteristics would make vapor migration from the source or plume unlikely.

**Conditions:**

Petroleum Hydrocarbon Chemicals of Concern: YES

**Groundwater Flow Gradient:**

Downgradient: YES

Hydrogeologically: YES

**Geological Attributes - Hydraulic Barrier:**

Wetlands: YES

**Geological Attributes - Physical Barrier:**

Impermeable soil layer: YES

**Geological Attributes - Soil Geology:**

Silty-clay, low-permeability soil: YES

**RCRA NonGen / NLR: Other Standard Environmental Records**

Date form received by agency: 02/04/2005  
 Facility name: ANGIOTECH BIOMATERIALS CORP  
 Facility address: 2500 FABER PL  
 PALO ALTO, CA 94303  
 EPA ID: CAD882006892  
 Mailing address: 1254 WILLO MAR DRIVE  
 ENV AND SAFETY MGMT LLC  
 SAN JOSE, CA 95118  
 Contact: SCOTT RENDLEMAN  
 Contact address: 1254 WILLO MAR DRIVE ENV AND SAFETY MGMT LLC  
 SAN JOSE, CA 95118  
 Contact country: US  
 Contact telephone: 408-005-0322  
 Contact email: Not Reported  
 EPA Region: 09  
 Classification: Non-Generator  
 Description: Handler: Non-Generators do not presently generate hazardous waste

**Owner/Operator Summary:**

Owner/operator name: ANGIOTECH BIOMATERIALS CORP  
 Owner/operator address: Not Reported  
 Owner/operator country: US

MAP FINDINGS

ANGIOTECH BIOMATERIALS CORP, 2500 FABER PL, PALO ALTO, CA 94303 (Continued)

Owner/operator telephone:	Not Reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	12/20/2004
Owner/Op end date:	Not Reported
Owner/operator name:	ANGIOTECH BIOMATERIALS CORP
Owner/operator address:	2500 FABER PL PALO ALTO, CA 94303
Owner/operator country:	US
Owner/operator telephone:	Not Reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	12/20/2004
Owner/Op end date:	Not Reported

Handler Activities Summary:

U.S. Importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground Injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
Used oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	08/04/1998
Facility name:	ANGIOTECH BIOMATERIALS CORP
Site name:	COHESION TECHNOLOGIES INC
Classification:	Small Quantity Generator

Hazardous Waste Summary:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Waste code:	D002

MAP FINDINGS

**ANGIOTECH BIOMATERIALS CORP, 2500 FABER PL, PALO ALTO, CA 94303 (Continued)**

Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D000

Waste name: MERCURY

Waste code: D035

Waste name: METHYL ETHYL KETONE

Waste code: D038

Waste name: PYRIDINE

Waste code: F003

Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005

Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

**SWEEPS UST: State and tribal registered storage tank lists**

Status: Active

Comp Number: 1818

Number: 9

Board Of Equalization: 44-026037

Referral Date: 07-01-85

Action Date: Not Reported

Created Date: 02-29-88

Tank Status: A

Owner Tank Id: SUMP2

Swrcb Tank Id: 43-006-001818-000001

Actv Date: 07-01-85

Capacity: 1000

Tank Use: UNKNOWN

Stg: W

Content: Not Reported

Number Of Tanks: 5

Status: Active

Comp Number: 1818

MAP FINDINGS

ANGIOTECH BIOMATERIALS CORP, 2500 FABER PL, PALO ALTO, CA 94303 (Continued)

Number: 9  
 Board Of Equalization: 44-026037  
 Referral Date: 07-01-85  
 Action Date: Not Reported  
 Created Date: 02-29-88  
 Tank Status: A  
 Owner Tank Id: T204  
 Swrcb Tank Id: 43-000-001818-000002  
 Actv Date: 07-01-85  
 Capacity: 5900  
 Tank Use: UNKNOWN  
 Slg: W  
 Content: Not Reported  
 Number Of Tanks: Not Reported

Status: Active  
 Comp Number: 1818  
 Number: 9  
 Board Of Equalization: 44-026037  
 Referral Date: 07-01-85  
 Action Date: Not Reported  
 Created Date: 02-29-88  
 Tank Status: A  
 Owner Tank Id: T205  
 Swrcb Tank Id: 43-006-001818-000003  
 Actv Date: 07-01-85  
 Capacity: 1480  
 Tank Use: UNKNOWN  
 Slg: W  
 Content: Not Reported  
 Number Of Tanks: Not Reported

Status: Active  
 Comp Number: 1818  
 Number: 9  
 Board Of Equalization: 44-026037  
 Referral Date: 07-01-85  
 Action Date: Not Reported  
 Created Date: 02-29-88  
 Tank Status: A  
 Owner Tank Id: T206  
 Swrcb Tank Id: 43-006-001818-000004  
 Actv Date: 07-01-85  
 Capacity: 2015  
 Tank Use: UNKNOWN  
 Slg: P  
 Content: Not Reported  
 Number Of Tanks: Not Reported

Status: Active  
 Comp Number: 1818

MAP FINDINGS

**ANGIOTECH BIOMATERIALS CORP, 2500 FABER PL, PALO ALTO, CA 94303 (Continued)**

Number: 9  
 Board Of Equalization: 44-026037  
 Referral Date: 07-01-85  
 Action Date: Not Reported  
 Created Date: 02-20-88  
 Tank Status: A  
 Owner Tank Id: TD  
 Swrcb Tank Id: 43-006-001818-000005  
 Actv Date: 07-01-85  
 Capacity: 571  
 Tank Use: M.V. FUEL  
 Stg: P  
 Content: DIESEL  
 Number Of Tanks: Not Reported

**LUST: State and tribal leaking storage tank lists**

Region: STATE  
 Global Id: T0608500443  
 Latitude: 37.4501  
 Longitude: -122.1155  
 Case Type: LUST Cleanup Site  
 Status: Completed - Case Closed  
 Status Date: 10/01/1997  
 Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)  
 Case Worker: UNK  
 Local Agency: SANTA CLARA COUNTY LOP  
 RB Case Number: 43-0392  
 LOC Case Number: Not Reported  
 File Location: Not Reported  
 Potential Media Affect: Soil  
 Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating  
 Site History: Not Reported

Click here to access the California GeoTracker records for this facility: [http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR\\_CA\\_LUST\\_ST&global\\_id=T0608500443](http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0608500443)

**Contact:**

Global Id: T0608500443  
 Contact Type: Local Agency Caseworker  
 Contact Name: UST CASE WORKER  
 Organization Name: SANTA CLARA COUNTY LOP  
 Address: 1555 Berger Drive, Suite 300  
 City: SAN JOSE  
 Email: Not Reported  
 Phone Number: 4089183400

Global Id: T0008500443  
 Contact Type: Regional Board Caseworker  
 Contact Name: RB 2  
 Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)



MAP FINDINGS

ANGIOTECH BIOMATERIALS CORP, 2500 FABER PL, PALO ALTO, CA 94303 (Continued)

Address: 1515 CLAY STREET, SUITE 1400  
 City: OAKLAND  
 Email: Not Reported  
 Phone Number: Not Reported

Regulatory Activities:

Global Id: T0608500443  
 Action Type: ENFORCEMENT  
 Date: 07/20/1994  
 Action: Closure/No Further Action Letter

Global Id: T0608500443  
 Action Type: Other  
 Date: 01/01/1990  
 Action: Leak Reported

Global Id: T0608500443  
 Action Type: Other  
 Date: 01/01/1990  
 Action: Leak Stopped

Global Id: T0608500443  
 Action Type: Other  
 Date: 01/01/1990  
 Action: Leak Discovery

Global Id: T0608500443  
 Action Type: RESPONSE  
 Date: 08/14/1987  
 Action: Other Report / Document

LUST REG 2:

Region: 2  
 Facility Id: 43-0392  
 Facility Status: Case Closed  
 Case Number: 43-0392  
 How Discovered: Tank Closure  
 Leak Cause: Structure Failure  
 Leak Source: Tank  
 Date Leak Confirmed: Not Reported  
 Oversight Program: LUST  
 Prelim. Site Assessment Workplan Submitted: Not Reported  
 Preliminary Site Assessment Began: Not Reported  
 Pollution Characterization Began: Not Reported  
 Pollution Remediation Plan Submitted: Not Reported  
 Date Remediation Action Underway: Not Reported  
 Date Post Remedial Action Monitoring Began: Not Reported

MAP FINDINGS

ANGIOTECH BIOMATERIALS CORP, 2500 FABER PL, PALO ALTO, CA 94303 (Continued)

**LUST SANTA CLARA:**

Region: SANTA CLARA  
 SCVWD ID: 05S2W31R01F  
 Date Closed: 07/20/1994

**CA FID UST: State and tribal registered storage tank lists**

Facility ID: 43000578  
 Regulated By: UTKKA  
 Regulated ID: 00001818  
 Cortese Code: Not Reported  
 SIC Code: Not Reported  
 Facility Phone: 4158560200  
 Mail To: Not Reported  
 Mailing Address: 2500 FABER PL  
 Mailing Address 2: Not Reported  
 Mailing City,St,Zip: PALO ALTO 94303  
 Contact: Not Reported  
 Contact Phone: Not Reported  
 DUNS Number: Not Reported  
 NPDES Number: Not Reported  
 EPA ID: Not Reported  
 Comments: Not Reported  
 Status: Active

**CORTESE: Other Standard Environmental Records**

Region: CORTESE  
 Facility County Code: 43  
 Reg By: LTNKA  
 Reg Id: 43-0302

**CUPA SANTA CLARA: Other Standard Environmental Records**

Region: SANTA CLARA  
 Program Description: GENERATES < 10 GAL/YR

**HIST UST: State and tribal registered storage tank lists**

Region: STATE  
 Facility ID: 0000001818  
 Facility Type: Other  
 Other Type: BIOMEDICAL RESEARCH  
 Total Tanks: 0006  
 Contact Name: PHIL KENT  
 Telephone: 4158560200  
 Owner Name: COLLAGEN CORPORATION  
 Owner Address: 2500 FABER PLACE

MAP FINDINGS

ANGIOTECH BIOMATERIALS CORP, 2500 FABER PL, PALO ALTO, CA 94303 (Continued)

Owner City,St,Zip: PALO ALTO, CA 94303

Tank Num: 001  
 Container Num: F  
 Year Installed: 1982  
 Tank Capacity: 00001000  
 Tank Used for: WASTE  
 Type of Fuel: Not Reported  
 Tank Construction: 2.5 inches  
 Leak Detection: Visual

Tank Num: 002  
 Container Num: SUMP2  
 Year Installed: 1977  
 Tank Capacity: 00001000  
 Tank Used for: WASTE  
 Type of Fuel: Not Reported  
 Tank Construction: 2.5 inches  
 Leak Detection: Visual

Tank Num: 003  
 Container Num: T204  
 Year Installed: 1984  
 Tank Capacity: 00005900  
 Tank Used for: WASTE  
 Type of Fuel: Not Reported  
 Tank Construction: 0.316 inches  
 Leak Detection: Visual, 10

Tank Num: 004  
 Container Num: T205  
 Year Installed: 1984  
 Tank Capacity: 00001480  
 Tank Used for: WASTE  
 Type of Fuel: Not Reported  
 Tank Construction: 0.268 inches  
 Leak Detection: Visual, 10

Tank Num: 005  
 Container Num: T206  
 Year Installed: 1984  
 Tank Capacity: 00002015  
 Tank Used for: PRODUCT  
 Type of Fuel: Not Reported  
 Tank Construction: 0.268 inches  
 Leak Detection: Visual, Stock Inventor, 10

Tank Num: 006  
 Container Num: TD  
 Year Installed: 1983  
 Tank Capacity: 00000971  
 Tank Used for: PRODUCT

MAP FINDINGS

ANGIOTECH BIOMATERIALS CORP, 2500 FABER PL, PALO ALTO, CA 94303 (Continued)

Type of Fuel:	DIESEL
Tank Construction:	Not Reported
Leak Detection:	Stock Inventor

MAP FINDINGS

OLD POST OFFICE PALO ALTO 2197 E BAYSHORE RD, PALO ALTO, CA,		S108223766
▼ B5	WNW 1/10 - 1/3 (1469 ft. / 0.282 mi.)	State and tribal leaking storage tank lists
	2 ft. Lower Elevation 6 ft. Above Sea Level	

**Worksheet:**

**Comments:** The hydrologic characteristics of the physical setting suggests that vapors would not migrate from the source to the target property.

Soil characteristics would make vapor migration from the source or plume unlikely.  
 Site is reported as closed.

**Conditions:**

Petroleum Hydrocarbon Chemicals of Concern: YES

**Groundwater Flow Gradient:**

Crossgradient: YES

Hydrogeologically: YES

**Geological Attributes - Physical Barrier:**

Impermeable soil layer: YES

**Geological Attributes - Soil Geology:**

Silty-clay, low-permeability soil: YES

**LUST SANTA CLARA: State and tribal leaking storage tank lists**

Region:	SANTA CLARA
SCVWD ID:	05S2W01K01F
Date Closed:	02/29/2000

MAP FINDINGS

OLD POST OFFICE PALO ALTO  
2197 E BAYSHORE RD, PALO ALTO, CA, 94303

S103472945

▼ B0	WNW 1/10 - 1/3	(1489 ft. / 0.282 mi.)	State and tribal leaking storage tank lists
	2 ft. Lower Elevation	6 ft. Above Sea Level	

**Worksheet:**

**Impact on Target Property:** VEC Can Be Ruled Out

**Comments:** The hydrologic characteristics of the physical setting suggests that vapors would not migrate from the source to the target property.

The site is listed as LUST cleanup site completed case closed by Santa Clara LOP.

**Conditions:**

Petroleum Hydrocarbon Chemicals of Concern: YES

**Groundwater Flow Gradient:**

Crossgradient: YES

Hydrogeologically: YES

**Geological Attributes - Physical Barrier:**

Impermeable soil layer: YES

**Geological Attributes - Soil Geology:**

Silty-clay, low-permeability soil: YES

**LUST: State and tribal leaking storage tank lists**

Region:	STATE
Global Id:	T0608500996
Latitude:	37.450331
Longitude:	-122.12171
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	02/29/2000
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not Reported
LOC Case Number:	Not Reported
File Location:	Stored electronically as an E-file
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	<a href="http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&amp;global_id=T0608500996">http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&amp;global_id=T0608500996</a>

**Contact:**

Global Id:	T0608500996
Contact Type:	Regional Board Caseworker
Contact Name:	ZSC
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY STREET, SUITE 1400
City:	OAKLAND
Email:	Not Reported

MAP FINDINGS

**OLD POST OFFICE PALO ALTO, 2197 E BAYSHORE RD, PALO ALTO, CA 94303 (Continued)**

Phone Number: Not Reported  
 Global Id: T0608500996  
 Contact Type: Local Agency Caseworker  
 Contact Name: UST CASE WORKER  
 Organization Name: SANTA CLARA COUNTY LOP  
 Address: 1555 Berger Drive, Suite 300  
 City: SAN JOSE  
 Email: Not Reported  
 Phone Number: 4080183400

**Regulatory Activities:**

Global Id: T0608500996  
 Action Type: Other  
 Date: 01/01/1950  
 Action: Leak Reported

Global Id: T0608500996  
 Action Type: RESPONSE  
 Date: 12/09/1989  
 Action: Soil and Water investigation Report

Global Id: T0608500996  
 Action Type: RESPONSE  
 Date: 08/07/1988  
 Action: Soil and Water Investigation Workplan

Global Id: T0608500996  
 Action Type: ENFORCEMENT  
 Date: 05/03/1984  
 Action: Notice of Responsibility - #39182

Global Id: T0608500996  
 Action Type: ENFORCEMENT  
 Date: 10/14/1988  
 Action: Staff Letter - #18257

Global Id: T0608500996  
 Action Type: ENFORCEMENT  
 Date: 07/24/1988  
 Action: Staff Letter - #18255

**LUST REG 2:**

Region: 2  
 Facility Id: Not Reported  
 Facility Status: Case Closed  
 Case Number: 05S2W31K01f  
 How Discovered: Not Reported  
 Leak Cause: Not Reported  
 Leak Source: Not Reported

MAP FINDINGS

**OLD POST OFFICE PALO ALTO, 2197 E BAYSHORE RD, PALO ALTO, CA 94303 (Continued)**

Date Leak Confirmed:	Not Reported
Oversight Program:	LUST
Prelim. Site Assessment Workplan Submitted:	Not Reported
Preliminary Site Assessment Began:	5/3/1984
Pollution Characterization Began:	8/13/1999
Pollution Remediation Plan Submitted:	Not Reported
Date Remediation Action Underway:	Not Reported
Date Post Remedial Action Monitoring Began:	Not Reported

**HIST LUST SANTA CLARA: State and tribal leaking storage tank lists**

Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	0552W31K01
Oversite Agency:	SCVWD
Date Listed:	1985-01-01 00:00:00
Closed Date:	2000-02-29 00:00:00



## RECORD SOURCES AND CURRENCY

To maintain currency of the following databases, EDR contacts the appropriate agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

### STANDARD ENVIRONMENTAL RECORDS

#### **PRP: Potentially Responsible Parties**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

A listing of verified Potentially Responsible Parties

Date of Government Version: 12/07/2012                      Source: EPA  
Number of Days to Update: 60                                      Telephone: 202-564-6023  
Last EDR Contact :04/04/2013

#### **RMP: Risk Management Plans**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g. the fire department) should an accident occur.

Date of Government Version: 05/08/2012                      Source: Environmental Protection Agency  
Number of Days to Update: 48                                      Telephone: 202-564-8800  
Last EDR Contact :04/29/2013

#### **ALAMEDA CO. UST: Underground Tanks**

Standard Environmental Record Source: State and tribal registered storage tank lists  
Underground storage tank sites located in Alameda county.

Date of Government Version: 04/15/2013                      Source: Alameda County Environmental Health Services  
Number of Days to Update: 30                                      Telephone: 510-507-0700  
Last EDR Contact :04/01/2013

#### **AST: Aboveground Petroleum Storage Tank Facilities**

Standard Environmental Record Source: State and tribal registered storage tank lists  
Search Distance: Property

Registered Aboveground Storage Tanks.

Date of Government Version: 08/01/2009                      Source: State Water Resources Control Board  
Number of Days to Update: 21                                      Telephone: 916-327-5032  
Last EDR Contact :04/06/2013

#### **Alameda County CS: Contaminated Sites**

Standard Environmental Record Source: State and tribal leaking storage tank lists  
Search Distance: 0.333 Mile

## RECORD SOURCES AND CURRENCY

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/15/2013

Source: Alameda County Environmental Health Services

Number of Days to Update: 30

Telephone: 510-867-8700

Last EDR Contact :04/01/2013

### CA BOND EXP. PLAN: Bond Expenditure Plan

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Department of Health Services developed a *site-specific* expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989

Source: Department of Health Services

Number of Days to Update: 6

Telephone: 916-255-2118

Last EDR Contact :05/31/1994

### CA FID UST: Facility Inventory Database

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994

Source: California Environmental Protection Agency

Number of Days to Update: 24

Telephone: 916-341-5851

Last EDR Contact :12/26/1998

### CA LA LF: City of Los Angeles Landfills

Standard Environmental Record Source: State and tribal landfill / solid waste disposal

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2008

Source: Engineering & Construction Division

Number of Days to Update: 29

Telephone: 213-473-7869

Last EDR Contact :05/20/2013

### CDL: Clandestine Drug Labs

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2012

Source: Department of Toxic Substances Control

Number of Days to Update: 41

Telephone: 916-255-6504

Last EDR Contact :04/01/2013

### CHMIRS: California Hazardous Material Incident Report System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

## RECORD SOURCES AND CURRENCY

Date of Government Version: 12/06/2012  
Number of Days to Update: 49  
Last EDR Contact :05/01/2013

Source: Office of Emergency Services  
Telephone: 916-845-8400

### **CONTRA COSTA CO. SITE LIST: Site List**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: 0.25 Mile

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 04/09/2013  
Number of Days to Update: 34  
Last EDR Contact :05/06/2013

Source: Contra Costa Health Services Department  
Telephone: 925-346-2280

### **CORTESE: "Cortese" Hazardous Waste & Substances Sites List**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: 0.333 Mile

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cat-Sites).

Date of Government Version: 04/01/2013  
Number of Days to Update: 42  
Last EDR Contact :04/02/2013

Source: CAL EPA/Office of Emergency Information  
Telephone: 916-323-3400

### **CUPA AMADOR: CUPA Facility List**

Standard Environmental Record Source: Other Standard Environmental Records  
Cupa Facility List

Date of Government Version: 03/13/2013  
Number of Days to Update: 21  
Last EDR Contact :03/11/2013

Source: Amador County Environmental Health  
Telephone: 209-223-6438

### **CUPA BUTTE: CUPA Facility Listing**

Standard Environmental Record Source: Other Standard Environmental Records  
Cupa facility list.

Date of Government Version: 10/16/2012  
Number of Days to Update: 27  
Last EDR Contact :04/20/2013

Source: Public Health Department  
Telephone: 530-538-7149

### **CUPA CALVERAS: CUPA Facility Listing**

Standard Environmental Record Source: Other Standard Environmental Records  
Cupa Facility Listing

Date of Government Version: 04/16/2013  
Number of Days to Update: 29  
Last EDR Contact :04/15/2013

Source: Calveras County Environmental Health  
Telephone: 209-754-6399

### **CUPA COLUSA: CUPA Facility List**

Standard Environmental Record Source: Other Standard Environmental Records  
Cupa facility list.

Date of Government Version: 01/04/2013  
Number of Days to Update: 46

Source: Health & Human Services  
Telephone: 530-458-6396

## RECORD SOURCES AND CURRENCY

Last EDR Contact :05/13/2013

### **CUPA DEL NORTE:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
Cupa Facility list

Date of Government Version: 01/09/2013  
Number of Days to Update: 46  
Last EDR Contact :05/09/2013

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426

### **CUPA EL DORADO:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
CUPA facility list.

Date of Government Version: 02/27/2013  
Number of Days to Update: 25  
Last EDR Contact :05/06/2013

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-8623

### **CUPA FRESNO:** CUPA Resources List

Standard Environmental Record Source: Other Standard Environmental Records  
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 03/31/2013  
Number of Days to Update: 30  
Last EDR Contact :04/16/2013

Source: Dept. of Community Health  
Telephone: 559-445-3271

### **CUPA HUMBOLDT:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
CUPA facility list.

Date of Government Version: 03/15/2013  
Number of Days to Update: 6  
Last EDR Contact :02/25/2013

Source: Humboldt County Environmental Health  
Telephone: Not Reported

### **CUPA IMPERIAL:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
Cupa facility list.

Date of Government Version: 05/01/2012  
Number of Days to Update: 40  
Last EDR Contact :04/29/2013

Source: San Diego Border Field Office  
Telephone: 760-339-2777

### **CUPA INYO:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
Cupa facility list.

Date of Government Version: 06/26/2012  
Number of Days to Update: 51  
Last EDR Contact :02/25/2013

Source: Inyo County Environmental Health Services  
Telephone: 760-878-0238

### **CUPA KINGS:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

## RECORD SOURCES AND CURRENCY

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/12/2013  
Number of Days to Update: 36  
Last EDR Contact :02/12/2013

Source: Kings County Department of Public Health  
Telephone: 559-584-1411

### **CUPA LAKE:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
Cupa facility list

Date of Government Version: 01/23/2013  
Number of Days to Update: 33  
Last EDR Contact :04/19/2013

Source: Lake County Environmental Health  
Telephone: 707-263-1164

### **CUPA MADERA:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 04/15/2013  
Number of Days to Update: 31  
Last EDR Contact :04/01/2013

Source: Madera County Environmental Health  
Telephone: 559-875-7923

### **CUPA MERCED:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
CUPA facility list.

Date of Government Version: 02/25/2013  
Number of Days to Update: 27  
Last EDR Contact :02/25/2013

Source: Merced County Environmental Health  
Telephone: 209-381-1094

### **CUPA MONO:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
CUPA Facility List

Date of Government Version: 03/04/2013  
Number of Days to Update: 17  
Last EDR Contact :03/04/2013

Source: Mono County Health Department  
Telephone: 760-932-5580

### **CUPA MONTEREY:** CUPA Facility Listing

Standard Environmental Record Source: Other Standard Environmental Records  
CUPA Program Listing from the Environmental Health Division.

Date of Government Version: 03/14/2013  
Number of Days to Update: 12  
Last EDR Contact :02/25/2013

Source: Monterey County Health Department  
Telephone: 831-786-1207

### **CUPA NEVADA:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

## RECORD SOURCES AND CURRENCY

CUPA facility list.

Date of Government Version: 03/08/2013  
Number of Days to Update: 17  
Last EDR Contact :05/17/2013

Source: Community Development Agency  
Telephone: 530-265-1467

### **CUPA SAN LUIS OBISPO:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
Cupa Facility List.

Date of Government Version: 02/26/2013  
Number of Days to Update: 27  
Last EDR Contact :02/25/2013

Source: San Luis Obispo County Public Health Department  
Telephone: 805-781-5696

### **CUPA SANTA BARBARA:** CUPA Facility Listing

Standard Environmental Record Source: Other Standard Environmental Records  
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 05/08/2011  
Number of Days to Update: 28  
Last EDR Contact :05/20/2013

Source: Santa Barbara County Public Health Department  
Telephone: 805-886-8167

### **CUPA SANTA CLARA:** Cupa Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
Cupa facility list

Date of Government Version: 03/04/2013  
Number of Days to Update: 20  
Last EDR Contact :03/04/2013

Source: Department of Environmental Health  
Telephone: 408-918-1973

### **CUPA SANTA CRUZ:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
CUPA facility listing.

Date of Government Version: 02/20/2013  
Number of Days to Update: 22  
Last EDR Contact :02/25/2013

Source: Santa Cruz County Environmental Health  
Telephone: 831-464-2781

### **CUPA SHASTA:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
Cupa Facility List.

Date of Government Version: 03/15/2013  
Number of Days to Update: 12  
Last EDR Contact :02/25/2013

Source: Shasta County Department of Resource Management  
Telephone: 530-225-5789

### **CUPA SONOMA:** Cupa Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
Cupa Facility list

Date of Government Version: 04/01/2013  
Number of Days to Update: 41  
Last EDR Contact :04/01/2013

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-505-1174

## RECORD SOURCES AND CURRENCY

### **CUPA TUOLUMNE:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
Cupa facility list

Date of Government Version: 01/14/2013  
Number of Days to Update: 42  
Last EDR Contact :05/15/2013

Source: Division of Environmental Health  
Telephone: 209-533-5633

### **CUPA YUBA:** CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records  
CUPA facility listing for Yuba County.

Date of Government Version: 03/05/2013  
Number of Days to Update: 18  
Last EDR Contact :05/20/2013

Source: Yuba County Environmental Health Department  
Telephone: 530-749-7523

### **DEED:** Deed Restriction Listing

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: 0.333 Mile

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/11/2013  
Number of Days to Update: 13  
Last EDR Contact :03/12/2013

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400

### **DRYCLEANERS:** Cleaner Facilities

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: 0.25 Mile

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholstery cleaning; industrial laundries; laundry and garment services.

Date of Government Version: 12/11/2012  
Number of Days to Update: 23  
Last EDR Contact :03/11/2013

Source: Department of Toxic Substance Control  
Telephone: 910-327-4498

### **EL SEGUNDO UST:** City of El Segundo Underground Storage Tank

Standard Environmental Record Source: State and tribal registered storage tank lists  
Underground storage tank sites located in El Segundo city.

Date of Government Version: 04/22/2013  
Number of Days to Update: 18  
Last EDR Contact :04/19/2013

Source: City of El Segundo Fire Department  
Telephone: 310-524-2236

### **EMI:** Emissions Inventory Data

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

## RECORD SOURCES AND CURRENCY

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2008

Source: California Air Resources Board

Number of Days to Update: 19

Telephone: 916-322-2990

Last EDR Contact :03/26/2013

### ENF: Enforcement Action Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/26/2013

Source: State Water Resources Control Board

Number of Days to Update: 17

Telephone: 916-445-9379

Last EDR Contact :04/20/2013

### ENVIROSTOR: EnviroStor Database

Standard Environmental Record Source: State and tribal - equivalent CERCLIS

Search Distance: 0.333 Mile

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 03/13/2013

Source: Department of Toxic Substances Control

Number of Days to Update: 13

Telephone: 916-323-3400

Last EDR Contact :05/07/2013

### HAULERS: Registered Waste Tire Haulers Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of registered waste tire haulers.

Date of Government Version: 04/26/2013

Source: Integrated Waste Management Board

Number of Days to Update: 20

Telephone: 916-341-3472

Last EDR Contact :05/20/2013

### HAZNET: Facility and Manifest Data

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2011

Source: California Environmental Protection Agency

Number of Days to Update: 14

Telephone: 916-255-1136

Last EDR Contact :04/19/2013

### HIST CAL-SITES: CalSites Database

Standard Environmental Record Source: State and tribal - equivalent CERCLIS



## RECORD SOURCES AND CURRENCY

Search Distance: 0.333 Mile

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005

Source: Department of Toxic Substances Control

Number of Days to Update: 21

Telephone: 916-323-3400

Last EDR Contact :02/23/2009

### HIST CORTESE: Hazardous Waste & Substance Site List

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (CALSTITES). This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001

Source: Department of Toxic Substances Control

Number of Days to Update: 76

Telephone: 916-323-3400

Last EDR Contact :01/23/2009

### HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

Standard Environmental Record Source: State and tribal leaking storage tank lists

Search Distance: 0.333 Mile

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005

Source: Santa Clara Valley Water District

Number of Days to Update: 22

Telephone: 408-285-2600

Last EDR Contact :03/23/2009

### HIST UST: Hazardous Substance Storage Container Database

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990

Source: State Water Resources Control Board

Number of Days to Update: 18

Telephone: 916-341-5851

Last EDR Contact :07/26/2001

### HWP: EnviroStor Permitted Facilities Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/25/2013

Source: Department of Toxic Substances Control

Number of Days to Update: 27

Telephone: 916-323-3400

Last EDR Contact :02/26/2013

### HWT: Registered Hazardous Waste Transporter Database

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

## RECORD SOURCES AND CURRENCY

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/15/2013  
Number of Days to Update: 31  
Last EDR Contact :04/16/2013

Source: Department of Toxic Substances Control  
Telephone: 916-440-7145

### **KERN CO. UST: Underground Storage Tank Sites & Tank Listing**

Standard Environmental Record Source: State and tribal registered storage tank lists  
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010  
Number of Days to Update: 29  
Last EDR Contact :05/10/2013

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700

### **LA Co. Site Mitigation: Site Mitigation List**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/30/2013  
Number of Days to Update: 32  
Last EDR Contact :04/19/2013

Source: Community Health Services  
Telephone: 323-890-7806

### **LDS: Land Disposal Sites Listing**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 03/18/2013  
Number of Days to Update: 8  
Last EDR Contact :05/02/2013

Source: State Water Quality Control Board  
Telephone: 866-480-1028

### **LIENS: Environmental Liens Listing**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/15/2013  
Number of Days to Update: 12  
Last EDR Contact :03/11/2013

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400

### **LONG BEACH UST: City of Long Beach Underground Storage Tank**

Standard Environmental Record Source: State and tribal registered storage tank lists  
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003  
Number of Days to Update: 34  
Last EDR Contact :04/20/2013

Source: City of Long Beach Fire Department  
Telephone: 562-570-2563

### **LOS ANGELES CO. HMS: HMS: Street Number List**

## RECORD SOURCES AND CURRENCY

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/31/2012  
Number of Days to Update: 28  
Last EDR Contact :04/15/2013

Source: Department of Public Works  
Telephone: 626-458-3517

### LOS ANGELES CO. LF: List of Solid Waste Facilities

Standard Environmental Record Source: State and tribal landfill / solid waste disposal  
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/24/2013  
Number of Days to Update: 23  
Last EDR Contact :04/24/2013

Source: La County Department of Public Works  
Telephone: 818-458-5185

### LUST: Geotracker's Leaking Underground Fuel Tank Report

Standard Environmental Record Source: State and tribal leaking storage tank lists  
Search Distance: 0.333 Mile

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 03/18/2013  
Number of Days to Update: 8  
Last EDR Contact :05/02/2013

Source: State Water Resources Control Board  
Telephone: see region list

### LUST REG 1: Active Toxic Site investigation

Standard Environmental Record Source: State and tribal leaking storage tank lists

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001  
Number of Days to Update: 29  
Last EDR Contact :08/01/2011

Source: California Regional Water Quality Control Board North Coast (1)  
Telephone: 707-570-3769

### LUST REG 2: Fuel Leak List

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 08/30/2004  
Number of Days to Update: 30  
Last EDR Contact :09/19/2011

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-622-2433

### LUST REG 3: Leaking Underground Storage Tank Database

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003  
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-542-4786

## RECORD SOURCES AND CURRENCY

Last EDR Contact :07/10/2011

### LUST REG 4: Underground Storage Tank Leak List

Standard Environmental Record Source: State and tribal leaking storage tank lists

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004

Source: California Regional Water Quality Control Board Los Angeles Region (4)

Number of Days to Update: 35

Telephone: 213-576-6710

Last EDR Contact :09/06/2011

### LUST REG 5: Leaking Underground Storage Tank Database

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calaveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumna, Yolo, Yuba counties.

Date of Government Version: 07/01/2008

Source: California Regional Water Quality Control Board Central Valley Region (5)

Number of Days to Update: 9

Telephone: 916-464-4834

Last EDR Contact :07/01/2011

### LUST REG 6L: Leaking Underground Storage Tank Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/08/2003

Source: California Regional Water Quality Control Board Lahontan Region (6)

Number of Days to Update: 27

Telephone: 530-542-5572

Last EDR Contact :09/12/2011

### LUST REG 6V: Leaking Underground Storage Tank Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005

Source: California Regional Water Quality Control Board Victorville Branch Office (6)

Number of Days to Update: 22

Telephone: 760-241-7385

Last EDR Contact :09/12/2011

### LUST REG 7: Leaking Underground Storage Tank Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)

Number of Days to Update: 27

Telephone: 700-778-8843

Last EDR Contact :08/01/2011

### LUST REG 8: Leaking Underground Storage Tanks

Standard Environmental Record Source: State and tribal leaking storage tank lists

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005

Source: California Regional Water Quality Control Board Santa Ana Region (8)

## RECORD SOURCES AND CURRENCY

Number of Days to Update: 41  
Last EDR Contact :08/15/2011

Telephone: 909-782-4496

### LUST REG 9: Leaking Underground Storage Tank Report

Standard Environmental Record Source: State and tribal leaking storage tank lists  
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001

Source: California Regional Water Quality Control Board San Diego Region (9)

Number of Days to Update: 28  
Last EDR Contact :09/20/2011

Telephone: 858-637-5595

### LUST SANTA CLARA: LOP Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists  
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/04/2013

Source: Department of Environmental Health

Number of Days to Update: 19  
Last EDR Contact :03/04/2013

Telephone: 408-918-3417

### MARIN CO. UBT: Underground Storage Tank Sites

Standard Environmental Record Source: State and tribal registered storage tank lists  
Currently permitted USTs in Marin County.

Date of Government Version: 11/26/2012

Source: Public Works Department Waste Management

Number of Days to Update: 54  
Last EDR Contact :04/08/2013

Telephone: 415-499-8047

### MCS: Military Cleanup Sites Listing

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 03/18/2013

Source: State Water Resources Control Board

Number of Days to Update: 8  
Last EDR Contact :05/02/2013

Telephone: 866-480-1028

### MED WASTE VENTURA: Medical Waste Program List

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 01/28/2013

Source: Ventura County Resource Management Agency

Number of Days to Update: 47  
Last EDR Contact :01/28/2013

Telephone: 805-854-2813

### MWMP: Medical Waste Management Program Listing

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

## RECORD SOURCES AND CURRENCY

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 03/06/2013  
Number of Days to Update: 13  
Last EDR Contact :02/11/2013

Source: Department of Public Health  
Telephone: 916-558-1784

### **NAPA CO. LUST: Sites With Reported Contamination**

Standard Environmental Record Source: State and tribal leaking storage tank lists  
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011  
Number of Days to Update: 63  
Last EDR Contact :03/04/2013

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269

### **NAPA CO. UST: Closed and Operating Underground Storage Tank Sites**

Standard Environmental Record Source: State and tribal registered storage tank lists  
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008  
Number of Days to Update: 23  
Last EDR Contact :03/04/2013

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269

### **NOTIFY 65: Proposition 65 Records**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993  
Number of Days to Update: 18  
Last EDR Contact :03/25/2013

Source: State Water Resources Control Board  
Telephone: 916-445-3846

### **NPDES: NPDES Permits Listing**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/16/2013  
Number of Days to Update: 30  
Last EDR Contact :02/16/2013

Source: State Water Resources Control Board  
Telephone: 916-445-9379

### **ORANGE CO. LUST: List of Underground Storage Tank Cleanups**

Standard Environmental Record Source: State and tribal leaking storage tank lists  
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 02/04/2013  
Number of Days to Update: 29  
Last EDR Contact :05/10/2013

Source: Health Care Agency  
Telephone: 714-834-3446

### **ORANGE CO. UST: List of Underground Storage Tank Facilities**

Standard Environmental Record Source: State and tribal registered storage tank lists

## RECORD SOURCES AND CURRENCY

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/04/2013

Source: Health Care Agency

Number of Days to Update: 37

Telephone: 714-834-3446

Last EDR Contact :05/10/2013

**Orange Co. Industrial Site:** List of Industrial Site Cleanups

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Petroleum and non-petroleum spills.

Date of Government Version: 02/04/2013

Source: Health Care Agency

Number of Days to Update: 22

Telephone: 714-834-3446

Last EDR Contact :05/10/2013

**PLACER CO. MS:** Master List of Facilities

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.25 Mile

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/12/2013

Source: Placer County Health and Human Services

Number of Days to Update: 14

Telephone: 530-745-2363

Last EDR Contact :03/11/2013

**PROC:** Certified Processors Database

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

A listing of certified processors.

Date of Government Version: 03/19/2013

Source: Department of Conservation

Number of Days to Update: 8

Telephone: 916-323-3836

Last EDR Contact :03/19/2013

**RESPONSE:** State Response Sites

Standard Environmental Record Source: State and tribal - equivalent NPL

Search Distance: 0.333 Mile

identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 03/13/2013

Source: Department of Toxic Substances Control

Number of Days to Update: 13

Telephone: 916-323-3400

Last EDR Contact :05/07/2013

**RIVERSIDE CO. LUST:** Listing of Underground Tank Cleanup Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/23/2013

Source: Department of Environmental Health

Number of Days to Update: 23

Telephone: 951-358-5055

Last EDR Contact :01/25/2013

**RIVERSIDE CO. UST:** Underground Storage Tank Tank List

## RECORD SOURCES AND CURRENCY

Standard Environmental Record Source: State and tribal registered storage tank lists  
Underground storage tank sites located in Riverside county.

Date of Government Version: 04/23/2013  
Number of Days to Update: 22  
Last EDR Contact :03/25/2013

Source: Department of Environmental Health  
Telephone: 951-358-5055

### **SAN DIEGO CO. HMMD:** Hazardous Materials Management Division Database

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 08/17/2012  
Number of Days to Update: 44  
Last EDR Contact :04/29/2013

Source: Hazardous Materials Management Division  
Telephone: 619-338-2288

### **SAN DIEGO CO. LF:** Solid Waste Facilities

Standard Environmental Record Source: State and tribal landfill / solid waste disposal  
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2012  
Number of Days to Update: 24  
Last EDR Contact :04/26/2013

Source: Department of Health Services  
Telephone: 619-338-2209

### **SAN DIEGO CO. SAM:** Environmental Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists  
Search Distance: 0.333 Mile

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010  
Number of Days to Update: 24  
Last EDR Contact :03/12/2013

Source: San Diego County Department of Environmental Health  
Telephone: 619-338-2371

### **SAN FRANCISCO CO. LUST:** Local Oversight Facilities

Standard Environmental Record Source: State and tribal leaking storage tank lists  
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008  
Number of Days to Update: 19  
Last EDR Contact :05/10/2013

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920

### **SAN FRANCISCO CO. UST:** Underground Storage Tank Information

Standard Environmental Record Source: State and tribal registered storage tank lists  
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010  
Number of Days to Update: 5

Source: Department of Public Health  
Telephone: 415-252-3920



## RECORD SOURCES AND CURRENCY

Last EDR Contact :05/10/2013

### **SAN JOSE HAZMAT:** Hazardous Material Facilities

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 02/12/2013

Source: City of San Jose Fire Department

Number of Days to Update: 34

Telephone: 408-535-7394

Last EDR Contact :05/13/2013

### **SAN MATEO CO. LUST:** Fuel Leak List

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/18/2013

Source: San Mateo County Environmental Health Services Division

Number of Days to Update: 8

Telephone: 650-363-1921

Last EDR Contact :03/18/2013

### **SCH:** School Property Evaluation Program

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 03/13/2013

Source: Department of Toxic Substances Control

Number of Days to Update: 13

Telephone: 916-323-3400

Last EDR Contact :05/07/2013

### **SLIC:** Statewide SLIC Cases

Standard Environmental Record Source: State and tribal leaking storage tank lists

Search Distance: 0.333 Mile

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 03/18/2013

Source: State Water Resources Control Board

Number of Days to Update: 8

Telephone: 866-480-1028

Last EDR Contact :05/02/2013

### **SLIC REG 1:** Active Toxic Site Investigations

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003

Source: California Regional Water Quality Control Board, North Coast Region (1)

Number of Days to Update: 18

Telephone: 707-576-2220

Last EDR Contact :08/01/2011

### **SLIC REG 2:** Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

## RECORD SOURCES AND CURRENCY

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004

Source: Regional Water Quality Control Board San Francisco Bay Region (2)

Number of Days to Update: 30

Telephone: 510-288-0457

Last EDR Contact :08/19/2011

### SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/16/2006

Source: California Regional Water Quality Control Board Central Coast Region (3)

Number of Days to Update: 28

Telephone: 805-549-3147

Last EDR Contact :07/16/2011

### SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004

Source: Region Water Quality Control Board Los Angeles Region (4)

Number of Days to Update: 47

Telephone: 213-570-6800

Last EDR Contact :07/01/2011

### SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005

Source: Regional Water Quality Control Board Central Valley Region (5)

Number of Days to Update: 16

Telephone: 816-464-3291

Last EDR Contact :09/12/2011

### SLIC REG 6L: SLIC Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004

Source: California Regional Water Quality Control Board, Lahontan Region

Number of Days to Update: 35

Telephone: 530-542-5574

Last EDR Contact :08/15/2011

### SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2006

Source: Regional Water Quality Control Board, Victorville Branch

Number of Days to Update: 22

Telephone: 619-241-6583

Last EDR Contact :08/15/2011

## RECORD SOURCES AND CURRENCY

### SLIC REG 7: SLIC List

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004

Source: California Regional Quality Control Board, Colorado River Basin Region

Number of Days to Update: 30

Telephone: 760-346-7481

Last EDR Contact :08/01/2011

### SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008

Source: California Region Water Quality Control Board Santa Ana Region (8)

Number of Days to Update: 11

Telephone: 951-782-3298

Last EDR Contact :08/12/2011

### SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007

Source: California Regional Water Quality Control Board San Diego Region (9)

Number of Days to Update: 17

Telephone: 858-467-2980

Last EDR Contact :08/08/2011

### SOLANO CO. LUST: Leaking Underground Storage Tanks

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/20/2013

Source: Solano County Department of Environmental Management

Number of Days to Update: 47

Telephone: 707-784-6770

Last EDR Contact :03/16/2013

### SOLANO CO. UST: Underground Storage Tanks

Standard Environmental Record Source: State and tribal registered storage tank lists

Underground storage tank sites located in Solano county.

Date of Government Version: 03/20/2013

Source: Solano County Department of Environmental Management

Number of Days to Update: 46

Telephone: 707-784-6770

Last EDR Contact :03/18/2013

### SONOMA CO. LUST: Leaking Underground Storage Tank Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/02/2013

Source: Department of Health Services

Number of Days to Update: 41

Telephone: 707-565-6565

Last EDR Contact :04/01/2013

### SUTTER CO. UST: Underground Storage Tanks

## RECORD SOURCES AND CURRENCY

Standard Environmental Record Source: State and tribal registered storage tank lists  
Underground storage tank sites located in Sutter county.

Date of Government Version: 03/13/2013  
Number of Days to Update: 13  
Last EDR Contact :03/11/2013

Source: Sutter County Department of Agriculture  
Telephone: 530-822-7500

### **SWEEPS UST: SWEEPS UST Listing**

Standard Environmental Record Source: State and tribal registered storage tank lists  
Search Distance: Property

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 03/01/1994  
Number of Days to Update: 35  
Last EDR Contact :03/03/2005

Source: State Water Resources Control Board  
Telephone: Not Reported

### **SWF/LF (SWIS): Solid Waste Information System**

Standard Environmental Record Source: State and tribal landfill / solid waste disposal  
Search Distance: 0.333 Mile

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/18/2013  
Number of Days to Update: 30  
Last EDR Contact :02/18/2013

Source: Department of Resources Recycling and Recovery  
Telephone: 916-341-6320

### **SWRCY: Recycler Database**

Standard Environmental Record Source: State and tribal landfill / solid waste disposal  
Search Distance: 0.333 Mile

A listing of recycling facilities in California.

Date of Government Version: 03/18/2013  
Number of Days to Update: 8  
Last EDR Contact :03/19/2013

Source: Department of Conservation  
Telephone: 916-323-3838

### **Sacramento Co. CS: Toxic Site Clean-Up List**

Standard Environmental Record Source: State and tribal leaking storage tank lists  
Search Distance: 0.333 Mile

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/04/2013  
Number of Days to Update: 33  
Last EDR Contact :04/08/2013

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406

### **Sacramento Co. ML: Master Hazardous Materials Facility List**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: 0.25 Mile

## RECORD SOURCES AND CURRENCY

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/04/2013

Source: Sacramento County Environmental Management

Number of Days to Update: 34

Telephone: 916-875-8400

Last EDR Contact :04/08/2013

### San Bern. Co. Permit: Hazardous Material Permits

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.25 Mile

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 03/04/2013

Source: San Bernardino County Fire Department Hazardous Materials Division

Number of Days to Update: 20

Telephone: 909-387-3041

Last EDR Contact :05/13/2013

### San Mateo Co. BI: Business Inventory

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.25 Mile

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 04/09/2013

Source: San Mateo County Environmental Health Services Division

Number of Days to Update: 34

Telephone: 650-363-1921

Last EDR Contact :03/18/2013

### TORRANCE UST: City of Torrance Underground Storage Tank

Standard Environmental Record Source: State and tribal registered storage tank lists

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 04/15/2013

Source: City of Torrance Fire Department

Number of Days to Update: 31

Telephone: 310-618-2973

Last EDR Contact :04/15/2013

### TOXIC PITS: Toxic Pits Cleanup Act Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995

Source: State Water Resources Control Board

Number of Days to Update: 27

Telephone: 916-227-4384

Last EDR Contact :01/26/2009

### UIC: UIC Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of underground control injection wells.

Date of Government Version: 03/05/2013

Source: Department of Conservation

Number of Days to Update: 8

Telephone: 916-445-2408

## RECORD SOURCES AND CURRENCY

Last EDR Contact :03/19/2013

### UST: Active UST Facilities

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/18/2013

Source: SWRCB

Number of Days to Update: 30

Telephone: 916-341-5851

Last EDR Contact :05/02/2013

### UST MENDOCINO: Mendocino County UST Database

Standard Environmental Record Source: State and tribal registered storage tank lists

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009

Source: Department of Public Health

Number of Days to Update: 8

Telephone: 707-463-4466

Last EDR Contact :03/01/2013

### UST SAN JOAQUIN: San Joaquin Co. UST

Standard Environmental Record Source: State and tribal registered storage tank lists

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/25/2013

Source: Environmental Health Department

Number of Days to Update: 24

Telephone: Not Reported

Last EDR Contact :03/25/2013

### VCP: Voluntary Cleanup Program Properties

Standard Environmental Record Source: State and tribal voluntary cleanup sites

Search Distance: 0.333 Mile

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 03/13/2013

Source: Department of Toxic Substances Control

Number of Days to Update: 13

Telephone: 916-323-3400

Last EDR Contact :05/07/2013

### VENTURA CO. BWT: Business Plans, Hazardous Waste Producers, and Operating Underground Tanks

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/30/2012

Source: Ventura County Environmental Health Division

Number of Days to Update: 42

Telephone: 805-654-2813

Last EDR Contact :05/20/2013

### VENTURA CO. LF: Inventory of Illegal Abandoned and Inactive Sites

Standard Environmental Record Source: State and tribal landfill / solid waste disposal

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011

Source: Environmental Health Division

Number of Days to Update: 49

Telephone: 805-654-2813

## RECORD SOURCES AND CURRENCY

Last EDR Contact :04/08/2013

### **VENTURA CO. LUST:** Listing of Underground Tank Cleanup Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists  
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/20/2008

Source: Environmental Health Division

Number of Days to Update: 37

Telephone: 805-654-2813

Last EDR Contact :07/16/2013

### **VENTURA CO. UST:** Underground Tank Closed Sites List

Standard Environmental Record Source: State and tribal registered storage tank lists  
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 03/01/2013

Source: Environmental Health Division

Number of Days to Update: 46

Telephone: 805-654-2813

Last EDR Contact :03/18/2013

### **WDS:** Waste Discharge System

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007

Source: State Water Resources Control Board

Number of Days to Update: 9

Telephone: 916-341-5227

Last EDR Contact :02/25/2013

### **WIP:** Well Investigation Program Case List

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: 0.25 Mile

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009

Source: Los Angeles Water Quality Control Board

Number of Days to Update: 13

Telephone: 213-576-6726

Last EDR Contact :04/01/2013

### **WMUDS/SWAT:** Waste Management Unit Database

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: 0.333 Mile

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000

Source: State Water Resources Control Board

Number of Days to Update: 30

Telephone: 916-227-4448

Last EDR Contact :05/10/2013

### **YOLO CO. UST:** Underground Storage Tank Comprehensive Facility Report

Standard Environmental Record Source: State and tribal registered storage tank lists  
Underground storage tank files located in Yolo county.

## RECORD SOURCES AND CURRENCY

Date of Government Version: 03/25/2013

Source: Yolo County Department of Health

Number of Days to Update: 45

Telephone: 530-666-8646

Last EDR Contact :03/25/2013

### **2020 CCR ACTION: 2020 Corrective Action Program List**

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.25 Mile

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011

Source: Environmental Protection Agency

Number of Days to Update: 7

Telephone: 703-308-4044

Last EDR Contact :05/17/2013

### **CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System**

Standard Environmental Record Source: Federal CERCLIS

Search Distance: 0.333 Mile

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/04/2013

Source: EPA

Number of Days to Update: 12

Telephone: 703-412-9810

Last EDR Contact :04/05/2013

### **CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned**

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 02/05/2013

Source: EPA

Number of Days to Update: 12

Telephone: 703-412-9810

Last EDR Contact :04/05/2013

### **COAL ASH DOE: Steam-Electric Plant Operation Data**

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005

Source: Department of Energy

Number of Days to Update: 76

Telephone: 202-586-8719

Last EDR Contact :04/18/2013

### **COAL ASH EPA: Coal Combustion Residues Surface Impoundments List**

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile



## RECORD SOURCES AND CURRENCY

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010

Source: Environmental Protection Agency

Number of Days to Update: 77

Telephone: Not Reported

Last EDR Contact :03/15/2013

### **CONSENT:** Superfund (CERCLA) Consent Decrees

Standard Environmental Record Source: Federal NPL

Search Distance: 0.333 Mile

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2011

Source: Department of Justice, Consent Decree Library

Number of Days to Update: 57

Telephone: Varies

Last EDR Contact :04/01/2013

### **CORRACTS:** Corrective Action Report

Standard Environmental Record Source: Federal RCRA CORRACTS facilities list

Search Distance: 0.333 Mile

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 02/12/2013

Source: EPA

Number of Days to Update: 6

Telephone: 800-424-0346

Last EDR Contact :05/02/2013

### **DEBRIS REGION 9:** Torres Martinez Reservation Illegal Dump Site Locations

Standard Environmental Record Source: State and tribal landfill / solid waste disposal

Search Distance: 0.333 Mile

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009

Source: EPA, Region 9

Number of Days to Update: 137

Telephone: 415-947-4219

Last EDR Contact :04/28/2013

### **DELISTED NPL:** National Priority List Deletions

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/01/2013

Source: EPA

Number of Days to Update: 12

Telephone: Not Reported

Last EDR Contact :05/09/2013

### **DOT OPS:** Incident and Accident Data

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Department of Transportation, Office of Pipeline Safety incident and Accident data.

Date of Government Version: 07/31/2012

Source: Department of Transportation, Office of Pipeline Safety

## RECORD SOURCES AND CURRENCY

Number of Days to Update: 42  
Last EDR Contact :05/07/2013

Telephone: 202-366-4595

### **EPA WATCH LIST: EPA WATCH LIST**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 12/31/2012  
Number of Days to Update: 81  
Last EDR Contact :06/10/2013

Source: Environmental Protection Agency  
Telephone: 617-520-3000

### **ERNS: Emergency Response Notification System**

Standard Environmental Record Source: Federal ERNS list  
Search Distance: Property

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2012  
Number of Days to Update: 29  
Last EDR Contact :04/02/2013

Source: National Response Center, United States Coast Guard  
Telephone: 202-267-2180

### **FEMA UST: Underground Storage Tank Listing**

Standard Environmental Record Source: State and tribal registered storage tank lists  
Search Distance: Property

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010  
Number of Days to Update: 55  
Last EDR Contact :04/18/2013

Source: FEMA  
Telephone: 202-646-5797

### **FINDS: Facility Index System/Facility Registry System**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/23/2011  
Number of Days to Update: 70  
Last EDR Contact :03/12/2013

Source: EPA  
Telephone: Not Reported

### **FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

## RECORD SOURCES AND CURRENCY

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009  
Number of Days to Update: 25  
Last EDR Contact :07/25/2013

Source: EPA/Office of Prevention, Pesticides and Toxic Substances  
Telephone: 202-566-1667

### **FTTS INSP:** FIFRA/TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Standard Environmental Record Source: Other Standard Environmental Records  
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009  
Number of Days to Update: 25  
Last EDR Contact :02/25/2013

Source: EPA  
Telephone: 202-506-1667

### **FUDS:** Formerly Used Defense Sites

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: 0.333 Mile

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/01/2011  
Number of Days to Update: 16  
Last EDR Contact :03/11/2013

Source: U.S. Army Corps of Engineers  
Telephone: 202-526-4285

### **HIST FTTS:** FIFRA/TSCA Tracking System Administrative Case Listing

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006  
Number of Days to Update: 40  
Last EDR Contact :12/17/2007

Source: Environmental Protection Agency  
Telephone: 202-564-2501

### **HMIRS:** Hazardous Materials Information Reporting System

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2012  
Number of Days to Update: 55  
Last EDR Contact :04/02/2013

Source: U.S. Department of Transportation  
Telephone: 202-346-4555

### **ICIS:** Integrated Compliance Information System

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

## RECORD SOURCES AND CURRENCY

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011

Source: Environmental Protection Agency

Number of Days to Update: 61

Telephone: 202-564-5068

Last EDR Contact :04/15/2013

### **INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land**

Standard Environmental Record Source: State and tribal leaking storage tank lists

Search Distance: 0.333 Mile

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 09/28/2012

Source: EPA Region 1

Number of Days to Update: 162

Telephone: 617-918-1313

Last EDR Contact :05/01/2013

### **INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land**

Standard Environmental Record Source: State and tribal leaking storage tank lists

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/05/2013

Source: EPA Region 10

Number of Days to Update: 65

Telephone: 206-553-2857

Last EDR Contact :04/29/2013

### **INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land**

Standard Environmental Record Source: State and tribal leaking storage tank lists

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/09/2013

Source: EPA Region 4

Number of Days to Update: 63

Telephone: 404-562-6677

Last EDR Contact :04/29/2013

### **INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land**

Standard Environmental Record Source: State and tribal leaking storage tank lists

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011

Source: EPA Region 6

Number of Days to Update: 69

Telephone: 214-665-6597

Last EDR Contact :04/29/2013

### **INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land**

Standard Environmental Record Source: State and tribal leaking storage tank lists

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 12/31/2012

Source: EPA Region 7

Number of Days to Update: 43

Telephone: 813-551-7000

Last EDR Contact :04/29/2013

### **INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land**

Standard Environmental Record Source: State and tribal leaking storage tank lists

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012

Source: EPA Region 8

## RECORD SOURCES AND CURRENCY

Number of Days to Update: 49  
Last EDR Contact :04/29/2013

Telephone: 303-312-6274

### **INDIAN LUST R9:** Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists  
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013  
Number of Days to Update: 42  
Last EDR Contact :04/26/2013

Source: Environmental Protection Agency  
Telephone: 415-972-3372

### **INDIAN ODI:** Report on the Status of Open Dumps on Indian Lands

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: 0.333 Mile

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Number of Days to Update: 52  
Last EDR Contact :05/03/2013

Source: Environmental Protection Agency  
Telephone: 703-308-8245

### **INDIAN UST R1:** Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists  
Search Distance: Property

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/26/2012  
Number of Days to Update: 156  
Last EDR Contact :04/29/2013

Source: EPA, Region 1  
Telephone: 617-918-1313

### **INDIAN UST R10:** Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013  
Number of Days to Update: 65  
Last EDR Contact :04/29/2013

Source: EPA Region 10  
Telephone: 208-553-2857

### **INDIAN UST R4:** Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/06/2013  
Number of Days to Update: 63  
Last EDR Contact :04/29/2013

Source: EPA Region 4  
Telephone: 404-562-9424

### **INDIAN UST R5:** Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

## RECORD SOURCES AND CURRENCY

Date of Government Version: 08/02/2012  
Number of Days to Update: 94  
Last EDR Contact :04/29/2013

Source: EPA Region 5  
Telephone: 312-886-6136

### INDIAN UST R6: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011  
Number of Days to Update: 34  
Last EDR Contact :04/29/2013

Source: EPA Region 6  
Telephone: 214-688-7591

### INDIAN UST R7: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012  
Number of Days to Update: 43  
Last EDR Contact :04/29/2013

Source: EPA Region 7  
Telephone: 813-551-7003

### INDIAN UST R8: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/27/2012  
Number of Days to Update: 49  
Last EDR Contact :04/29/2013

Source: EPA Region 8  
Telephone: 303-312-6137

### INDIAN UST R9: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/21/2013  
Number of Days to Update: 45  
Last EDR Contact :04/29/2013

Source: EPA Region 9  
Telephone: 415-972-3388

### INDIAN VCP R1: Voluntary Cleanup Priority Listing

Standard Environmental Record Source: State and tribal voluntary cleanup sites

Search Distance: 0.333 Mile

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/28/2012  
Number of Days to Update: 14  
Last EDR Contact :04/05/2013

Source: EPA, Region 1  
Telephone: 617-318-1102

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

Standard Environmental Record Source: State and tribal voluntary cleanup sites

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008

Source: EPA, Region 7

## RECORD SOURCES AND CURRENCY

Number of Days to Update: 27  
Last EDR Contact :04/20/2009

Telephone: 913-551-7365

### LEAD SMELTER 1: Lead Smelter Sites

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013  
Number of Days to Update: 13  
Last EDR Contact :04/08/2013

Source: Environmental Protection Agency  
Telephone: 703-803-8787

### LEAD SMELTER 2: Lead Smelter Sites

Standard Environmental Record Source: Other Standard Environmental Records

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1984. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust.

Date of Government Version: 04/05/2001  
Number of Days to Update: 36  
Last EDR Contact :12/02/2009

Source: American Journal of Public Health  
Telephone: 703-305-6451

### LIENS 2: CERCLA Lien Information

Standard Environmental Record Source: Federal CERCLIS  
Search Distance: Property

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/03/2013  
Number of Days to Update: 15  
Last EDR Contact :04/29/2013

Source: Environmental Protection Agency  
Telephone: 202-564-0023

### LUCIS: Land Use Control Information System

Standard Environmental Record Source: Federal Institutional controls / engineering controls registries  
Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: 0.333 Mile

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005  
Number of Days to Update: 31  
Last EDR Contact :05/26/2013

Source: Department of the Navy  
Telephone: 843-820-7326

### MLTS: Material Licensing Tracking System

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/21/2011  
Number of Days to Update: 60

Source: Nuclear Regulatory Commission  
Telephone: 301-415-7169

## RECORD SOURCES AND CURRENCY

Last EDR Contact :03/11/2013

### **NPL: National Priority List**

Standard Environmental Record Source: Federal NPL

Search Distance: 0.333 Mile

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 02/01/2013

Source: EPA

Number of Days to Update: 12

Telephone: Not Reported

Last EDR Contact :05/09/2013

### **NPL Site Boundaries**

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-566-0690

EPA Region 1  
Telephone: 617-918-1102

EPA Region 2  
Telephone: 212-637-4293

EPA Region 3  
Telephone: 215-814-5418

EPA Region 4  
Telephone: 404-562-8681

EPA Region 5  
Telephone: 312-353-1063

EPA Region 6  
Telephone: 214-655-6659

EPA Region 7  
Telephone: 913-551-7247

EPA Region 8  
Telephone: 303-312-0118

EPA Region 9  
Telephone: 415-047-4570

EPA Region 10  
Telephone: 208-553-4479

### **NPL LIENS: Federal Superfund Liens**

Standard Environmental Record Source: Federal NPL

Search Distance: Property

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991

Source: EPA

Number of Days to Update: 56

Telephone: 202-564-4267

Last EDR Contact :08/15/2011

### **ODI: Open Dump Inventory**

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile



## RECORD SOURCES AND CURRENCY

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 00/30/1985  
Number of Days to Update: 39  
Last EDR Contact :03/08/2004

Source: Environmental Protection Agency  
Telephone: 800-424-9348

### **PADS: PCB Activity Database System**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

PCB Activity Database. PADS identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2012  
Number of Days to Update: 114  
Last EDR Contact :04/19/2013

Source: EPA  
Telephone: 202-566-0500

### **PCB TRANSFORMER: PCB Transformer Registration Database**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011  
Number of Days to Update: 83  
Last EDR Contact :05/03/2013

Source: Environmental Protection Agency  
Telephone: 202-566-0517

### **Proposed NPL: Proposed National Priority List Sites**

Standard Environmental Record Source: Federal NPL  
Search Distance: 0.333 Mile

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 02/01/2013  
Number of Days to Update: 12  
Last EDR Contact :05/09/2013

Source: EPA  
Telephone: Not Reported

### **RAATS: RCRA Administrative Action Tracking System**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995  
Number of Days to Update: 35  
Last EDR Contact :00/02/2008

Source: EPA  
Telephone: 202-564-4104

### **RADINFO: Radiation Information Database**

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

## RECORD SOURCES AND CURRENCY

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/09/2013

Source: Environmental Protection Agency

Number of Days to Update: 29

Telephone: 202-343-0775

Last EDR Contact :04/11/2013

### **RCRA NonGen / MLR: RCRA - Non Generators**

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

RCRAinfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/12/2013

Source: Environmental Protection Agency

Number of Days to Update: 12

Telephone: 703-308-8895

Last EDR Contact :05/02/2013

### **RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators**

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAinfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/12/2013

Source: Environmental Protection Agency

Number of Days to Update: 12

Telephone: 703-308-8895

Last EDR Contact :05/02/2013

### **RCRA-LQG: RCRA - Large Quantity Generators**

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAinfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/12/2013

Source: Environmental Protection Agency

Number of Days to Update: 12

Telephone: 703-308-8895

Last EDR Contact :05/02/2013

### **RCRA-SQG: RCRA - Small Quantity Generators**

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAinfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/12/2013

Source: Environmental Protection Agency

Number of Days to Update: 12

Telephone: 703-308-8895

## RECORD SOURCES AND CURRENCY

Last EDR Contact :05/02/2013

### RCRA-TSDF: RCRA - Treatment, Storage and Disposal

Standard Environmental Record Source: Federal RCRA TSD facilities list

Search Distance: 0.333 Mile

RCRAinfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/12/2013

Source: Environmental Protection Agency

Number of Days to Update: 12

Telephone: 703-308-8895

Last EDR Contact :05/02/2013

### ROD: Records Of Decision

Standard Environmental Record Source: Federal NPL

Search Distance: 0.333 Mile

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 12/18/2012

Source: EPA

Number of Days to Update: 30

Telephone: 703-416-0223

Last EDR Contact :03/13/2013

### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011

Source: Environmental Protection Agency

Number of Days to Update: 54

Telephone: 615-532-8599

Last EDR Contact :05/06/2013

### SSTS: Section 7 Tracking Systems

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009

Source: EPA

Number of Days to Update: 77

Telephone: 202-564-4203

Last EDR Contact :04/29/2013

### TRIS: Toxic Chemical Release Inventory System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

## RECORD SOURCES AND CURRENCY

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2009

Source: EPA

Number of Days to Update: 131

Telephone: 202-566-0250

Last EDR Contact :02/26/2013

### **TSCA: Toxic Substances Control Act**

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2008

Source: EPA

Number of Days to Update: 91

Telephone: 202-260-5521

Last EDR Contact :03/26/2013

### **UNTRA: Uranium Mill Tailings Sites**

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010

Source: Department of Energy

Number of Days to Update: 148

Telephone: 505-845-0011

Last EDR Contact :02/25/2013

### **US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)**

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 01/23/2013

Source: EPA

Number of Days to Update: 100

Telephone: 202-564-5962

Last EDR Contact :04/01/2013

### **US AIRS MINOR: Air Facility System Data**

Standard Environmental Record Source: Other Standard Environmental Records

A listing of minor source facilities.

Date of Government Version: 01/23/2013

Source: EPA

Number of Days to Update: 100

Telephone: 202-564-5802

Last EDR Contact :04/01/2013

### **US BROWNFIELDS: A Listing of Brownfields Sites**

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

## RECORD SOURCES AND CURRENCY

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/10/2012  
Number of Days to Update: 9  
Last EDR Contact :03/20/2013

Source: Environmental Protection Agency  
Telephone: 202-566-2777

### US CDL: Clandestine Drug Labs

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/04/2013  
Number of Days to Update: 59  
Last EDR Contact :03/04/2013

Source: Drug Enforcement Administration  
Telephone: 202-307-1000

### US ENG CONTROLS: Engineering Controls Sites List

Standard Environmental Record Source: Federal institutional controls / engineering controls registries  
Search Distance: Property

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/14/2013  
Number of Days to Update: 42  
Last EDR Contact :03/11/2013

Source: Environmental Protection Agency  
Telephone: 703-603-0695

### US FIN ASSUR: Financial Assurance Information

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/04/2013  
Number of Days to Update: 56  
Last EDR Contact :05/20/2013

Source: Environmental Protection Agency  
Telephone: 202-566-1917

### US HIST CDL: National Clandestine Laboratory Register

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007

Source: Drug Enforcement Administration

## RECORD SOURCES AND CURRENCY

Number of Days to Update: 131  
Last EDR Contact :03/23/2009

Telephone: 202-307-1000

### **US INST CONTROL:** Sites with Institutional Controls

Standard Environmental Record Source: Federal institutional controls / engineering controls registries  
Search Distance: Property

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/14/2013  
Number of Days to Update: 42  
Last EDR Contact :03/11/2013

Source: Environmental Protection Agency  
Telephone: 703-603-0695

### **US MINES:** Mines Master Index File

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/05/2013  
Number of Days to Update: 22  
Last EDR Contact :03/06/2013

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959

### **AOC CONCERN:** San Gabriel Valley Areas of Concern

Standard Environmental Record Source: State and tribal - equivalent CERCLIS  
Search Distance: 0.333 Mile

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009  
Number of Days to Update: 206  
Last EDR Contact :05/10/2013

Source: EPA Region 9  
Telephone: 415-972-3178

### **DOD:** Department of Defense Sites

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: 0.333 Mile

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005  
Number of Days to Update: 62  
Last EDR Contact :04/19/2013

Source: USGS  
Telephone: 888-275-6747

### **INDIAN RESERV:** Indian Reservations

Standard Environmental Record Source: Other Standard Environmental Records  
Search Distance: Property

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005  
Number of Days to Update: 34  
Last EDR Contact :04/19/2013

Source: USGS  
Telephone: 202-208-3710

## RECORD SOURCES AND CURRENCY

**PWS: Public Water System Data**

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

This Safe Drinking Water Information System (SDWIS) file contains public water systems name and address, population served and the primary source of water

Date of Government Version: 04/12/2007

Source: EPA

Number of Days to Update: N/A

Telephone: Not Reported

Last EDR Contact :03/11/2013

## RECORD SOURCES AND CURRENCY

### HISTORICAL USE RECORDS

#### **EDR MGP: EDR Proprietary Manufactured Gas Plants**

Standard Environmental Record Source: Former manufactured Gas Plants

Search Distance: 0.333 Mile

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oil waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: 08/28/2009

Source: EDR, Inc.

Number of Days to Update: 55

Telephone: Not Reported

Last EDR Contact :11/30/2012

#### **EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations**

Standard Environmental Record Source: Historical Gas Stations

Search Distance: 0.25 Mile

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRRR. EDR's HRRR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: 02/20/2007

Source: EDR, Inc.

Number of Days to Update: 42

Telephone: Not Reported

Last EDR Contact :02/21/2007

#### **EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners**

Standard Environmental Record Source: Historical Dry Cleaners

Search Distance: 0.25 Mile

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRRR. EDR's HRRR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: 02/20/2007

Source: EDR, Inc.

Number of Days to Update: 42

Telephone: Not Reported

Last EDR Contact :02/21/2007



## RECORD SOURCES AND CURRENCY

### TOPOGRAPHIC INFORMATION

#### **USGS 7.5' Digital Elevation Model (DEM)**

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5' minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

### HYDROGEOLOGIC INFORMATION

#### **AQUIFLOW<sup>®</sup> Information System**

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW<sup>®</sup> Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

### GEOLOGIC INFORMATION

#### **STATSGO: State Soil Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services. The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

#### **SSURGO: Soil Survey Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

### STREET AND ADDRESS INFORMATION

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**APPENDIX H**

**EDR BUILDING PERMIT REPORT**

(Provided on attached CD)

**Property At**

1700 Embarcadero Road  
Palo Alto, CA 94303

Inquiry Number: 3611943.11  
May 20, 2013

# EDR Building Permit Report

Target Property and Adjoining Properties

# EDR Building Permit Report: Search Documentation

5/20/13

<b>Site Name:</b> Property At 1700 Embarcadero Palo Alto, CA 94303	<b>Client Name:</b> Romig Consulting Engineers 1390 El Camino Real San Carlos, CA 94070
EDR Inquiry # 3611943.11	Contact: Chris Palmer

## Search Documentation

### DATA GAP

The complete collection of Building Permit data available to EDR has been searched, and as of 5/20/13, EDR does not have access to building permits in the city where your target property is located (Palo Alto, CA).

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## EDR BUILDING PERMIT REPORT

### About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

### ASTM and EPA Requirements

ASTM E 1527-05 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records – The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquiries (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

### Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.





## **Appendix E**

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*Project Traffic Impact Analysis  
and May 2016 Supplemental Traffic Memorandum*



## Memorandum

**Date:** May 23, 2016  
**To:** Kristen Cessna, Gensler  
**From:** Gary Black, Ricky Williams  
**Subject:** 1700 Embarcadero CEQA Comments

This memorandum provides responses to comments from the Santa Clara Valley Transportation Authority (VTA) and the County of Santa Clara regarding the 1700 Embarcadero Mercedes Benz Dealership Transportation Impact Analysis (TIA). The comments to the TIA can be seen in Table 1, along with Hexagon’s responses to these comments. Also included in this memo are revised figures, transit delay calculations, and the project’s Auto Trip Reduction Statement.

**Table 1  
VTA and County Comments and Responses**

Agency	Comment	Response
County of Santa Clara	The MND should describe the San Francisco Bay Trail and the California Avenue Trail in the vicinity of the project site	Noted, see "Bicycle and Pedestrian Facilities" below
	Figure 3 should be amended to show the on-street bicycle route within road right-of-way on Geng Road, and the California Avenue Trail beyond the "Bike/Pedestrian Bridge"	See revised Figure 3, attached
VTA	The TIA should include an analysis of transit delay.	Transit delay analysis included
	The TIA is required to include an Auto Trip Reduction Statement (ATRS)	ATRS attached
	The pedestrian improvements shown in Figure 12 should be described within the text of the TIA. These improvements are supported by VTA and are recommended as conditions of approval for the project.	Noted, see "Pedestrian Accommodations" below



## Bicycle and Pedestrian Facilities

### San Francisco Bay Trail

The San Francisco Bay trail is a partially existing, Class I trail that provides a regional connection along the San Francisco Bay shoreline. This is a multi-use trail designed for hiking and cycling. This trail is located near the project site, with access along E. Bayshore Road. The project is not expected to generate any significant impacts to the trail.

### California Avenue Trail

The California Avenue Trail is a partially existing Class II trail that currently extends from St. Francis Drive to the Baylands preserve. The planned trail will provide bicycle and pedestrian access between the existing bike/pedestrian bridge over US 101 to the existing Class II bicycle lanes along Louis Road. The completion of this trail will enhance the pedestrian and bicycle access to and from the west side of the US 101 and the project area. The proposed project is not expected to generate any significant impacts to this trail.

## Transit Vehicle Delay

The increase in project traffic on roadways where bus transit service is provided could result in increased congestion and affect transit operations. There are no regular VTA bus lines that travel through the study intersections, but there are two shuttles:

- City of Palo Alto Embarcadero Shuttle Service
- Marguerite Shuttle Service, operated by Stanford

The increase in transit delay was determined by summing the increase in movement delay at each of the study intersections for each route in each direction. These movement delays were obtained from the level of service calculation sheets at each signalized study intersection, which were included in the 1700 Embarcadero TIA (Appendix C). The sum of movement delay that the buses would experience at each of the study intersections was calculated under existing and existing plus project conditions for both the AM and PM peak hours. Table 2 presents the delay that the buses would experience in each travel direction under existing and existing plus project conditions.

**Table 2**  
**1700 Embarcadero Transit Vehicle Delay**

Route		Transit Service Delay at Study Intersections (sec.)					
		AM Peak Hour			PM Peak Hour		
		Existing	Ext + Proj	+/-	Existing	Ext + Proj	+/-
City of Palo Alto	NB	71.5	79.9	8.4	42.6	46.0	3.4
Embarcadero Shuttle	SB	138.4	141.4	3.0	110.7	118.6	7.9
Stanford	NB	171.9	156.2	(15.7)	129.0	127.0	(2.0)
Marguerite Tech Shuttle	SB	138.4	141.4	3.0	110.7	118.6	7.9

The TIA identified a significant traffic impact at the intersection of Embarcadero Road & East Bayshore Road. The TIA recommended an intersection improvement that would offset the additional delay created by the project. The increase in transit delay as a result of the proposed project is relatively minimal, thus the intersection improvements would only reduce this delay. The project is not expected to generate any significant impact on transit services in the area.

## **Pedestrian Accommodations**

The improvement at the intersection of E Bayshore Road and Embarcadero Road, as proposed in the TIA, is supported by VTA. The improvement includes modifications to the pedestrian crossing, not described within the TIA. These pedestrian modifications include removing an existing porkchop island at the southwest corner of the intersection, thus reducing the total pedestrian crossing distance on the south leg. A new crosswalk will also be added across the north leg of the intersection. Similar to the overall intersection improvements, the project should make a fair-share contribution towards these pedestrian improvements.

## **Attachments**

### **Attachment 1 – Auto Trip Reduction Statement (ATRS)**

Required per Section 8.2 and Appendix C of the 2014 TIA Guidelines.

### **Attachment 2 – Revised Figure 3 from TIA**

Bicycle facilities map including Geng Road bicycle route, and California Avenue Trail

# AUTO TRIP REDUCTION STATEMENT

UPDATED: October 2014



PROJECT INFORMATION		Relevant TIA Section:	
<b>Project Name:</b> 1700 Embarcadero Mercedes Benz Dealership			
<b>Location:</b> Palo Alto, CA			
<b>Description:</b> The proposed project would consist of the development of a Mercedes Benz dealership, including sales floor (18,500 s.f.), service area, and large indoor inventory storage. Ming's restaurant, now closed, currently exists on the site.			
<b>Size (net new):</b>	<i>D.U. Residential</i>	110,000	<i>Sq. Ft. Comm.</i> Acres (Gr.)
<b>Density:</b>	<i>D.U. / Acre</i>		<i>Floor Area Ratio (FAR)</i>
<b>Located within 2000 feet walking distance of an LRT, BRT, BART or Caltrain station or major bus stop?</b> No			

PROJECT AUTO TRIP GENERATION		Relevant TIA Section:	
<b>Auto Trips Generated:</b>	102	<i>AM Pk Hr</i>	149 <i>PM Pk Hr</i> Total Weekday
<b>Methodology (check one)</b>	<input type="checkbox"/> ITE	<input checked="" type="checkbox"/> Other (Please describe below)	
Driveway counts were collected at three nearby, similar automobile dealerships. The trip generation rates calculated from these sites were used.			

AUTO TRIP REDUCTION APPROACH		Relevant TIA Section:	
<input type="checkbox"/> Standard <i>Complete Table A below</i>	<input checked="" type="checkbox"/> Peer/Study-Based <i>Complete Table B below</i>	<input type="checkbox"/> Target-Based <i>Complete Table C below</i>	<input type="checkbox"/> None Taken

TRIP REDUCTION REQUIREMENTS		Relevant TIA Section:	
<b>Is the project required to meet any trip reduction requirements or targets?</b> No		<b>If so, specify percent:</b>	
<b>Reference code or requirement:</b>			

## TRIP REDUCTION APPROACHES

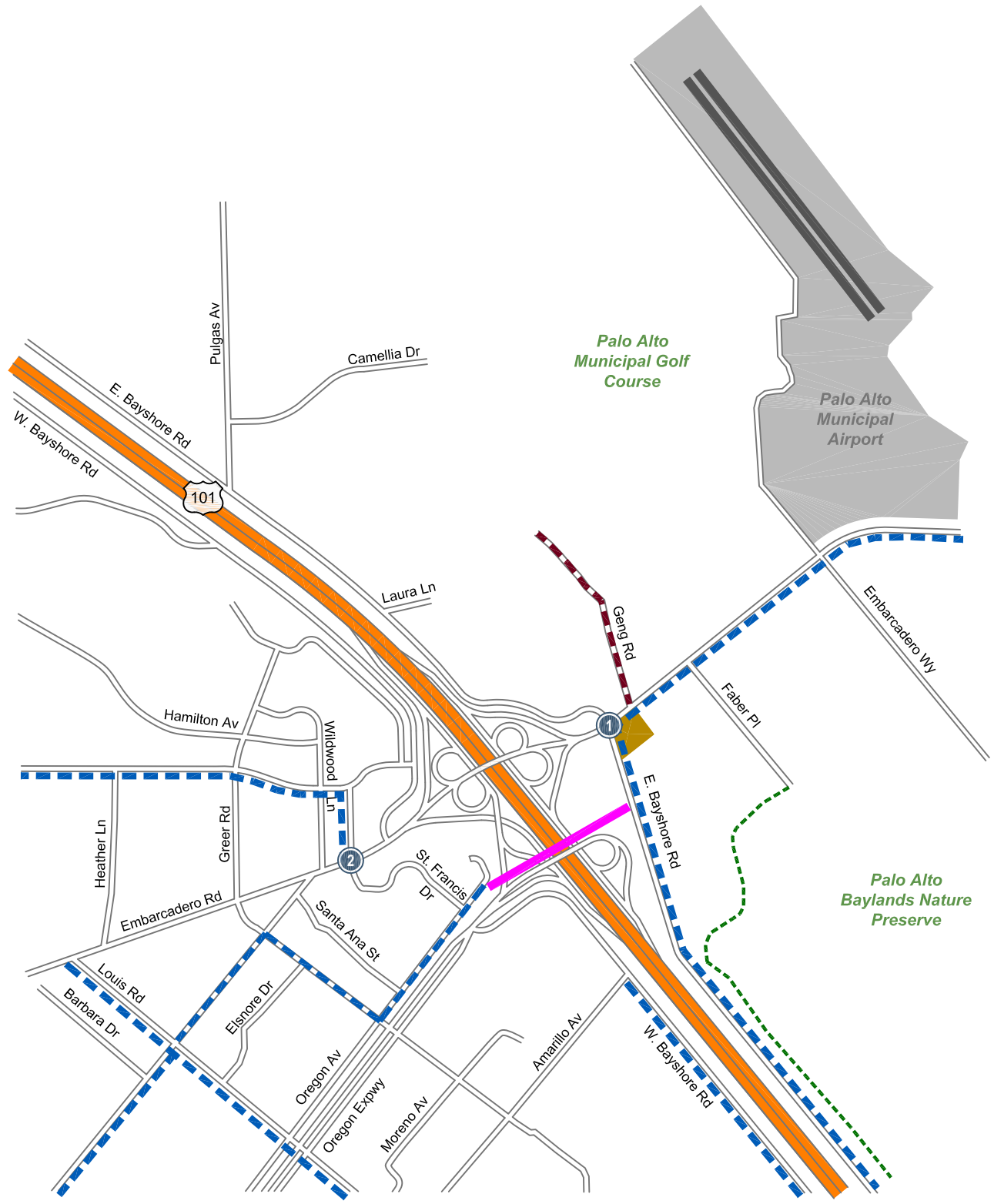
A. STANDARD APPROACH		Relevant TIA Section:	
Type of Reduction <i>Specify reduction. See Table 2 in TIA Guidelines</i>	% Reduction from ITE Rates	Total Trips Reduced (AM/PM/Daily)	TOTAL REDUCTION CLAIMED % Trips
Transit			
Mixed-Use			
Financial Incentives			
Shuttle			

B. PEER/STUDY-BASED APPROACH		Relevant TIA Section:	
Basis of Reduction		TOTAL REDUCTION CLAIMED % Trips	
A large amount of the project will be used as automobile storage for the dealership. Because of this, ITE rates based on 1,000 s.f. we're deemed excessive in their trip generation estimates as the total project s.f. is 110,000. Trip generation was determined based on showroom size. Showroom sizes and trip generation rates from similar dealerships in the area were gathered and used to estimate the number of trips for this project.			AM: 109 PM: 139

C. TARGET-BASED APPROACH			Relevant TIA Section:		
Type of Reduction (check all that apply)				TOTAL REDUCTION CLAIMED	
<input type="checkbox"/> % Trip Reduction	<input type="checkbox"/> % SOV mode share	<input type="checkbox"/> Trip Cap		%	Trips
Description					
Time period for reduction	Peak Hour	Peak Period	Full Day		
	<input type="checkbox"/> AM/PM	<input type="checkbox"/> AM/PM	<input type="checkbox"/>		

OTHER TDM/REDUCTION MEASURES			
Bicycle/Pedestrian	Yes/No	Relevant TIA Section:	
Parking Management	Yes/No	Relevant TIA Section:	
Transit	Yes/No	Relevant TIA Section:	
Site Planning and Design	Yes/No	Relevant TIA Section:	
TDM Program	Yes/No	Relevant TIA Section:	

IMPLEMENTATION		Relevant TIA Section:
Have the project sponsor and Lead Agency agreed to any of the following measures?		
<input type="checkbox"/> Monitoring		
<input type="checkbox"/> Enforcement		
<input type="checkbox"/> Data Sharing		



LEGEND

- = Site Location
- = Bike Route
- X = Study Intersection
- = Bike Lane
- = Multi-Use Path
- = Bike/Pedestrian Bridge

**Figure 3**  
**Existing Bicycle Facilities**



# HEXAGON TRANSPORTATION CONSULTANTS, INC.

## 1700 Embarcadero Road Mercedes Benz Dealership

### Traffic Impact Analysis

Prepared for:

**Fletcher Jones Management Group**

January 29, 2016



#### **Hexagon Transportation Consultants, Inc.**

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## Executive Summary

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This report presents the results of the traffic impact analysis conducted for the proposed Mercedes Benz dealership at 1700 Embarcadero Road in Palo Alto, California. The proposed project would consist of the development of a Mercedes Benz dealership, including sales floor, service area, and large indoor inventory storage. Access to the site would be provided by a full-access driveway on East Bayshore Road and a right-in/right-out driveway on Embarcadero Road. Currently, Ming's restaurant, now closed, exists at the proposed site.

This study was conducted for the purpose of identifying potential traffic impacts related to the proposed development. The potential impacts of the project were evaluated in accordance with the standards set forth by the City of Palo Alto and the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP). The traffic analysis is based on AM and PM peak-hour levels of service for two signalized intersections, two freeway segments, and four freeway ramps.

### Project Trip Generation

Trip generation for the proposed automobile dealership was estimated based on the driveway counts of the existing Mercedes Benz dealer located in Belmont, CA, which is assumed to generate a comparable number of trips to the proposed dealership. Driveway counts were conducted at the Belmont dealership, Autobahn Motors, during the AM and PM peak hours. During the AM peak hour the project is estimated to produce 102 total trips, with 57 trips inbound and 45 trips outbound. During the PM peak hour, the project is estimated to produce 149 total trips, with 58 trips inbound and 91 trips outbound.

### Project Impacts

#### Intersection Level of Service Analysis

The results of the intersection level of service analysis are shown in Table ES 1. The intersection of Embarcadero Road & E. Bayshore Road is shown to operate at LOS D during the AM peak hour, and LOS F during the PM peak hour. The addition of project-generated traffic would create a significant impact at the intersection of East Bayshore Road and Embarcadero Road during the PM peak hour under Background Plus Project and Cumulative scenarios, and during the AM peak hour under the Cumulative scenario.

## East Bayshore Road and Embarcadero Road

Improvements to the intersection of E. Bayshore Dr/Embarcadero Rd should be made. The recommended improvement at this intersection is to revise the eastbound leg on Embarcadero to include two left-turn pockets, a through lane, and a shared through/right-turn lane. The improvement also includes changing the east-west phasing from split phase timing to protected left turn phasing. There is a large volume of left turns and a large volume of through traffic on eastbound Embarcadero Road in the morning. Creating two separate dedicated left turn lanes and two through lanes will reduce delay for eastbound traffic. Also, the split phase signal operation is generally less efficient compared to protected left turn phasing. A change to protected left turn phasing means that the eastbound and westbound through traffic will be able to proceed simultaneously. This will reduce delays for the through traffic. In addition to the east/west Embarcadero improvements, the city should consider restriping the northbound approach to have one left turn lane and one shared left-through-right. This would likely require modifying the median island and relocating the signal equipment on the west leg of the intersection. The recommended improvements would reduce the project impact to a level that is less than significant. The project should make a fair-share contribution to the cost of the recommended improvements.

**Table ES 1  
Intersection Level of Service Summary**

Study Number	Intersection	Peak Hour	Count Date	Existing		Existing + Project		Background		Background + Project <sup>2</sup>				Cumulative No Project		Cumulative <sup>3</sup>			
				Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Incr. In Crit. Delay (sec.)	Incr. In Crit. V/C	Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1	E Bayshore Dr/Embarcadero Rd <sup>1</sup> <i>With Mitigation</i>	AM	05/27/15	47.7	D	52.4	D	48.7	D	53.5	D	2.8	0.009	<b>65.7</b>	<b>E</b>	<b>73.0</b>	<b>E</b>	<b>10.3</b>	<b>0.028</b>
		PM	05/27/15	<b>83.5</b>	<b>F</b>	<b>91.2</b>	<b>F</b>	<b>95.6</b>	<b>F</b>	<b>104.2</b>	<b>F</b>	<b>5.1</b>	<b>0.015</b>	<b>122.0</b>	<b>F</b>	<b>136.3</b>	<b>F</b>	<b>19.4</b>	<b>0.048</b>
										<b>88.7</b>	<b>F</b>					<b>111.6</b>	<b>F</b>		
2	St Francis Dr/Embarcadero Rd	AM	05/27/15	20.8	C	20.8	C	21.9	C	21.8	C	0.0	0.002	22.9	C	23.0	C	0.0	0.002
		PM	05/27/15	11.8	B	11.8	B	16.0	B	15.9	B	0.0	0.002	16.4	B	16.4	B	0.0	0.002

**Notes:**  
**Bold** indicates a substandard level of service  
<sup>1</sup> Intersection LOS calculations based on traffic counts conducted prior to construction along the US 101. Calculation adjustments made to represent observed intersection operations during PM peak hour of LOS F.  
<sup>2</sup> Increase in critical delay and increase in critical V/C as compared to Background scenario  
<sup>3</sup> Increase in critical delay and increase in critical V/C as compared to Cumulative No Project Scenario

## Freeway Segment Analysis

The project would contribute trips equivalent to less than one percent of the capacity on each of the studied freeway segments. Thus, the project would have an insignificant impact on nearby freeway segments.

## Freeway Ramp Capacity Analysis

The analysis of freeway ramps showed that the US 101 ramps at Embarcadero Road that provide access to the project site would have sufficient capacity to serve the projected traffic volumes with the proposed project. The study ramps are expected to have volume-to-capacity (V/C) ratios below 1.0. Therefore, the project is considered to have an insignificant impact on the study freeway ramps. Based on field observations, the freeway ramps are congested during peak hours. This congestion is largely due to the congestion on the freeway itself due to the current construction project at the San Francisquito Creek crossing. Absent the construction project, the ramps themselves would have adequate capacity to serve the volumes of vehicles that used them prior to the construction.

It is recommended that these ramps be reevaluated following the completion of these construction projects. With the completion of the construction, the freeway is expected to carry additional traffic, and the ramp should be analyzed to determine if ramp metering rates or signal timing at the ramp-arterial intersection should be adjusted to reduce potential on- and off-ramp queuing.

## Other Transportation Issues

### Queuing Analysis

The existing storage capacity for the northbound left-turn lane from East Bayshore Road onto Embarcadero Road is up to 11 vehicles (275 feet) without interfering with other movements. The existing queue length is 425 feet during the PM peak hour. This queue length would remain the same under Background conditions. The project would add 77 vehicles to the left turn movement during the PM peak hour and would increase the 95<sup>th</sup> percentile queue length by 75 feet, or 3 vehicles. The roadway is not wide enough, between the striped center line and the curb, to allow for all vehicles going right or through at the intersection to make it around this queue.

Embarcadero Road is wide enough for the center line to be restriped to extend the left turn pocket should the City desire to do so.

# 1. Introduction

---

This report presents the results of the traffic impact analysis conducted for the proposed automobile dealership located at 1700 Embarcadero Road in Palo Alto, California. The proposed project would consist of the development of a Mercedes Benz dealership, including sales floor, service area, and large indoor inventory storage. Access to the site would be provided by a full-access driveway on East Bayshore Road and a right-in/right-out driveway on Embarcadero Road. Currently, Ming's restaurant, which is now closed, exists at the proposed site.

The project site and the surrounding study area are shown on Figure 1. The proposed site plan is shown on Figure 2.

## Scope of Study

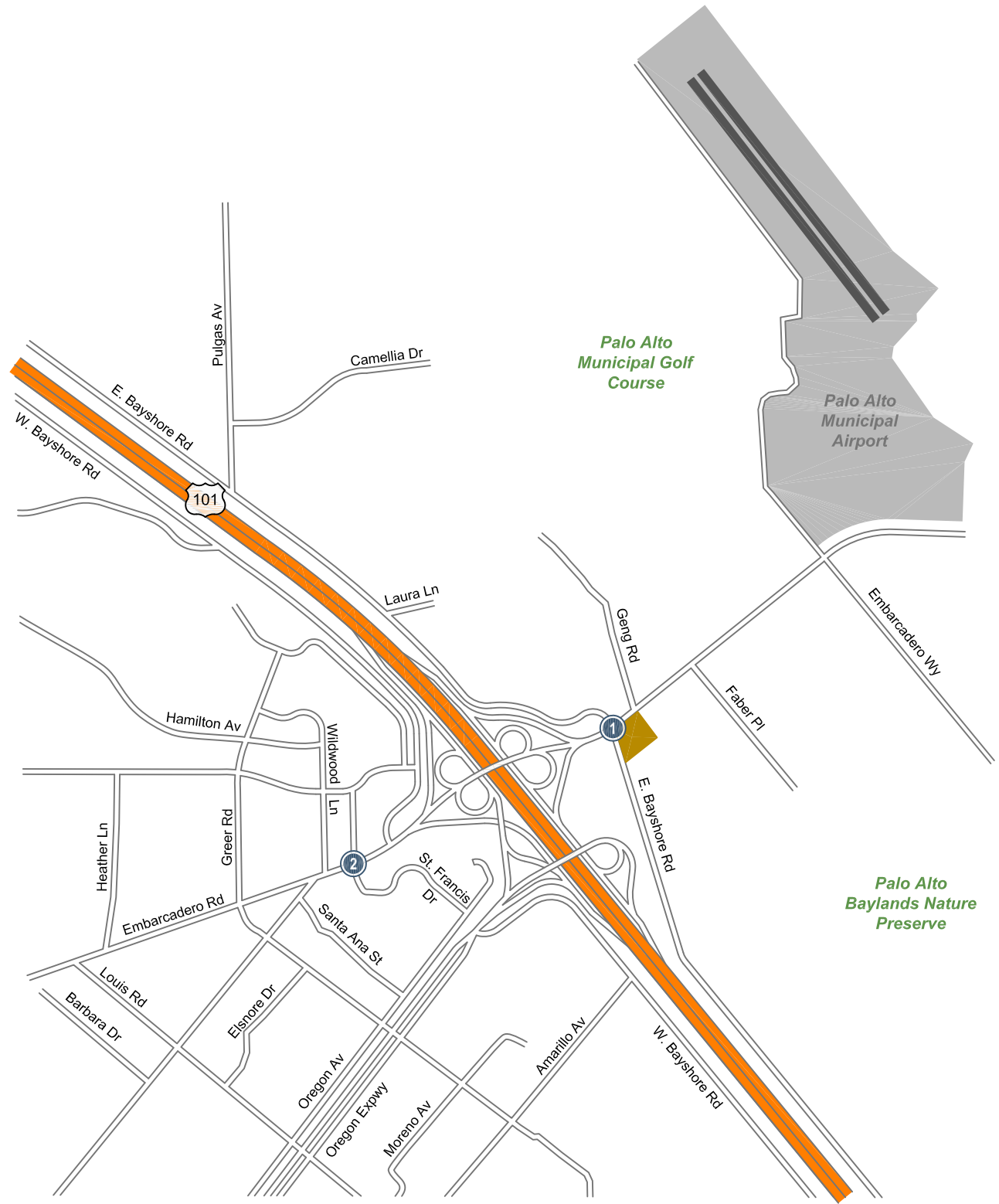
This study was conducted for the purpose of identifying the potential traffic impacts related to the proposed development. The potential impacts of the project were evaluated in accordance with the standards set forth by the City of Palo Alto and the Santa Clara Valley Transportation Authority CMP. A County Congestion Management Program (CMP) analysis is required, as the proposed project is estimated to generate greater than 100 peak hour trips. The traffic study includes an analysis of AM and PM peak hour traffic conditions for two signalized intersections, two freeway segments, and four freeway ramps in the vicinity of the project site. Intersections chosen for analysis were based on the expected number of trips the site will generate at each location, in accordance with CMP guidelines. For this project, only two intersections were analyzed as they were the only intersections that would have an increase of more than 10 trips per lane due to the project. The study also includes an analysis of transit, bicycle, and pedestrian access.

## Study Intersections



1. East Bayshore Road & Embarcadero Road
2. St. Francis Drive & Embarcadero Road

## Study Freeway Segments

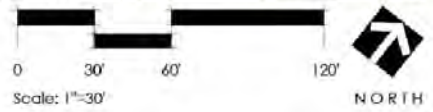
1. US 101 North of Embarcadero Road
2. US 101 South of Embarcadero Road



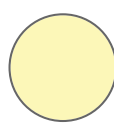
LEGEND

-  = Site Location
-  = Study Intersection

**Figure 1**  
**Site Location and Study Intersections**



**LEGEND**

 = Driveway Operations

**Figure 2**  
**Concept Plan**

## Study Freeway Ramps

1. Southbound US 101 Off Ramp at Embarcadero Road
2. Southbound US 101 On Ramp at Embarcadero Road
3. Northbound US 101 Off Ramp at Embarcadero Road
4. Northbound US 101 On Ramp at Embarcadero Road

The freeway ramps to and from Oregon Expressway were not analyzed because the project is not expected to add enough trips to warrant an analysis, based on VTA TIA Guidelines.

Traffic conditions at the study intersections were analyzed for both the weekday AM and PM peak hours of adjacent street traffic. The AM peak hour is expected to occur between 7:00 AM and 9:00 AM and the PM peak hour is expected to occur between 4:00 PM and 6:00 PM on a regular weekday. These are the peak commute hours during which most traffic congestion occurs on the roadways.

Traffic conditions were evaluated for the following scenarios:

- Scenario 1:** *Existing Conditions.* Existing traffic volumes at study intersections were based on traffic counts conducted in May 2015. The two study intersections were evaluated with a level of service analysis using TRAFFIX software in accordance with the *2000 Highway Capacity Manual* methodology. Study freeway segments were analyzed in accordance with VTA and San Mateo CMP methods and study freeway ramps were analyzed using demand to capacity ratios.
- Scenario 2:** *Existing plus Project Conditions.* Existing traffic volumes with the project were estimated by adding to existing traffic volumes the additional traffic generated by the project. Existing plus project conditions were evaluated relative to existing conditions in order to determine the effects the project would have on the existing roadway network.
- Scenario 3:** *Background Conditions.* Background traffic volumes reflect traffic added by nearby approved projects that have not been completed or occupied, including the Palo Alto Golf Course Reconfiguration Project, Palo Alto Audi Expansion, and the Edgewood Plaza Shopping Center Project.
- Scenario 4:** *Background plus Project Conditions.* Background traffic volumes with the project (hereafter called project traffic volumes) were estimated by adding to background traffic volumes the additional traffic generated by the project. Background plus project conditions were evaluated relative to background conditions in order to determine potential project impacts.
- Scenario 5:** *Cumulative With Project Conditions.* Cumulative traffic volumes were obtained by applying a 1.4% annual growth factor to the existing counts to the year 2020. Project and approved trips were added to these calculated counts to create the Cumulative traffic conditions.

## Methodology

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

## Data Requirements

The data required for the analysis were obtained from new traffic counts, the City of Palo Alto, and field observations. The following data were collected from these sources:

- existing traffic volumes
- existing lane configurations
- signal timing and phasing



## Level of Service Standards and Analysis Methodologies

Traffic conditions at the study intersections were evaluated using level of service (LOS) standards set forth by the City of Palo Alto and the County's Congestion Management Plan. *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 various analysis methods are described below.

### City of Palo Alto Signalized Intersections

The two signalized study intersections are located in the City of Palo Alto and are therefore subject to the City of Palo Alto level of service standards. The City of Palo Alto evaluates level of service at signalized intersections based on the *2000 Highway Capacity Manual* (HCM) level of service methodology using TRAFFIX software. This method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. The City of Palo Alto level of service standard for signalized intersections is LOS D or better. Table 1 shows the level of service definitions for signalized intersections.

**Table 1**  
**Signalized Intersection Level of Service Definitions Based on Control Delay**

Level of Service	Description	Average Control Delay Per Vehicle (Sec.)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	Up to 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operation with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	Greater than 80.0

Source: Transportation Research Board, *2000 Highway Capacity Manual*, (Washington, D.C., 2000)

### Freeway Ramps

A freeway ramp analysis was performed in order to verify that the freeway ramps would have sufficient capacity to serve the expected traffic volumes with and without the project. This analysis consisted of a volume-to-capacity ratio evaluation of the freeway ramps at the selected interchange. The ramp capacities were obtained from the *Highway Capacity Manual 2000*, and consider both the free-flow speed and the number of lanes on the ramp.

Based on VTA TIA Guidelines 9.1.2, queuing analyses are to be conducted for freeway on-ramps in the study area that have existing or planned ramp meters, and off-ramps controlled by signals at junctions with local streets. The current conditions at these ramps, due to US 101 construction activities, are not normal, and ramp queuing analyses are not included as part of this report.

## **Freeway Segments**

The Santa Clara /San Mateo County line is located between the Embarcadero Road and University Avenue interchanges on US 101. For this reason, the segments of US 101 between San Antonio Drive and Embarcadero Road were analyzed based on the Santa Clara CMP guidelines, and the segment of US 101 between Embarcadero Road and University Avenue was analyzed based on San Mateo County CMP guidelines. The Santa Clara County CMP and San Mateo County CMP guidelines for freeway analysis are described below.

### **Santa Clara County Freeway CMP Guidelines**

As prescribed in the CMP technical guidelines, the level of service for freeway segments is estimated based on vehicle density. Density is calculated by the following formula:

$$D = V / (N * S)$$

where:

D= density, in vehicles per mile per lane (vpmpl)

V= peak hour volume, in vehicles per hour (vph)

N= number of travel lanes

S= average travel speed, in miles per hour (mph)

The vehicle density on a segment is correlated to level of service as shown in Table 2. The CMP requires that mixed-flow lanes and auxiliary lanes be analyzed separately from high-occupancy vehicle (HOV) lanes (otherwise known as carpool lanes). The CMP specifies that a capacity of 2,300 vehicles per hour per lane (vphpl) be used for segments three lanes or wider in one direction and a capacity of 2,200 vphpl be used for segments two lanes wide in one direction. HOV lanes are specified as having a capacity of 1,800 vphpl.

### **San Mateo County Freeway CMP Guidelines**

The City/County Association of Governments of San Mateo County (C/CAG) established LOS E as the minimum acceptable level of service for all segments of US 101 within San Mateo County, unless the segment was operating at LOS F in 1991 (the date when the CMP was first adopted), in which case the LOS standard is LOS F (Final San Mateo County Congestion Management Program, 2011). The LOS F standard was applied to the freeway segment on US 101 between University Avenue and Embarcadero Road as this segment was operating at LOS F in 1991.

The freeway segment level of service definitions are shown in Table 2.

**Table 2**  
**Freeway Segment Level of Service Definitions Based on Density**

Level of Service	Description	Density (vehicles/mile/lane)
<b>A</b>	Average operating speeds at the free-flow speed generally prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	0-11
<b>B</b>	Speeds at the free-flow speed are generally maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high.	<11-18
<b>C</b>	Speeds at or near the free-flow speed of the freeway prevail. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more vigilance on the part of the driver.	<18-26
<b>D</b>	Speeds begin to decline slightly with increased flows at this level. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels.	<26-46
<b>E</b>	At this level, the freeway operates at or near capacity. Operations in this level are volatile, because there are virtually no usable gaps in the traffic stream, leaving little room to maneuver within the traffic stream.	<46-58
<b>F</b>	Vehicular flow breakdowns occurs. Large queues form behind breakdown points.	<58

Source: Santa Clara Valley Transportation Authority, Transportation Impact Analysis Guidelines, Updated March 2009 (Based on the *Highway Capacity Manual* (2000), Washington D.C.)

## Report Organization

The remainder of this report is divided into seven chapters. Chapter 2 describes the existing roadway network, transit services, and pedestrian facilities. Chapter 3 describes the methods used to estimate project traffic and its impact on the existing transportation system. Chapter 4 describes the background scenario conditions, approved projects in the City of Palo Alto, and the background plus project conditions which are used to determine the impacts the project will have on the network. Chapter 5 describes the cumulative conditions, generated from applying a growth factor to the network and analyzed with project traffic. Chapter 6 presents the projects impacts on other transportation issues including transit, bicycle and pedestrian facilities, and vehicle queuing. Chapter 7 includes a summary of project impacts, any proposed mitigation measures, and recommended improvements.

## 2. Existing Conditions

---

This chapter describes the existing conditions for transportation facilities in the vicinity of the site, including the roadway network, transit service, pedestrian and bicycle facilities.

### Existing Roadway Network

Regional access to the project site is provided via US 101.

**US 101** is a north/south freeway that extends from San Francisco through San Mateo and Santa Clara Counties. In Palo Alto, US 101 is eight lanes wide, including two HOV lanes (one in each direction). Embarcadero Road provides access to and from US 101.

Local access to the site is provided on Embarcadero Road and East Bayshore Road. These roadways are described below.

**Embarcadero Road** extends in an east-west direction starting at El Camino Real and terminating near the Palo Alto Municipal Airport. In the vicinity of the project site, Embarcadero Road is a four-lane roadway and runs along the northern boundary of the project. Embarcadero Road provides access to the Mercedes Benz site via a planned site driveway with right-in/right-out access only. Near the project site, Embarcadero Road is not wide enough for vehicles to make U-turns after exiting the right-in/right-out driveway.

**East Bayshore Road** is a two-lane frontage roadway that runs parallel to and immediately west of US 101. The project site has one full-access driveway on East Bayshore Road.

### Existing Pedestrian and Bicycle Facilities

In the project vicinity, east of US 101, sidewalks exist along the office/commercial development along both sides of Embarcadero Road. Sidewalks exist on both sides of East Bayshore Road south of Embarcadero Road and on the east side of East Bayshore Road, north of Embarcadero Road. West of US 101, sidewalks are found along both sides of Embarcadero Road, both sides of Saint Francis Drive, both sides of Channing Avenue, and most residential roadways.

In the vicinity of the project, a bikeway/multi-use path (Class I Bikeway) exists off of East Bayshore Road and Farber Place. This Class I Bikeway makes up the Renzel Trail which merges with the Adobe Creek Loop trail, which traverses through the Baylands open space area of Palo Alto. In addition, bike lanes (Class II Bikeways) exist along both sides of Embarcadero Road and East Bayshore Road east of US 101 (see Figure 3). In addition, bicyclists and pedestrians are able to cross US 101 via a dedicated pedestrian/bike bridge at Oregon Expressway. Bicyclists can access the pedestrian/bike bridge via East Bayshore Road.

## Existing Transit Service

Existing transit service to the study area is provided by the City of Palo Alto and Stanford University. This is described below.

### City of Palo Alto Embarcadero Shuttle Service

The Embarcadero Shuttle provides weekday peak-hour service between the University Avenue Caltrain Station and the Baylands Business Parks east of Highway 101. Local schools and community facilities are also served including Palo Alto High School, Jordan Middle School and Castilleja School. The Embarcadero Shuttle runs approximately every 15 minutes, Monday through Friday during commute hours (7:00 to 10:00 AM and 3:30 to 7:00 PM) and is coordinated with the Caltrain schedule. The nearest shuttle stops are located at Harbor Place on the south side of Embarcadero Road east of Faber Place and near the intersection of Geng Road and Embarcadero Road.

### Marguerite Shuttle Service

Marguerite is Stanford's free public shuttle service, which travels around campus and connects to nearby transit, shopping, dining, and entertainment. The TECH shuttle line travels between the Palo Alto Transit Center and the Palo Alto Technology Center at 1810 and 1850 Embarcadero Rd, Palo Alto. Service is provided Monday through Friday during commute hours (6:00 to 10:00 AM and 2:30 to 7:30 PM). The nearest shuttle stops are located within the Palo Alto Technology Center at 1810 Embarcadero Road and near the intersection of Geng Road and Embarcadero Road.

Other transit services (VTA bus services & Caltrain) are provided at the Caltrain Station.

## Existing Intersection Lane Configurations

The existing lane configurations at the study intersections were determined by observations in the field and are shown on Figure 4.

## Existing Traffic Volumes

Existing traffic volumes were obtained from peak hour counts collected on May 27<sup>th</sup>, 2015. The Monday of the week these counts were conducted was Memorial Day, but a Wednesday count is unlikely to have been affected by this holiday. At the time of the counts, the Palo Alto Unified School District was still in session. The existing peak-hour intersection volumes are shown in Figure 5. Intersection turning-movement counts conducted for this analysis are presented in Appendix A.

## Existing Intersection Levels of Service

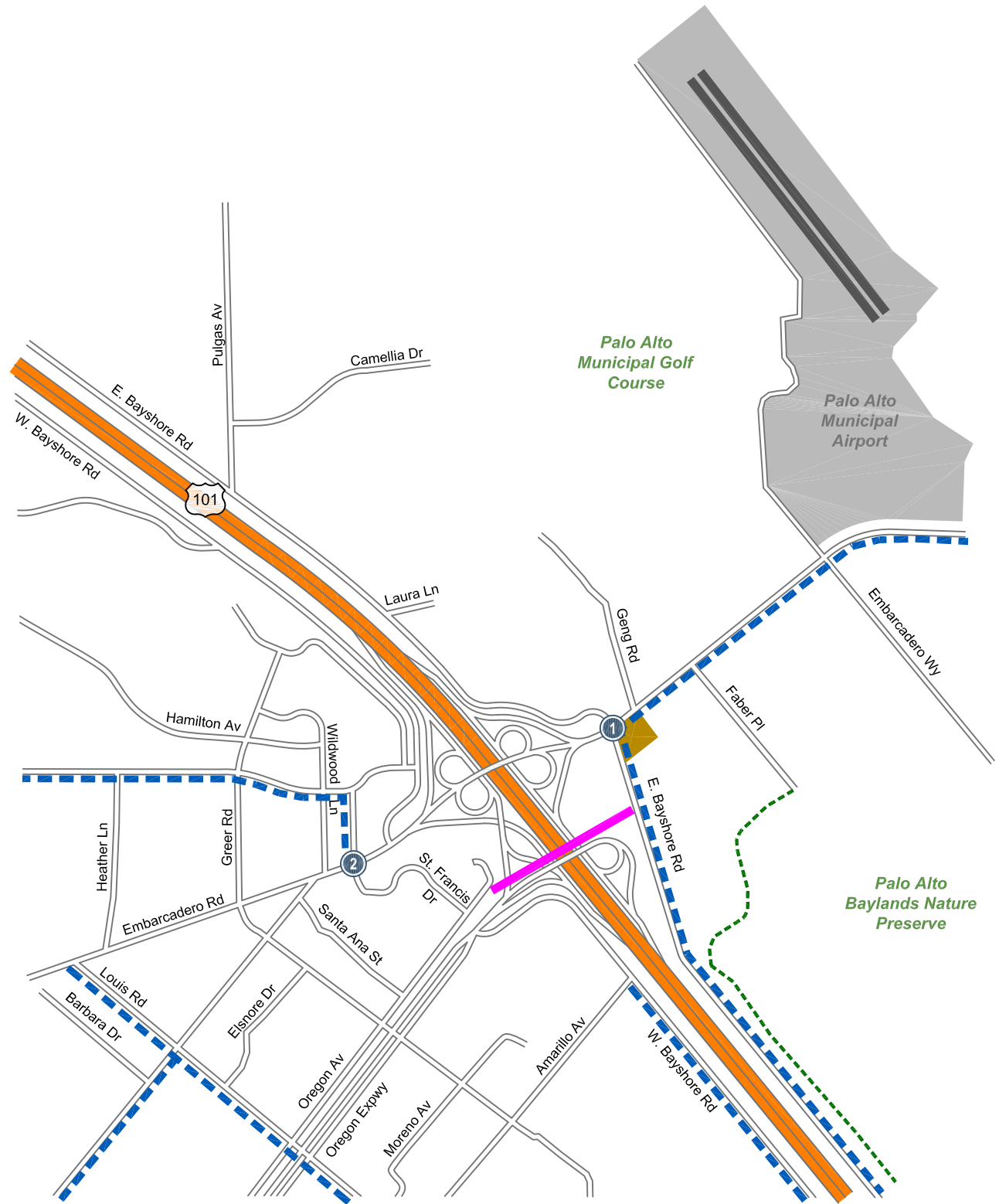
Intersection levels of service were evaluated against City of Palo Alto standards. The results of the intersection level of service analysis under existing conditions are summarized in Table 3. The results of the analysis show that the intersection of St Francis Drive and Embarcadero Road operates at acceptable levels during both the AM and PM peak hours. The intersection of E Bayshore Road and Embarcadero Road operates at an acceptable LOS D during the AM peak hour, but at an unacceptable LOS F during the PM peak hour. The intersection levels of service calculation sheets are included in Appendix C.

## **E Bayshore Road and Embarcadero Road**

The LOS calculations are based on traffic counts from May 2015. More recent field observations show that conditions have changed due to the construction on US 101. During the PM peak hour, lengthy queues along the northbound segment of E Bayshore Road, between Clarke Avenue and Embarcadero Road, significantly hinder vehicles from getting onto the north leg of the intersection. This includes northbound through vehicles, eastbound left turns, and westbound right turns. Queues from the US 101 NB on-ramp also impact the operations of this intersection and not all northbound left-turn vehicles are able to make this movement due to the high number of vehicles attempting to enter the freeway. The LOS calculations were adjusted to reflect these conditions, and thus the intersection is shown to operate at LOS F.

## **Construction on US 101**

In early summer 2015, Caltrans began a 3 to 4 year construction project that removed one auxiliary lane in each direction of US 101 between Embarcadero Road and University Avenue. Upon completion of this project, the City of East Palo Alto is anticipated to begin construction of a grade separated bicycle and pedestrian bridge south of University Avenue that is anticipated to require similar lane closures. The City of Palo Alto will also be constructing a bicycle and pedestrian bridge at Adobe Creek (just north of San Antonio Road), which will require median work and likely lane closures.

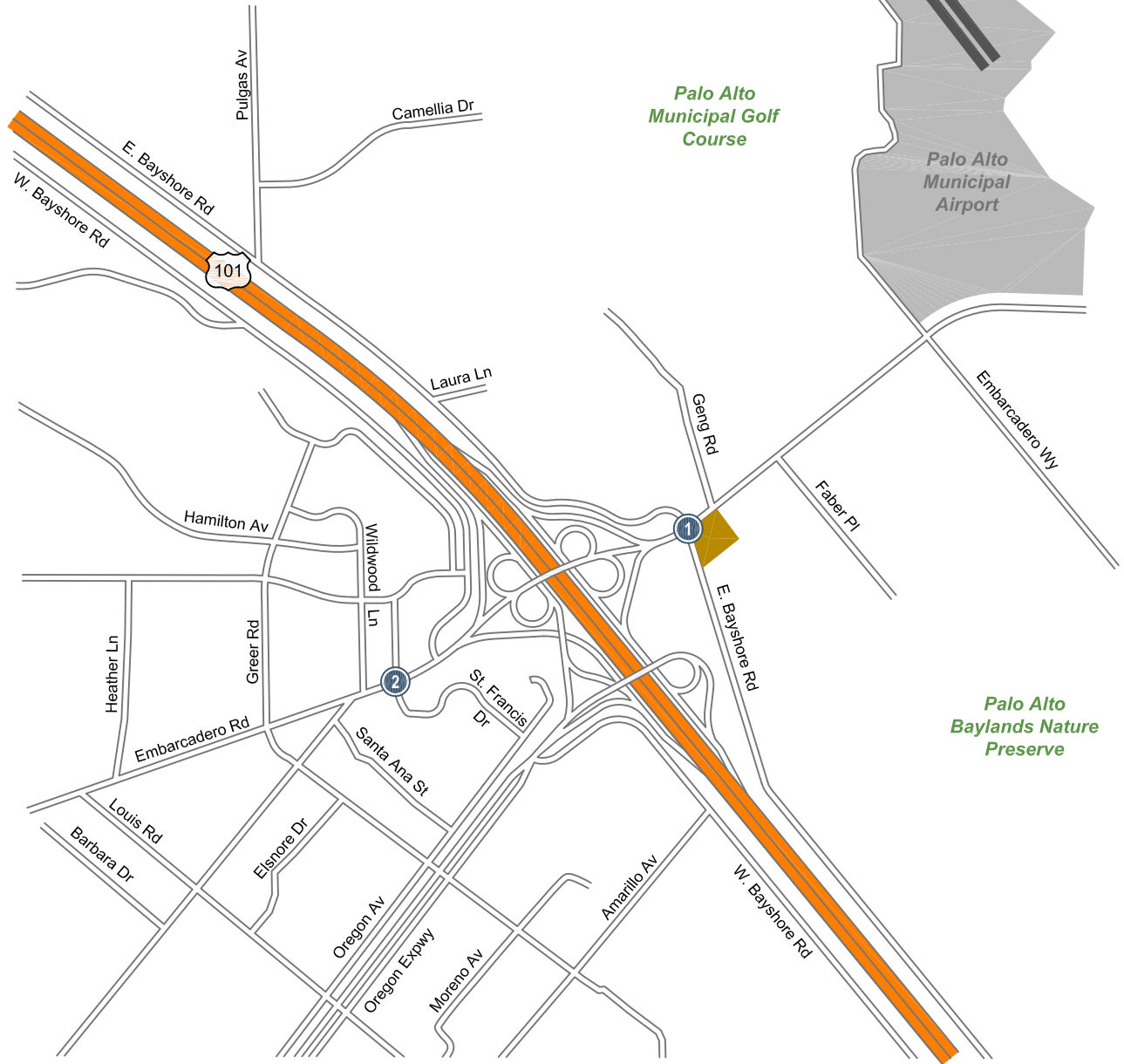
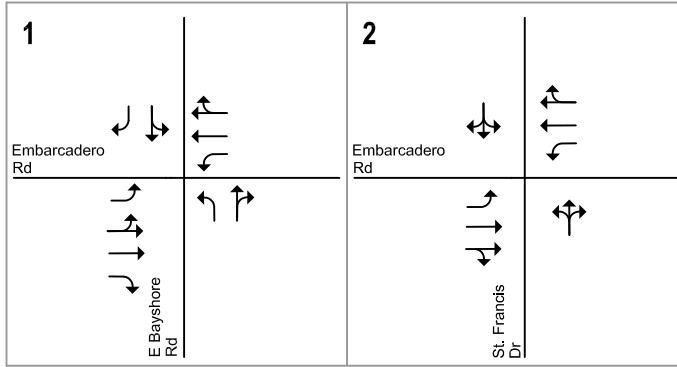


**LEGEND**

- = Site Location
- X = Study Intersection
- = Multi-Use Path
- = Bike Lane
- = Bike/Pedestrian Bridge

**Figure 3**  
**Existing Bicycle Facilities**

# 1700 Embarcadero Road



## LEGEND

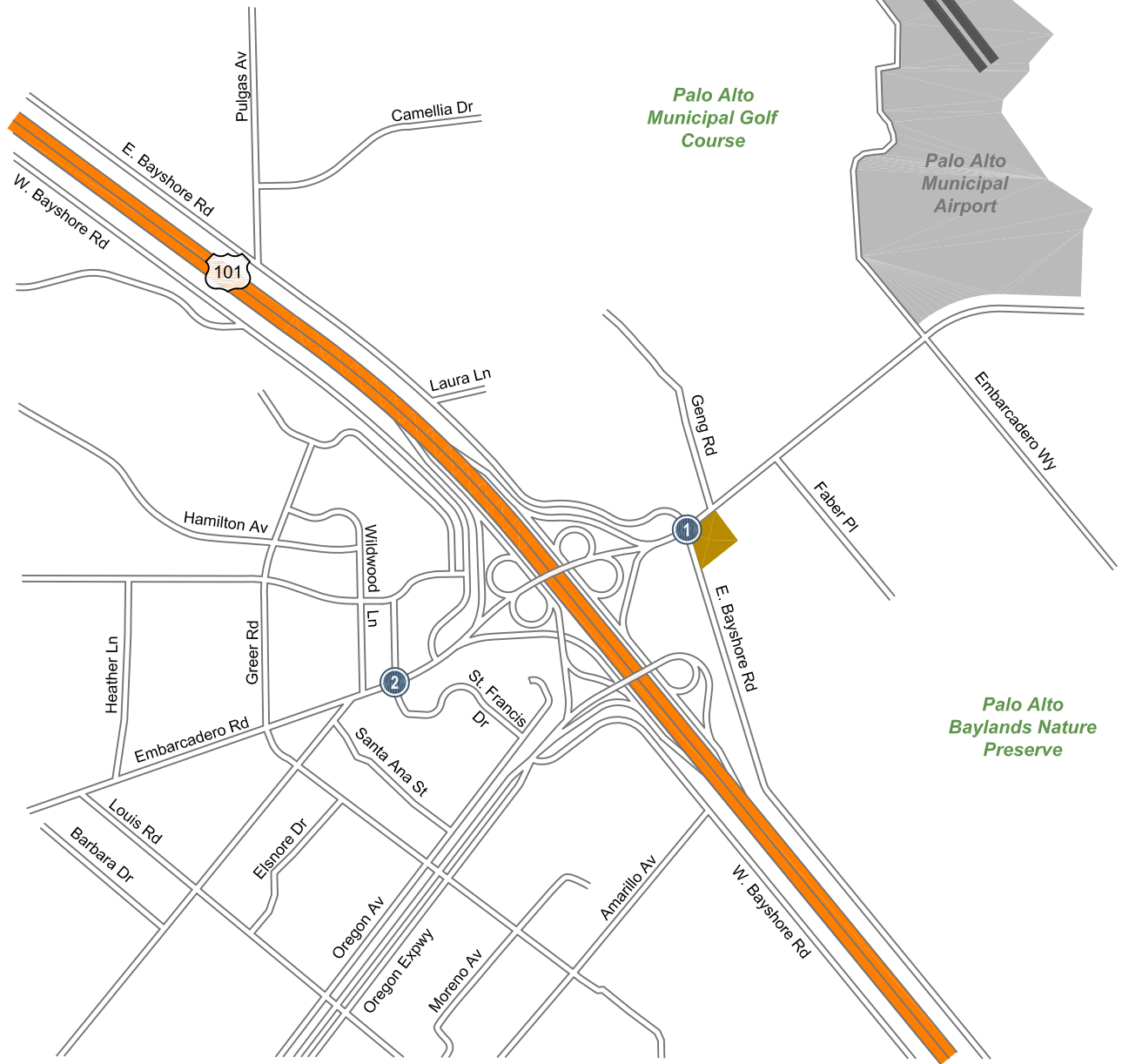
- = Site Location
- = Study Intersection

**Figure 4**  
**Existing Lane Configurations**



# 1700 Embarcadero Road

<b>1</b> 	<b>2</b> 
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## LEGEND



= Site Location



= Study Intersection

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

**Figure 5**  
**Existing Traffic Volumes**

**Table 3**  
**Existing Intersection Levels of Service**

Study Number	Intersection	Peak Hour	Count Date	Avg. Delay (sec.)	LOS
1	E Bayshore Rd/Embarcadero Rd <sup>1</sup>	AM	05/27/15	47.7	D
		PM	05/27/15	83.5	F
2	St Francis Dr/Embarcadero Rd	AM	05/27/15	20.8	C
		PM	05/27/15	11.8	B

**Notes:**  
<sup>1</sup> Intersection LOS calculations based on traffic counts conducted prior to construction along the US 101. Calculation adjustments made to represent observed intersection operations during PM peak hour of LOS F.

## Existing Freeway Ramp Capacity Analysis

This analysis consisted of a volume-to-capacity ratio evaluation of the freeway ramps at the Embarcadero Road interchange with US 101. The ramp capacity was obtained from the *Highway Capacity Manual 2000* (Chapter 25), which considers both the free-flow speed and the number of lanes on the study ramps. The peak-hour freeway ramp volumes were obtained from Caltrans. The most recent counts available on these ramps are from 2009 and 2010. Table 4 shows the AM and PM peak hour volumes. It should be noted that any count conducted on a heavily congested segment is a measure of throughput, and not the true demand. In these situations the true demand is typically higher than the measured throughput.

The analysis of freeway ramps showed that the US 101 ramps at Embarcadero Road that provide access to the project site would have sufficient capacity to serve the projected traffic volumes with the proposed project. The study ramps are expected to have volume-to-capacity (V/C) ratios below 1.0. Therefore, the project is considered to have an insignificant impact on the study freeway ramps. Based on field observations, the freeway ramps are congested during peak hours. This congestion is largely due to the congestion on the freeway itself due to the current construction project. Absent the construction project, the ramps themselves would have adequate capacity to serve the volumes of vehicles that used them prior to the construction.

It is recommended that these ramps be reevaluated following the completion of these construction projects. With the completion of the construction, the freeway is expected to carry additional traffic, and the ramp should be analyzed to determine if ramp metering rates or signal timing at the ramp-arterial intersection should be adjusted to reduce potential on- and off-ramp queuing.

**Table 4**  
**Existing Freeway Ramp Capacity Analysis**

Ramp	Type	Capacity	Hour	Existing Conditions	
				Volume <sup>1</sup>	V/C
SB US 101 to EB Embarcadero Rd.	Loop	1,800	AM	270	0.15
			PM	100	0.06
WB Embarcadero Rd. to SB US 101 <sup>2</sup>	Loop	900	AM	290	0.32
			PM	560	0.62
NB US 101 to EB Embarcadero Rd.	Diagonal	2,000	AM	580	0.29
			PM	420	0.21
WB Embarcadero Rd. to NB US 101 <sup>2</sup>	Diagonal	900	AM	115	0.13
			PM	370	0.41

1. Existing AM and PM Peak-hour ramp volumes are based on 2009 and 2010 hourly counts provided by Caltrans.  
2 This ramp is controlled by a ramp meter during the peak hours. Capacity reflects the maximum ramp meter rate.

## Existing Freeway Levels of Service

### Santa Clara County

Existing weekday AM and PM peak-hour traffic volumes on the study freeway segments were obtained from the 2012 CMP Annual Monitoring Report. The existing freeway levels of service during the weekday peak hours of traffic are summarized in Table 5. During peak hours, three of the mixed flow lanes and one HOV lane experience a level of service below acceptable LOS E standards. These four segments include:

- NB 101 San Antonio to Oregon, AM Mixed flow lanes
- SB 101 Embarcadero to Oregon, PM Mixed flow lanes
- SB 101 Oregon to San Antonio, PM Mixed flow and HOV lanes

### San Mateo County

The levels of service for the freeway segments were obtained from the 2013 San Mateo County Congestion Management Program (CMP) Monitoring Report. Table 6 summarizes the level of service standard and existing levels of service on the study freeway segments. C/CAG established LOS E as the minimum acceptable level of service for all segments of US 101 within San Mateo County, unless the segment was operating at LOS F in 1991 (the date when the CMP was first adopted), in which case the LOS standard is LOS F. The study freeway segments between University Avenue and Embarcadero Road are subject to the LOS F standard. As shown in Table 6, both the northbound and southbound directions presently operate at LOS F during the PM peak hour.

**Table 5  
Existing Freeway Levels of Service in Santa Clara County**

Freeway	Segment	Direction	Peak Hour	Mixed-Flow Lanes					HOV Lane Traffic Volume				
				Avg. Speed <sup>1</sup>	# of Lanes	Volume <sup>1</sup>	Density	LOS	Avg. Speed <sup>1</sup>	# of Lanes	Volume <sup>1</sup>	Density	LOS
US 101	San Antonio to Oregon	NB	AM	32	3	5,960	62	F	38	1	2,060	54	E
			PM	36	3	6,050	56	E	70	1	2,450	35	D
US 101	Oregon to Embarcadero	NB	AM	58	3	6,620	38	D	58	1	2,210	38	D
			PM	51	3	6,580	43	D	70	1	2,520	36	D
US 101	Embarcadero to Oregon	SB	AM	45	3	6,480	48	E	58	1	2,210	38	D
			PM	23	3	5,320	77	F	50	1	2,450	49	E
US 101	Oregon to San Antonio	SB	AM	42	3	6,300	50	E	54	1	2,220	41	D
			PM	26	3	5,540	71	F	40	1	2,440	61	F

1. Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2012.

**Table 6  
Existing Freeway Levels of Service in San Mateo County**

Freeway	Segment	Direction	Peak Hour	Lanes <sup>1</sup>	Capacity	1% Capacity <sup>2</sup>	LOS Standard	Existing LOS <sup>3</sup>
US 101	Embarcadero to University	NB	AM	3.5	8,050	81	F	F
			PM	3.5	8,050	81	F	F
US 101	University to Embarcadero	SB	AM	3.5	8,050	81	F	F
			PM	3.5	8,050	81	F	F

<sup>1</sup> Includes mixed-flow lanes and one auxiliary lane (equivalent to 0.5 lane) in each direction on US 101.  
<sup>2</sup> A capacity of 2,300 vehicles per hour per lane (vphpl) was assumed for freeway segments six lanes or wider in both directions, as specified in the 2000 Highway Capacity Manual.  
<sup>3</sup> Reported levels of service were obtained from the 2013 San Mateo CMP Monitoring.

## Observed Existing Traffic Conditions

Traffic conditions in the field were observed in order to identify existing operational deficiencies and to confirm the accuracy of calculated intersection levels of service. The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to level of service, and (2) to identify any locations where the level of service analysis does not accurately reflect existing traffic conditions.

Field observations showed that operational issues currently occur at the Embarcadero Road/E Bayshore Road intersection that may not be reflected when calculating the level of service using the existing volumes.

During the AM peak hour, there was a long vehicle queue in the southbound right-turn lane on E Bayshore Road due to high traffic volume. Vehicles were observed to take more than one cycle to get through the intersection.

During the PM peak hour, there were long vehicle queues in the eastbound lanes on Embarcadero Road and the northbound lane on E Bayshore Road. The long vehicle queues are contributed by high eastbound left-turn and northbound through traffic and by the dropped northbound receiving lanes on E Bayshore Road. Two northbound exit lanes on E Bayshore Road are reduced to one lane immediately north of the intersection, which causes the merging traffic to frequently queue back to the intersection and stops eastbound left-turn and northbound through traffic entering the intersection even when there are green times left in the cycle. Additional issues along northbound E Bayshore Road stem from queues at the signalized intersection of E Bayshore Road and Clarke Avenue, where queues extend in the northbound lane from this intersection to Embarcadero Road.

The long vehicle queue caused by high eastbound left-turn traffic extend beyond the access point of the US101 northbound off-ramp and also result in a long vehicle queue on the off-ramp because it is difficult for the off-ramp vehicles to merge to the eastbound traffic on Embarcadero Road and change to the left-turn lanes. Vehicles on eastbound Embarcadero Road, the northbound off-ramp, and on northbound E Bayshore Road were observed to take 2-3 cycles to clear the intersection.

Northbound left-turn queues were occasionally unable to clear within a single cycle due to queuing from the US 101 northbound on-ramp from Embarcadero Road. The high number of vehicles attempting to turn left from northbound East Bayshore Road and quickly merge to enter the US 101 North on-ramp blocked the remaining through lanes in the westbound direction, and the on-ramp queue was observed spilling back into the intersection of East Bayshore Road and Embarcadero Road.

The westbound vehicle queue on Embarcadero Road occasionally reached Geng Road and took more than one cycle to clear the intersection.

### 3.

## Existing Plus Project Conditions

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This chapter describes traffic conditions with the project. It begins with a description of the transportation system under existing plus project conditions and the method by which project traffic is estimated. A summary of levels of service under existing plus project traffic conditions is presented in this chapter. Existing plus project conditions are represented by existing traffic conditions with the addition of traffic generated by the project. Existing plus project traffic conditions could potentially occur if the project were to be occupied prior to the other approved projects in the area.

### Transportation Network under Existing Plus Project Conditions

It is assumed in this analysis that the transportation network under existing plus project conditions would be the same as the existing transportation network.

### Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear were estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic traveling to and from the proposed Mercedes Benz dealership was estimated for the AM and PM peak hours. As part of the project trip distribution, the directions to and from which the project trips would travel were estimated. In the project trip assignment, the project trips were assigned to specific streets and intersections. These procedures are described below.

#### Trip Generation

Trip generation for the proposed automobile dealership was estimated based on calculating the average trip generation rates for nearby automobile dealerships in Palo Alto and Belmont, based on Showroom/Office Space square footage. Driveway counts for the Palo Alto Audi, Anderson Honda, and Autobahn Motors were conducted on 7/22-23/2015. Using these driveway counts, and the estimated showroom and office size, average rates for trips per 1,000 s.f. were calculated from the three dealerships. Based on showroom size, the nearby automobile dealerships were found to produce 5.52 trips per 1,000 s.f. during the AM peak hour, and 8.01 trips per 1,000 s.f. during the PM peak hour. Using these rates the project is estimated to produce 102 total trips, with 47 trips inbound and 45 trips outbound during the AM peak hour. During the PM peak hour, the project is estimated to produce 149 total trips, with 58 trips inbound and 91 trips outbound. No credit was given for the existing restaurant on the site because it is vacant. The trip generation estimates for the Mercedes Benz project are shown in Table 7.

## Trip Distribution

Peak hour project traffic was distributed to the transportation network based on the existing trip distribution patterns in the project vicinity. It is expected that most of the trips to/from the proposed project would be from the freeway. It is expected that 25% of the trips would come from the north via US 101, and 30% from the south via US 101. Another large number of the trips would come from west of the project. It is expected that 20% of the trips will come via Oregon Expressway, and 10% of the trips will come via Embarcadero Road from the west. Of the remaining trips, it is expected that 9% will come from the east via Embarcadero Road, 5% will come from the north via E Bayshore Road, and 1% will come from the south via E Bayshore Road. The trip distribution pattern is shown on Figure 6. Though the 9 percent of vehicles travelling to and from east of the project site appears relatively high considering the existing development in this direction, the trip distribution here is meant to account for test drives to and from the site.

## Trip Assignment

The peak-hour trips associated with the proposed project were added to the transportation network in accordance with the distribution patterns discussed above. Inbound project trips would enter the site through the driveways off of Embarcadero Rd and E Bayshore Road. Some traffic would enter from northbound E Bayshore Road. This traffic would make a right turn into the E Bayshore Road driveway. Most traffic would enter from eastbound Embarcadero Road. This traffic would be split between the E Bayshore Road driveway, making a left turn, and the Embarcadero driveway, making a right turn. To exit the site, almost all vehicles would use the E Bayshore Road driveway to turn right or left. Then they could use the signal at Embarcadero to turn left toward the freeway. The Embarcadero driveway allows right turns only, and Embarcadero is not wide enough to allow U-turns, thus no trips exiting the site to travel west were assigned to this driveway. Figure 6 shows the assignment of project traffic on the local transportation network, and the project trips at each driveway. A tabular summary of project traffic at each study intersection is contained in Appendix B.

**Table 7**  
**Project Trip Generation Estimates**

	Showroom Size (ksf)	Rate <sup>1</sup>		AM Peak Hour			PM Peak Hour		
		AM	PM	Trips			Trips		
				In	Out	Total	In	Out	Total
Proposed Project									
Mercedes Benz	18.537	5.52	8.01	57	45	102	58	91	149
<b>NEW TRIPS GENERATED</b>				<b>57</b>	<b>45</b>	<b>102</b>	<b>58</b>	<b>91</b>	<b>149</b>
<sup>1</sup> Peak Hour rates based on trips per 1,000 square feet of Showroom/Office Space from similar Auto Dealerships in Palo Alto and Belmont									



## Existing Plus Project Traffic Volumes

Project trips, as represented in the above project trip assignment, were added to existing traffic volumes to obtain existing plus project traffic volumes. The existing plus project traffic volumes are shown on Figure 7.

## Existing Plus Project Intersection Analysis

The results of the level of service analysis under existing plus project conditions are summarized in Table 8. This analysis is presented for information only as the criteria that define a significant project impact at a signalized intersection are based on background plus project conditions.

The results of the analysis show that the intersection of E Bayshore Road and Embarcadero Road, during the PM peak hour, is operating at an unacceptable level of service. The addition of project trips, primarily to the northbound left-turn movement, would increase the average delay at the E Bayshore Road and Embarcadero Road intersection by 2.8 seconds during the AM peak hour, and by 4.5 seconds during the PM peak hour. . The project would not change the average delay at the St Francis Drive and Embarcadero Road intersection, and will Intersection level of service calculation sheets are included in Appendix C.

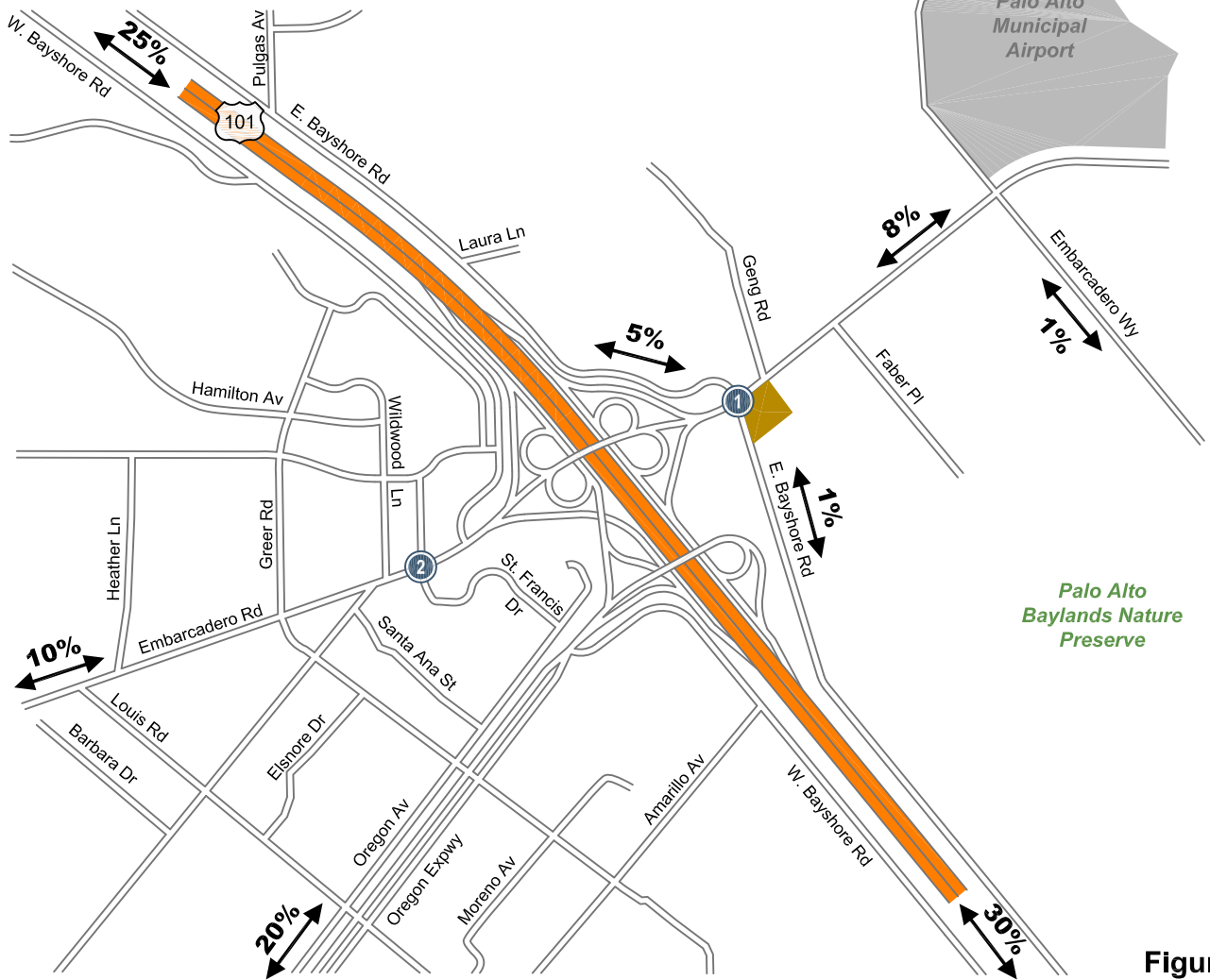
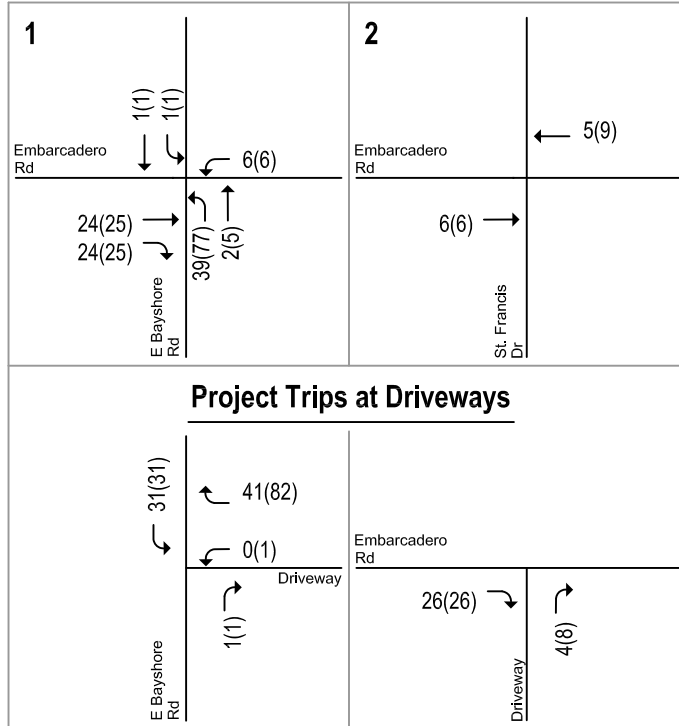
Improvements to the intersection of E. Bayshore Dr/Embarcadero Rd should be made. The recommended improvement at this intersection is to revise the eastbound leg on Embarcadero to include two left-turn pockets, a through lane, and a shared through/right-turn lane. The improvement also includes changing the east-west phasing from split phase timing to protected left turn phasing. There is a large volume of left turns and a large volume of through traffic on eastbound Embarcadero Road in the morning. Creating two separate dedicated left turn lanes and two through lanes will reduce delay for eastbound traffic. Also, the split phase signal operation is generally less efficient compared to protected left turn phasing. A change to protected left turn phasing means that the eastbound and westbound through traffic will be able to proceed simultaneously. This will reduce delays for the through traffic. In addition to the east/west Embarcadero improvements, the city should consider restriping the northbound approach to have one left turn lane and one shared left-through-right. This would likely require modifying the median island and relocating the signal equipment on the west leg of the intersection. The project should make a fair-share contribution to the cost of the recommended improvements.

**Table 8**  
**Existing Plus Project Intersection Levels of Service**

Study Number	Intersection	Peak Hour	Count Date	Existing		Existing Plus Project			
				Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Incr. In Crit. Delay (sec.)	Incr. In Crit. V/C
1	E Bayshore Rd/Embarcadero Rd <sup>1</sup>	AM	09/26/06	47.7	D	52.4	D	2.8	0.009
		PM	09/26/06	<b>83.5</b>	<b>F</b>	<b>91.2</b>	<b>F</b>	<b>4.5</b>	<b>0.016</b>
2	St Francis Dr/Embarcadero Rd	AM	03/27/07	20.8	C	20.8	C	0.0	0.002
		PM	03/27/07	11.8	B	11.8	B	0.0	0.002

**Notes:**  
<sup>1</sup> Intersection LOS calculations based on traffic counts conducted prior to construction along the US 101. Calculation adjustments made to represent observed intersection operations during PM peak hour of LOS F.  
**Bold** indicates a substandard level of service.

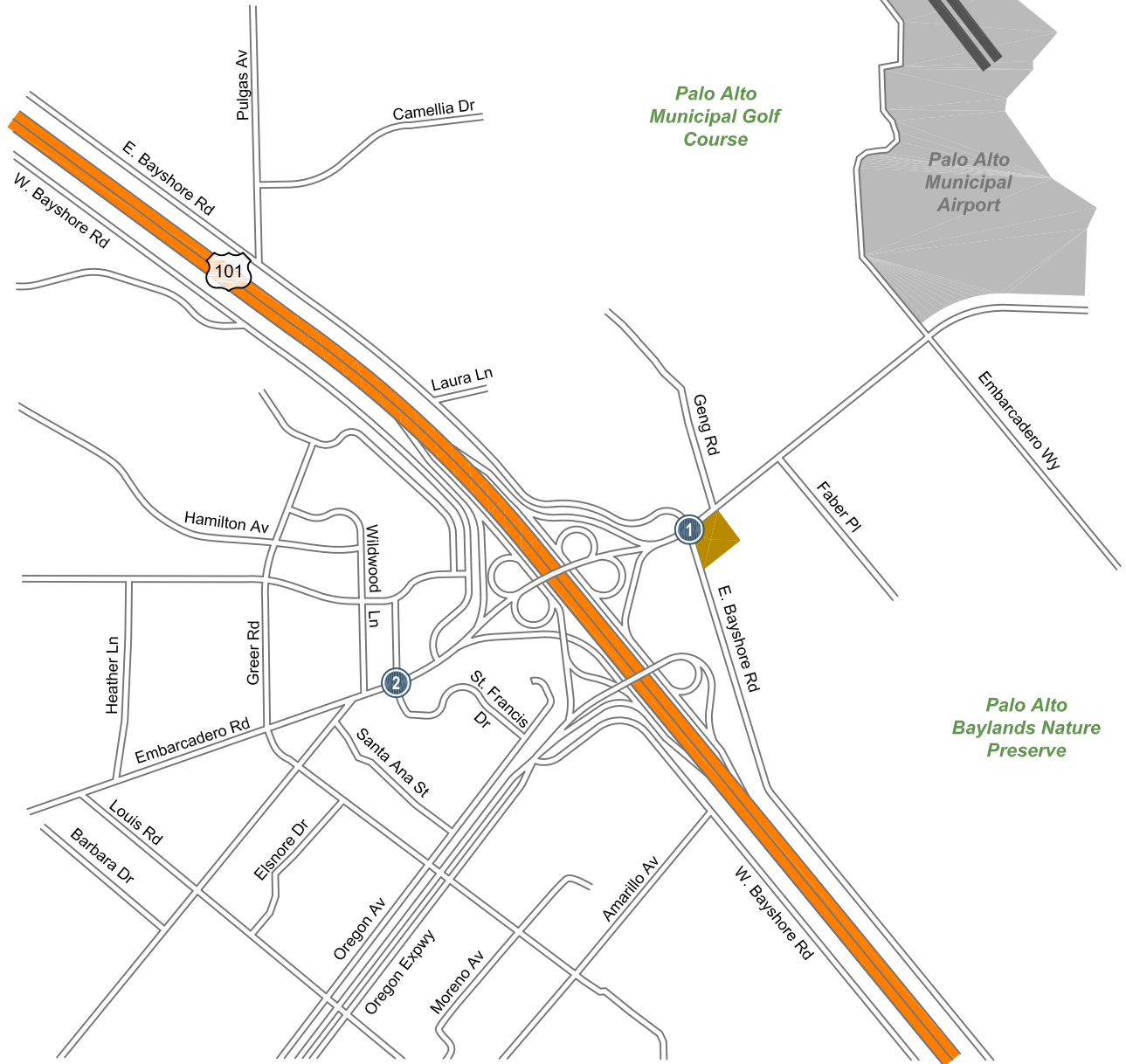
1700 Embarcadero Road



**Figure 6**  
Project Trip Distribution and Assignment

# 1700 Embarcadero Road

<b>1</b> 	<b>2</b> 
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## LEGEND



= Site Location



= Study Intersection

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

**Figure 7**  
**Existing Plus Project Traffic Volumes**

## Existing Plus Project Freeway Ramp Capacity Analysis

The freeway ramp volumes under existing plus project conditions were estimated by adding to the existing ramp volumes the traffic generated by the project.

### Definition of Significant Freeway Ramp Impacts

For the purpose of this study, the project is said to create a significant adverse impact on a freeway ramp if its implementation:

1. Causes the volume-to-capacity (V/C) ratio of the freeway ramp to exceed 1.0; or
2. Increases the amount of traffic on a freeway ramp that is already exceeding its capacity by more than one percent (1%) of the ramp's capacity.

The ramp analysis under existing plus project conditions shows that the selected ramps would continue to have sufficient capacity to serve the projected traffic volumes under existing plus project conditions. Each of the study ramps is expected to have a volume-to-capacity (V/C) ratio well below 1.0 (see Table 9). Therefore, the project is considered to cause an insignificant impact on the freeway ramps that provide access to the project site.

## Existing Plus Project Freeway Segment Analysis

Due to the current construction along US 101, it is recommended that these ramps be reevaluated following the completion of these construction projects. With the completion of the construction, the freeway is expected to carry additional traffic, and the ramp should be analyzed to determine if ramp metering rates or signal timing at the ramp-arterial intersection should be adjusted to reduce potential on- and off-ramp queuing. The following analysis may be based off of counts that take into only ramp throughput, rather than actual ramp demand.

### CMP Definition of Significant Freeway Segment Impacts

#### Santa Clara County

The CMP defines an acceptable level of service for freeway segments in Santa Clara County as LOS E or better. A project is said to create a significant adverse impact on traffic conditions on a CMP freeway segment if for either peak hour:

1. The level of service on the freeway segment degrades from an acceptable LOS E or better under existing conditions to an unacceptable LOS F under project conditions, or
2. The level of service on the freeway segment is an unacceptable LOS F under project conditions and the number of project trips on that segment constitutes at least one percent of capacity on that segment.

**Table 9**  
**Existing Plus Project Freeway Ramp V/C Analysis**

Ramp	Type	Capacity	Peak Hour	Existing		Existing Plus Project Conditions		
				Volume <sup>1</sup>	V/C	Project Trips	Total Volume	V/C
SB US 101 to EB Embarcadero Rd.	Loop	1,800	AM	270	0.15	14	284	0.16
			PM	100	0.06	15	115	0.06
WB Embarcadero Rd. to SB US 101 <sup>2</sup>	Loop	900	AM	290	0.32	23	313	0.35
			PM	560	0.62	45	605	0.67
NB US 101 to EB Embarcadero Rd.	Diagonal	2,000	AM	580	0.29	28	608	0.30
			PM	420	0.21	29	449	0.22
WB Embarcadero Rd. to NB US 101 <sup>2</sup>	Diagonal	900	AM	115	0.13	11	126	0.14
			PM	370	0.41	23	393	0.44

<sup>1</sup> Existing AM and PM peak-hour ramp volumes are based on 2009 and 2010 hourly counts provided by Caltrans.  
<sup>2</sup> This ramp is controlled by a ramp meter during the peak hour. Capacity reflects the maximum ramp meter rate.

A significant impact by CMP standards is said to be satisfactorily mitigated when measures are implemented that would restore freeway conditions to better than background conditions.

### **San Mateo County**

The study freeway segment on US 101 between Embarcadero Road and University Avenue was operating at LOS F during the PM peak hour in 1991, when the CMP was first adopted. Therefore, this segment is subject to the LOS F standard.

Per CMP technical guidelines, an analysis of freeway segment level of service is required for all segments to which the project is projected to add one percent or more to the segment capacity. The traffic added by the project to each freeway segment is summarized in 10 and 11. Since the project trips represent less than one percent of the freeway segment capacity, an analysis of freeway segments is not required and the project is considered to have an insignificant impact on the study freeway segments.

**Table 10**  
**Existing Plus Project Freeway Segment Capacity Summary in Santa Clara County**

Freeway Segment	Direction	Peak Hour	Existing Plus Project Trips								Project Trips				
			Mixed-Flow Lanes				HOV Lane				Total Volume	Mixed-Flow		HOV Lane	
			# of Lanes	Volume	LOS	Capacity	# of Lanes	Volume	LOS	Capacity		Added Volume	% Capacity	Added Volume	% Capacity
US 101 San Antonio to Oregon	NB	AM	3	5,968	F	6900	1	2,063	E	1800	11	8	0.1%	3	0.2%
		PM	3	6,059	E	6900	1	2,453	D	1800	12	9	0.1%	3	0.2%
US 101 Oregon to Embarcadero	NB	AM	3	6,628	D	6900	1	2,213	D	1800	11	8	0.1%	3	0.2%
		PM	3	6,589	D	6900	1	2,523	D	1800	12	9	0.1%	3	0.2%
US 101 Embarcadero to Oregon	SB	AM	3	6,486	E	6900	1	2,212	D	1800	8	6	0.1%	2	0.1%
		PM	3	5,330	F	6900	1	2,455	E	1800	15	10	0.1%	5	0.3%
US 101 Oregon to San Antonio	SB	AM	3	6,306	E	6900	1	2,222	D	1800	8	6	0.1%	2	0.1%
		PM	3	5,550	F	6900	1	2,445	F	1800	15	10	0.1%	5	0.3%

1. Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2012.

**Table 11  
Existing Plus Project Freeway Segment Capacity Summary in San Mateo County**

Freeway	Segment	Direction	Peak Hour	Lanes <sup>1</sup>	Capacity	1% Capacity <sup>2</sup>	LOS Standard	Existing LOS <sup>3</sup>	Added Project Trips	% Capacity
US 101	Embarcadero to University	NB	AM	3.5	8,050	81	F	F	7	0.1%
			PM	3.5	8,050	81	F	F	13	0.2%
US 101	University to Embarcadero	SB	AM	3.5	8,050	81	F	F	9	0.1%
			PM	3.5	8,050	81	F	F	10	0.1%

<sup>1</sup> Includes mixed-flow lanes and one auxiliary lane (equivalent to 0.5 lane) in each direction on US 101.  
<sup>2</sup> A capacity of 2,300 vehicles per hour per lane (vphpl) was assumed for freeway segments six lanes or wider in both directions, as specified in the 2000 Highway Capacity Manual.  
<sup>3</sup> Reported levels of service were obtained from the 2013 San Mateo CMP Monitoring.  
<sup>4</sup> Added project trips represent project traffic on the freeway segment.

## 4. Background Conditions

---

This chapter presents a summary of the traffic conditions that would occur under background conditions both with and without the proposed project.

### Significant Impact Criteria

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.

#### City of Palo Alto Definition of Significant Intersection Impacts

The project is said to create a significant adverse impact on traffic conditions at a signalized intersection in the City of Palo Alto if for either peak hour:

1. The level of service at the intersection degrades from an acceptable level (LOS D or better for non-CMP intersections and LOS E or better for CMP intersections) under background conditions to an unacceptable LOS E or F under background plus project conditions, or
2. The level of service at the intersection is an unacceptable level (LOS E or F at non-CMP intersections and LOS F at CMP intersections) under background conditions and the addition of project trips 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 .01 or more.

An exception to this rule applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e. the change in average delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more.

### Roadway Network and Traffic Volumes

The roadway network under background conditions is assumed to be the same as under existing conditions.

Background traffic volumes for the study intersections were estimated by adding to existing traffic volumes the trips generated by nearby approved projects that have not been completed or occupied, including the Palo Alto Golf Course Reconfiguration Project, Palo Alto Audi Expansion, and the Edgewood Plaza Shopping Center Project.

The project trip estimates were then added to the background traffic volumes to derive background plus project traffic volumes. Figures 8 and 9 show the intersection turning-movement volumes under background conditions without and with the project, respectively.



## Intersection Level of Service Analysis

The results of the level of service analysis under background conditions are summarized in Table 12. The results show that, measured against the City of Palo Alto level of service standards, the intersection of E Bayshore Road and Embarcadero Road, during the PM peak hour, will operate at an unacceptable LOS F, both without and with the project. . The project would increase the average delay at the E Bayshore Road and Embarcadero Road intersection by 2.8 seconds during the AM peak hour, and by 5.1 seconds during the PM peak hour. This increase in average delay of 5.1 seconds during the PM peak hour is primarily due to the northbound left-turn movements generated by the project, and would constitute a significant impact. The project would not change the average delay at the St Francis Drive and Embarcadero Road intersection. Intersection level of service calculation sheets are included in Appendix C.

**Table 12**  
**Background Level of Service Summary**

Study Number	Intersection	Peak Hour	Background		Background Plus Project			
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Incr. In Crit. Delay (sec.)	Incr. In Crit. V/C
1	E Bayshore Dr/Embarcadero Rd1	AM	48.7	D	53.5	D	2.8	0.009
		PM	95.6	F	<b>104.2</b>	<b>F</b>	<b>5.1</b>	<b>0.015</b>
<i>With Mitigation</i>					<b>88.7</b>	<b>F</b>		
2	St Francis Dr/Embarcadero Rd	AM	21.9	C	21.8	C	0.0	0.002
		PM	16.0	B	15.9	B	0.0	0.002

**Notes:**  
<sup>1</sup> Intersection LOS calculations based on traffic counts conducted prior to construction along the US 101. Calculation adjustments made to represent observed intersection operations during PM peak hour of LOS F.

**Bold** indicates a substandard level of service.  
**Bold** indicates a significant project impact.

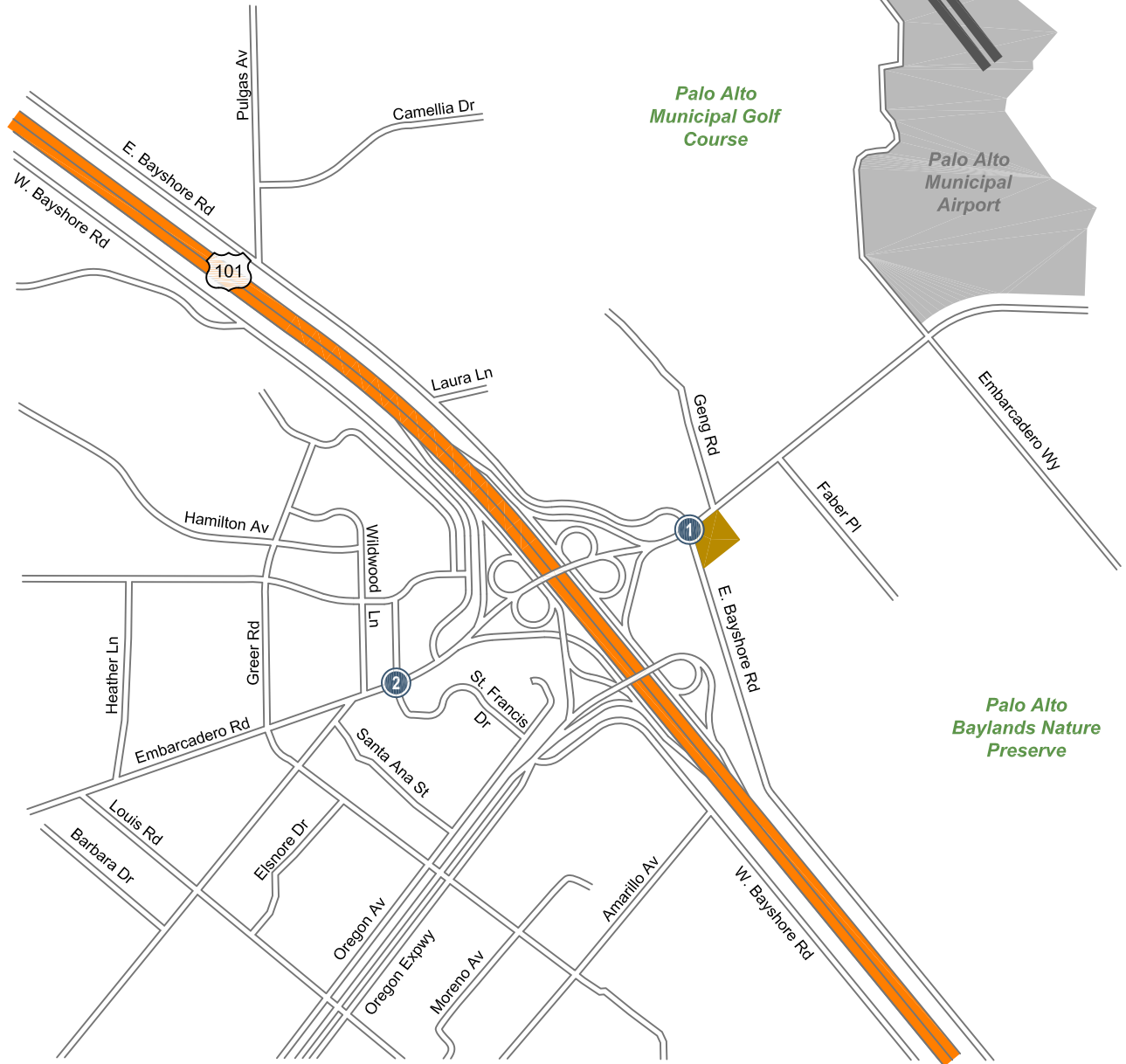
## **E Bayshore Road and Embarcadero Road Operations**

The following improvements are recommended at this intersection to mitigate the project impact. With these improvements, the intersection would continue to operate at LOS F, but the average delay would improve to 88.7 seconds. The project should make a fair-share contribution to the cost of the recommended improvements.

The recommended improvement at this intersection is to revise the eastbound leg on Embarcadero to include two left-turn pockets, a through lane, and a shared through/right-turn lane. The improvement also includes changing the east-west phasing from split phase timing to protected left turn phasing. There is a large volume of left turns and a large volume of through traffic on eastbound Embarcadero Road in the morning. Creating two separate dedicated left turn lanes and two through lanes will reduce delay for eastbound traffic. Also, the split phase signal operation is generally less efficient compared to protected left turn phasing. A change to protected left turn phasing means that the eastbound and westbound through traffic will be able to proceed simultaneously. This will reduce delays for the through traffic. In addition to the east/west Embarcadero improvements, the city should consider restriping the northbound approach to have one left turn lane and one shared left-through-right. This would likely require modifying the median island and relocating the signal equipment on the west leg of the intersection. The project should make a fair-share contribution to the cost of the recommended improvements. This improvement can be seen in Figure 12.

1700 Embarcadero Road

<p><b>1</b></p> <p>Embarcadero Rd</p> <p>E Bayshore Rd</p>	<p><b>2</b></p> <p>Embarcadero Rd</p> <p>St. Francis Dr</p>
--	---



LEGEND



= Site Location



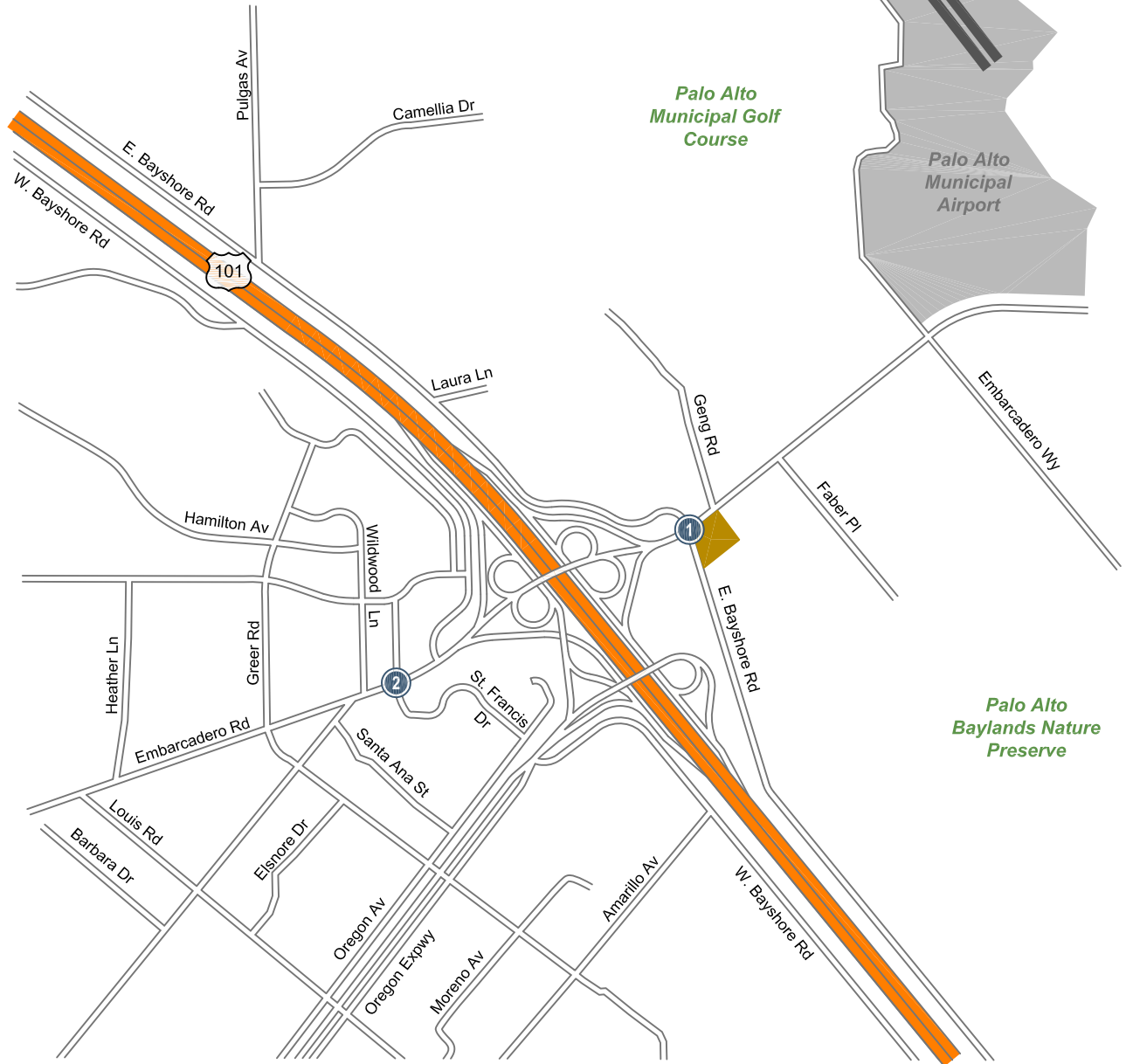
= Study Intersection

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

**Figure 8**  
**Background Without Project Traffic Volumes**

1700 Embarcadero Road

<p><b>1</b></p>	<p><b>2</b></p>
-----------------	-----------------



LEGEND

= Site Location

= Study Intersection

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

**Figure 9**  
**Background Plus Project Traffic Volumes**

## 5. Cumulative Conditions

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This chapter presents a summary of the traffic conditions that would occur under cumulative conditions with the proposed project. Cumulative conditions reflect a horizon year of 2020. This short-term cumulative analysis is done in accordance to VTA TIA Guidelines for the proposed scope and timeline of the proposed project.

### Roadway Network and Traffic Volumes

The intersection lane configurations under cumulative conditions were assumed to be the same as described under background conditions.

Cumulative conditions for both intersections were estimated by applying a 1.4% annual growth rate to the existing traffic conditions. The growth rate, which has been approved by the City of Palo Alto, was applied to the study intersections through the year 2020. The cumulative volumes without project trips added can be seen in Figure 10. Project trips were added to the growth estimates to create the cumulative conditions volumes. Figure 11 shows the intersection turning-movement volumes under cumulative conditions with the project.

### Intersection Levels of Service Analysis

The results of the level of service analysis under cumulative conditions are summarized in Table 13. The results show that, measured against the City of Palo Alto level of service standards, the intersection of St Francis Drive and Embarcadero Road will operate at acceptable levels of service during both the AM and PM peak hours. The intersection of E Bayshore Road and Embarcadero Road will operate at an unacceptable LOS E during the AM peak hour and an unacceptable LOS F during the PM peak hour under cumulative conditions. Compared to the Cumulative No Project scenario, the St Francis Drive and Embarcadero Road intersection would have a relatively minimal increase in critical delay with project trips added. The intersection of E Bayshore Road and Embarcadero Road would have an increase in critical delay of 10.3 seconds during the AM peak hour, and 19.4 seconds during the PM peak hour. Though the intersection is operating at an LOS F during the PM peak hour, this increase in critical delay during both peak hours constitutes a significant impact.

## Recommended Improvement

With the recommended improvements, this intersection would continue to operate at LOS E during the AM peak hour, but would improve to an average delay to 61.1 seconds, and would continue to operate at a LOS F during the PM peak hour, but would improve to an average delay to 111.6 seconds.

The recommended improvement at this intersection is to revise the eastbound leg on Embarcadero to include two left-turn pockets, a through lane, and a shared through/right-turn lane. The improvement also includes changing the east-west phasing from split phase timing to protected left turn phasing. There is a large volume of left turns and a large volume of through traffic on eastbound Embarcadero Road in the morning. Creating two separate dedicated left turn lanes and two through lanes will reduce delay for eastbound traffic. Also, the split phase signal operation is generally less efficient compared to protected left turn phasing. A change to protected left turn phasing means that the eastbound and westbound through traffic will be able to proceed simultaneously. This will reduce delays for the through traffic. In addition to the east/west Embarcadero improvements, the city should consider restriping the northbound approach to have one left turn lane and one shared left-through-right. This would likely require modifying the median island and relocating the signal equipment on the west leg of the intersection. The project should make a fair-share contribution to the cost of the recommended improvements.

**Table 13**  
**Cumulative Level of Service Summary**

Study Number	Intersection	Peak Hour	Cumulative No Project		Cumulative			
			Ave. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Incr. in Crit. Delay <sup>2</sup>	Incr. Crit. V/C <sup>2</sup>
1	E Bayshore Rd/Embarcadero Rd <sup>1</sup>	AM	<b>65.7</b>	<b>E</b>	<b>73.0</b>	<b>E</b>	<b>10.3</b>	<b>0.028</b>
		<i>With Mitigation</i>				<b>61.1</b>	<b>E</b>	
		PM	<b>122.0</b>	<b>F</b>	<b>136.3</b>	<b>F</b>	<b>19.4</b>	<b>0.048</b>
		<i>With Mitigation</i>				<b>111.6</b>	<b>F</b>	
2	St Francis Dr/Embarcadero Rd	AM	22.9	C	23.0	C	0.0	0.002
		PM	16.4	B	16.4	B	0.0	0.002

**Notes:**

<sup>1</sup> Intersection LOS calculations based on traffic counts conducted prior to construction along the US 101. Calculation adjustments made to represent observed intersection operations during PM peak hour of LOS F.

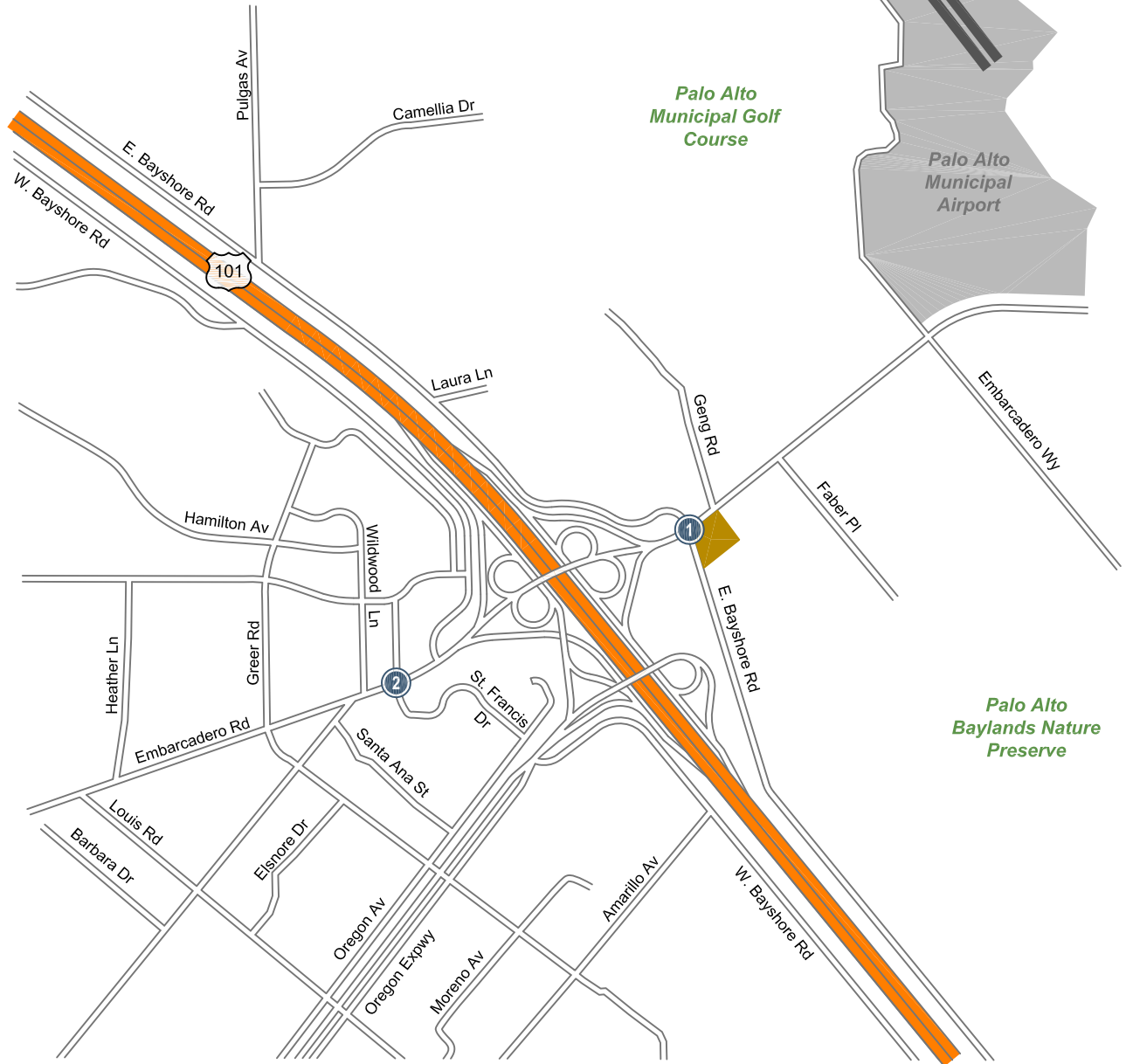
<sup>2</sup> Increase in Critical Delay and Increase in Critical V/C were calculated by comparing Cumulative with Cumulative No Project Conditions

**Bold** indicates substandard level of service

**Border** indicates significant project impact

1700 Embarcadero Road

<p><b>1</b></p>	<p><b>2</b></p>
-----------------	-----------------



LEGEND

= Site Location

= Study Intersection

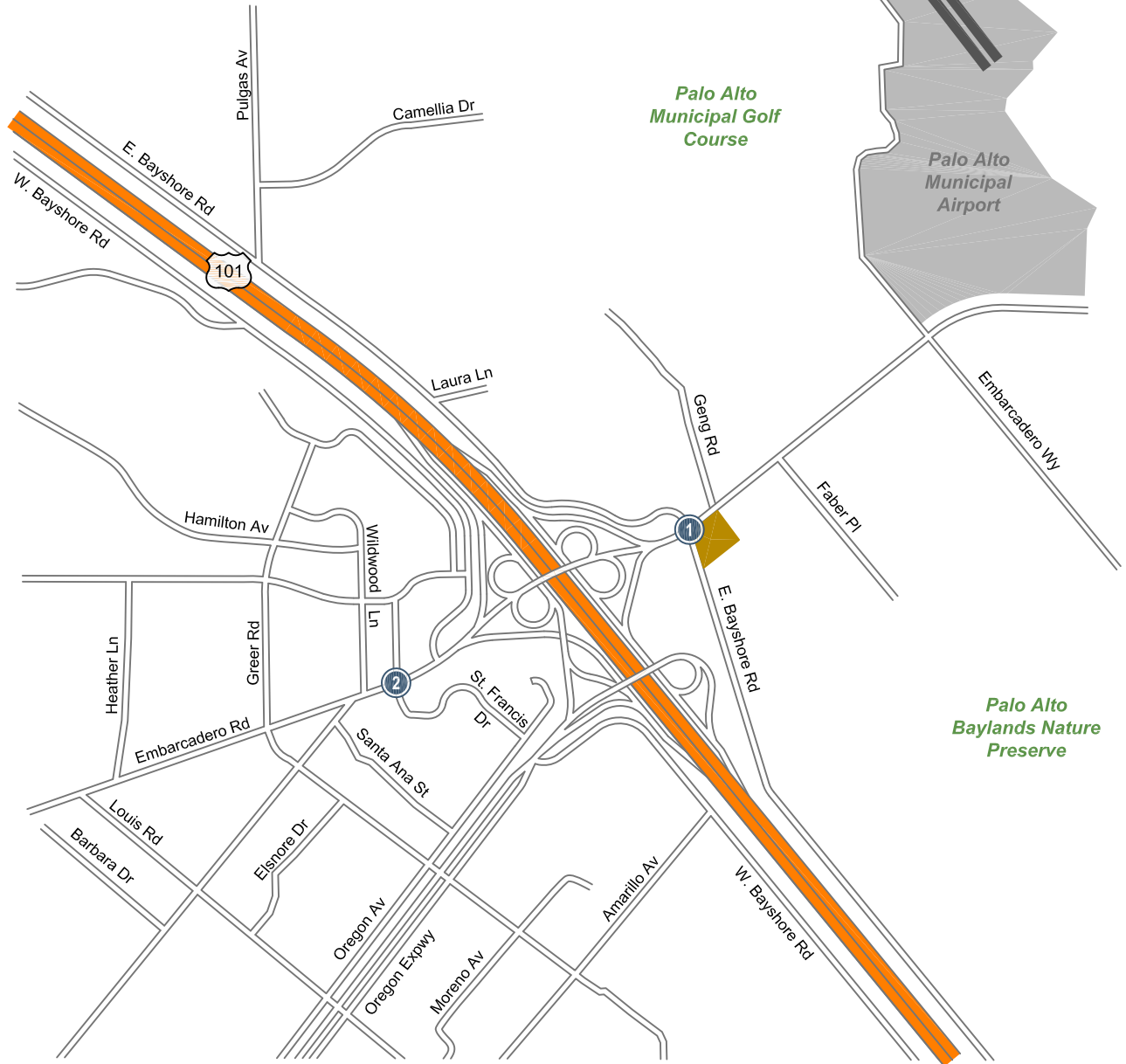
XX(XX) = AM(PM) Peak-Hour Traffic Volumes

**Figure 10**  
Cumulative Without Project Traffic Volumes



1700 Embarcadero Road

<p><b>1</b></p> <p>Embarcadero Rd</p> <p>E Bayshore Rd</p>	<p><b>2</b></p> <p>Embarcadero Rd</p> <p>St. Francis Dr</p>
--	---



LEGEND



= Site Location



= Study Intersection

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

**Figure 11**  
Cumulative With Project Traffic Volumes

## 6. Other Transportation Issues

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This chapter presents other transportation issues associated with the project. These include an analysis of:

- Vehicle Queuing
- Site access and circulation
- Potential impacts to transit, bicycle and pedestrian facilities

Unlike the level of service impact methodology, which is adopted by the City Council, the analyses in this chapter are based on professional judgement in accordance with the standards and methods employed by the traffic engineering community.

### Queuing Analysis

The operations analysis is based on vehicle queuing for high-demand movements at intersections (see Table 14). Vehicle queues were estimated using a Poisson probability distribution, which estimates the probability of “n” vehicles for a vehicle movement using the following formula:

$$P(x=n) = \frac{\lambda^n e^{-\lambda}}{n!}$$

Where:

$P(x=n)$  = probability of “n” vehicles in queue per lane

$n$  = number of vehicles in the queue per lane

$\lambda$  = average number of vehicles in the queue per lane (vehicles per hour per lane/signal cycles per hour)

The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95<sup>th</sup> percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. Poisson probability calculation sheets are provided in Appendix D.

**Table 14**  
**Queuing Analysis Summary**

Movement: Peak Hour Period:	East Bayshore Rd & Embarcadero Rd	
	AM	NBL PM
<b>Existing</b>		
Cycle/Delay <sup>1</sup> (sec)	120	120
Volume (vphpl )	92	332
Avg. Queue (veh/ln.)	3.1	11.1
Avg. Queue <sup>2</sup> (ft./ln)	77	277
50th %. Queue (veh/ln.)	3	11
95th %. Queue (veh/ln.)	6	17
95th %. Queue (ft./ln)	150	425
Storage (ft./ ln.)	275	275
Adequate (Y/N)	Y	<b>N</b>
<b>Existing Plus Project</b>		
Cycle/Delay <sup>1</sup> (sec)	120	120
Volume (vphpl )	131	409
Avg. Queue (veh/ln.)	4.4	13.6
Avg. Queue <sup>2</sup> (ft./ln)	109	341
50th %. Queue (veh/ln.)	4	13
95th %. Queue (veh/ln.)	8	20
95th %. Queue (ft./ln)	200	500
Storage (ft./ ln.)	275	275
Adequate (Y/N)	Y	<b>N</b>
<b>Background</b>		
Cycle/Delay <sup>1</sup> (sec)	120	120
Volume (vphpl )	92	332
Avg. Queue (veh/ln.)	3.1	11.1
Avg. Queue <sup>2</sup> (ft./ln)	77	277
50th %. Queue (veh/ln.)	3	11
95th %. Queue (veh/ln.)	6	17
95th %. Queue (ft./ln)	150	425
Storage (ft./ ln.)	275	275
Adequate (Y/N)	Y	<b>N</b>
<b>Background Plus Project</b>		
Cycle/Delay <sup>1</sup> (sec)	120	120
Volume (vphpl )	131	409
Avg. Queue (veh/ln.)	4.4	13.6
Avg. Queue <sup>2</sup> (ft./ln)	109	341
50th %. Queue (veh/ln.)	4	13
95th %. Queue (veh/ln.)	8	20
95th %. Queue (ft./ln)	200	500
Storage (ft./ ln.)	275	275
Adequate (Y/N)	Y	<b>N</b>
<b>Notes:</b>		
<sup>1</sup> Vehicle queue calculations based on cycle length for signalized intersections .		
<sup>2</sup> Assumes 25 feet per vehicle queued.		

## East Bayshore Rd and Embarcadero Rd

The existing storage capacity for the northbound left-turn lane from East Bayshore Road onto Embarcadero Road is up to 11 vehicles (275 feet) without interfering with other movements. The existing queue length is 425 feet during the PM peak hour. This queue length would remain the same under PM peak hour Background conditions. The project would add 77 vehicles to the left turn movement during the PM peak hour and would increase the 95<sup>th</sup> percentile queue length by 75 feet, or 3 vehicles. The roadway is not wide enough, between the striped center line and the curb, to allow for all vehicles going right or through at the intersection to make it around this queue.

Embarcadero Road is wide enough for the center line to be restriped to extend the left turn pocket should the City desire to do so.

## Site Access and On-Site Circulation

A review of site access and on-site circulation was completed based on the site plan dated September 18<sup>th</sup>, 2015 and shown in Figure 2. The project proposes to make use of the existing site driveways, one of which is located on Embarcadero Road near Geng Road, and the other is located on E. Bayshore Road at the southern edge of the property. The Embarcadero Road driveway would be restricted to right turns only due to the median on Embarcadero Road. The driveway on E. Bayshore Road would allow full access.

Most vehicles entering the site will be heading eastbound on Embarcadero Road, either coming from the freeway or Palo Alto. These vehicles could enter the site either by making a left turn off of E. Bayshore Road or a right turn off of Embarcadero Road. Most vehicles exiting the site would desire to travel westbound on Embarcadero Road. They could do so by first turning right on E. Bayshore Road and then left on Embarcadero Road at the signal. Vehicles exiting the Embarcadero Road driveway would have a difficult time heading west on Embarcadero Road. There is a median preventing left turns, and the driveway is too close to Geng Road to allow access to the left turn pocket. Also, Embarcadero Road is not wide enough for U-turns, and U-turns are prohibited at the Geng Road intersection. Because of these difficulties, it is assumed that traffic heading west on Embarcadero Road would use the E. Bayshore Road driveway.

Based on the site description and field observations, adequate sight distance is available at the E Bayshore Road driveway to insure that exiting vehicles can see pedestrians on the sidewalk, as well as vehicles on East Bayshore Road. Vehicles making a left-turn, 30 AM vehicles and 31 PM vehicles, into the project driveway at this location may occasionally have to wait for a gap in northbound traffic. Based on the driveway LOS calculations, shown in Table 15, the average delay for vehicles turning right at the driveway is between 9.4 and 9.7 seconds during the AM peak periods, and between 13.9 and 15.4 seconds during the PM peak periods. The delay for vehicles turning left into the site ranges between 7.7 and 9.2 seconds for all time periods. There is currently no left turn pocket at the location of this driveway and with so few project trips a pocket would not be warranted. Level of service calculations for this driveway are shown in Table 15.

To reduce reliance on the E. Bayshore Road driveway, it would be desirable to develop the option to make left turns out of the Embarcadero Road driveway. The applicant should work with the Audi dealership next door to see if it would be possible to develop a full access driveway opposite Geng Road.

**Table 15**  
**E Bayshore Road Driveway Level of Service Calculations**

Scenario		E Bayshore Driveway		
		LOS	Inbound Left-Turn Delay	Outbound Right-Turn Delay
Existing Plus Project	AM	A	7.7	9.4
	PM	B	8.8	13.9
Background Plus Project	AM	A	7.7	9.4
	PM	B	8.8	13.9
Cumulative	AM	A	7.7	9.7
	PM	C	9.2	15.4

NOTES:  
LOS calculations based on *HCS 2000 Unsignalized Intersection Level of Service*

## Transit, Pedestrian and Bicycle Analysis

Because the Embarcadero Shuttle that provides transit service in the site vicinity is limited to weekday commute hours, the project is not expected to generate a significant number of transit trips. It is unlikely that the project would by itself generate enough demand for transit service to justify the extension of shuttle hours.

The project is assumed to create no impacts or need for improvements to the pedestrian and bicycle facilities. Existing facilities provide adequate access to the project site. Also, as an automobile dealership the project is not expected to generate a large number of non-automobile trips.

## 7. Conclusions

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The potential impacts of the project were evaluated in accordance with the standards set forth by the City of Palo Alto and the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP). The study included the analysis of traffic conditions at two signalized intersections, three freeway segments, and four freeway ramps during the weekday AM and PM peak hours. The weekday peak hours are typically between 7:00 and 9:00 AM and between 4:00 and 6:00 PM.

### Intersection Level of Service Analysis

The results of the intersection level of service analysis show that all study intersections are expected to operate at acceptable levels under all conditions according to standards set forth by the City of Palo Alto, and based on traffic counts conducted prior to construction projects occurring on US 101. Field observations show that the intersection of E Bayshore Road and Embarcadero Road currently operates at LOS F due to the construction activities.

#### E Bayshore Road and Embarcadero Road

The LOS calculations are based on traffic counts from May 2015. Based on field observations of this intersection during the AM and PM peak hours, the calculations using these volumes do not accurately reflect the current conditions. During the PM peak hour lengthy queues along the northbound segment of E Bayshore Road, between Clarke Avenue and Embarcadero Road, significantly hinder vehicles from completing movements onto the north leg of the intersection. This includes northbound through vehicles, eastbound left turns, and westbound right turns. The LOS calculations were adjusted to reflect these conditions, and the intersection is shown to operate at LOS F. As part of this analysis, adjustments were made to reflect these conditions. Under these conditions, it was determined that the project would have a significant impact at the intersection during the PM peak hour under the Background Plus Project scenario, and during both the AM and PM peak hours under the Cumulative scenario.

Improvements to the intersection of E. Bayshore Dr/Embarcadero Rd should be made. The recommended improvement at this intersection is to revise the eastbound leg on Embarcadero to include two left-turn pockets, a through lane, and a shared through/right-turn lane. The improvement also includes changing the east-west phasing from split phase timing to protected left turn phasing. There is a large volume of left turns and a large volume of through traffic on eastbound Embarcadero Road in the morning. Creating two separate dedicated left turn lanes and two through lanes will reduce delay for eastbound traffic. Also, the split phase signal operation is generally less efficient compared to protected left turn phasing. A change to protected left turn phasing means that the eastbound and westbound through traffic will be able to proceed simultaneously. This will reduce delays for the through traffic. In addition to the east/west Embarcadero improvements, the city should consider restriping the northbound approach to have one left turn lane and one shared left-through-right. This would likely require modifying the median island and relocating the signal equipment on the west leg of the intersection. The project should make a fair-share contribution to the cost of the recommended improvements.

With these improvements, the significant project impacts would be mitigated.

## Freeway Segment Analysis

The project would contribute trips equivalent to less than one percent of the segment capacity. Thus, the project would have an insignificant impact on nearby freeway segments.

## Freeway Ramp Capacity Analysis

The analysis of freeway ramps showed that the US 101 ramps at Embarcadero Road that provide access to the project site would have sufficient capacity to serve the projected traffic volumes with the proposed project. The study ramps are expected to have volume-to-capacity (V/C) ratios below 1.0. Therefore, the project is considered to have an insignificant impact on the study freeway ramps. Based on field observations, the freeway ramps are congested during peak hours. This congestion is largely due to the congestion on the freeway itself due to the current construction project. Absent the construction project, the ramps themselves have adequate capacity to serve the volumes of vehicles that used them prior to the construction.

The project is considered to have an insignificant impact on the study freeway ramps. However, it is recommended that these ramps be reevaluated following the completion of these construction projects. With the completion of the construction, the freeway is expected to carry additional traffic, and the ramp should be analyzed to determine if ramp metering rates or signal timing at the ramp-arterial intersections should be adjusted to reduce potential on- and off-ramp queuing.

## Other Transportation Issues

### Queuing Analysis

The existing storage capacity for the northbound left-turn lane from East Bayshore Road onto Embarcadero Road is up to 11 vehicles (275 feet) without interfering with other movements. The number of left-turning vehicles already exceeds this capacity during the PM peak hour. The project will add 43 vehicles to this movement during the PM peak hour. The 95<sup>th</sup> percentile queue with the proposed project is projected to extend to 425 feet. The roadway is not wide enough, between the striped yellow line and the curb, to allow for all vehicles going right or through at the intersection to make it around this queue.

Embarcadero Road is wide enough for the center line to be restriped to extend the left turn pocket should the City desire to do so.

### Site Access and On-Site Circulation

Based on a review of the site description there will be no issues with site access along both Embarcadero Road and E Bayshore Road. No issues are expected to arise regarding on-site circulation. The final site plan should demonstrate conformance with the City of Palo Alto design guidelines and requirements.

It is recommended that the applicant work with the Audi dealership next door to explore the potential of creating a shared, full-access driveway opposite Geng Road.

### Transit, Pedestrian, and Bicycle Analysis

The proposed project would not have an adverse effect on the existing transit, pedestrian, or bicycle facilities in the study area. Thus, no project sponsored improvements would be necessary.

## Summary of Mitigations and Recommendations

Below is a summary of the mitigations and recommendations described throughout this report for the proposed project.

- It is recommended that the applicant work with the Audi dealership next door to explore the potential of creating a shared, full-access driveway opposite Geng Road.
- The project should make a fair-share contribution to improvements at the intersection of E Bayshore Road and Embarcadero Road. Recommended improvements include geometry changes to the eastbound leg of the intersection to provide two left-turning lanes, a through lane, and a shared through/right-turn lane in the eastbound direction. The improvement also includes signal modifications to change the current split phase in the east-west directions to protected left-turn phasing. In addition to the east/west Embarcadero improvements, the city should consider restriping the northbound approach to have one left turn lane and one shared left-through-right. This would likely require modifying the median island and relocating the signal equipment on the west leg of the intersection.
- It is recommended that the US 101/Embarcadero interchange be reevaluated following the completion of the construction projects. With the completion of the construction, the freeway is expected to carry additional traffic, and the ramp should be analyzed to determine if ramp metering rates or signal timing at the ramp-arterial intersections should be adjusted to reduce potential on- and off-ramp queuing.



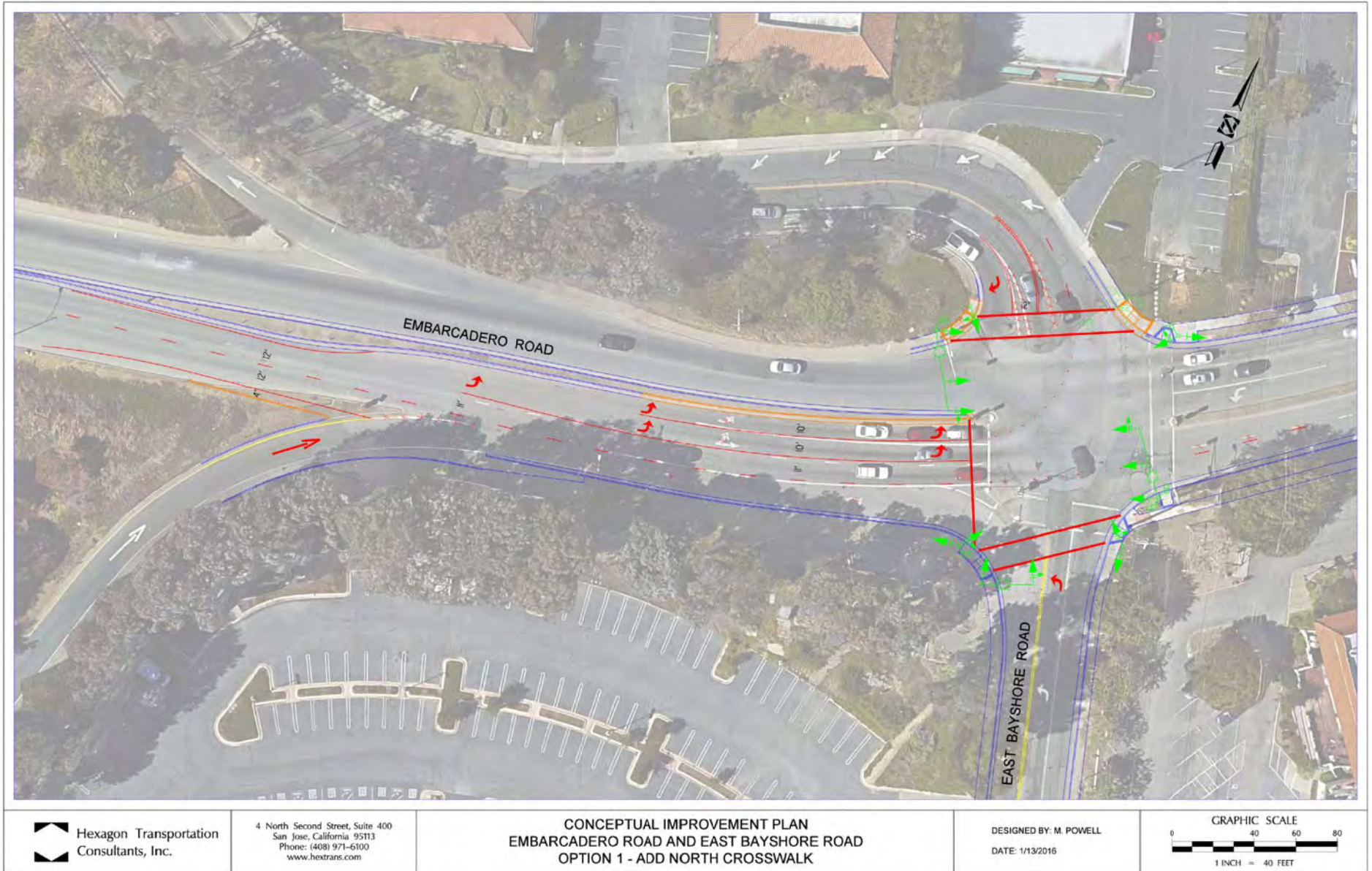


Figure 12  
East Bayshore Road and Embarcadero Improvement

**1700 Embarcadero Road  
Mercedes Benz TIA  
Technical Appendices**

February 8, 2016

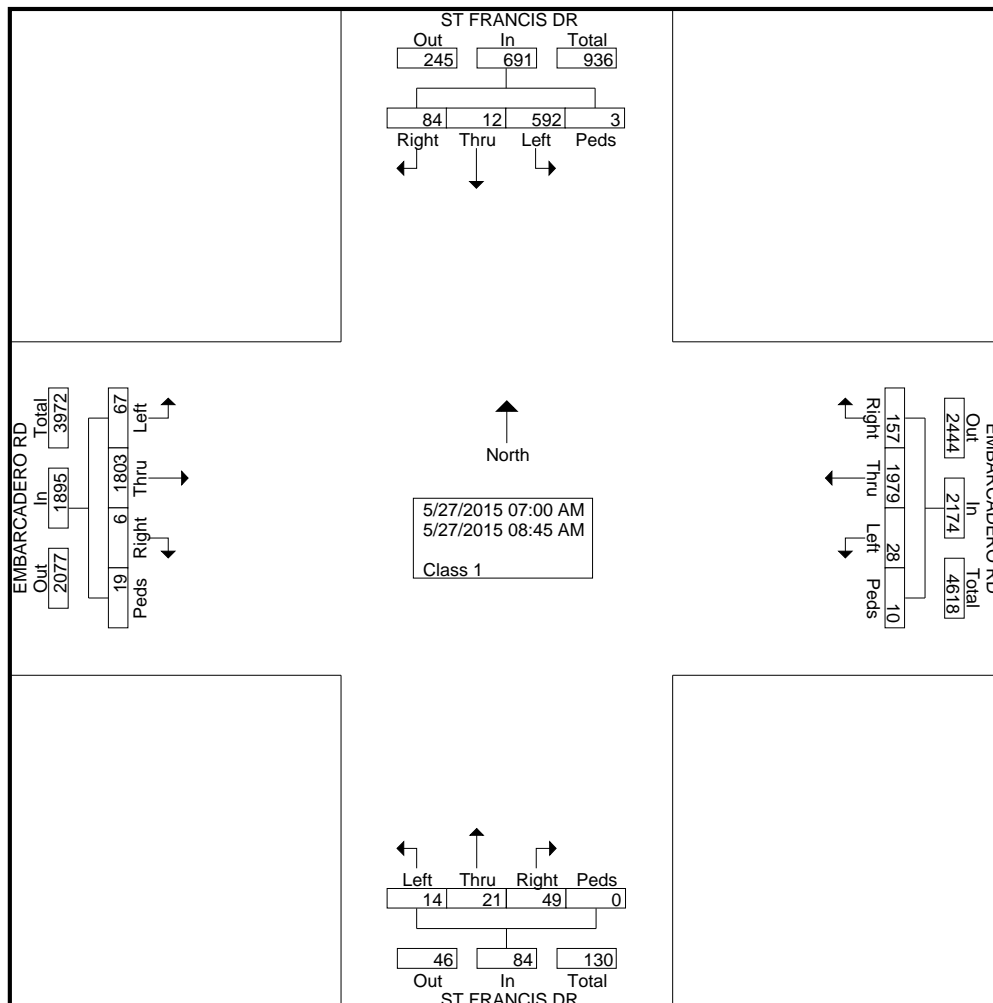
## **Appendix A**

### **Traffic Counts**

File Name : #1 EMBARCADERO&STFRANCISAM  
 Site Code :  
 Start Date : 5/27/2015  
 Page No : 1

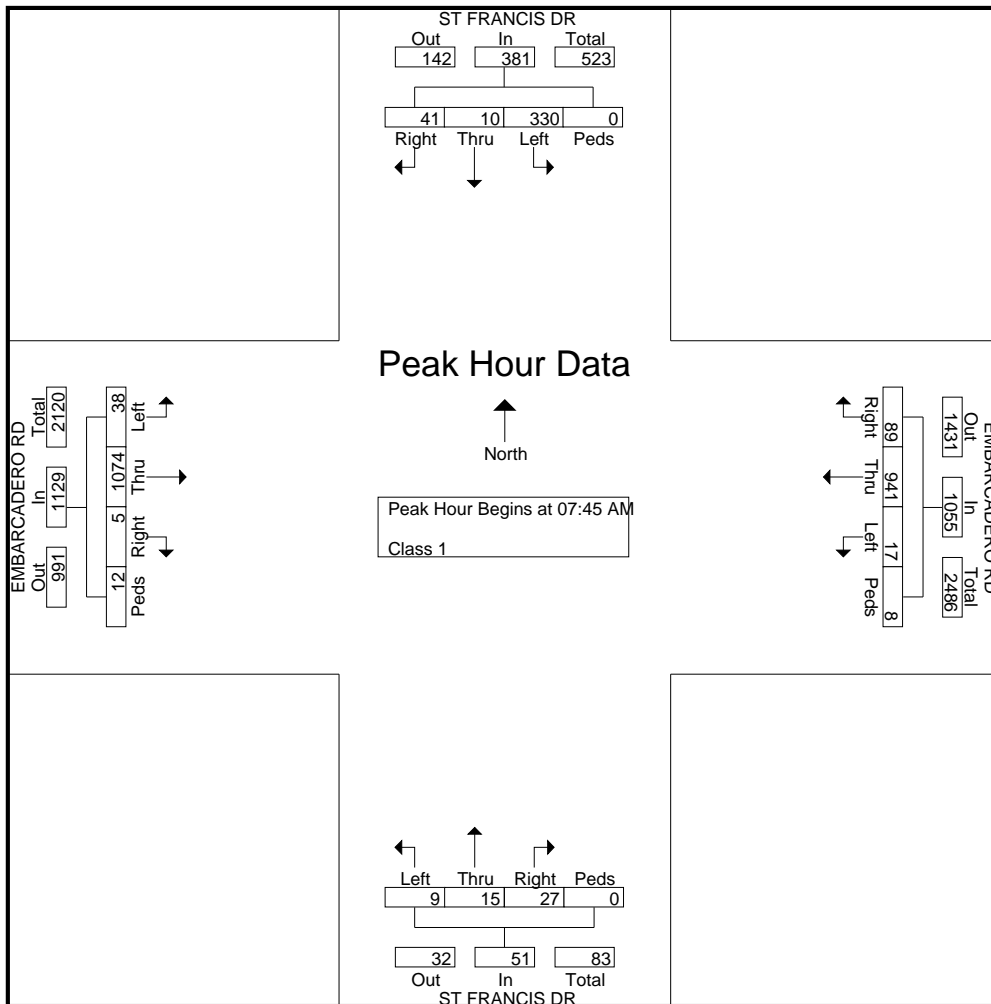
Groups Printed- Class 1

Start Time	ST FRANCIS DR Southbound				EMBARCADERO RD Westbound				ST FRANCIS DR Northbound				EMBARCADERO RD Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	9	0	41	0	12	219	1	0	1	0	0	0	0	124	7	1	415
07:15 AM	13	0	52	0	19	280	4	0	7	1	1	0	0	173	8	0	558
07:30 AM	15	2	96	2	20	295	2	2	3	3	1	0	1	190	7	4	643
07:45 AM	10	2	85	0	28	255	6	4	9	9	8	0	0	229	3	3	651
Total	47	4	274	2	79	1049	13	6	20	13	10	0	1	716	25	8	2267
08:00 AM	4	3	74	0	20	224	4	0	6	4	1	0	4	276	9	1	630
08:15 AM	15	4	92	0	22	223	3	4	7	1	0	0	1	298	13	5	688
08:30 AM	12	1	79	0	19	239	4	0	5	1	0	0	0	271	13	3	647
08:45 AM	6	0	73	1	17	244	4	0	11	2	3	0	0	242	7	2	612
Total	37	8	318	1	78	930	15	4	29	8	4	0	5	1087	42	11	2577
Grand Total	84	12	592	3	157	1979	28	10	49	21	14	0	6	1803	67	19	4844
Apprch %	12.2	1.7	85.7	0.4	7.2	91	1.3	0.5	58.3	25	16.7	0	0.3	95.1	3.5	1	
Total %	1.7	0.2	12.2	0.1	3.2	40.9	0.6	0.2	1	0.4	0.3	0	0.1	37.2	1.4	0.4	



File Name : #1 EMBARCADERO&STFRANCISAM  
 Site Code :  
 Start Date : 5/27/2015  
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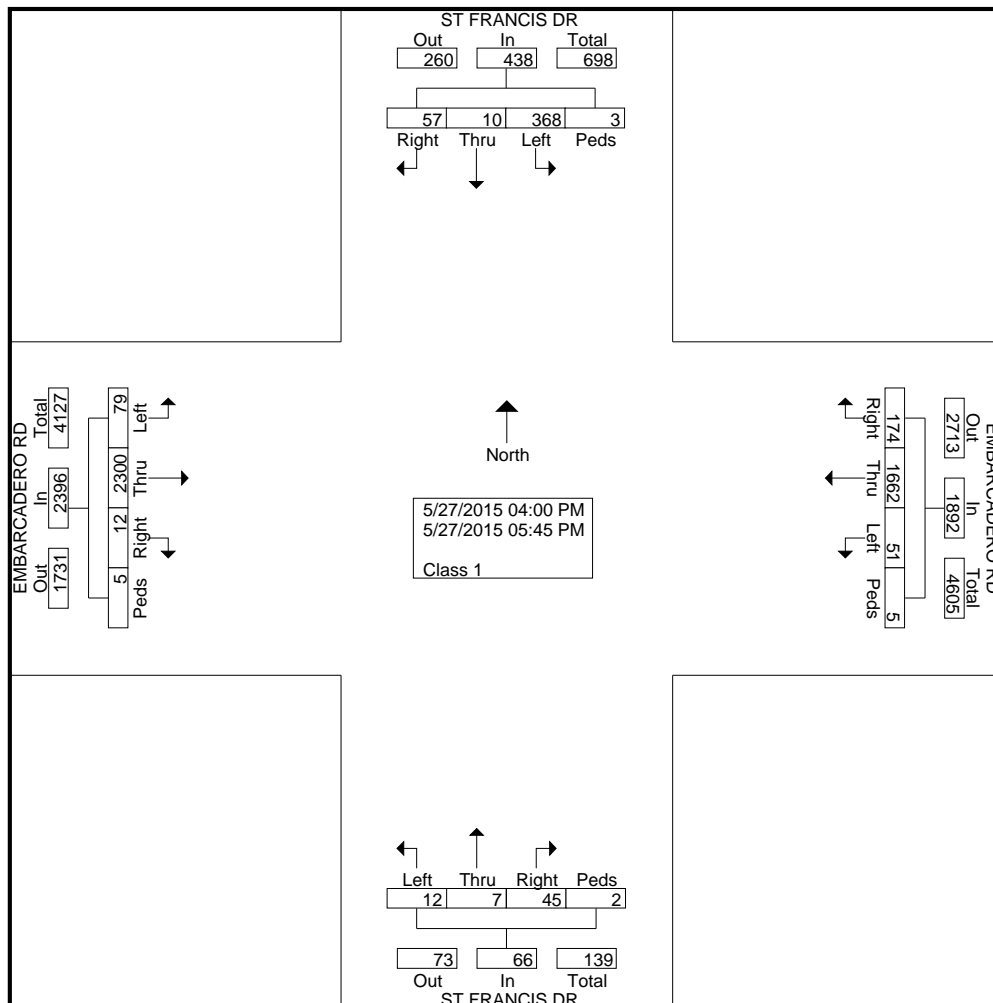
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	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
<b>Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	10	2	85	0	97	28	255	6	4	293	9	9	8	0	26	0	229	3	3	235	651
08:00 AM	4	3	74	0	81	20	224	4	0	248	6	4	1	0	11	4	276	9	1	290	630
08:15 AM	15	4	92	0	111	22	223	3	4	252	7	1	0	0	8	1	298	13	5	317	688
08:30 AM	12	1	79	0	92	19	239	4	0	262	5	1	0	0	6	0	271	13	3	287	647
Total Volume	41	10	330	0	381	89	941	17	8	1055	27	15	9	0	51	5	1074	38	12	1129	2616
% App. Total	10.8	2.6	86.6	0		8.4	89.2	1.6	0.8		52.9	29.4	17.6	0		0.4	95.1	3.4	1.1		
PHF	.683	.625	.897	.000	.858	.795	.923	.708	.500	.900	.750	.417	.281	.000	.490	.313	.901	.731	.600	.890	.951



File Name : #1 EMBARCADERO&STFRANCISPM  
 Site Code :  
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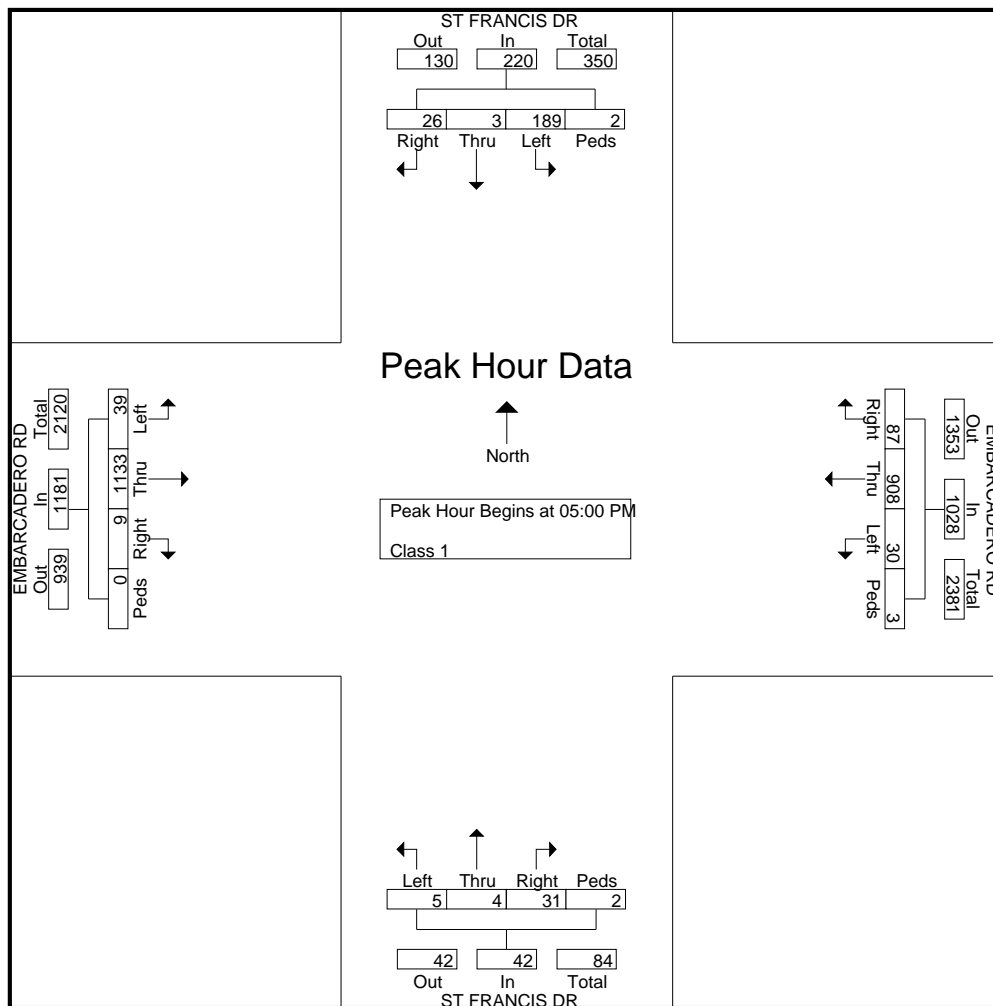
Groups Printed- Class 1

Start Time	ST FRANCIS DR Southbound				EMBARCADERO RD Westbound				ST FRANCIS DR Northbound				EMBARCADERO RD Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	3	4	45	0	20	181	5	1	4	0	3	0	1	307	14	1	589
04:15 PM	15	1	41	0	25	189	8	0	4	2	2	0	0	274	14	0	575
04:30 PM	7	2	44	1	22	192	3	1	2	1	0	0	0	296	8	1	580
04:45 PM	6	0	49	0	20	192	5	0	4	0	2	0	2	290	4	3	577
Total	31	7	179	1	87	754	21	2	14	3	7	0	3	1167	40	5	2321
05:00 PM	15	1	52	0	20	205	3	1	8	1	0	0	1	286	9	0	602
05:15 PM	4	1	37	0	19	199	9	0	8	1	0	2	2	300	11	0	593
05:30 PM	4	0	56	0	20	274	9	2	11	0	0	0	2	291	8	0	677
05:45 PM	3	1	44	2	28	230	9	0	4	2	5	0	4	256	11	0	599
Total	26	3	189	2	87	908	30	3	31	4	5	2	9	1133	39	0	2471
Grand Total	57	10	368	3	174	1662	51	5	45	7	12	2	12	2300	79	5	4792
Apprch %	13	2.3	84	0.7	9.2	87.8	2.7	0.3	68.2	10.6	18.2	3	0.5	96	3.3	0.2	
Total %	1.2	0.2	7.7	0.1	3.6	34.7	1.1	0.1	0.9	0.1	0.3	0	0.3	48	1.6	0.1	



File Name : #1 EMBARCADERO&STFRANCISPM  
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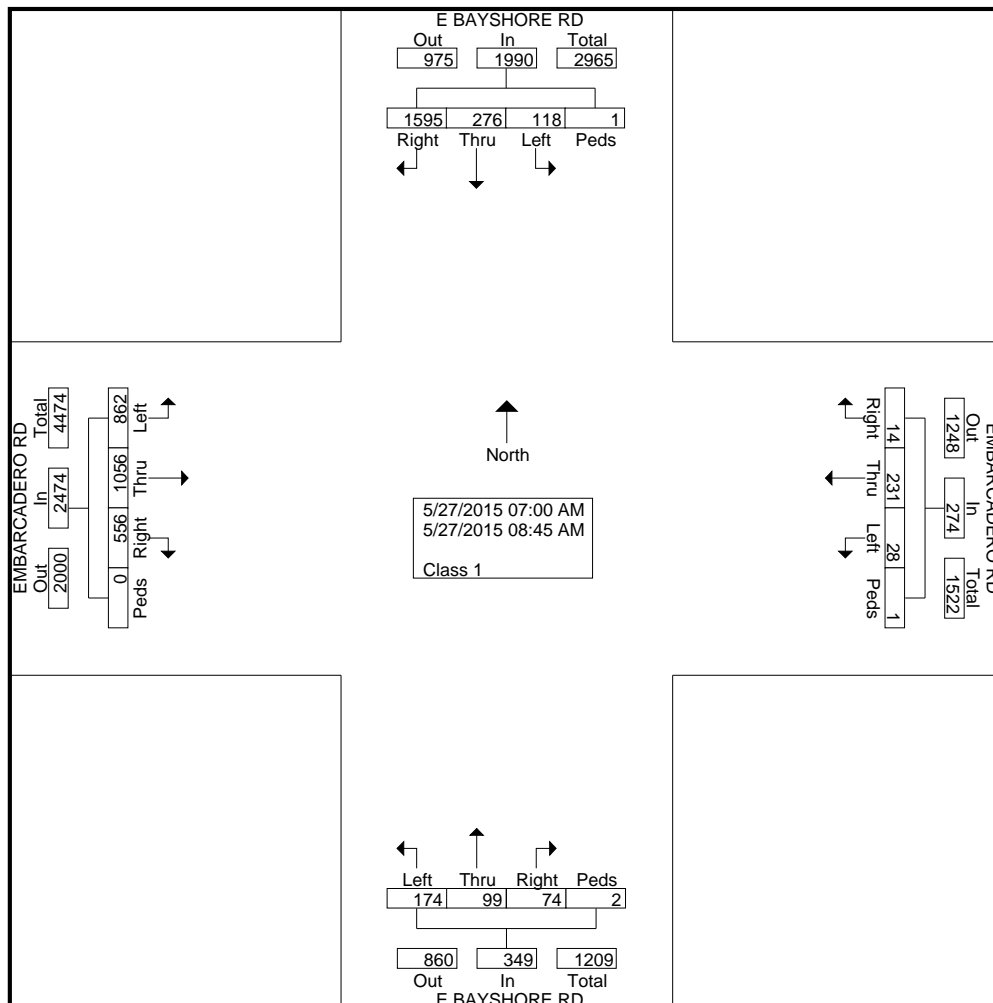
Start Time	ST FRANCIS DR Southbound					EMBARCADERO RD Westbound					ST FRANCIS DR Northbound					EMBARCADERO RD Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
<b>Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	15	1	52	0	68	20	205	3	1	229	8	1	0	0	9	1	286	9	0	296	602
05:15 PM	4	1	37	0	42	19	199	9	0	227	8	1	0	2	11	2	300	11	0	313	593
05:30 PM	4	0	56	0	60	20	274	9	2	305	11	0	0	0	11	2	291	8	0	301	677
05:45 PM	3	1	44	2	50	28	230	9	0	267	4	2	5	0	11	4	256	11	0	271	599
Total Volume	26	3	189	2	220	87	908	30	3	1028	31	4	5	2	42	9	1133	39	0	1181	2471
% App. Total	11.8	1.4	85.9	0.9		8.5	88.3	2.9	0.3		73.8	9.5	11.9	4.8		0.8	95.9	3.3	0		
PHF	.433	.750	.844	.250	.809	.777	.828	.833	.375	.843	.705	.500	.250	.250	.955	.563	.944	.886	.000	.943	.912



File Name : #2 EMBARCADERO&BAYSHOREAM  
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Groups Printed- Class 1

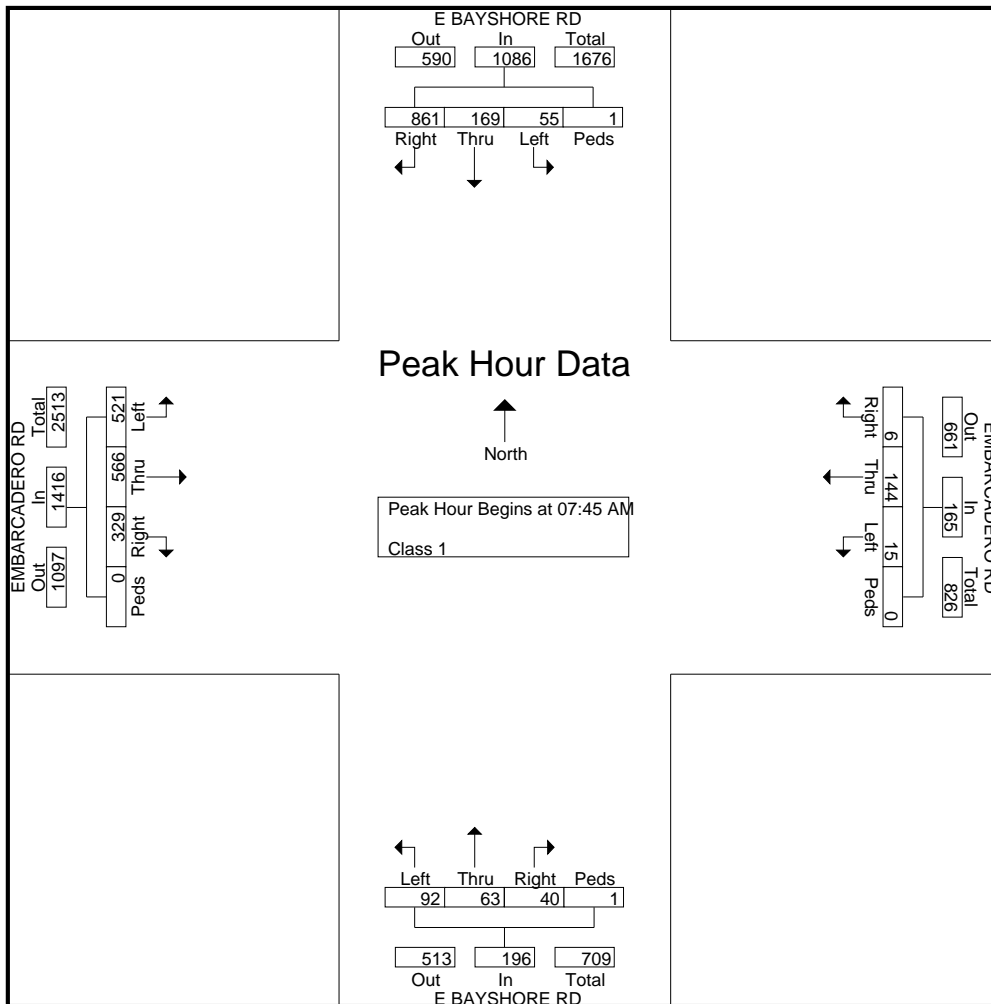
Start Time	E BAYSHORE RD Southbound				EMBARCADERO RD Westbound				E BAYSHORE RD Northbound				EMBARCADERO RD Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	133	15	13	0	1	14	3	0	5	5	8	0	25	110	63	0	395
07:15 AM	216	22	20	0	0	20	5	0	7	12	10	0	34	134	82	0	562
07:30 AM	218	23	9	0	4	21	0	0	9	6	16	0	63	98	117	0	584
07:45 AM	255	31	4	0	2	30	1	0	12	16	18	0	56	140	167	0	732
Total	822	91	46	0	7	85	9	0	33	39	52	0	178	482	429	0	2273
08:00 AM	222	34	10	0	1	33	4	0	9	12	19	1	70	138	154	0	707
08:15 AM	197	38	26	0	3	43	3	0	10	22	21	0	112	143	111	0	729
08:30 AM	187	66	15	1	0	38	7	0	9	13	34	0	91	145	89	0	695
08:45 AM	167	47	21	0	3	32	5	1	13	13	48	1	105	148	79	0	683
Total	773	185	72	1	7	146	19	1	41	60	122	2	378	574	433	0	2814
Grand Total	1595	276	118	1	14	231	28	1	74	99	174	2	556	1056	862	0	5087
Apprch %	80.2	13.9	5.9	0.1	5.1	84.3	10.2	0.4	21.2	28.4	49.9	0.6	22.5	42.7	34.8	0	
Total %	31.4	5.4	2.3	0	0.3	4.5	0.6	0	1.5	1.9	3.4	0	10.9	20.8	16.9	0	





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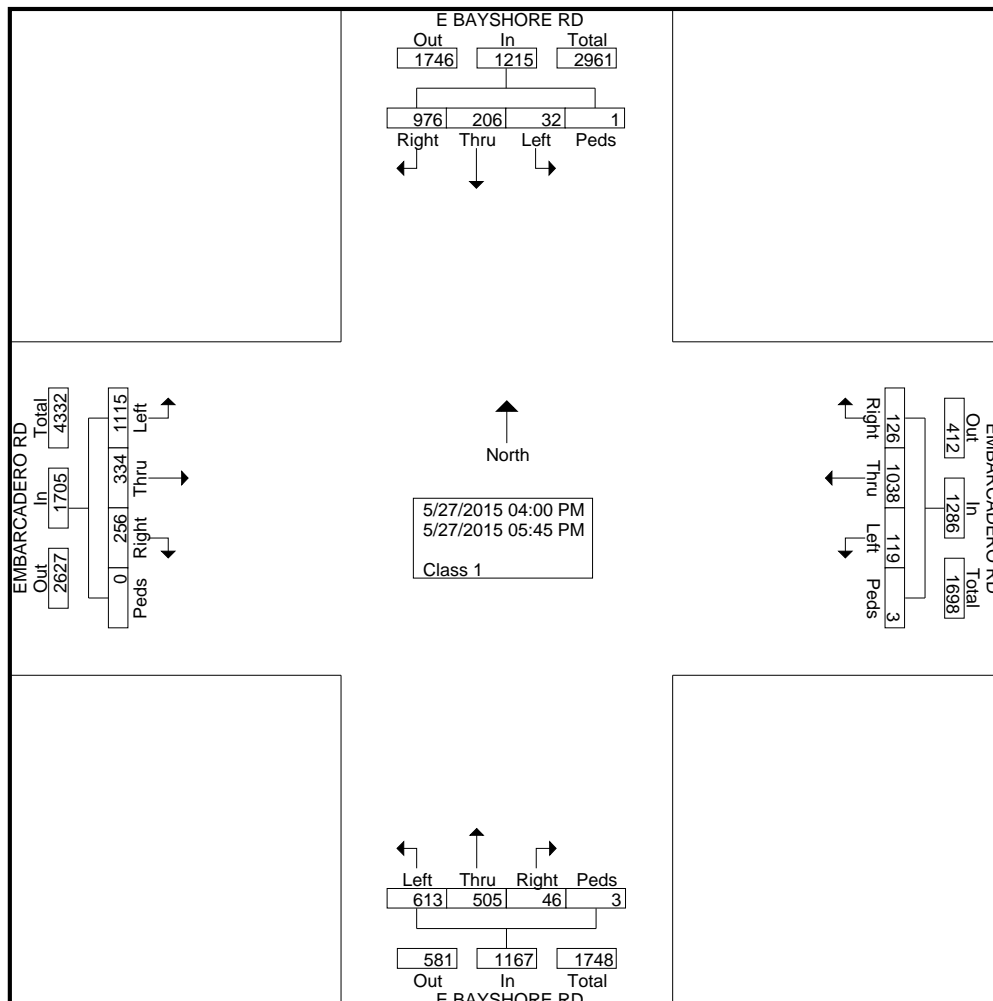
Start Time	E BAYSHORE RD Southbound					EMBARCADERO RD Westbound					E BAYSHORE RD Northbound					EMBARCADERO RD Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
<b>Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	255	31	4	0	290	2	30	1	0	33	12	16	18	0	46	56	140	167	0	363	732
08:00 AM	222	34	10	0	266	1	33	4	0	38	9	12	19	1	41	70	138	154	0	362	707
08:15 AM	197	38	26	0	261	3	43	3	0	49	10	22	21	0	53	112	143	111	0	366	729
08:30 AM	187	66	15	1	269	0	38	7	0	45	9	13	34	0	56	91	145	89	0	325	695
Total Volume	861	169	55	1	1086	6	144	15	0	165	40	63	92	1	196	329	566	521	0	1416	2863
% App. Total	79.3	15.6	5.1	0.1		3.6	87.3	9.1	0		20.4	32.1	46.9	0.5		23.2	40	36.8	0		
PHF	.844	.640	.529	.250	.936	.500	.837	.536	.000	.842	.833	.716	.676	.250	.875	.734	.976	.780	.000	.967	.978



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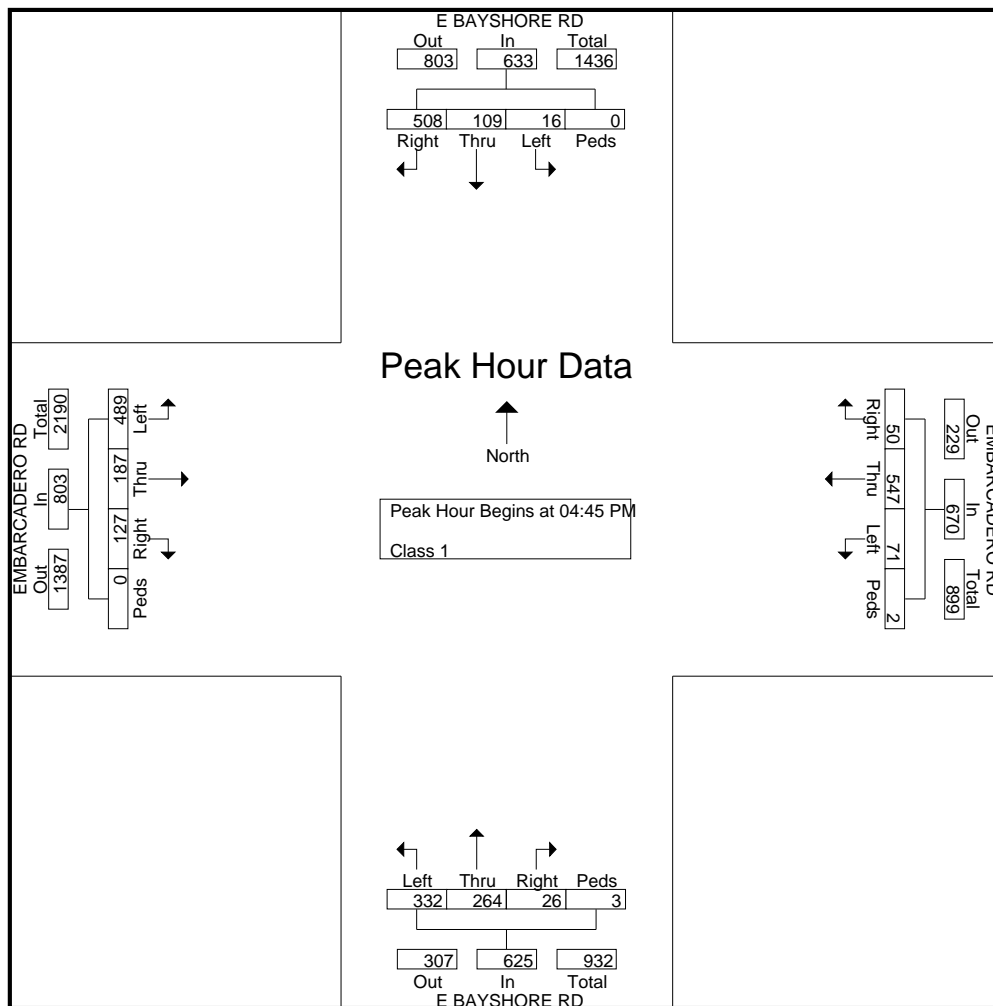
Groups Printed- Class 1

Start Time	E BAYSHORE RD Southbound				EMBARCADERO RD Westbound				E BAYSHORE RD Northbound				EMBARCADERO RD Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	113	32	5	0	22	153	12	0	5	60	89	0	33	39	144	0	707
04:15 PM	124	23	2	1	27	121	8	1	4	50	47	0	25	42	180	0	655
04:30 PM	134	19	7	0	18	123	13	0	0	58	69	0	29	27	169	0	666
04:45 PM	130	31	5	0	14	132	16	1	6	52	74	0	25	40	144	0	670
Total	501	105	19	1	81	529	49	2	15	220	279	0	112	148	637	0	2698
05:00 PM	148	29	3	0	9	127	19	1	9	70	106	1	41	37	88	0	688
05:15 PM	100	18	3	0	17	150	19	0	6	79	84	1	33	52	144	0	706
05:30 PM	130	31	5	0	10	138	17	0	5	63	68	1	28	58	113	0	667
05:45 PM	97	23	2	0	9	94	15	0	11	73	76	0	42	39	133	0	614
Total	475	101	13	0	45	509	70	1	31	285	334	3	144	186	478	0	2675
Grand Total	976	206	32	1	126	1038	119	3	46	505	613	3	256	334	1115	0	5373
Apprch %	80.3	17	2.6	0.1	9.8	80.7	9.3	0.2	3.9	43.3	52.5	0.3	15	19.6	65.4	0	
Total %	18.2	3.8	0.6	0	2.3	19.3	2.2	0.1	0.9	9.4	11.4	0.1	4.8	6.2	20.8	0	



File Name : #2 EMBARCADERO&BAYSHOREPM  
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Start Time	E BAYSHORE RD Southbound					EMBARCADERO RD Westbound					E BAYSHORE RD Northbound					EMBARCADERO RD Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
<b>Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	130	31	5	0	166	14	132	16	1	163	6	52	74	0	132	25	40	144	0	209	670
05:00 PM	148	29	3	0	180	9	127	19	1	156	9	70	106	1	186	41	37	88	0	166	688
05:15 PM	100	18	3	0	121	17	150	19	0	186	6	79	84	1	170	33	52	144	0	229	706
05:30 PM	130	31	5	0	166	10	138	17	0	165	5	63	68	1	137	28	58	113	0	199	667
Total Volume	508	109	16	0	633	50	547	71	2	670	26	264	332	3	625	127	187	489	0	803	2731
% App. Total	80.3	17.2	2.5	0		7.5	81.6	10.6	0.3		4.2	42.2	53.1	0.5		15.8	23.3	60.9	0		
PHF	.858	.879	.800	.000	.879	.735	.912	.934	.500	.901	.722	.835	.783	.750	.840	.774	.806	.849	.000	.877	.967



# **Appendix B**

## **Volume Summary**

Intersection Number:	31	311											
Traffic Node Number:	31												
Intersection Name:	East Bayshore Roar & Embarcadero Road												
Peak Hour:	AM										Date of Analysis:	08/20/15	
Count Date:	05/27/15												
Scenario:	Mercedes Benz Dealership												
(S,J) Growth Factor:											Future Growth % Per Year:	1.400	
(S,J) Number of Months:											Number of Years to Buildout:	5	
	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	861	169	55	7	144	15	40	63	92	329	566	521	2862
	861	169	55	7	144	15	40	63	92	329	566	521	
<b>Approved Project Trips</b>													
Edgewood Plaza	3	0	0	0	0	0	0	0	0	0	1	2	6
Palo Alto Approved	0	0	0	0	8	0	0	0	0	0	7	0	15
Total Approved Trips	3	0	0	0	8	0	0	0	0	0	8	2	21
Background Conditions	864	169	55	7	152	15	40	63	92	329	574	523	2883
	check	864	169	55	7	152	15	40	63	92	329	574	523
<b>Project Trips</b>													
Mercedes Benz	0	1	1	0	0	6	0	2	39	24	24	0	97
Net Project Trips	0	1	1	0	0	6	0	2	39	24	24	0	97
Existing + Project	861	170	56	7	144	21	40	65	131	353	590	521	2959
	Existing + Project Check	861	170	56	7	144	21	40	65	131	353	590	521
Background + Project	864	170	56	7	152	21	40	65	131	353	598	523	2980
	Bkgrd+Proj check	864	170	56	7	152	21	40	65	131	353	598	523
<b>Cumulative Project Trips</b>													
2035 Growth	923	181	59	8	154	16	43	68	99	353	607	559	0
Cumulative	926	182	60	8	162	22	43	70	138	377	639	561	3186
	Cumulative Check	926	182	60	8	162	22	43	70	138	377	639	561

(S,J) Growth Factor:											Future Growth % Per Year:	1.400	
(S,J) Number of Months:											Number of Years to Buildout:	5	
Intersection Number:	36												
Traffic Node Number:	36												
Intersection Name:	St. Francis Drive & Embarcadero Road												
Peak Hour:	AM										Date of Analysis:	08/20/15	
Count Date:	05/27/15												
Scenario:	Mercedes Benz Dealership												
	Movements												
	North Approach			East Approach			South Approach			West Approach			
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	41	10	330	89	941	17	27	15	9	5	1074	38	2596
	41	10	330	89	941	17	27	15	9	5	1074	38	
<b>Approved Project Trips</b>													
Edgewood Plaza	10	1	16	0	10	0	0	1	0	0	13	13	64
Palo Alto Approved	0	0	0	0	1	0	0	0	0	0	2	0	3
Total Approved Trips	10	1	16	0	11	0	0	1	0	0	15	13	67
Background Conditions	51	11	346	89	952	17	27	16	9	5	1089	51	2663
	check	51	11	346	89	952	17	27	16	9	5	1089	51
<b>Project Trips</b>													
Mercedes Benz	0	0	0	0	5	0	0	0	0	0	6	0	11
Net Project Trips	0	0	0	0	5	0	0	0	0	0	6	0	11
Existing + Project	41	10	330	89	946	17	27	15	9	5	1080	38	2607
	Existing + Project Check	41	10	330	89	946	17	27	15	9	5	1080	38
Background + Project	51	11	346	89	957	17	27	16	9	5	1095	51	2674
	Bkgrd+Proj check	51	11	346	89	957	17	27	16	9	5	1095	51
<b>Cumulative Project Trips</b>													
2035 Growth	44	11	354	95	1009	18	29	16	10	5	1151	41	0
Cumulative	54	12	370	95	1025	18	29	17	10	5	1172	54	2861
	Cumulative Check	54	12	370	95	1025	18	29	17	10	5	1172	54

Intersection Number:	31												
Traffic Node Number:	31												
Intersection Name:	East Bayshore Road & Embarcadero Road												
Peak Hour:	PM												
Count Date:	05/27/15												
Scenario:	Mercedes Benz Dealership												
(PA) Growth Factor:	Future Growth % Per Year: 1.400												
(PA) Number of Years:	Number of Years to Buildout: 5												
	Movements												Total
Scenario:	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	508	109	16	50	547	71	26	264	332	127	187	489	2726
	508	109	16	50	547	71	26	264	332	127	187	489	
<b>Approved Project Trips</b>													
Edgewood Plaza	6	0	0	0	1	0	0	0	0	0	1	7	15
Palo Alto Approved	0	0	8	7	126	1	1	0	0	0	140	0	283
Total Approved Trips	6	0	8	7	127	1	1	0	0	0	141	7	298
Background Conditions	514	109	24	57	674	72	27	264	332	127	328	496	3024
Background Check	514	109	24	57	674	72	27	264	332	127	328	496	
<b>Project Trips</b>													
Mercedes Benz	0	1	1	0	0	6	0	5	77	25	25	0	140
Net Project Trips	0	1	1	0	0	6	0	5	77	25	25	0	140
Existing + Project	508	110	17	50	547	77	26	269	409	152	212	489	2866
Existing + Project Check	508	110	17	50	547	77	26	269	409	152	212	489	
Background + Project	514	110	25	57	674	78	27	269	409	152	353	496	3164
Bkgrd+Proj check	514	110	25	57	674	78	27	269	409	152	353	496	
<b>Cumulative Project Trips</b>													
2035 Projection	545	117	17	54	586	76	28	283	356	136	200	524	2922
Cumulative	551	118	26	61	713	83	29	288	433	161	366	531	3360
Cumulative Check	551	118	26	61	713	83	29	288	433	161	366	531	

Intersection Number:	36												
Traffic Node Number:	36												
Intersection Name:	St. Francis Drive & Embarcadero Road												
Peak Hour:	PM												
Count Date:	05/27/15												
Scenario:	Mercedes Benz Dealership												
(S,J) Growth Factor:	Future Growth % Per Year: 1.400												
(S,J) Number of Months:	Number of Years to Buildout: 5												
	Movements												Total
Scenario:	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	26	3	189	87	908	30	31	4	5	9	1133	39	2464
	26	3	189	87	908	30	31	4	5	9	1133	39	
<b>Approved Project Trips</b>													
Edgewood Plaza	40	4	47	0	40	0	0	3	0	0	39	39	212
Palo Alto Approved	0	0	0	0	16	0	0	0	0	0	15	0	31
Total Approved Trips	40	4	47	0	56	0	0	3	0	0	54	39	243
Background Conditions	66	7	236	87	964	30	31	7	5	9	1187	78	2707
Background Check	66	7	236	87	964	30	31	7	5	9	1187	78	
<b>Project Trips</b>													
Mercedes Benz	0	0	0	0	9	0	0	0	0	0	6	0	15
Net Project Trips	0	0	0	0	9	0	0	0	0	0	6	0	15
Existing + Project	26	3	189	87	917	30	31	4	5	9	1139	39	2479
Existing + Project Check	26	3	189	87	917	30	31	4	5	9	1139	39	
Background + Project	66	7	236	87	973	30	31	7	5	9	1193	78	2722
Bkgrd+Proj check	66	7	236	87	973	30	31	7	5	9	1193	78	
<b>Cumulative Project Trips</b>													
Existing Growth	28	3	203	93	973	32	33	4	5	10	1215	42	2641
Cumulative	68	7	250	93	1038	32	33	7	5	10	1275	81	2899
Cumulative Check	68	7	250	93	1038	32	33	7	5	10	1275	81	

# Appendix C

## Level of Service Calculations

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #31: E Bayshore Dr/Embarcadero Rd

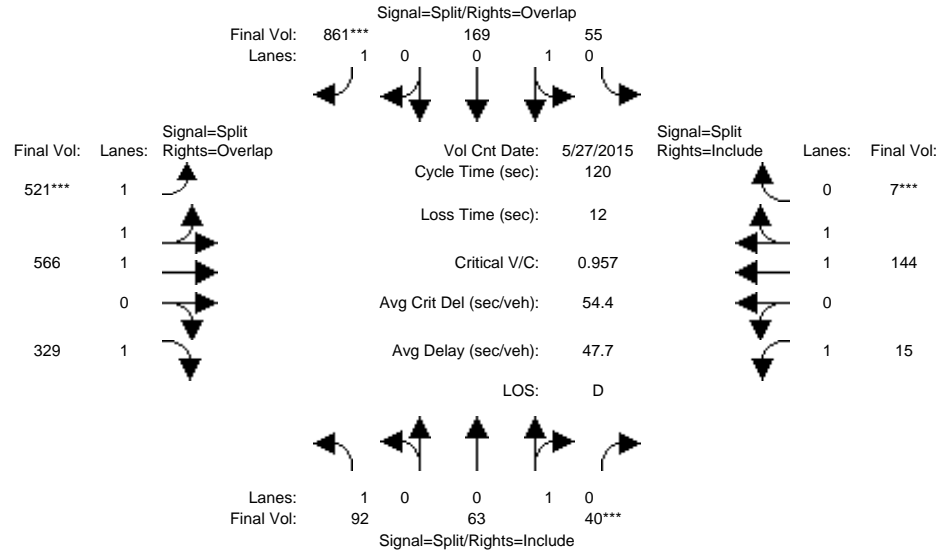


Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include Volume Module, Saturation Flow Module, Capacity Analysis Module, HCM Ops Adjusted Lane Utilization Module, HCM Ops Input Saturation Adj Module, HCM Ops f(lt) Adj Case Module, and HCM Ops Saturation Adj Module.





Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #31: E Bayshore Dr/Embarcadero Rd

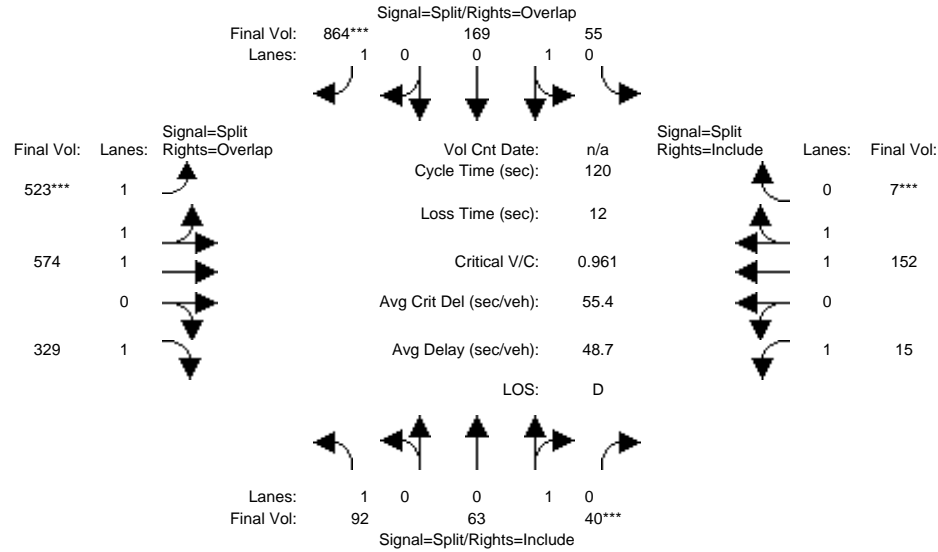


Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include Volume Module, Saturation Flow Module, Capacity Analysis Module, and HCM Ops Adjusted Lane Utilization Module.



Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project AM

Intersection #31: E Bayshore Dr/Embarcadero Rd

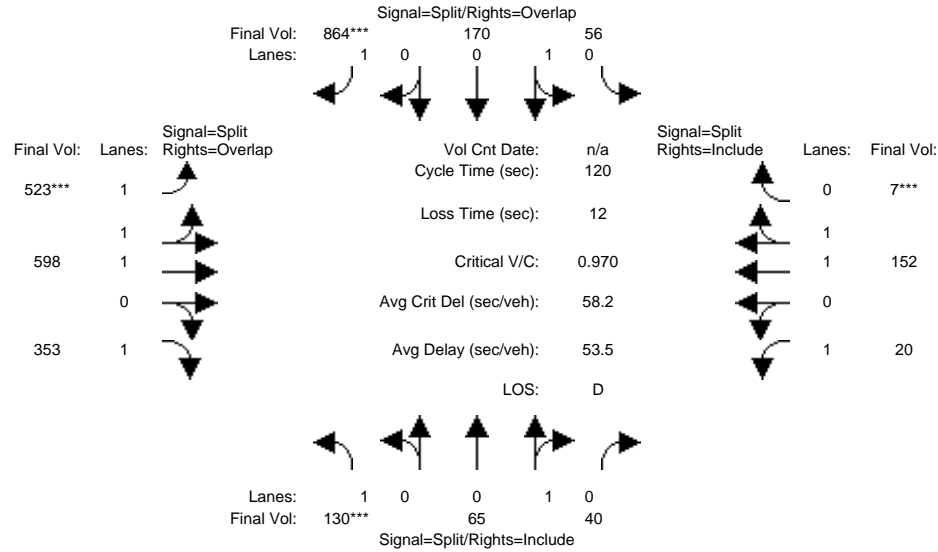


Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include Volume Module, Saturation Flow Module, Capacity Analysis Module, and HCM Ops Adjusted Lane Utilization Module.



Level Of Service Computation Report
2000 HCM Operations (alternative)
Cumulative AM

Intersection #31: E Bayshore Dr/Embarcadero Rd

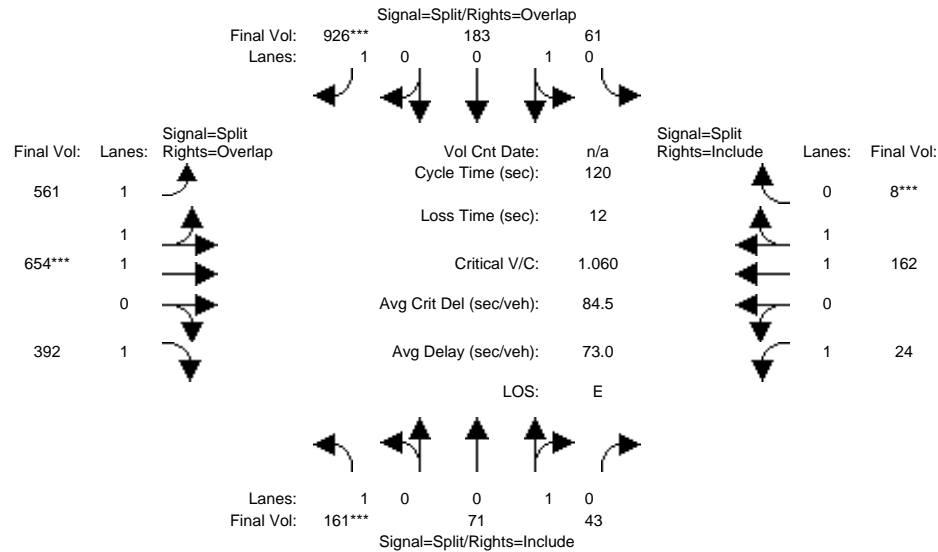


Table with columns for Approach (North Bound, South Bound, East Bound, West Bound) and Movement (L, T, R). Rows include Volume Module, Saturation Flow Module, Capacity Analysis Module, and HCM Ops Adjusted Lane Utilization Module.



Level Of Service Computation Report
2000 HCM Operations (alternative)
Existing AM

Intersection #36: St Francis Dr/Embarcadero Rd

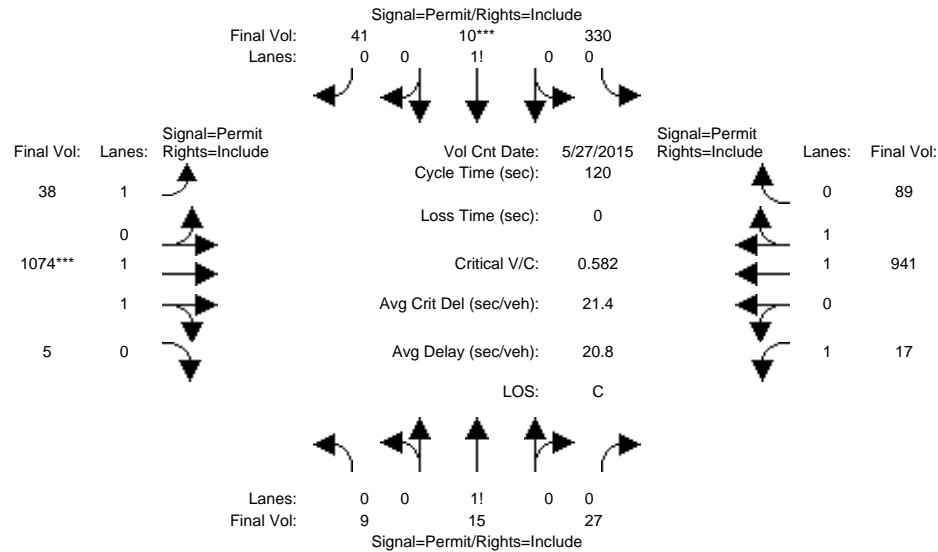


Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include: Min. Green, Y+R, Volume Module (Count, Date, Base Vol, Growth Adj, etc.), Sat. Flow Module (Sat/Lane, Adjustment, etc.), Capacity Analysis Module (Vol/Sat, Crit Moves, Green/Cycle, etc.), HCM Ops Adjusted Lane Utilization Module, HCM Ops Input Saturation Adj Module, and HCM Ops f(lt) Adj Case Module.





caution and only for comparisons of different signal timings, geometric design alternatives or for general planning applications, as these calculations are applied to the analysis of a single intersection within the CCG and TRAFFIX. Network models are more appropriate since they can account for the influence of the adjacent control measures and other system elements.

Level Of Service Computation Report
2000 HCM Operations (alternative)
Background AM

Intersection #36: St Francis Dr/Embarcadero Rd

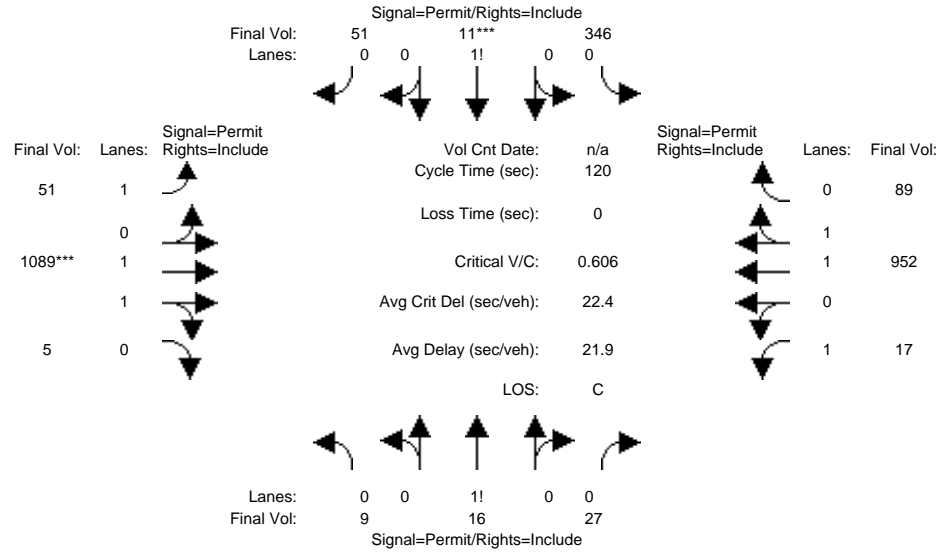


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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project AM

Intersection #36: St Francis Dr/Embarcadero Rd

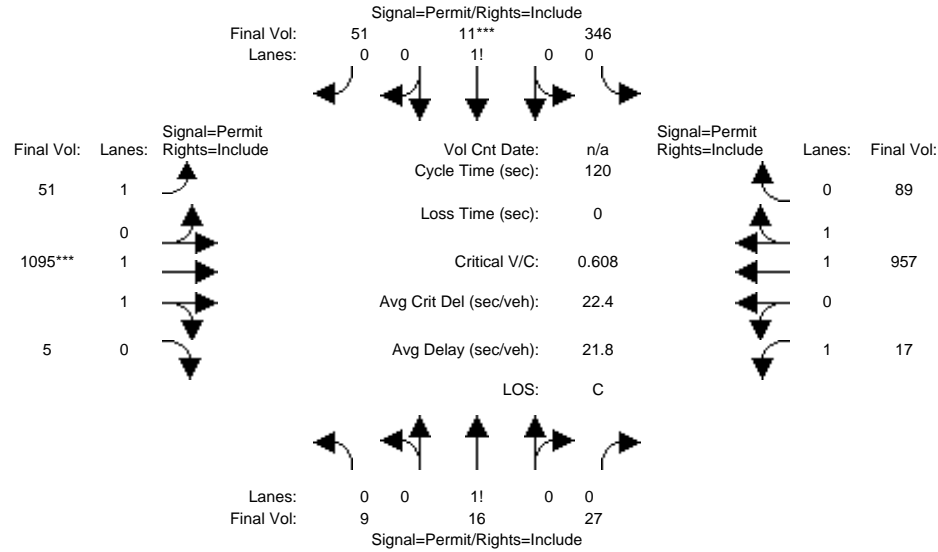


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Level Of Service Computation Report
2000 HCM Operations (alternative)
Cumulative AM

Intersection #36: St Francis Dr/Embarcadero Rd

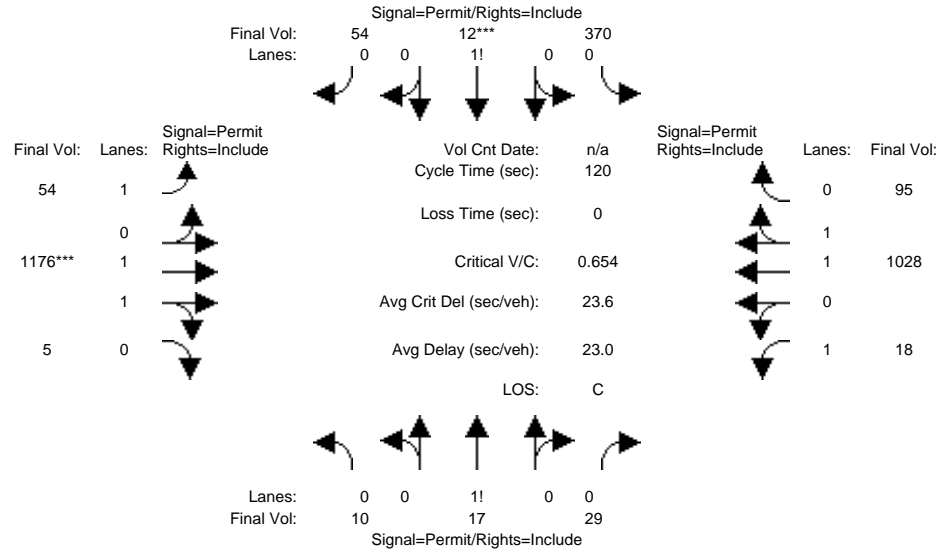


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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #31: E Bayshore Dr/Embarcadero Rd

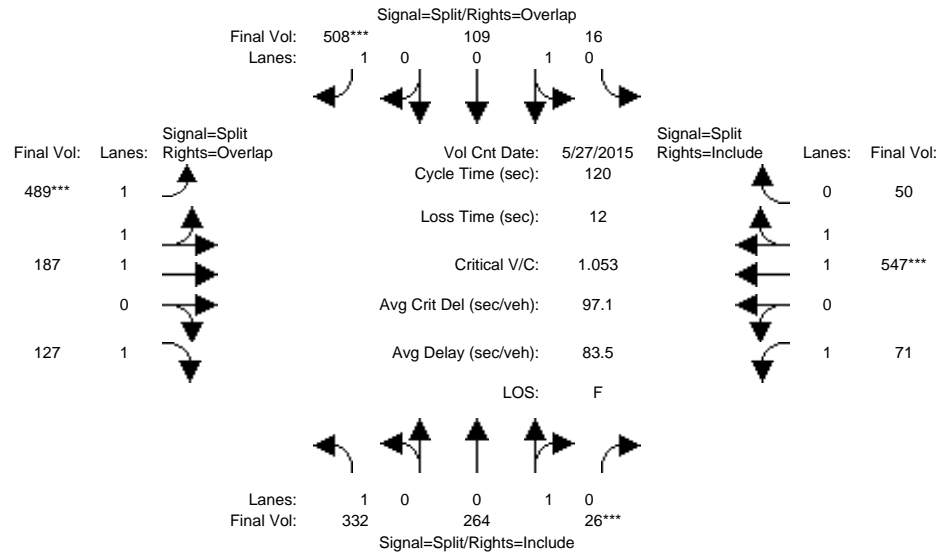


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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #31: E Bayshore Dr/Embarcadero Rd

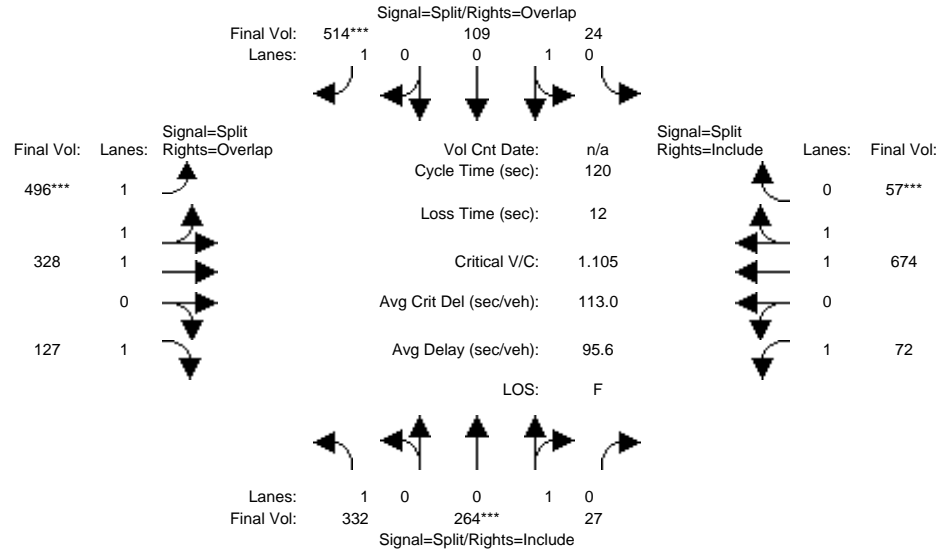


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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project PM

Intersection #31: E Bayshore Dr/Embarcadero Rd

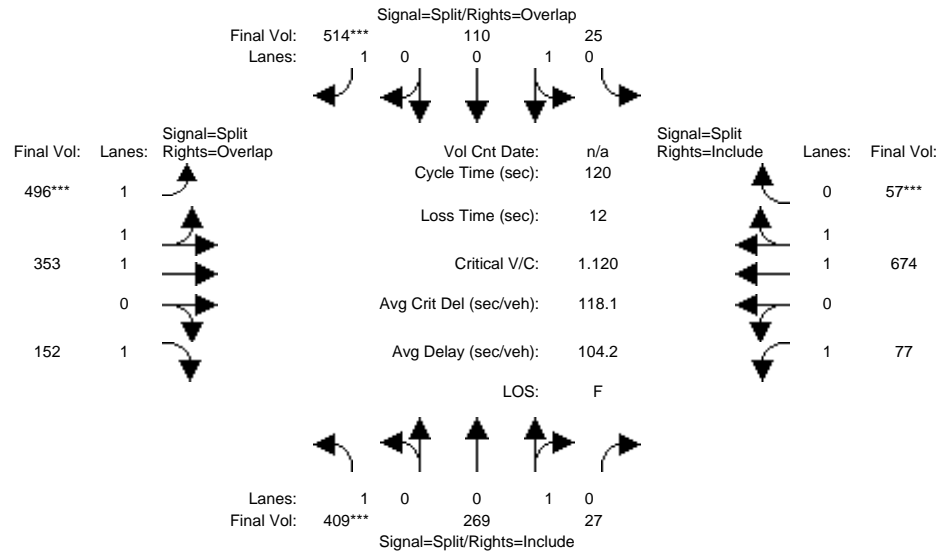


Table with columns for Approach, Movement, and four bound directions (North, South, East, West). Rows include Volume Module, Saturation Flow Module, Capacity Analysis Module, and HCM Ops Adjusted Lane Utilization Module.



Level Of Service Computation Report
2000 HCM Operations (alternative)
Cumulative PM

Intersection #31: E Bayshore Dr/Embarcadero Rd

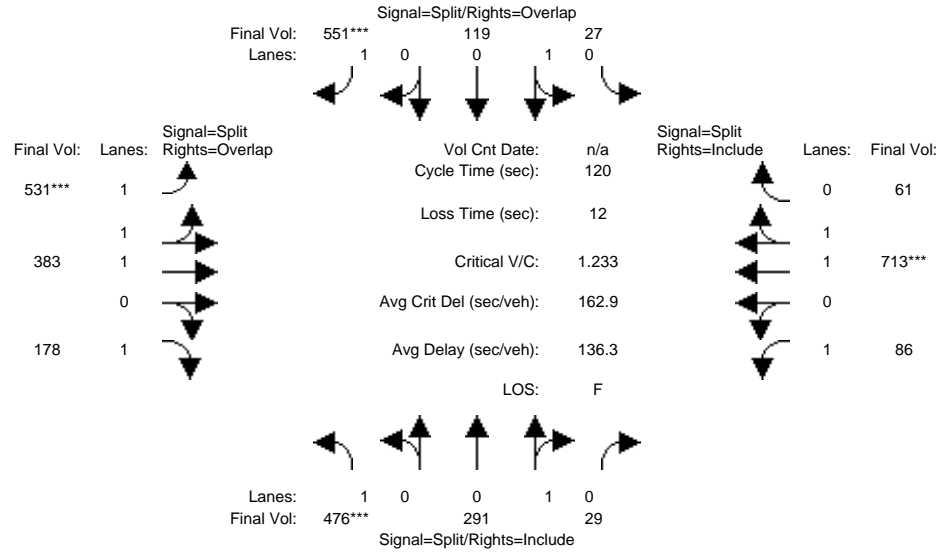


Table with columns for Approach, Movement, and four directions (North, South, East, West Bound). Rows include Volume Module, Saturation Flow Module, Capacity Analysis Module, HCM Ops Adjusted Lane Utilization Module, HCM Ops Input Saturation Adj Module, and HCM Ops f(lt) Adj Case Module.





Level Of Service Computation Report
2000 HCM Operations (alternative)
Existing PM

Intersection #36: St Francis Dr/Embarcadero Rd

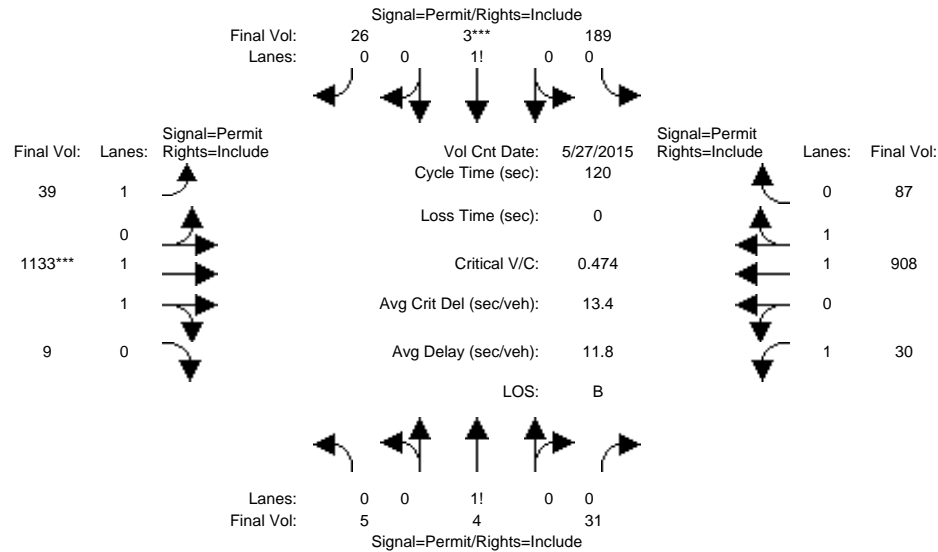


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Level Of Service Computation Report
2000 HCM Operations (alternative)
Background PM

Intersection #36: St Francis Dr/Embarcadero Rd

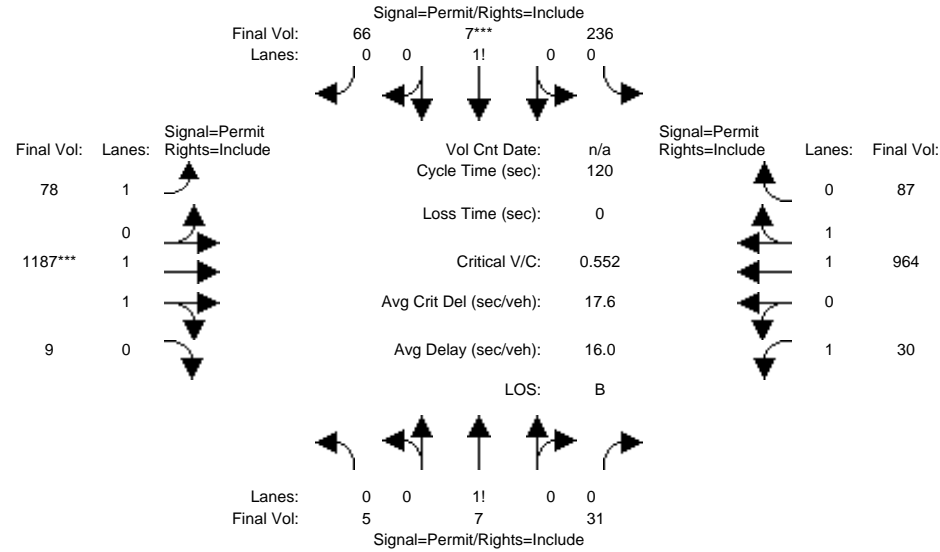


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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project PM

Intersection #36: St Francis Dr/Embarcadero Rd

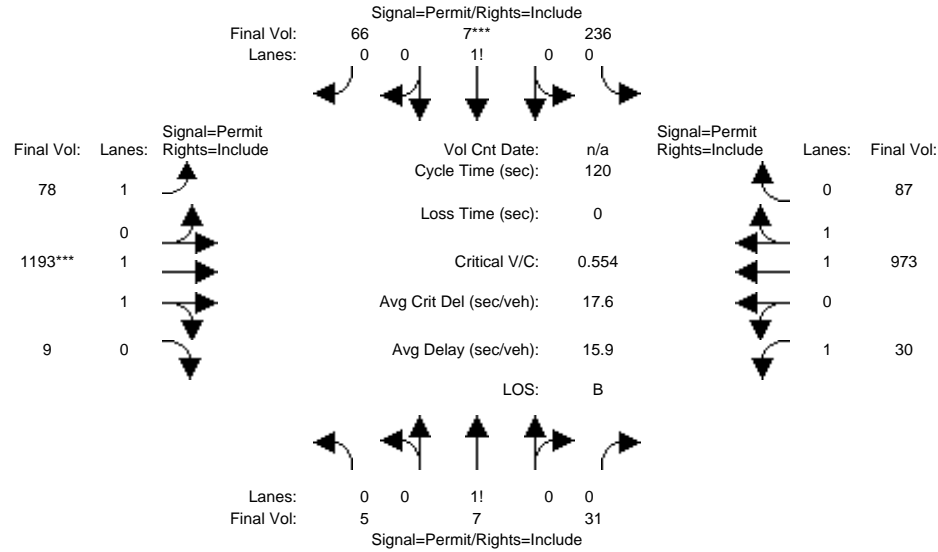


Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include Volume Module, Saturation Flow Module, Capacity Analysis Module, HCM Ops Adjusted Lane Utilization Module, HCM Ops Input Saturation Adj Module, and HCM Ops f(lt) Adj Case Module.



Level Of Service Computation Report
2000 HCM Operations (alternative)
Cumulative PM

Intersection #36: St Francis Dr/Embarcadero Rd

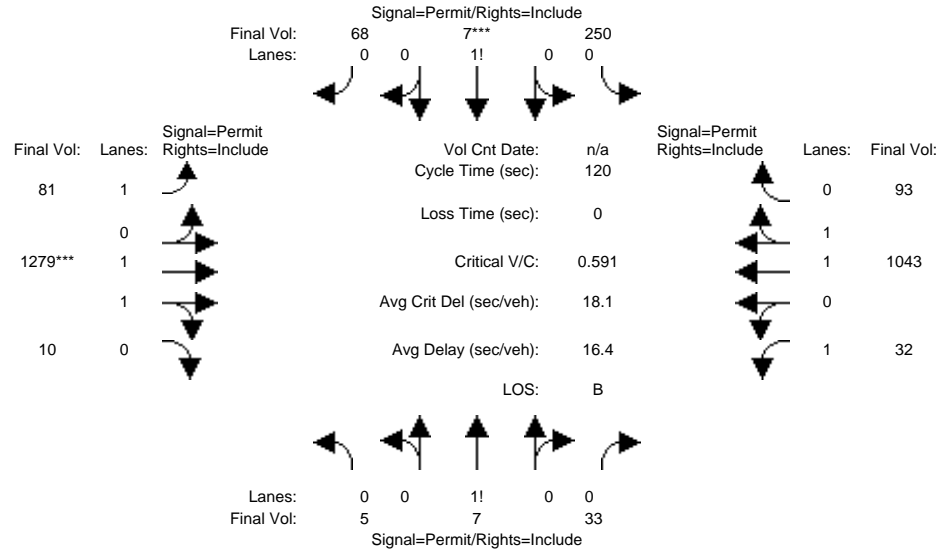


Table with columns for Approach, Movement, and four Bound types (North, South, East, West). Rows include Volume Module, Saturation Flow Module, Capacity Analysis Module, HCM Ops Adjusted Lane Utilization Module, HCM Ops Input Saturation Adj Module, and HCM Ops f(lt) Adj Case Module.





Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Project AM

Intersection #31: E Bayshore Dr/Embarcadero Rd

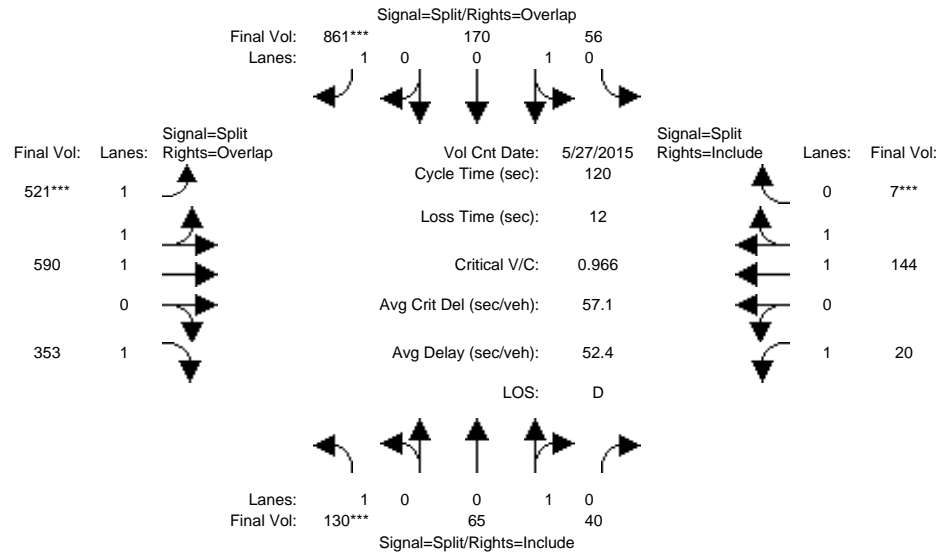


Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include: Min. Green, Y+R, Volume Module (Count Date, Base Vol, Growth Adj, etc.), Saturation Flow Module, Capacity Analysis Module, HCM Ops Adjusted Lane Utilization Module, HCM Ops Input Saturation Adj Module, HCM Ops f(lt) Adj Case Module, and HCM Ops Saturation Adj Module.



Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Project PM

Intersection #31: E Bayshore Dr/Embarcadero Rd

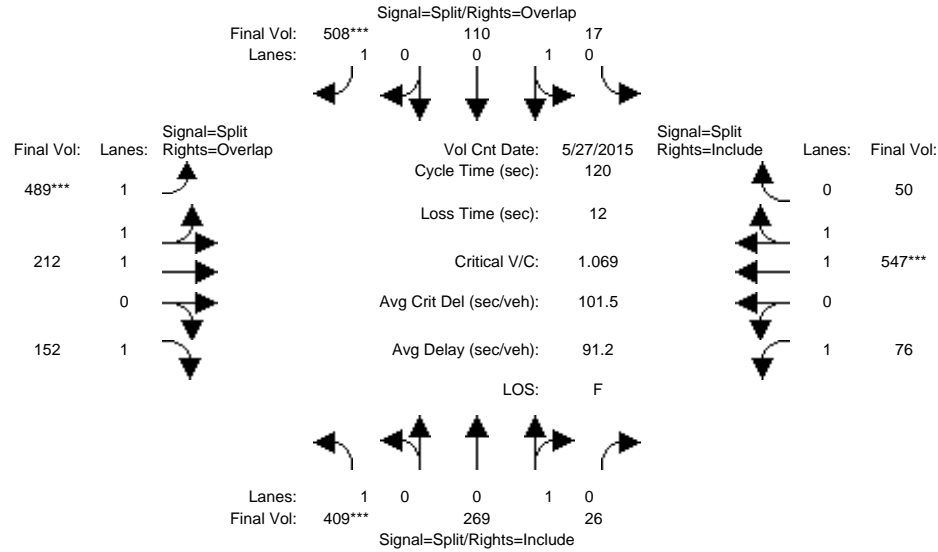
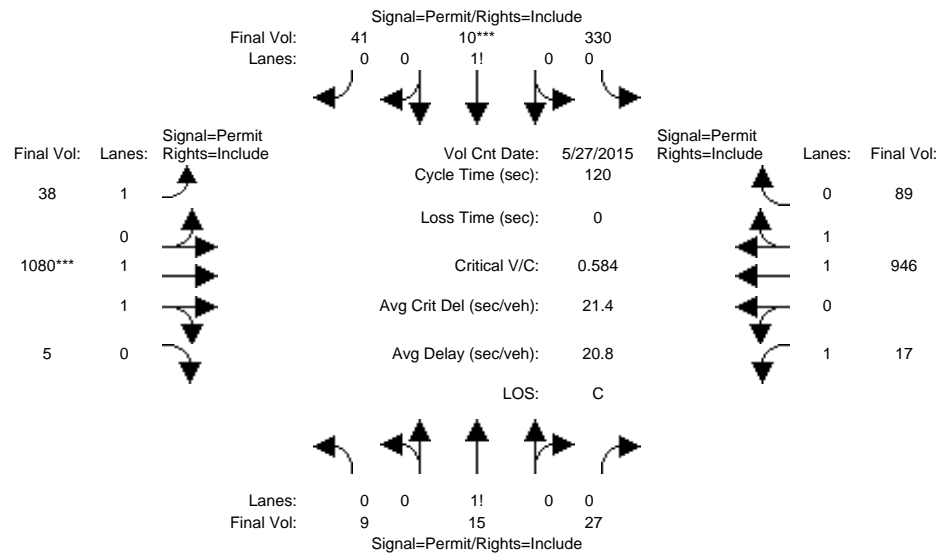


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Level Of Service Computation Report  
2000 HCM Operations (alternative)  
Existing + Project AM

Intersection #36: St Francis Dr/Embarcadero Rd



Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Volume Module:	Count Date: 27 May 2015 << 7:00 AM to 8:45 AM															
Base Vol:	9	15	27	330	10	41	38	1074	5	17	941	89				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	9	15	27	330	10	41	38	1074	5	17	941	89				
Added Vol:	0	0	0	0	0	0	0	0	0	6	0	5	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Pnt:	9	15	27	330	10	41	38	1080	5	17	946	89				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	9	15	27	330	10	41	38	1080	5	17	946	89				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	9	15	27	330	10	41	38	1080	5	17	946	89				
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Final Volume:	9	15	27	330	10	41	38	1080	5	17	946	89				
Saturation Flow Module:	Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900															
Adjustment:	0.87	0.87	0.87	0.71	0.71	0.71	0.71	0.16	0.95	0.95	0.15	0.94	0.94	0.94	0.94	0.17
Lanes:	0.18	0.29	0.53	0.86	0.03	0.11	1.00	1.99	0.01	1.00	1.83	0.17				
Final Sat.:	293	488	878	1165	35	145	311	3590	17	280	3256	306				
Capacity Analysis Module:	Vol/Sat: 0.03 0.03 0.03 0.28 0.28 0.12 0.30 0.30 0.06 0.29 0.29															
Crit Moves:	****															
Green/Cycle:	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Volume/Cap:	0.06	0.06	0.06	0.58	0.58	0.58	0.58	0.24	0.58	0.58	0.12	0.56	0.56	0.56	0.56	0.56
Uniform Del:	16.4	16.4	16.4	22.2	22.2	22.2	22.2	16.1	20.2	20.2	15.0	19.9	19.9	19.9	19.9	19.9
IncrementDel:	0.0	0.0	0.0	1.4	1.4	1.4	1.4	0.8	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	16.5	16.5	16.5	23.6	23.6	23.6	23.6	16.8	20.7	20.7	15.4	20.3	20.3	20.3	20.3	20.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.5	16.5	16.5	23.6	23.6	23.6	23.6	16.8	20.7	20.7	15.4	20.3	20.3	20.3	20.3	20.3
LOS by Move:	B	B	B	B	C	C	C	B	C	C	B	C	C	C	C	C
HCM2kAvgQ:	1	1	1	10	10	10	10	1	15	15	0	14	14	14	14	14
Note:	Queue reported is the number of cars per lane.															
HCM Ops Adjusted Lane Utilization Module:	Lanes: 0 0 1 0 0 0 0 1 0 0 1 0 1 0 1 0 1 1 0															
Lane Group:	LTR	LTR	LTR	LTR	LTR	LTR	LTR	L	RT	RT	L	RT	RT	L	RT	RT
#LnsInGrps:	1	1	1	1	1	1	1	1	2	2	1	2	2	1	2	2
HCM Ops Input Saturation Adj Module:	Lane Width: 12 12 12 12 12 12 12 12 12 12 12 12															
CrsswalkWid:	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
% Hev Veh:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grade:	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Parking/Hr:	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Bus Stp/Hr:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Area Type:	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
Cnft Ped/Hr:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ExclusiveRT:	Include	Include	Include	Include	Include	Include	Include	Include	Include	Include	Include	Include	Include	Include	Include	Include
% RT Prtct:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HCM Ops f(lt) Adj Case Module:	f(lt) Case: 5 5 5 5 5 5 5 2 xxxxx xxxxx 2 xxxxx xxxxx															
HCM Ops Saturation Adj Module:	Ln Wid Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00															
Hev Veh Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Grade Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	xxxxx	1.00	1.00	xxxxx	1.00	1.00	1.00	1.00	1.00
Bus Stp Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	xxxxx	1.00	1.00	xxxxx	1.00	1.00	1.00	1.00	1.00
Area Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
RT Adj:	0.93	0.93	0.93	0.99	0.99	0.99	0.99	xxxxx	1.00	1.00	xxxxx	0.99	0.99	0.99	0.99	0.99
LT Adj:	0.94	0.94	0.94	0.72	0.72	0.72	0.72	0.16	xxxxx	xxxxxxx	0.15	xxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx
PedBike Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
HCM Sat Adj:	0.87	0.87	0.87	0.71	0.71	0.71	0.71	0.16	0.95	0.95	0.15	0.99	0.99	0.99	0.99	0.99
Usr Sat Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Sat Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	0.95	0.95	0.95
FnI Sat Adj:	0.87	0.87	0.87	0.71	0.71	0.71	0.71	0.16	0.95	0.95	0.15	0.94	0.94	0.94	0.94	0.94



caution and only for comparisons of different signal timings, geometric design alternatives or for general planning applications, as these calculations are applied to the analysis of a single intersection within the CCG and TRAFFIX. Network models are more appropriate since they can account for the influence of the adjacent control measures and other system elements.







Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Mitigated Bkgd + Proj PM

Intersection #31: E Bayshore Dr/Embarcadero Rd

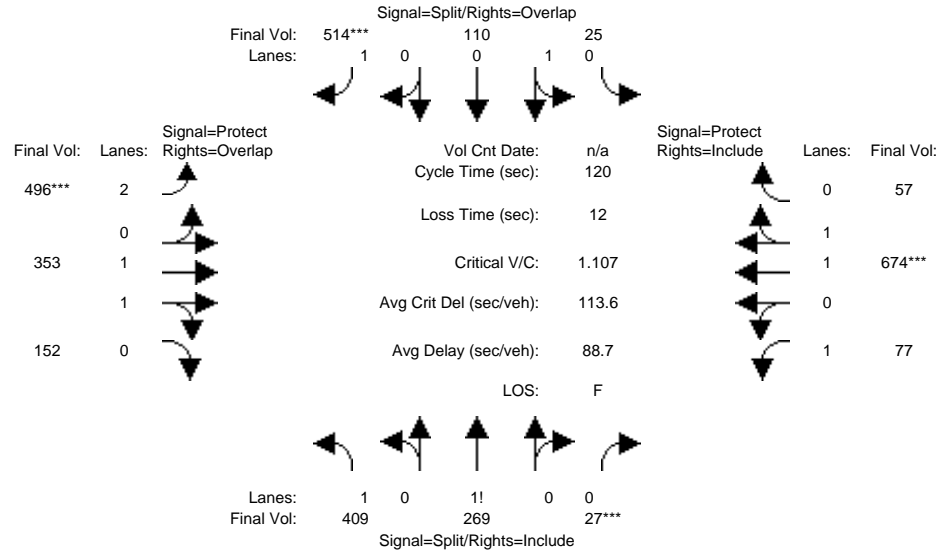


Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include Volume Module, Saturation Flow Module, Capacity Analysis Module, HCM Ops Adjusted Lane Utilization Module, HCM Ops Input Saturation Adj Module, HCM Ops f(lt) Adj Case Module, and HCM Ops Saturation Adj Module.



Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Mitigated Cum AM

Intersection #31: E Bayshore Dr/Embarcadero Rd

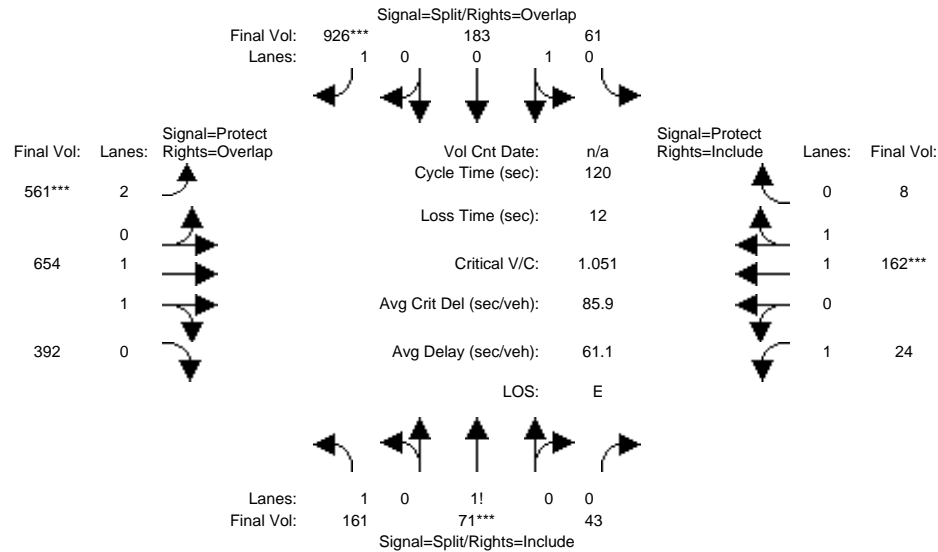


Table with columns for Approach, Movement, and four Bound directions (North, South, East, West). Rows include Volume Module, Saturation Flow Module, Capacity Analysis Module, HCM Ops Adjusted Lane Utilization Module, HCM Ops Input Saturation Adj Module, and HCM Ops f(lt) Adj Case Module.



Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Mitigated Cum PM

Intersection #31: E Bayshore Dr/Embarcadero Rd

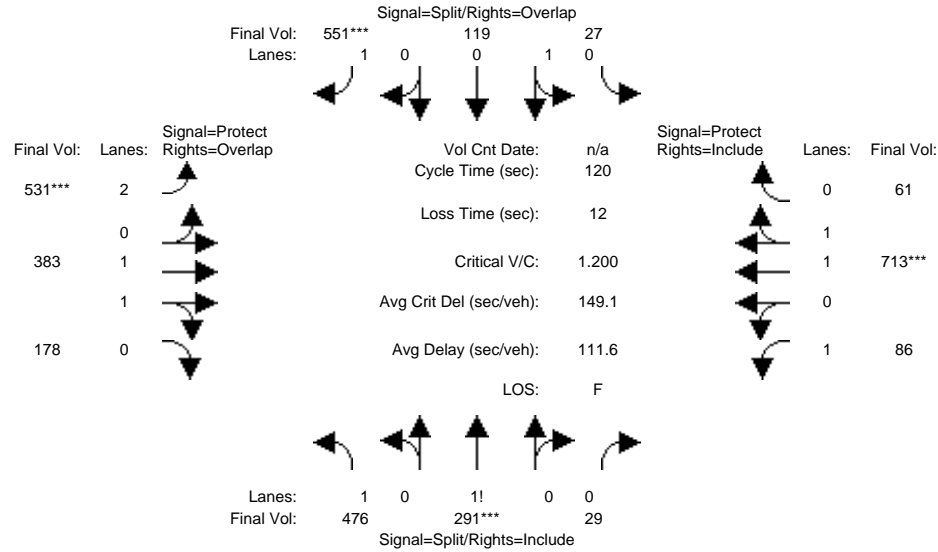


Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include Volume Module, Saturation Flow Module, Capacity Analysis Module, HCM Ops Adjusted Lane Utilization Module, HCM Ops Input Saturation Adj Module, and HCM Ops f(lt) Adj Case Module.





Level Of Service Computation Report
2000 HCM Operations (alternative)
Mitigated Bkgd + Proj PM

Intersection #36: St Francis Dr/Embarcadero Rd

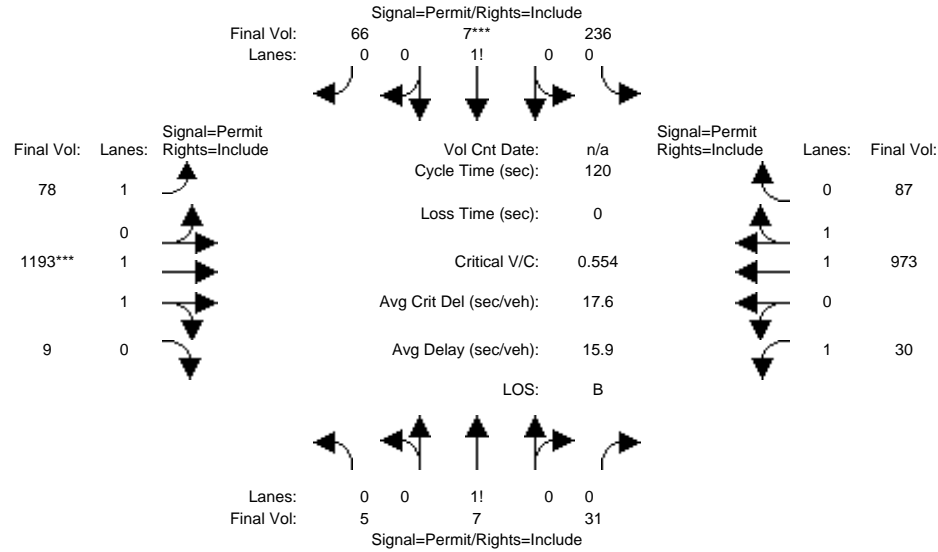


Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include Volume Module, Saturation Flow Module, Capacity Analysis Module, HCM Ops Adjusted Lane Utilization Module, HCM Ops Input Saturation Adj Module, and HCM Ops f(lt) Adj Case Module.







Level Of Service Computation Report
2000 HCM Operations (alternative)
Mitigated Cum PM

Intersection #36: St Francis Dr/Embarcadero Rd

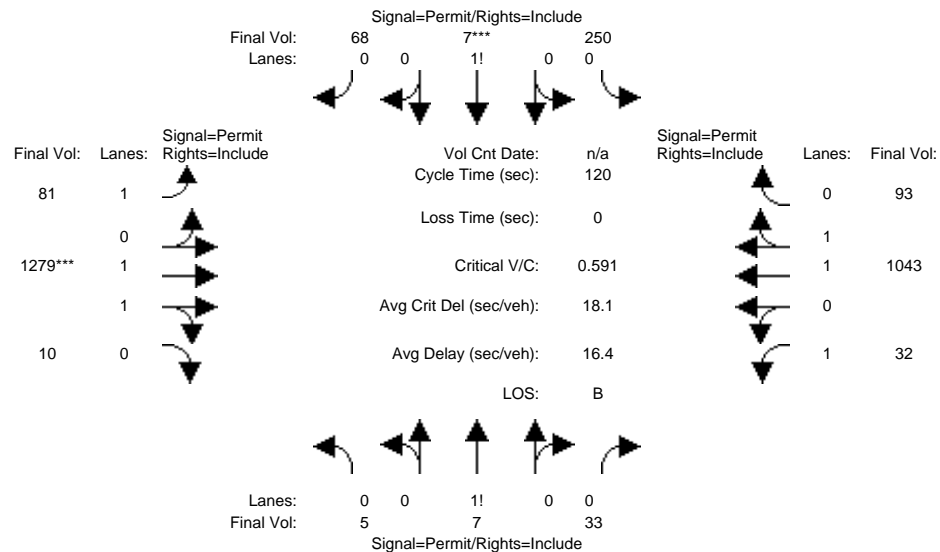


Table with columns for Approach, Movement, and four Bound directions (North, South, East, West). Rows include Volume Module, Saturation Flow Module, Capacity Analysis Module, and HCM Ops Adjusted Lane Utilization Module.



## **Appendix F**

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### *Mitigation Monitoring and Reporting Program*

## **MITIGATION MONITORING AND REPORTING PROGRAM**

The Initial Study-Mitigated Negative Declaration identifies the mitigation measures that will be implemented to reduce the impacts associated with the 1700 Embarcadero Road Auto Dealership Project. The California Environmental Quality Act (CEQA) requires a public agency to adopt a monitoring and reporting program for assessing and ensuring compliance with any required mitigation measures applied to proposed development. As stated in section 21081.6(a)(1) of the Public Resources Code:

*... the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.*

Section 21081.6 also provides general guidelines for implementing mitigation monitoring programs and indicates that specific reporting and/or monitoring requirements, to be enforced during project implementation, shall be defined as part of adopting a mitigated negative declaration.

The mitigation monitoring table lists those mitigation measures that may be included as conditions of approval for the project. To ensure that the mitigation measures are properly implemented, a monitoring program has been devised which identifies the timing and responsibility for monitoring each measure. The project applicant will have the responsibility for implementing the measures, and the various City of Palo Alto departments will have the primary responsibility for monitoring and reporting the implementation of the mitigation measures.





<b>1700 Embarcadero Road Auto Dealership Project Initial Study-Mitigated Negative Declaration Mitigation Monitoring and Reporting Plan</b>					
<b>Mitigation Measure</b>		<b>Action Required</b>	<b>When Monitoring to Occur</b>	<b>Implementation Responsibility</b>	<b>Monitoring Responsibility</b>
<b>BIOLOGICAL RESOURCES</b>					
<b>BIO-1</b>	<p><b>Nesting Bird Protection.</b> To avoid disturbance of nesting and special-status birds, activities related to the project, including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season (typically February through August in the project region). If construction must begin within the breeding season, then a pre-construction nesting bird survey shall be conducted no more than 3 days prior to initiation of ground disturbance and vegetation removal activities. The nesting bird pre-construction survey shall be conducted within the Project Boundary, including a 300-foot buffer (500-foot for raptors), on foot, and within inaccessible areas (i.e., private lands) afar using binoculars to the extent practical. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in the area. If nests are found, an avoidance buffer (which is dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground disturbing activities shall occur within this buffer until the avian biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.</p>	<p>If construction work is planned during nesting season, verification of completed surveys will be required.</p> <p>Verification that prescribed mitigation measures are taken including adhering to time delays (due to nesting or breeding season) if species are observed.</p>	<p>At least once before work commences.</p> <p>Periodically during initial ground disturbance and/or vegetation removal.</p>	Applicant	City of Palo Alto
<b>GEOLOGY AND SOILS</b>					
<b>GEO-1</b>	<p><b>Geotechnical Design Considerations.</b> The recommendations included in the 2015 <i>Geotechnical Investigation</i> 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:</p> <ul style="list-style-type: none"> <li>• <i>Foundation design</i></li> <li>• <i>Surface improvements</i></li> <li>• <i>Slabs-on-grade</i></li> <li>• <i>Retaining walls</i></li> <li>• <i>Vehicle pavements</i></li> <li>• <i>Earthwork</i></li> </ul>	<p>Verification that recommendations incorporated into the grading and building plans.</p>	Prior to issuance of grading permit.	Applicant	City of Palo Alto



<b>1700 Embarcadero Road Auto Dealership Project Initial Study-Mitigated Negative Declaration Mitigation Monitoring and Reporting Plan</b>					
<b>Mitigation Measure</b>		<b>Action Required</b>	<b>When Monitoring to Occur</b>	<b>Implementation Responsibility</b>	<b>Monitoring Responsibility</b>
<b>TRANSPORTATION/TRAFFIC</b>					
<b>T-1</b>	<p><b>East Bayshore Road and Embarcadero Road.</b> The project applicant shall construct the following improvements and enter into a reimbursement agreement with the City for payment less their fair share of the improvement costs:</p> <ol style="list-style-type: none"> <li>1. Revise the eastbound leg on Embarcadero Road to include two left-turn pockets, a through lane, and a shared through/right-turn lane. This improvement shall also include changing the east-west phasing from split phase timing to protected left turn phasing.</li> <li>2. Restripe the northbound approach to have one left turn lane and one shared left-through-right lane. This would likely require modifying the median island and relocating the signal equipment on the west leg of the intersection.</li> </ol>	Verification that fair share payment has been made.	Prior to occupancy of the building.	Applicant	City of Palo Alto



## **Appendix G**

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*Response to Comments on the Draft IS-MND*

## RESPONSES to COMMENTS

This appendix contains the written comments received in response to the Draft Initial Study - Mitigated Negative Declaration (IS-MND) prepared for the 1700 Embarcadero Road Auto Dealership Project and responses to those comments.

The IS-MND was circulated for a public review period that began on April 22, 2016, and concluded on May 12, 2016. The City received three comment letters on the Draft IS-MND; one of these, Letter 3, was received after the close of the comment period. The commenter and the page number on which each commenter's letter appears are listed in the table below. The comment letters and the City's responses follow. Each comment letter has been numbered sequentially and each separate issue raised by the commenter has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 1.1, for example, indicates that the response is for the first issue raised in comment Letter 1).

Additional text discussed in the responses to comments is shown in the text of the Final IS-MND in ~~striethrough~~ (for deleted text) and underline (for added text) format. Other minor corrections to the text that were not made specifically in response to the comments received are also shown in this format. None of these changes introduces significant new information or affect the conclusions of the IS-MND.

<b>Letter No. and Commenter</b>	<b>Page #</b>
1. County of Santa Clara Parks and Recreation Department	G-2
2. Santa Clara Valley Transportation Authority	G-6
3. California Department of Transportation (Caltrans) (Received after close of comment period)	G-11



# County of Santa Clara

## Parks and Recreation Department

298 Garden Hill Drive  
Los Gatos, California 95032-7669  
(408) 355-2200 FAX 355-2290  
Reservations (408) 355-2201  
[www.parkhere.org](http://www.parkhere.org)



May 10, 2016

Attn: Sheldon Ah Sing  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, CA 94301

### **Subject: Notice of Intent to Adopt a Mitigated Negative Declaration for the 1700 Embarcadero Road Auto Dealership Project**

Dear Mr. Sheldon Ah Sing:

The County of Santa Clara, Parks and Recreation Department (“County Parks Department”), has reviewed the Notice of Intent to Adopt a Mitigated Negative Declaration (MND) for the demolition of an existing 17,942 square-foot single-story commercial building, and construction and operation of a new three-story, approximately 61,510 square-foot, auto dealership with roof deck parking. Other on-site features proposed include a detached car wash facility, customer parking, vehicle merchandise display, solid waste/recycling facilities, and landscaping.

The County Parks Department is charged with the planning and implementation of *The Santa Clara County Countywide Trails Master Plan Update (Countywide Trails Plan)*, an element of the Parks and Recreation Section of the County General Plan adopted by the Board of Supervisors on November 14, 1995. Although responsibility for the actual construction and long-term management of each individual trail varies, the County Parks Department provides general oversight and protection of the overall trail system. The existing trails and proposed trail routes located near the Project site are as follows:

- ***San Francisco Bay Trail*** (Route R1-B) – This partially existing trail provides a regional connection along the San Francisco Bay shoreline. It is designated for hiking and cycling.

The MND should describe the above-mentioned trail route as well as the California Avenue Trail, which is identified in the *City of Palo Alto Bicycle & Pedestrian Transportation Plan*. This partially existing trail is another regional trail in close proximity, which currently extends from St. Francis Drive to the Baylands Preserve. The trail, acknowledged as part of the “Bay to Ridge Trail,” starts near St. Francis Drive, crosses East Bayshore Road, and extends into the Baylands Preserve where it connects to the San Francisco Bay Trail.

1.1



**Board of Supervisors:** Mike Wasserman, Cindy Chavez, Dave Cortese, Ken Yeager, S. Joseph Simitian

**County Executive:** Jeffrey V. Smith

**Transportation/Traffic**

The Draft MND states that the Project will have less than significant impact on public transit, bikeways, or pedestrian facilities. However, the Traffic Impact Analysis does not accurately note local and regional trails in the project vicinity. The Traffic Impact Analysis should be amended to address the following concerns:

- Figure 3 (Traffic Impact Analysis pg. 11) should be amended to show the on-street bicycle route within road right-of-way on Geng Road, as identified in the *City of Palo Alto Bicycle & Pedestrian Transportation Plan* (Map 6-1). 1.2
- Figure 3 (Traffic Impact Analysis pg. 11) should also be amended to show the California Avenue Trail beyond the “Bike/Pedestrian Bridge” as depicted in the *City of Palo Alto Bicycle & Pedestrian Transportation Plan* (Map 6-1).

The MND should address potential impacts to these trail routes and include mitigation measures for those impacts. 1.3

Thank you for the opportunity to comment on the Notice of Intent to Adopt a Mitigated Negative Declaration for the 1700 Embarcadero Road Auto Dealership Project. If you have any questions regarding these comments, please feel free to contact me at (408) 355-2228 or via email at [Hannah.Cha@prk.sccgov.org](mailto:Hannah.Cha@prk.sccgov.org).

Sincerely,



Hannah Cha  
Provisional Park Planner II

cc: Annie Thomson, Principal Planner



**Board of Supervisors:** Mike Wasserman, Cindy Chavez, Dave Cortese, Ken Yeager, S. Joseph Simitian

**County Executive:** Jeffrey V. Smith

*Letter 1*

**COMMENTER:** Hannah Cha, Provisional Park Planner II, County of Santa Clara Parks and Recreation Department

**DATE:** May 10, 2016

Response 1.1

The commenter summarizes the project description and provides an overview of the County of Santa Clara Parks and Recreation Department's responsibilities related to review of the proposed project. The commenter identifies the following two existing trails near the project site, and states an opinion that they should be described in the Draft IS-MND:

- A segment of the San Francisco Bay Trail ("Route R1-B") that traverses a portion of the Baylands Preserve near the project site, and
- The California Avenue Trail, which is identified in the *City of Palo Alto Bicycle & Pedestrian Transportation Plan* and extends from St. Francis Drive to the Baylands Preserve.

The Final IS-MND has been revised accordingly. The text on Page 12 has been augmented as follows:

The proposed project would increase the massing and intensity of development on the project site (see Figure 4). As such, the proposed project would represent a change in the visual character of the site. However, the existing visual character and quality of the site, characterized by a one-story commercial building, surface parking and landscaping, are considered low to moderate. Figure 8 shows a visual simulation of the proposed project from the Renzel Trail within the Baylands Nature Preserve. 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 two-story auto dealership located to the east. In addition, the proposed project would be consistent with the FAR and height allowances for the CS(AD) zone in accordance with the Palo Alto Municipal Code (PAMC) (see Section X, Land Use and Planning). 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.

Please see also Response 1.2 below.



### Response 1.2

The commenter suggests that the Geng Road bicycle route and the St. Francis Drive-Embarcadero Road Crossing-Baylands connector trail discussed in Response 1.1 above be shown on Figure 3, *Existing Bicycle Facilities*, of the project's Traffic Impact Analysis (Appendix E to the IS-MND). Figure 3 of the Traffic Impact Analysis has been modified to show the bicycle route and trail. The revised figure is included in Appendix E of the Final IS-MND in the supplemental traffic memorandum prepared by Hexagon Transportation Consultants.

### Response 1.3

The commenter states an opinion that the IS-MND should address potential impacts to these trail routes and include mitigation measures for those impacts. The commenter does not provide information or analysis to indicate that such impacts would occur or what they would be. Impacts related to aesthetics are discussed under Section I, *Aesthetics*, of the IS-MND, and as discussed there impacts related to views from public streets and trails would be less than significant and no mitigation measures are required. Impacts related to traffic, circulation and traffic safety are discussed in Section XVI, *Transportation/Traffic*, of the Draft IS-MND, and in the project's traffic impact analysis (TIA), included as Appendix E to the IS-MND. As discussed therein, impacts related to bicycle facilities and circulation would be less than significant and no mitigation measures are required. The following text has been added to the Final IS-MND in Section XVI, *Transportation/Traffic*; this information is also included in Appendix E in the May 2016 supplemental traffic memorandum prepared by Hexagon Transportation Consultants.

The San Francisco Bay trail is a partially existing Class I trail that provides a regional connection along the San Francisco Bay shoreline. This is a multi-use trail designed for hiking and cycling. This trail is located near the project site, with access along E. Bayshore Road. Views from trails are discussed in Section I, *Aesthetics*. The project would not result in significant traffic or circulation impacts to the trail.

...

The California Avenue Trail is a partially existing Class II trail that currently extends from St. Francis Drive to the Baylands preserve. This planned trail will provide bicycle and pedestrian access between the existing bike/pedestrian bridge over US 101 to the existing Class II bicycle lanes along Louis Road. The completion of this trail will enhance the pedestrian and bicycle access to and from the west side of the US 101 and the project area. The proposed project would not result in significant traffic or circulation impacts to this trail.







May 12, 2016

Letter 2

City of Palo Alto  
Planning Department  
P.O. Box 10250  
Palo Alto, CA 94303

Attention: Sheldon Ah Sing

Subject: Embarcadero Road Auto Dealership

Dear Mr. Ah Sing:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the Initial Study for a 61,510-square foot auto dealership at 1700 Embarcadero Road. We have the following comments.

Transportation Impact Analysis (TIA) Report

VTA notes that the analysis of potential effects on transit service in the TIA (pg. 34) is based on transit capacity rather than transit vehicle delay, as required per Section 9.2 of the 2014 TIA Guidelines. As noted in the 2014 VTA TIA Guidelines (page 46), the transit vehicle delay analysis may simply utilize information produced by the intersection Level of Service analysis, or other sources if available. In addition, the TIA did not include an Auto Trip Reduction Statement (ATRS), as required per Section 8.2 and Appendix C of the 2014 TIA Guidelines. Please submit the completed ATRS and transit vehicle delay analysis in a revised TIA report or memo to VTA, as well as in materials shared with the public and decision-makers regarding this project.

2.1

The October 2014 version of the VTA TIA Guidelines can be found online at <http://www.vta.org/cmp/tia-guidelines>. For any questions about the updated TIA Guidelines, please contact Robert Swierk of the VTA Planning and Program Development Division at 408-321-5949 or [Robert.Swierk@vta.org](mailto:Robert.Swierk@vta.org).

Pedestrian Accommodations

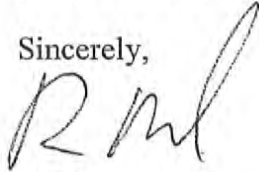
Figure 12 of the TIA (“Conceptual Improvement Plan”) indicates that a new crosswalk would be added on north leg of the intersection of Embarcadero Road and East Bayshore Road intersection, and an existing porkchop island would be removed on the southwest corner of the intersection, reducing the total pedestrian crossing distance on the south leg. However, these pedestrian improvements are not described in the text of the TIA or Initial Study. VTA supports these improvements and recommends that the City include them as enforceable conditions of approval for the project.

2.2

City of Palo Alto  
May 12, 2016  
Page 2

Thank you for the opportunity to review this project. If you have any questions, please call me at (408) 321-5784.

Sincerely,

A handwritten signature in black ink, appearing to read "R Molseed". The signature is written in a cursive style with a large, looped initial "R".

Roy Molseed  
Senior Environmental Planner

PA1504

## VTA Development Review Program Contact List

*Last Updated: 4/22/2016*

Please route development referrals to:

### **Environmental (CEQA) Documents, Site Plans, other miscellaneous referrals**

Roy Molseed – [Roy.Molseed@vta.org](mailto:Roy.Molseed@vta.org) – 408.321.5784

### **Transportation Impact Analysis (TIA) Reports and Notification Forms:**

Robert Cunningham – [Robert.Cunningham@vta.org](mailto:Robert.Cunningham@vta.org) – 408.321.5792

Eugene Maeda – [Eugene.Maeda@vta.org](mailto:Eugene.Maeda@vta.org) – 408.952.4298

Electronic/email referrals are preferred, but please mail any hardcopy documents to:

[Name of recipient(s) as detailed above, depending on type of document]

Planning & Program Development Division

3331 North First Street, Building B-2

San Jose, CA 95134-1906

---

Contacts for specific questions related to VTA comments on a referral are below by topic area:

### **Transportation Impact Analysis (TIA) Guidelines (General Questions)**

Robert Swierk – [Robert.Swierk@vta.org](mailto:Robert.Swierk@vta.org) – 408.321.5949

Robert Cunningham – [Robert.Cunningham@vta.org](mailto:Robert.Cunningham@vta.org) – 408.321.5792

### **Auto LOS Methodology**

#### **VTA Highway Projects & Freeway Ramp Metering**

Shanthi Chatradhi – [Shanthi.Chatradhi@vta.org](mailto:Shanthi.Chatradhi@vta.org) – 408.952.4224

### **VTA Transit Service, Ridership & Bus Stops**

Rodrigo Carrasco – [Rodrigo.Carrasco@vta.org](mailto:Rodrigo.Carrasco@vta.org) – 408.952.4106

Nicholas Stewart – [Nicholas.Stewart@vta.org](mailto:Nicholas.Stewart@vta.org) – 408.321.5939

### **TDM Programs**

#### **Congestion Management Program (CMP)**

#### **VTA Eco Pass Program Questions Before Project Approval** (e.g. when writing Conditions of Approval)

Robert Cunningham – [Robert.Cunningham@vta.org](mailto:Robert.Cunningham@vta.org) – 408.321.5792

#### **VTA Eco Pass Program Questions After Project Approval** (e.g. Program Implementation)

Dino Guevarra – [Dino.Guevarra@vta.org](mailto:Dino.Guevarra@vta.org) – 408.321.5572

### **BART Silicon Valley Extension**

Kevin Kurimoto – [Kevin.Kurimoto@vta.org](mailto:Kevin.Kurimoto@vta.org) – 408.942.6126

### **VTA Bicycle & Pedestrian Projects**

Lauren Ledbetter – [Lauren.Ledbetter@vta.org](mailto:Lauren.Ledbetter@vta.org) – 408.321.5716

**VTA Real Estate**

Kathy Bradley – [Kathy.Bradley2@vta.org](mailto:Kathy.Bradley2@vta.org) – 408.321.5815

**VTA Permits** (Construction Access Permit, Restricted Access Permit)

Victoria King-Dethlefs – [Victoria.King-Dethlefs@vta.org](mailto:Victoria.King-Dethlefs@vta.org) – 408-321-5824

Cheryl D. Gonzales – [Cheryl.gonzales@vta.org](mailto:Cheryl.gonzales@vta.org) – 408-546-7608

**Other Topics and General Questions about VTA Comments**

Roy Molseed – [Roy.Molseed@vta.org](mailto:Roy.Molseed@vta.org) – 408.321.5784

*Letter 2*

**COMMENTER:** Roy Molseed, Senior Environmental Planner, Santa Clara Valley  
Transportation Authority

**DATE:** May 12, 2016

Response 2.1

The commenter notes that the analysis of potential effects on transit service is based on transit capacity rather than transit vehicle delay, and that the TIA did not include an Auto Trip Reduction Statement (ATRS).

In response to this comment, Hexagon Transportation Consultants, the project traffic consultant, analyzed the transit vehicle delay associated with the proposed project and provided an ATRS in a memorandum dated May 17, 2016. The results of this memo are summarized in the Final IS-MND in Section XVI, *Transportation/Traffic*. The memo is also included in Appendix E of the Final IS-MND. As discussed in Section XVI, *Transportation and Traffic*, of the Final IS-MND, there are no regular VTA bus lines that travel through the study intersections, but there are two shuttles: City of Palo Alto Embarcadero Shuttle Service and the Marguerite Shuttle Service operated by Stanford University. Mitigation Measure T-1, which would offset the additional delay created by the project at the intersection of Embarcadero Road and East Bayshore Road, would also offset the increase in travel time. No additional significant impacts associated with the project have been identified in light of this comment.

Additionally in response to this comment, an ATRS has been prepared. The ATRS is included in Appendix E of the Final IS-MND. No additional significant impacts associated with the project have been identified in light of this comment.

Response 2.2

The commenter notes that the Figure 12 of the TIA indicates that a pedestrian improvement would be added on the north leg of the intersection of Embarcadero Road and East Bayshore Road, and that this pedestrian improvement is not specifically described in the text of the TIA or the Draft IS-MND. The commenter states support for this improvement and recommends that the City include the improvement as a condition of approval for the project.

The pedestrian improvement is not described in the Draft IS-MND because it does not address a potential project impact. However, it is planned by the City as part of the larger set of improvements for the intersection of East Bayshore Road and Embarcadero Road, and is therefore shown in the figure to provide a complete picture of the overall improvements. No changes to the IS-MND are warranted. The commenter's support for this improvement will be forwarded to the City's decision makers for their consideration.



**DEPARTMENT OF TRANSPORTATION**

DISTRICT 4  
P.O. BOX 23660  
OAKLAND, CA 94623-0660  
PHONE (510) 286-5528  
FAX (510) 286-5559  
TTY 711  
www.dot.ca.gov



*Serious Drought.  
Help save water!*

Letter 3  
(received after close  
of comment period)

May 20, 2016

SCL101967  
SCL/101/PM 52

Mr. Sheldon Ah Sing  
Department of Planning and Community Environment  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, CA 94301

Dear Mr. Ah Sing:

**1700 Embarcadero Road Auto Dealership Project – Mitigated Negative Declaration**

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced project. Caltrans' new mission, vision, and goals signal a modernization of our approach to California's transportation system, in which we seek to reduce statewide vehicle miles traveled (VMT) and increase non-auto modes of active transportation. Caltrans plans to increase non-auto mode shares by 2020 through tripling bicycle, and doubling pedestrian and transit. Also, these targets support the Metropolitan Transportation Commission's (MTC) Sustainable Communities Strategy, which promotes the increase of non-auto mode shares by ten percentage points and a decrease in automobile VMT per capita by ten percent. Our comments are based on the Mitigated Negative Declaration (MND).

***Project Understanding***

The proposed project is located approximately 356 feet northeast on Embarcadero Road from the northbound (NB) US Highway (US) 101/Embarcadero Road on- and off-ramps. The proposed project would involve the demolition of an existing 17,942 square foot (sf) single-story commercial building and construction and operation of a new three-story, approximately 61,510 sf auto dealership with roof deck parking. The building would integrate sales and administrative offices, customer parking, vehicle merchandise storage, and vehicle service/repair areas on multiple floors. Other on-site features would include a detached car wash facility, customer parking, vehicle merchandise display, solid waste/recycling facilities, and landscaping.

***Lead Agency***

As the lead agency, the City of Palo Alto (City) is responsible for all project mitigation, including any needed improvements to State highways. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

*"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"*

Mr. Ah Sing/City of Palo Alto  
 May 20, 2016  
 Page 2

**Traffic Impacts**

1. Left-Turning and US 101 Ramp Queues

- A. The proposed plan is likely to have impacts on the operations of the following metered freeway on-ramps:
- Southbound (SB) US 101/Embarcadero Road loop on-ramp (metered 3:00 PM to 7:00 PM).
  - NB US 101/Embarcadero Road diagonal collector on-ramp (to be metered in the future for AM and PM).

During the ramp metering hours, the on-ramp queues will likely be lengthened with the additional traffic demand by this project, and they may impede onto the collector/distributor and the local streets affecting their operations. Please provide additional storage on the on-ramps and associated local streets for the freeway on-ramp traffic to avoid such impacts.

B. Caltrans recommends the Traffic Impact Analysis (TIA) and MND:

- Clarify the reported number of left-turning vehicles in the queuing analysis for the East Bayshore Road/Embarcadero Road intersection. The TIA states on page vii, "The project would add 77 vehicles to the left turn movement during the PM peak hour..." However, on page 43, the TIA states, "The project will add 43 vehicles to this movement [left turn movement] during the PM peak hour." This is repeated on page 47 of the MND.
  - Include analyses of the Oregon Expressway on- and off-ramps, as they are connected to the Embarcadero Road ramps by collectors/distributors. The first paragraph of the TIA states, "The freeway ramps to and from Oregon Expressway were not analyzed because the project is not expected to add enough trips to warrant an analysis..." Additional queuing by this project may affect the operations of both the US 101/Embarcadero Road and US 101/Oregon Expressway interchanges.
  - Reassess the queuing and update the volume-to-capacity (V/C) values for the ramp metering rate at the SB US 101/Embarcadero Road loop on-ramp in the PM peak period. The rate is metered between 880 and 900 vehicles per hour (vph) on the high-occupancy vehicle (HOV) lane and between 300 and 400 vph on the single-occupancy vehicle (SOV) lane. The capacity of 900 vph in TIA Table 4 (p. 15) and in Table 9 (p. 25) should be changed accordingly to these metering rates.
2. Adjusting metering rates on State facilities cannot be considered mitigation to reduce potential impacts to on-ramp queuing. Please remove the TIA recommendation (p. 44) to re-evaluate the US 101/Embarcadero Road interchange, when the US 101 construction project is complete, and adjusting the rates as mitigation. Please see comment above for mitigation for queuing impacts.
3. Caltrans recommends exclusively using 2015 freeway ramp data or collect new data. Bay area traffic in general has grown substantially in the past few years, so mixing freeway ramp volumes from 2009 and 2010 with data from 2015 in a data set for existing conditions and analyses creates inaccurate assessments and underestimates impacts to State facilities.

*"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"*

Mr. Ah Sing/City of Palo Alto  
May 20, 2016  
Page 3

4. Please include a citation to the source document for the existing volumes provided by Caltrans, as referenced in TIA Table 4 and Table 25.

#### ***Vehicle Trip Reduction***

Caltrans encourages the City to locate future housing, jobs, and employee-related services near major mass transit centers with connecting streets configured to facilitate walking and biking. This would promote mass transit use thereby reducing regional VMT and traffic impacts. Transportation Demand Management (TDM) programs should be documented with annual monitoring reports by an onsite TDM coordinator to demonstrate effectiveness. Suggested TDM strategies include working with the Santa Clara Valley Transportation Authority (VTA) to decrease headway times and improve way-finding on bus lines to provide a better connection between the project, the Palo Alto and California Avenue Stations, and regional destinations and providing:

- Secured bicycle storage facilities.
- Fix-it bicycle repair station(s).
- Bicycles for employee uses to access local resources.
- Showers, changing rooms and clothing lockers.
- 10% vehicle parking reduction.
- Carpool and clean-fuel parking spaces.
- Transit subsidies and/or transit passes to all employees.
- Emergency Ride Home program.
- Transit and trip planning resources.
- Carpool and vanpool ride-matching support.

#### ***Traffic Impact Fees***

Given the project's contribution to area traffic and its proximity to US 101, the project should contribute fair share traffic impact fees to the US 101 Express Lanes Project. These contributions would be used to lessen future traffic congestion and improve transit in the project vicinity.

#### ***Traffic Control Plan***

Since it is anticipated that vehicular, bicycle, and pedestrian traffic will be impacted during the construction of the proposed project requiring traffic restrictions and detours, a Caltrans-approved Traffic Control Plan (TCP) is required to avoid project-related impacts to US 101. The TCP must also comply with the requirements of corresponding jurisdictions. In addition, pedestrian access through the construction zone must be in accordance with the Americans with Disabilities Act (ADA) regulations (see Caltrans' *Temporary Pedestrian Facilities Handbook* for maintaining pedestrian access and meeting ADA requirements during construction at: [www.dot.ca.gov/hq/construc/safety/Temporary\\_Pedestrian\\_Facilities\\_Handbook.pdf](http://www.dot.ca.gov/hq/construc/safety/Temporary_Pedestrian_Facilities_Handbook.pdf)) (see also Caltrans' Traffic Operations Policy Directive 11-01 "Accommodating Bicyclists in Temporary Traffic Control Zones" at: [www.dot.ca.gov/hq/traffops/policy/11-01.pdf](http://www.dot.ca.gov/hq/traffops/policy/11-01.pdf)). All curb ramps and pedestrian facilities located within the limits of the project are required to be brought up to current ADA standards as part of this project.

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Mr. Ah Sing/City of Palo Alto  
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For further TCP assistance, please contact the Caltrans District 4 Office of Traffic Management Operations at (510) 286-4579. Further traffic management information is available at the following website:  
[www.dot.ca.gov/hq/traffops/trafmngmt/tmp\\_lcs/index.htm](http://www.dot.ca.gov/hq/traffops/trafmngmt/tmp_lcs/index.htm).

**Sea Level Rise**

The effects of sea level rise may have impacts on transportation facilities located in the project area. Executive Order (EO) S-13-08 directs State agencies to plan for potential impacts by considering a range of sea level rise scenarios for the years 2050 and 2100. Higher water levels may increase erosion rates, change environmental characteristics that affect material durability, lead to increased groundwater levels and change sediment movement along shores and at estuaries and river mouths, as well as affect soil pore pressure at dikes and levees on which transportation facilities are constructed. All these factors must be addressed through geotechnical and hydrological studies conducted in coordination with Caltrans.

Should you have any questions regarding this letter, please contact Brian Ashurst at (510) 286-5505 or [brian.ashurst@dot.ca.gov](mailto:brian.ashurst@dot.ca.gov).

Sincerely,



PATRICIA MAURICE  
District Branch Chief  
Local Development - Intergovernmental Review

- c: Robert Swierk, Santa Clara Valley Transportation Authority (VTA) – electronic copy
- Robert Cunningham, Santa Clara Valley Transportation Authority (VTA) – electronic copy

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*Letter 3*

**COMMENTER:** Patricia Maurice, District 4 Branch Chief, California Department of Transportation (Caltrans)

**DATE:** May 20, 2016

This letter was received after the close of the public comment period on the Draft IS-MND and after a final draft of this document was prepared. Nevertheless, the City considered these comments and Hexagon Transportation Consultants prepared a memorandum to the City to address these comments; the memorandum appears on the following pages.





May 25, 2016

Mr. Jarrett Mullen, Planning & Community Environment - Transportation  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, CA 94301

**Re: 1700 Embarcadero Road Auto Dealership Project – Response to Caltrans**

Dear Mr. Mullen:

Hexagon Transportation Consultants, Inc. has reviewed the Caltrans letter sent to the City of Palo Alto, dated May 20, 2016. The letter concerns the auto dealership project located at 1700 Embarcadero Road. Our responses to Caltrans comments are summarized below.

**1A. Left-Turning and US 101 Ramp Queues**

Caltrans noted that the project should provide additional storage on the on ramps and associated local streets for the freeway on ramp traffic to avoid impacts at nearby US 101 ramps. An analysis of freeway ramp queues was not conducted because neither the City of Palo Alto nor the VTA has established any standards of significance criteria related to freeway ramp operations. Additionally, Caltrans has not established any mechanism for collecting contributions towards any ramp improvements.

**1B. Caltrans Recommendations**

**Left-Turn Volume at E Bayshore/Embarcadero**

The report contains a discrepancy in the number of left-turning vehicles in the queueing analysis for the East Bayshore Road/Embarcadero Road intersection in the northbound direction during the PM peak hour. The correct number of project trips added is stated on page vii of the TIA and should be clarified elsewhere as 77 vehicles.

**Oregon Expressway Ramps**

The spillback and queuing issues that occur on the ramps are due to existing freeway congestion and slow meter rates. This issue is not due to the ramps capacity. For this reason the Embarcadero Road ramps were analyzed because operational issues on these ramps are not due to project related traffic.

**Ramp Meter Rate**

The project does not need to assess the volume-to-capacity (V/C) values for the ramp metering rate at the SB US 101/Embarcadero loop on-ramp in the PM peak period. It has already been determined that the project has a less than significant impact on the freeway segments, as defined by the Santa Clara Valley Transportation Authority (VTA). As noted above, operational issues related to freeway ramps are not CEQA issues since neither the City of Palo Alto nor the VTA has established any standards or significance criteria based on freeway ramp operations. The V/C analysis for the US 101/Embarcadero Road Interchange was revised to reflect the



metering rates suggested by Caltrans (see Table 1). Additionally, Caltrans has not established any mechanism for collecting contributions towards any ramp improvements.

**Table 1**  
**US 101 and Embarcadero Road Interchange – V/C Analysis**

Ramp	Type	Capacity	Peak Hour	Existing		Existing Plus Project Conditions		
				Volume <sup>1</sup>	V/C	Project Trips	Total Volume	V/C
SB US 101 to EB Embarcadero Rd.	Loop	1,800	AM	270	0.15	14	284	0.16
			PM	100	0.06	15	115	0.06
WB Embarcadero Rd. to SB US 101 <sup>2</sup>	Loop	900	AM	290	0.32	23	313	0.35
		400 <sup>3</sup>	PM	560	1.40	45	605	1.51
NB US 101 to EB Embarcadero Rd.	Diagonal	2,000	AM	580	0.29	28	608	0.30
			PM	420	0.21	29	449	0.22
WB Embarcadero Rd. to NB US 101 <sup>2</sup>	Diagonal	900	AM	115	0.13	11	126	0.14
			PM	370	0.41	23	393	0.44

<sup>1</sup> Existing AM and PM peak-hour ramp volumes are based on 2009 and 2010 hourly counts provided by Caltrans.

<sup>2</sup> This ramp is controlled by a ramp meter during the peak hour. Capacity reflects the maximum ramp meter rate.

<sup>3</sup> Capacity for the PM Peak Hour at this loop ramp reflects the Caltrans metering rate for a single occupancy vehicle lane. V/C ratios also reflect this capacity.

## 2. Ramp Metering

The letter from Caltrans states that adjusting the metering rates on State facilities cannot be considered mitigation. Hexagon has described the slow metering rates in the TIA report to describe existing conditions, but does not suggest that modifying these rates should be used as a mitigation measure.

## 3. Freeway Ramp Data

Caltrans recommended exclusively using 2015 freeway ramp data or collecting new data. Throughout the preparation of the TIA for this project, Caltrans was contacted and asked to provide 2015 count data. To this date, no reply to these requests has been recorded and 2015 freeway data was unavailable at the time of the analysis. Freeway counts were not conducted as the current conditions along the freeway are not typical due to the ongoing construction.

## 4. Source of Count Data

The best available data was found on the Caltrans website, from 2009 and 2010. This data include US 101 freeway and ramp volumes in the project vicinity.

## 5. Vehicle Trip Reduction

The City of Palo Alto requires vehicle trip reduction programs where it is appropriate. No trip reductions were assumed for this project.

## 6. Traffic Impact Fees

Caltrans has suggested that the project contribute fair share traffic impact fees to the US 101 Express Lanes Project. Caltrans has not yet prepared a nexus study that is required to collect these fees. For this reason, the project cannot be obligated to make a fair-share contribution towards the US 101 Express Lanes Project.



Mr. Jarrett Mullen  
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### **7. Traffic Control Plan**

The project will file a traffic control plan for any construction that occurs within Caltrans right-of-way.

### **8. Sea Level Rise**

Caltrans comment regarding sea level rise and transportation facilities has been noted. The possible effects of sea level rise are not attributable to the proposed project.

If you have any questions please do not hesitate to call.

Sincerely,

**HEXAGON TRANSPORTATION CONSULTANTS, INC.**

A handwritten signature in black ink, appearing to read "Gary K. Black", with a long horizontal line extending to the right.

Gary K. Black  
President