

## **Appendix A      Notice of Preparation**

## Appendices

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December 2018 | Initial Study

# THE RESIDENCES AT NOHL RANCH

Development Project No. 2017-00039  
Environmental Impact Report No. 2018-00351  
City of Anaheim

*Prepared for:*

**City of Anaheim**

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## Abbreviations and Acronyms

AAQS	ambient air quality standards
AB	Assembly Bill
ACM	asbestos-containing materials
ADT	average daily traffic
AF	acre-feet
AF&R	Anaheim Fire & Rescue
AQMP	air quality management plan
BMP	best management practices
CAA	Clean Air Act
Cal/EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources, Recycling, and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEAAMPSS	Combined East Anaheim Area Master Plan of Sanitary Sewers
CEQA	California Environmental Quality Act
CGS	California Geologic Survey
CMP	congestion management program
CNDDDB	California Natural Diversity Database
CO <sub>2</sub>	carbon dioxide
CRECs	controlled RECs
CUP	condition use permit
d/D	depth-to-diameter
DTSC	Department of Toxic Substances Control
EIR	environmental impact report
EPA	United States Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program

## Abbreviations and Acronyms

FTA	Federal Transit Administration
GCP	General Construction Permit
GHAD	Geological Hazard Abatement District
GHG	greenhouse gases
gpd	gallons per day
gpm	gallons per minute
HCM	Highway Capacity Manual
HREC	historical RECs
LBP	lead-based paint
LST	localized significance thresholds
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MMT	million metric tons
MPO	metropolitan planning organization
MRZs	Mineral Resource Zones
N <sub>2</sub> O	nitrous oxide
NAHC	Native American Heritage Commission
NCCP/HCP	Natural Community Conservation Plan/Habitat Conservation Plan
NO <sub>x</sub>	nitrogen oxides
NOP	Notice of Preparation
NPDES	National Pollution Discharge Elimination System
O <sub>3</sub>	ozone
OCSD	Orange County Sanitation District
OCWD	Orange County Water District
OSHA	Occupational Safety & Health Administration
PCBs	polychlorinated biphenyls
PHGA	Peak Horizontal Ground Accelerations
PM	particulate matter
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board

## Abbreviations and Acronyms

SARWQCB	Santa Ana Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SMARA	Surface Mining and Reclamation Act
SoCAB	South Coast Air Basin
SO <sub>x</sub>	sulfur oxides
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
tpd	tons per day
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	urban water management plan
V/C	volume-to-capacity ratio
VHFHSZ	very high fire hazard severity zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WQMP	water quality management plan
WSA	water supply assessment

## Abbreviations and Acronyms

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# 1. Introduction

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Robert Kim, as the project applicant (Applicant) on behalf of the property owner 6509 Serrano LP, a California limited partnership, proposes to demolish an existing one-story multi-suite commercial center and develop the Residences at Nohl Ranch residential project (Proposed Project) consisting of 58 single-family attached units on a 3.03-acre site, in the City of Anaheim, Orange County.

This Initial Study presents information on the project and an evaluation of the probable environmental effects anticipated by the project. Together with the Notice of Preparation (NOP) and the Environmental Checklist Form, the Initial Study has been distributed to all responsible agencies as required by the California Environmental Quality Act (CEQA). A notice has also been sent to all property owners within a 1,000-foot radius of the project site and other interested parties indicating that these documents are available for a 30-day public review at Anaheim City Hall, Planning and Building Department, at 200 S. Anaheim Boulevard, on the project's website ([www.anaheim.net/876/Environmental-Documents](http://www.anaheim.net/876/Environmental-Documents)), and at the Canyon Hills Branch Library (400 Scout Trail, Anaheim Hills, CA 92807). A scoping meeting will be held on January 7, 2019, at the East Anaheim Community Center, Oak and Canyon Room, at 8201 E Santa Ana Canyon Road Anaheim, CA 92808, to request input regarding the scope and content of the environmental information that should be included in the environmental impact report (EIR).

## 1.1 PROJECT LOCATION

The Project Site is at 6501 through 6513 Serrano Avenue (APN 365-062-09), at the northeast corner of Serrano Avenue and Nohl Ranch Road, in the southeastern portion of the City. Regional access is provided by State Route 91 (SR-91), approximately two miles to the north, and SR-55, approximately four miles to the west. Figure 1, *Regional Location*, depicts the regional location of the Project Site and surrounding cities, and Figure 2, *Local Vicinity*, depicts two street frontages, Nohl Ranch Road and Serrano Avenue, and other nearby streets.

## 1.2 ENVIRONMENTAL SETTING

### 1.2.1 Existing Land Use

The Project Site is currently developed and operating as the Serrano Center, a small neighborhood commercial center with seven 1-story buildings that the property owner has leased out for various commercial and neighborhood businesses. Some of the commercial land uses include a performing arts academy, Kumon, a dentist office, several insurance offices, Bodies by Us (gym), two salons, a martial arts studio, Aqua Duks (swim school), Green Earth Cleaners, and Serrano Heights Academy.

## 1. Introduction

### 1.2.2 Surrounding Land Uses

The Project Site is surrounded by single-family residential to the north, south, and east; Anaheim Hills Elementary School to the southwestern corner; and vacant property with steep slopes leading to Anaheim Hills residences to the west. The Santa Ana Mountains trailhead's link to the Santiago Oaks Regional Park trail system is adjacent to the Anaheim Hills Elementary School. Beyond residential uses to the south are the Peralta Hills, low-lying hills that extend from the Santa Ana Mountains. Other major land uses near the project, other than residential neighborhoods, are the Walnut Canyon Reservoir and Lenain Water Treatment Plant, 0.6 mile to the northeast, and the Anaheim Hills Golf Course, also about 0.6 mile to the north. Figures 2 and 3, show the Project Site and its surrounding land uses.

### 1.2.3 Existing Zoning and General Plan

The Project Site is currently designated for Neighborhood Center (Commercial) by the General Plan and within the "C-G" General Commercial Zone. The project site is also in the Scenic Corridor (SC) Overlay Zone.

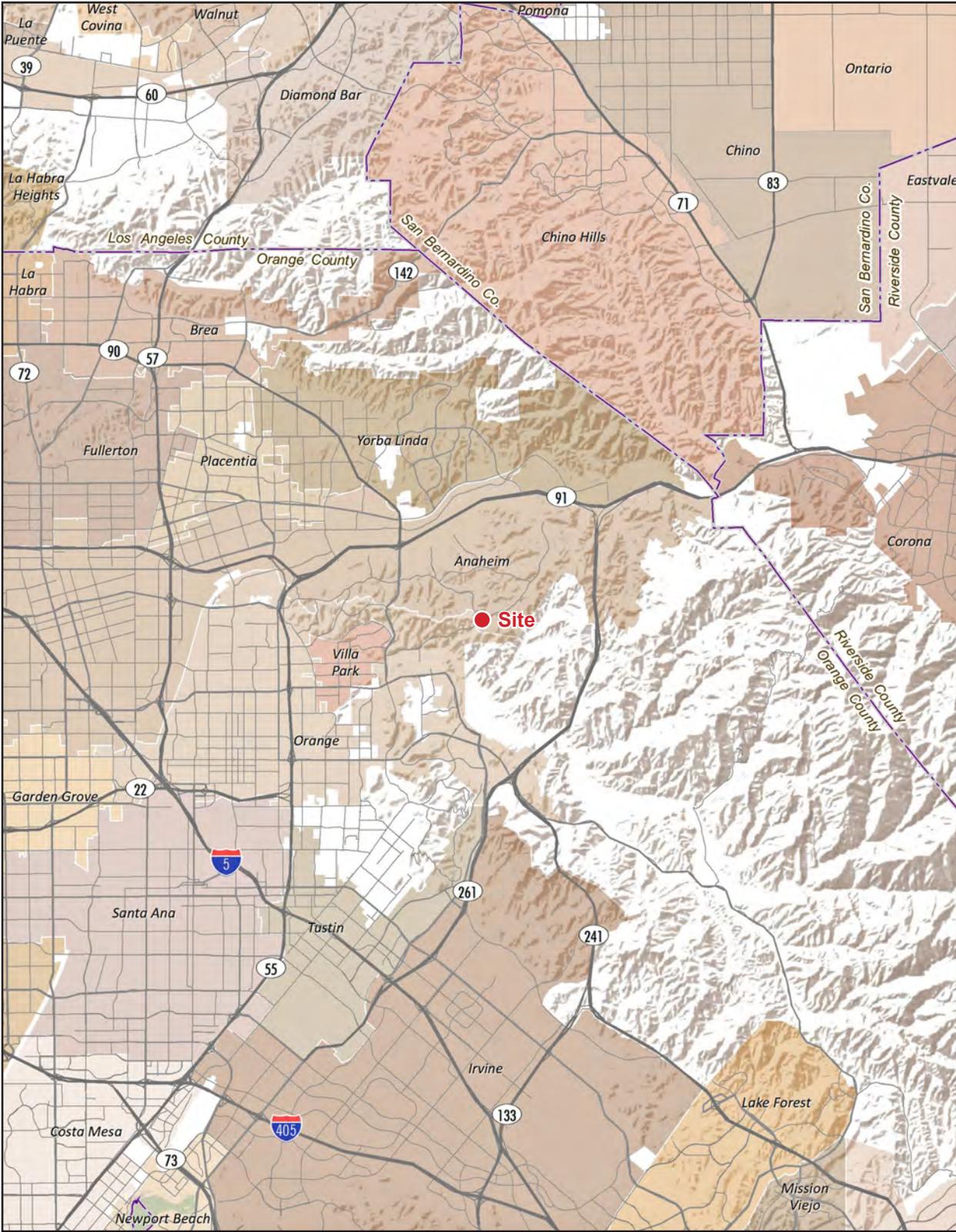
## 1.3 PROJECT DESCRIPTION

### 1.3.1 Description of the Project

The Project Applicant proposes to demolish the existing Serrano Center, which consists of seven 1-story buildings, totaling approximately 42,526 square feet of nonresidential space, to construct 58 multifamily units on 3.03 acres, with a development density of 19.14 dwelling units per acre (du/ac) development density. The units would range in size from 1,171 to 2,018 square feet. The units would be constructed in eight buildings totaling 84,759 square feet, as shown on Figure 4, *Proposed Site Plan*. Project amenities include two outdoor lounges, an outdoor dining room, an outdoor living room, and three artificial turf play areas, as shown on Figure 5, *Proposed Landscape Plan*. Of the 58 total units, 12 affordable housing units would be provided in order to be eligible for an Affordable Housing Density Bonus and associated incentives. The units would consist of 35 two-bedroom units and 23 three-bedroom units in three-story townhomes, two-story townhomes, carriage townhomes, and stacked flats, with a maximum building height of 40 feet. As shown in building perspectives from Serrano Road and Nohl Ranch Road (Figures 6 and 7), the units would be two to three stories. Figure 8, *Building 1 Section Views*, shows section views of Building 1, which faces Serrano Road.

Vehicular access to the project site would be provided from both Serrano Avenue and Nohl Ranch Road. The Serrano Avenue entry would be near the southeast corner of the Project Site, in the same location as the existing driveway, providing a full vehicular access. The access on Nohl Ranch Road would be approximately 150 feet from Serrano Avenue and provide right-in and right-out vehicular access. A main internal access drive would connect the Nohl Ranch Road and Serrano Avenue driveways, providing access to the units' garages. Each dwelling unit would have two garage spaces, totaling 116 garaged parking spaces, of which 14 would be provided with tandem parking, and an additional 32 uncovered surface parking spaces would be provided, including 2 ADA spaces, for a total of 148 parking spaces.

Figure 1 - Regional Location  
1. Introduction



Note: Unincorporated county areas are shown in white.



Source: ESRI, 2018

## 1. Introduction

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Figure 2 - Local Vicinity  
1. Introduction



— Project Boundary

0 1,200  
Scale (Feet)



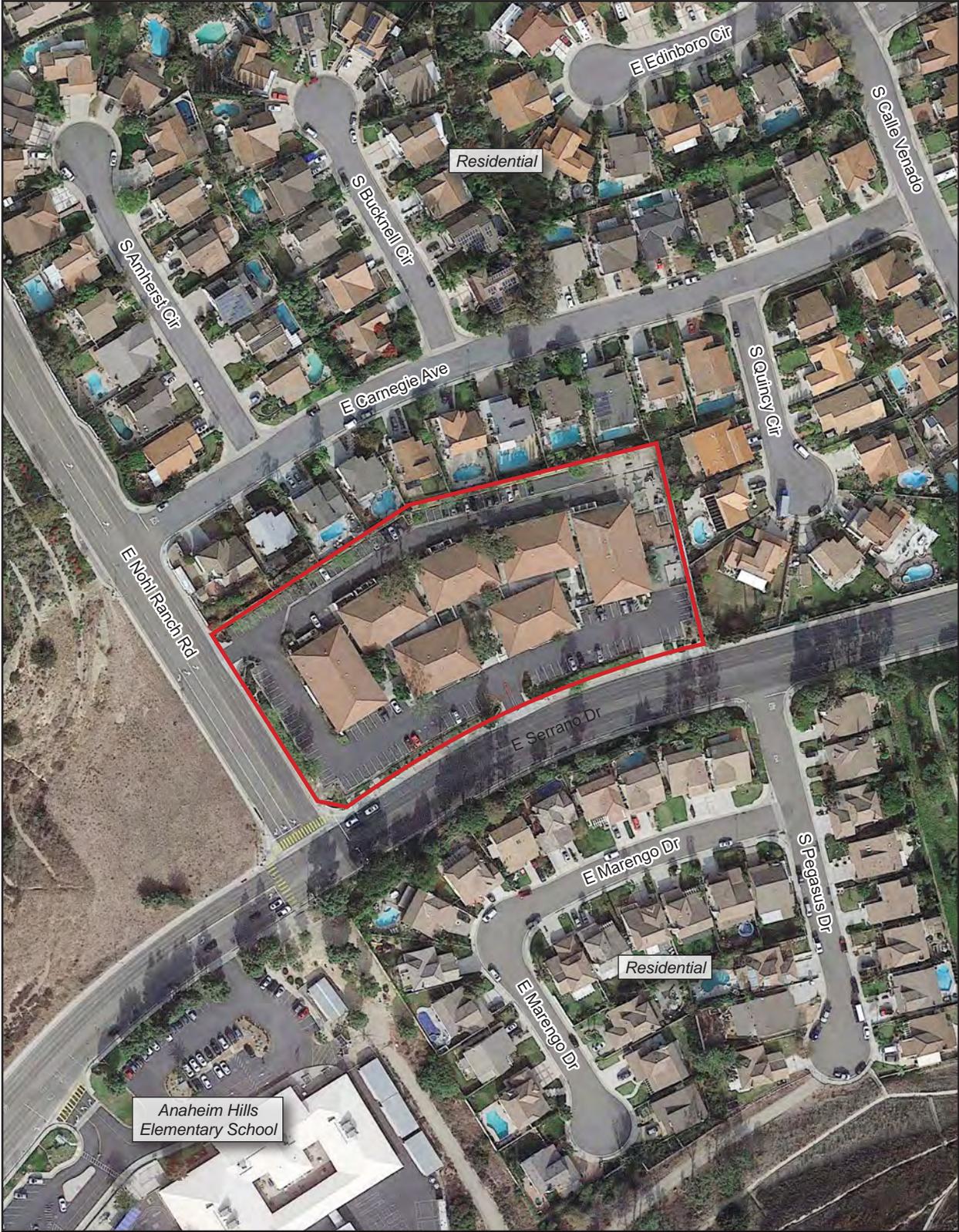
Source: ESRI, 2018

PlaceWorks

## 1. Introduction

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Figure 3 - Aerial Photograph  
1. Introduction



— Project Boundary

0 200  
Scale (Feet)



Source: Google Earth Pro, 2018

## 1. Introduction

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Figure 4 - Proposed Site Plan  
1. Introduction



Source: Hunsaker & Associates, 2018



## 1. Introduction

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Figure 5 - Proposed Landscape Plan  
1. Introduction



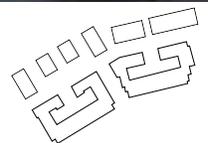
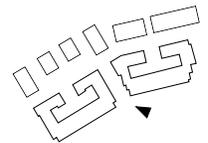
0 100  
Scale (Feet)



## 1. Introduction

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Figure 6 - Building Perspective from Serrano Road of Building 1  
1. Introduction

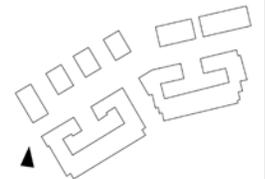


Source: MVE and Partners, 2018

## 1. Introduction

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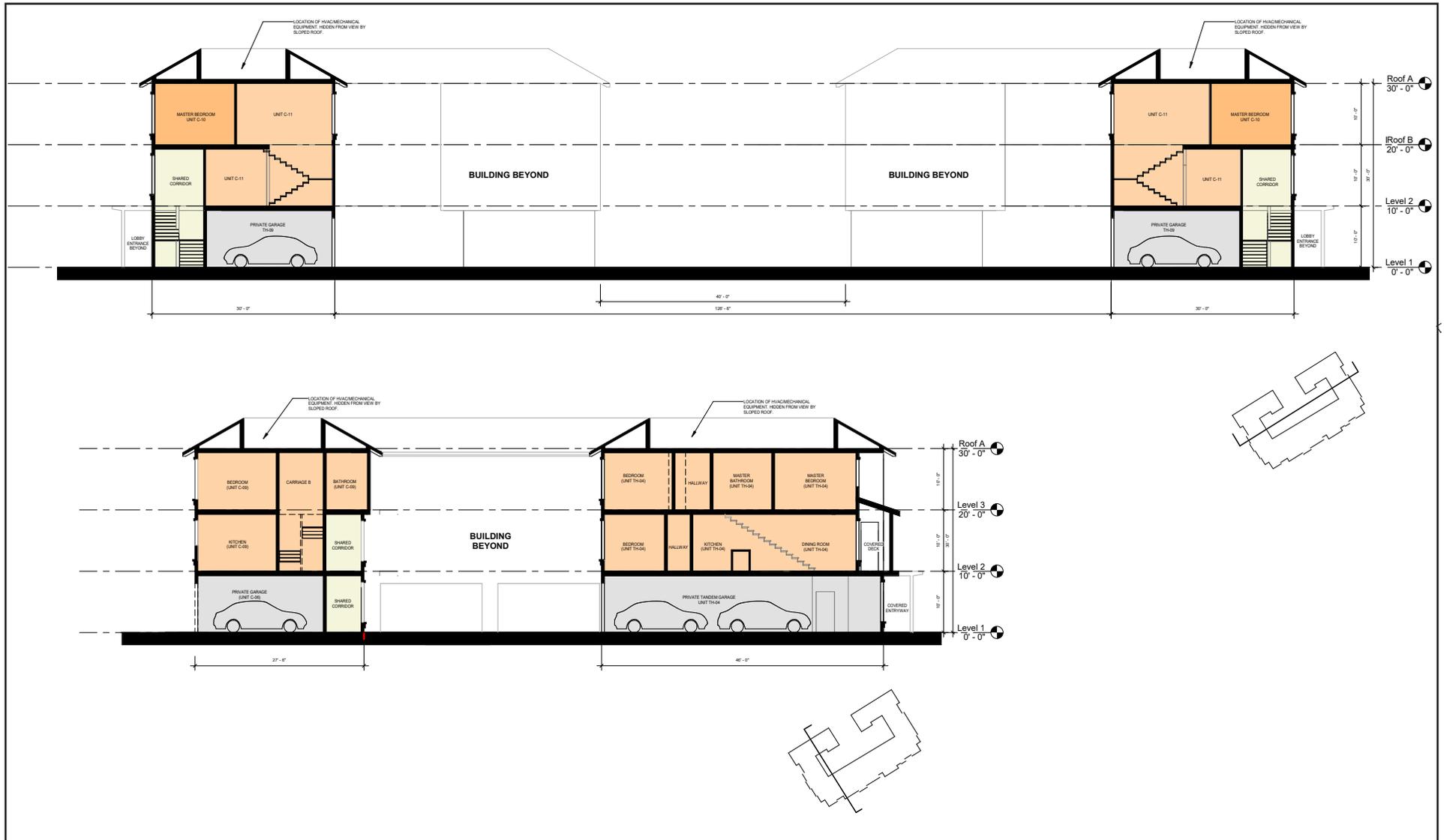
Figure 7 - Building Perspective from Nohl Ranch Road of Buildings 1 and 8  
1. Introduction



## 1. Introduction

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Figure 8 - Proposed Building Section - Building 1  
1. Introduction



Source: MVE and Partners, 2018

## 1. Introduction

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## 1. Introduction

### Proposed City Approvals

Approval of the Proposed Project includes certification of Environmental Impact Report No. 351, including the adoption of Findings of Fact and a Statement of Overriding Considerations, and Mitigation Monitoring Program No. 359; approval of amendments to the General Plan; approval of a Conditional Use Permit; approval of the Vesting Tentative Tract Map No. 18104 and an Affordable Housing Density Bonus and associated Incentives, and approval of a Specimen Tree Removal Permit. Together, the proposed approvals and their implementation constitute the “Project” for the purposes of CEQA. Below is a description of the proposed approvals.

- **General Plan Amendment (GPA) No. 2017-00515:** Amend the Project Site’s General Plan land use designation from Neighborhood Center Commercial to Low-Medium Density Residential (18 du/ac).
- **Zoning Reclassification (RCL) No. 2017-00309:** Reclassify the project site from the existing "C-G" General Commercial Zone to the “RM-3” Multiple-Family Residential Zone
- **Affordable Housing Density Bonus and associated Tier II Incentives (Miscellaneous (MIS) Permit No. 2017-00654):**
  - **Density Bonus:** Allow 19.14 du/ac in the RM-3 Zone, which permits 18 du/ac. The proposed project would be eligible for a 7 percent density bonus by providing 12 units (approximately 20 percent of the total units) that are affordable to moderate income households.
  - **Tier II Incentives:** Waive the minimum site size for a multifamily residential development in the Scenic Corridor Overlay Zone (5 acres required; 3.03 acres proposed), and waive the required minimum setback from an arterial highway (i.e., Nohl Ranch Road and Serrano Avenue) for a multifamily residential project in the Scenic Corridor Overlay Zone (50-foot minimum setback required; 14-foot setback proposed).
- **Vesting Tentative Tract Map No. 18104:** Approve VTTM No. 18104 for condominium purposes to provide the right to further subdivide the site into condominium air space for individual ownership of the residential units and common ownership of the landscape, parking, and access drive areas.
- **Conditional Use Permit (CUP) No. 2017-05931:** Approve a CUP to allow single-family attached residential use in a RM-3 Zone as part of a Residential Planned Unit Development with modified standards; The approval will allow flexibility for the proposed development to modify the RM-3 Zone’s development standards for setbacks between buildings and landscape setbacks abutting a single-family residential zone; which include a modification of the required interior landscape setback to 5-feet where 10-feet would be required, and a reduction of building-to-building setbacks to 36.7-feet where 40-feet would be required (3-story Primary to Primary elevation) and 32-feet where 35-feet would be required (2-story Primary to 30 story Primary elevation).The Anaheim Municipal Code allows such modifications, subject to the approval of a CUP, if they are needed in order to achieve a good project design, privacy, livability, and compatibility with surrounding uses.

## 1. Introduction

- **Specimen Tree Removal Permit No. 2018-00006:** Remove pepper trees in the Scenic Corridor (SC) Overlay Zone.

### 1.3.2 Project Phasing

The Proposed Project will be implemented in one phase upon approval of necessary discretionary actions and permits. The construction is tentatively scheduled to start in 2020 and take approximately two years to complete.

## 1.4 PROJECT APPROVAL AND PERMITS

The City of Anaheim is the lead agency under CEQA and has the principal approval authority over the proposed project. A responsible agency is a public agency other than the lead agency that has responsibility for carrying out or approving a project (CEQA Guidelines § 15381 and PRC § 21069). The following discretionary actions will be required to implement the project.

Lead Agency	Action
Anaheim City Council	<ul style="list-style-type: none"> <li>• Certify Environmental Impact Report No. 351 and adopt Findings, a Statement of Overriding Considerations, and Mitigation Monitoring Program No. 359.</li> <li>• General Plan Amendment No. 2017-00515.</li> <li>• Zoning Reclassification No. 2017-00309</li> <li>• Affordable Housing Density Bonus and Incentives (Miscellaneous Permit No. 2017-00654)</li> <li>• Vesting Tentative Tract Map No. 18104</li> <li>• Conditional Use Permit No. 2017-05931</li> <li>• Specimen Tree Removal Permit No. 2018-00006</li> </ul>
Responsible Agencies	Action
South Coast Air Quality Management District	Issue necessary air quality permits to implement the project.
Regional Water Quality Control Board	Issue National Pollutant Discharge Elimination System Permit to implement the project.
Orange County Sanitation District (OCSD)	Approve necessary sewer upgrades to OCSD facilities.
Orange County Flood Control District (OC Flood)	Provide necessary infrastructure improvements.
Orange County Water District	Provide necessary infrastructure improvements.
Southern California Edison (SCE) and other applicable utility providers	Approve undergrounding of utilities

## 2. Environmental Checklist

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### 2.1 BACKGROUND

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1. **Project Title:** The Residences at Nohl Ranch

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2. **Lead Agency Name and Address:**

City of Anaheim  
Anaheim Planning and Building Department  
200 South Anaheim Boulevard, Suite 162  
Anaheim, California 92805

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3. **Contact Person:**

Nicholas Taylor, Associate Planner  
Tel: 714.765.4323  
Email: njtaylor@anaheim.net

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4. **Project Location:**

6501–6513 East Serrano Avenue  
Anaheim, California 92807

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5. **Project Sponsor's Name and Address:**

6509 Serrano L.P.  
4040 MacArthur Boulevard, Suite 300  
Newport Beach, California 92660

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6. **General Plan Designation:** Neighborhood Center (Commercial)

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7. **Zoning:** "C-G" General Commercial Zone and the Scenic Corridor (SC) Overlay Zone

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8. **Description of Project:** The Project Applicant proposes to demolish the existing Serrano Center, which consists of seven 1-story buildings totaling approximately 42,526 square feet nonresidential space, to develop 58 single-family attached units in eight buildings totaling 84,759 square feet.

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9. **Surrounding Land Uses and Setting:** The Project Site is surrounded by single-family residential to the north, south, and east; Anaheim Hills Elementary School to the southwestern corner; and vacant property with steep slopes leading to Anaheim Hills residences to the west. Santa Ana Mountains trailhead's link to the Santiago Oaks Regional Park trail system is adjacent to the Anaheim Hills Elementary School. Beyond residential uses to the south are the Peralta Hills, low-lying hills that extend from the Santa Ana Mountains. Other major land uses near the project, other than residential neighborhoods, are the Walnut Canyon Reservoir and Lenain Water Treatment Plant, 0.6 mile to the northeast, and the Anaheim Hills Golf Course, also about 0.6 mile to the north.

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## 2. Environmental Checklist

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### 10. Other Public Agencies Whose Approval Is Required:

- South Coast Air Quality Management District
- Santa Ana Regional Water Quality Control Board
- Orange County Sanitation District (OCSD)
- Orange County Flood Control District (OC Flood)
- Orange County Water District
- Southern California Edison (SCE)

## 2. Environmental Checklist

### 2.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact,” as indicated by the checklist on the following pages.

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

### 2.3 DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

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 potentially 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*

\_\_\_\_\_  
City of Anaheim

\_\_\_\_\_  
*Printed Name*

\_\_\_\_\_  
*For*

## 2. Environmental Checklist

### 2.4 EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) **Earlier Analyses Used.** Identify and state where they are available for review.
  - b) **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) **Mitigation Measures.** For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

## 2. Environmental Checklist

- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
- the significance criteria or threshold, if any, used to evaluate each question; and
  - the mitigation measure identified, if any, to reduce the impact to less than significant.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>I. AESTHETICS. Would the project:</b>				
a) Have a substantial adverse effect on a scenic vista?	<b>X</b>			
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				<b>X</b>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<b>X</b>			
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<b>X</b>			
<b>II. AGRICULTURE AND FORESTRY RESOURCES. 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:</b>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				<b>X</b>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				<b>X</b>
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))?				<b>X</b>
d) Result in the loss of forest land or conversion of forest land to non-forest use?				<b>X</b>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				<b>X</b>
<b>III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</b>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<b>X</b>			
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<b>X</b>			

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Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?	X			
d) Expose sensitive receptors to substantial pollutant concentrations?	X			
e) Create objectionable odors affecting a substantial number of people?			X	
<b>IV. BIOLOGICAL RESOURCES. Would the project:</b>				
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 Game or U.S. Fish and Wildlife Service?	X			
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
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?				X
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?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	X			
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?			X	
<b>V. CULTURAL RESOURCES. Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the CEQA Guidelines and/or identified on the Qualified Historic Structures list of the Anaheim Colony Historic District Preservation Plan (April 15, 2010)?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5 of the CEQA Guidelines?	X			
c) Disturb any human remains, including those interred outside of formal cemeteries?			X	
<b>VI. GEOLOGY AND SOILS. Would the project:</b>				
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? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?	X			

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Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
<b>VII. GREENHOUSE GAS EMISSIONS. Would the project:</b>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	X			
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	X			
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:</b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	X			
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
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?				X
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?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	X			
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?	X			
i) Would the project include a new or retrofitted stormwater treatment control Best Management Practice (BMP), (e.g., water quality treatment basin, constructed treatment wetlands, etc.), the operation of which could result in significant environmental effects (e.g., increased vectors and noxious odors)?	X			
<b>IX. HYDROLOGY AND WATER QUALITY. Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements?	X			
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)?			X	

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Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 a substantial erosion or siltation on- or off-site	<b>X</b>			
d) Substantially alter the existing drainage pattern of the site or area, including through 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?			<b>X</b>	
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<b>X</b>			
f) Otherwise substantially degrade water quality?			<b>X</b>	
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?			<b>X</b>	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			<b>X</b>	
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?			<b>X</b>	
j) Inundation by seiche, tsunami, or mudflow?			<b>X</b>	
k) Substantially degrade water quality by contributing pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling, or storage, delivery areas, loading docks or other outdoor work areas?			<b>X</b>	
l) Substantially degrade water quality by discharge which affects the beneficial uses (i.e., swimming, fishing, etc.) of the receiving or downstream waters?	<b>X</b>			
m) Potentially impact stormwater runoff from construction activities?	<b>X</b>			
n) Potentially impact stormwater runoff from post-construction activities?	<b>X</b>			
o) Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?			<b>X</b>	
p) Create significant increases in erosion of the Project Area or surrounding areas?	<b>X</b>			
<b>X. LAND USE AND PLANNING. Would the project:</b>				
a) Physically divide an established community?				<b>X</b>
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?	<b>X</b>			
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				<b>X</b>
<b>XI. MINERAL RESOURCES. Would the project:</b>				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				<b>X</b>
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?				<b>X</b>

## 2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XII. NOISE. Would the project result in:</b>				
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?	X			
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	X			
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	X			
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	X			
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?	X			
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 levels?				X
<b>XIII. PALEONTOLOGICAL RESOURCES. Would the project:</b>				
a) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	X			
<b>XIV. POPULATION AND HOUSING. Would the project:</b>				
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)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
<b>XV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</b>				
a) Fire protection?	X			
b) Police protection?	X			
c) Schools?	X			
d) Parks?			X	
e) Other public facilities?			X	
<b>XVI. RECREATION. Would the project:</b>				
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?			X	
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

## 2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVII. TRANSPORTATION/TRAFFIC. Would the project:</b>				
a) Conflict with an applicable plan, ordinance or policy establishing measures 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?	<b>X</b>			
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?			<b>X</b>	
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?				<b>X</b>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<b>X</b>			
e) Result in inadequate emergency access?	<b>X</b>			
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<b>X</b>			
<b>XVIII. TRIBAL CULTURAL RESOURCES. Would the project:</b>				
a) Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in §21074?	<b>X</b>			
<b>XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:</b>				
a) Exceed waste water treatment requirements of the applicable Regional Water Quality Control Board?			<b>X</b>	
b) Require or result in the construction of new water or waste water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			<b>X</b>	
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?			<b>X</b>	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?	<b>X</b>			
e) Result in a determination by the waste water 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?			<b>X</b>	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<b>X</b>			
g) Comply with federal, state, and local statutes and regulations related to solid waste?			<b>X</b>	
h) Result in a need for new systems or supplies, or substantial alterations related to electricity?	<b>X</b>			
i) Result in a need for new systems or supplies, or substantial alterations related to natural gas?	<b>X</b>			
j) Result in a need for new systems or supplies, or substantial alterations related to telephone service?			<b>X</b>	

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Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
k) Result in a need for new systems or supplies, or substantial alterations related to television service/reception?			<b>X</b>	
<b>XX. MANDATORY FINDINGS OF SIGNIFICANCE.</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<b>X</b>			
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.)	<b>X</b>			
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<b>X</b>			

## 2. Environmental Checklist

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## 3. Environmental Analysis

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Section 2.4 provided a checklist of environmental impacts. This section provides evidence to substantiate the conclusions in the environmental impacts checklist. An analysis for each of the impact categories and discussion of mitigation measures to reduce or eliminate any potentially significant impacts, if applicable, are presented.

### 3.1 AESTHETICS

Would the project:

**a) Have a substantial adverse effect on a scenic vista?**

**Potentially Significant Impact.** The Anaheim General Plan Green Element identifies Anaheim's major scenic features, which are the Hill and Canyon Area, Santa Ana Mountains, Santa Ana River, and golf courses. These areas provide scenic and recreational resources for the City and the region. The Project Site is in the Anaheim Hill area near Peralta Hills, in the Scenic Corridor (SC) Overlay Zone. The Project Site is developed with neighborhood-serving commercial uses in seven 1-story buildings. Development of the Proposed Project would change the existing visual character of the site and increase the building height, scale, and mass within the project boundaries, and may impact the visual features of the Hill and Canyon Area and Santa Ana Mountains. The Proposed Project may also remove specimen trees protected within the Scenic Corridor (SC) Overlay Zone. Therefore, the EIR will address the potential adverse impacts from the project development.

**b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**No Impact.** The nearest state-designated scenic highway is SR-91 (Riverside Freeway) between SR-55 (Costa Mesa Freeway) and Weir Canyon Road (Caltrans 2018). This segment of SR-91 is approximately two miles to the north, and the Project Site is not visible from this highway because of the wall that runs along the length of the freeway and blocks the view to the south toward the Project Site. Moreover, the Project Site is already developed with commercial uses, and no trees, rock outcroppings, or historic buildings within a state scenic highway would be damaged due to project implementation. Impacts associated with state scenic highways would be less than significant and no mitigation measures are required. This issue will not be further addressed in the EIR.

**c) Substantially degrade the existing visual character or quality of the site and its surroundings?**

**Potentially Significant Impact.** The Proposed Project would allow construction of 58 units on a 3.03-acre site that currently is developed with commercial uses. The Project Site is surrounded by residential uses, considered to be sensitive receptors, to the north, south, and east. Implementation of the Proposed Project would convert an existing neighborhood commercial center to attached single-family development that differs

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from existing land uses in use, height, scale, mass, and character. Thus, the EIR will evaluate potential impacts to visual character and quality and identify mitigation measures as necessary.

**d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?**

**Potentially Significant Impact.** Existing sources of light on the Project Site include street lights, vehicle headlights, building and security lights, and parking lot lights. Implementation of the Proposed Project would allow for intensification of existing land uses and new development with associated lighting. Therefore, new sources of light and glare could increase levels of light and glare above existing conditions, potentially resulting in adverse impacts to day or nighttime views. The EIR will discuss this issue in further detail, and mitigation measures will be recommended as needed.

### 3.2 AGRICULTURE AND FORESTRY RESOURCES

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:

**a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

**No Impact.** The Project Site is designated as urban and built-up land by the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency (DOC 2017). The Project Site is developed with urban uses, and the Proposed Project would not convert any special status farmland to nonagricultural use. No impact would occur, and no mitigation measures are required. This issue will not be further addressed in the EIR.

**b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**No Impact.** The Project Site is within the "C-G" General Commercial Zone and the Scenic Corridor (SC) Overlay Zone and would not conflict with any agricultural use or a Williamson Act contract. No impact would occur, and no mitigation measures are required. This issue will not be further addressed in the EIR.

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- 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))?**

**No Impact.** The Project Site is within the "C-G" General Commercial Zone and Scenic Corridor (SC) Overlay Zone and no rezoning of forest land or timberland would result from project implementation. No impact would occur, and no mitigation measures are required. This issue will not be further addressed in the EIR.

- d) **Result in the loss of forest land or conversion of forest land to non-forest use?**

**No Impact.** The Project Site is built-up urban land, and no forest land would be lost due to project implementation. No impact would occur, and no mitigation measures are required. This issue will not be further addressed in the EIR.

- e) **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

**No Impact.** The Project Site is urban, built-up land with various residential and commercial uses and would not result in the conversion of farmland to nonagricultural or forest land to non-forest use. No impact would occur, and no mitigation measures are required. This issue will not be further addressed in the EIR.

### 3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- a) **Conflict with or obstruct implementation of the applicable air quality plan?**

**Potentially Significant Impact.** The Project Site is in the South Coast Air Basin (SoCAB) and is subject to the air quality management plan (AQMP) prepared by the South Coast Air Quality Management District (SCAQMD). Construction activities would generate exhaust from construction equipment and vehicle trips, fugitive dust from demolition and ground-disturbing activities, and off-gas emissions from architectural coatings and paving. Implementation of the Proposed Project would convert commercial uses to residential uses, resulting in a change in development intensity and associated increase in criteria air pollutants. The EIR will evaluate the Proposed Project's consistency with regional growth forecasts and any impacts the planning program may have on the attainment of regional air quality objectives. Mitigation measures will be identified as necessary.

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**b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

**Potentially Significant Impact.** Construction and operation activities associated with the Proposed Project have the potential to generate fugitive dust, stationary-source emissions, and mobile-source emissions. Air pollutant emissions associated with the Proposed Project could occur over the short term for site preparation and construction activities. In addition, emissions could result from the long-term operation. An air quality analysis will be conducted for the Proposed Project to determine if the short- and/or long-term emissions would exceed SCAQMD's regional significance thresholds. This topic will be addressed in the EIR, and mitigation measures will be recommended as needed.

**c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

**Potentially Significant Impact.** The SoCAB is designated nonattainment for O<sub>3</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, lead (Los Angeles County only), and nitrogen oxides (NO<sub>x</sub>) (California standard only). Implementation of the Proposed Project may increase existing levels of criteria pollutants and contribute to the nonattainment status for these criteria pollutants in the SoCAB. Air pollutant emissions associated with development that would be accommodated by the Proposed Project could occur over the short term for site preparation and construction activities. In addition, emissions could result during long-term operation of completed project. An air quality analysis will be prepared to determine if the Proposed Project would result in a cumulatively considerable net increase in any criteria air pollutant. This topic will be evaluated in the EIR, and mitigation measures will be identified as necessary.

**d) Expose sensitive receptors to substantial pollutant concentrations?**

**Potentially Significant Impact.** An air quality analysis is required to determine if the potential mobile and stationary air emissions associated with the project could result in exposure of sensitive receptors to significant concentrations of air pollutants. This evaluation will need to address potential impacts to sensitive receptors that would be exposed on a recurring basis to substantial air emissions associated with the Proposed Project. Further evaluation in the EIR is required to determine the level of significance and to identify mitigation measures that reduce impacts to below a level of significance, if required.

**e) Create objectionable odors affecting a substantial number of people?**

**Less Than Significant Impact.** The Proposed Project would not result in objectionable odors. The threshold for odor is if a project creates an odor nuisance pursuant to SCAQMD Rule 402, Nuisance, which states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural

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tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The proposed 58-unit residential project does not fall within the aforementioned land uses. Emissions from construction equipment, such as diesel exhaust and VOCs from architectural coatings, may generate odors. However, these odors would be low in concentration, temporary, and are not expected to affect a substantial number of people. Therefore, implementation of the Proposed Project would result in less than significant odor impacts, and no mitigation measures are required. This issue will not be further addressed in the EIR.

#### 3.4 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 Game or U.S. Fish and Wildlife Service?**

**Potentially Significant Impact.** Special status species include those listed as endangered or threatened under the federal Endangered Species Act or California Endangered Species Act; species otherwise given certain designations by the California Department of Fish and Wildlife; and plant species listed as rare by the California Native Plant Society. The Project Site is fully developed with commercial development and does not provide natural habitat. However, the Project Site is in the Orange Quad of the California Natural Diversity Database (CNDDDB), and the Orange Quad includes special status bird species (CDFW 2018). Because there are number of mature trees as part of landscaping, a Biological Constraints Study will be prepared by a qualified biologist to ensure that the ornamental trees do not support habitat for any of the listed protected species. This issue will be further addressed in the EIR.

- b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

**No Impact.** The Project Site is fully developed with a commercial plaza and does not contain any riparian habitat or other sensitive natural community. Sensitive natural communities are natural communities that are considered rare in the region by regulatory agencies; that are known to provide habitat for sensitive animal or plant species; or are known to be important wildlife corridors. Riparian habitats are those occurring along the banks of rivers and streams. The Project Site does not contain any areas currently designated Open Space by the General Plan. There is no sensitive natural community or riparian habitat onsite. No impact would occur, and no mitigation measures are required. This issue will not be further addressed in the EIR.

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- 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?**

**No Impact.** Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. The Project Site is already developed and there are no wetlands onsite. This issue will not be further addressed in the EIR.

- 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?**

**Less Than Significant Impact.** Wildlife movement corridors facilitate movement of species between large patches of natural habitat. The Project Site is already fully developed except for nonnative landscaping materials, and therefore lacks suitable habitat for wildlife species and is not a native wildlife nursery site. However, there are several ornamental trees and other vegetation onsite that require removal, and these may be used for nesting by migratory birds, which are protected under the federal Migratory Bird Treaty Act (MBTA; US Code, Title 16, §§ 703–712). The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. It prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations. If removal of the vegetation occurs during nesting season (typically between February 1 and September 1), the project applicant is required to conduct nesting bird surveys in accordance with the California Department of Fish and Wildlife requirements prior to removal of the trees. Compliance with the MBTA would ensure that no significant impacts to migratory birds occur. This issue will not be addressed further in the EIR.

- e) **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**Potentially Significant Impact.** The Project Site is in the Scenic Corridor (SC) Overlay Zone, that protects specimen trees of the *Quercus* (oak), *Schinus* (pepper), and *Platanus* (sycamore) varieties. Implementation of the Proposed Project would require removal of ornamental trees, which may include specimen trees that require protection. Additionally, Chapter 13.12 of the Anaheim Municipal Code establishes applicable regulations for the protection, maintenance, removal, and replacement of street trees within the City's right-of-way. The Proposed Project would not require removal of any trees within the City's right-of-way. A Specimen Tree Report will be prepared as part of the EIR evaluation and include mitigation measures, if necessary. This issue will be further addressed in the EIR.

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**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?**

**Less Than Significant Impact.** The Project Site is in the Orange County's Central and Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) area. According to the Anaheim General Plan Green Element, a portion of the City generally south of SR-91 and east of SR-55 falls within the NCCP. However, the Project Site is already fully developed with urban uses, and redevelopment of the Project Site to residential uses would not conflict with the provision of the NCCP or any adopted habitat conservation plan. This issue will not be addressed further in the EIR.

## 3.5 CULTURAL RESOURCES

Would the project:

**a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5 of the CEQA Guidelines and/or identified on the Qualified Historic Structures list of the Anaheim Colony Historic District Preservation Plan (April 15, 2010)?**

**No Impact.** Section 15064.5 defines historic resources as resources listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historical resources, or the lead agency. Generally, a resource is considered “historically significant” if it meets one of the following criteria:

- i) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- ii) Is associated with the lives of persons important in our past.
- iii) Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- iv) Has yielded, or may be likely to yield, information important in prehistory or history.

The Project Site was developed circa 1980 as a neighborhood commercial center. The Project Site and its surroundings were not identified as having potential historical significance by the City of Anaheim Citywide Historic Preservation Plan. The Project Site is not listed in the California Historical Resources and the National Register of Historic Places lists (OHP 2018; NPS 2018). This issue will not be addressed further in the EIR.

**b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?**

**Potentially Significant Impact.** Development in accordance with the Proposed Project may cause the disturbance of subsurface archaeological resources. Building construction in undeveloped areas or redevelopment that requires excavation to depths greater than current foundations has the potential to

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encounter unknown archaeological resources. The EIR will evaluate potential impacts of the implementation of the Proposed Project on archeological resources.

#### c) **Disturb any human remains, including those interred outside of formal cemeteries?**

**Less Than Significant Impact.** California Health and Safety Code, Section 7050.5, requires that in the event that human remains are discovered within a Project Site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and if the coroner has reason to believe the human remains are those of a Native American, he or she shall contact the Native American Heritage Commission by telephone within 24 hours. The Proposed Project would comply with existing law, and potential impacts to human remains would be less than significant. This issue will not be addressed further in the EIR.

## 3.6 GEOLOGY AND SOILS

The analysis in this section is based, in part, upon the following report:

- *Geotechnical Exploration Report, Proposed Residential Development, 6501–6513 East Serrano Avenue, Anaheim, California*, Leighton and Associates, Inc., October 9, 2017. (Appendix A to the Initial Study)

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? Refer to Division of Mines and Geology Special Publication 42.**

**No Impact.** The Project Site is not on the Alquist-Priolo Earthquake Fault Zoning Map (Leighton 2017). Therefore, there is no potential for the rupture of a known earthquake fault at the Project Site. No impact related to an earthquake rupture would occur and no mitigation measures are required. This issue will not be addressed further in the EIR.

ii) **Strong seismic ground shaking?**

**Less Than Significant Impact.** Similar to the rest of southern California, the Project Site is subject to ground shaking and potential damage in the event of seismic activity. The closest active faults to the site are the Elsinore Fault Zone (Whittier fault), Puente Hills fault, Chino fault and the San Joaquin Hills fault, located approximately 3.6 miles, 7.7 miles, 8.2 miles and 10.5 miles from the site, respectively. The Puente Hills and San Joaquin Hills faults are both blind thrust faults that are concealed at depth, without

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the potential for surface fault rupture. The San Andreas fault, which is the largest active fault in California, is approximately 35 miles northeast of the site.

The intensity of ground shaking at a given location depends primarily upon the earthquake magnitude, the distance from the source, and the site response characteristics. Peak horizontal ground accelerations (PHGA) are generally used to evaluate the intensity of ground motion. According to the Geotechnical Exploration Report, the Project Site's PHGA was calculated to be 0.599g. The Project Site could be subject to moderate and possibly strong ground motion due to the proximity and potential earthquake magnitude of these faults, which would expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death. However, the nearest active fault is approximately 3.6 miles from the Project Site, and the Proposed Project is required to be constructed in compliance with the 2016 California Building Code, which contains standards for building design to minimize the impacts from ground shaking. Therefore, impacts from strong ground shaking would be considered less than significant, and this issue will not be addressed further in the EIR.

#### iii) Seismic-related ground failure, including liquefaction?

**Less Than Significant Impact.** Liquefaction refers to loose, saturated sand or gravel deposits that lose their load supporting capability when subjected to intense shaking. Any buildings or structures on these sediments may float, sink, or tilt as if on a body of water.

Based on a review of the Seismic Hazard Zones map for the Orange Quadrangle, the entire Project Site is not within an area that has been identified as being potentially susceptible to liquefaction. Potentially significant impacts from liquefaction is not anticipated. This issue will not be addressed further in the EIR.

#### iv) Landslides?

**Less Than Significant Impact.** Susceptibility of slopes to landslides and other forms of slope failure depend on several factors, which are usually present in combination—steep slopes, condition of rock and soil materials, presence of water, formational contacts, geologic shear zones, seismic activity, etc.

The Project Site is not within an area susceptible to seismic landslides. The Geotechnical Exploration Report indicated that the Project Site is approximately 0.4 mile to the west of the Santiago Landslide that occurred in Anaheim Hills in 1993 as mapped by Cotton, Shires & Associates in 2005. However, the Geotechnical Exploration Report determined that, based on the location of the Santiago Landslide and consideration of the geologic and topographic conditions of the Project Site and immediate vicinity, the potential for landslide at the Project Site is low.

Moreover, the Geotechnical Exploration Report was also reviewed by the Geological Hazard Abatement District (GHAD) concerning the Proposed Project's impact on the Santiago landslide. GHAD determined that the Proposed Project is not anticipated to adversely affect the Santiago landslide or the ongoing mitigation efforts by the Santiago GHAD. Impacts related to landslides would be less than significant, and this issue will not be addressed further in the EIR.

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**b) Result in substantial soil erosion or the loss of topsoil?**

**Potentially Significant Impact.** Construction during buildout of the Proposed Project would involve site grading and construction, and thus could cause erosion if effective erosion control measures were not used. Erosion control measures would be specified in Stormwater Pollution Prevention Plans (SWPPPs) that would be prepared and implemented for the Proposed Project. This issue will be further addressed in the EIR.

**c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?**

**Less Than Significant Impact.** See responses to Section 3.6(a)(iii) above for liquefaction and (iv) for landslide impacts.

Lateral spreading refers to lateral displacement of large, surficial blocks of soil as a result of pore pressure buildup or liquefaction in a subsurface layer. The Geotechnical Exploration Report determined that based on the consideration that the Project Site is not in an area with potential for liquefaction, lateral spreading induced by soil liquefaction is also not likely to occur. No impact is anticipated.

The phenomenon of widespread land sinking, or subsidence, is generally related to substantial overdraft of groundwater or petroleum reserves from underground reservoirs. Collapsible soils may appear strong and stable in their natural (dry) state, but they rapidly consolidate under wetting, generating large and often unexpected settlements. The Geotechnical Exploration Report evaluated the effects of potential subsidence and collapsible soils, and indicated that onsite artificial fill materials should meet the acceptable shrinkage factor of approximately 5 percent ( $\pm 3$  percent) during grading. This could include remedial grading in specific areas to prepare the site to support the proposed structures; to provide a relative uniform-bearing material below shallow foundations; and/or to allow for over-excavation and re-compaction below planned foundations. The Proposed Project would be designed and constructed to protect structural integrity and infrastructure against geologic hazards per the recommendations in the Geotechnical Exploration Report prepared in accordance with California Building Code (CBC) requirements and reviewed and approved by the City of Anaheim.

Impacts related to subsidence and collapse would be less than significant. These issues will not be addressed further in the EIR.

**d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

**Less Than Significant Impact.** Expansive soils shrink or swell as the moisture content decreases or increases; the shrinking can shift, crack, or break structures built on such soils. The Project Site is already developed and underlain by artificial fill materials. The Proposed Project would involve excavation of existing soil and import of materials. The imported soil materials would meet the CBC standards and would be required to have an Expansion Index of 20 or less. Such imported materials are anticipated to contain sufficient fines (binder material) to result in a stable subgrade when compacted, and required to be approved

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by the geotechnical engineer of record prior to being transported to the Project Site. Therefore, the Proposed Project would not be located on expansive soil, and substantial risks to life or property due to expansive geologic unit would be less than significant. This issue will not be addressed further in the EIR.

**e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

**No Impact.** Development of the Proposed Project would not require the installation of a septic tank or alternative wastewater disposal system. The project would utilize the existing local sewer system. Therefore, no impacts would result from septic tanks or other onsite wastewater disposal systems. No mitigation measures are required. This issue will not be further addressed in the EIR.

### 3.7 GREENHOUSE GAS EMISSIONS

Would the project:

**a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

**Potentially Significant Impact.** Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas (GHG) emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact. The State of California, through its governor and legislature, has established a comprehensive framework for the substantial reduction of GHG emissions over the next 40-plus years. This will occur primarily through the implementation of Assembly Bill 32 (AB 32, 2006), Senate Bill 375 (SB 375, 2008), and SB 32 (2016), which address GHG emissions on a statewide, cumulative basis.

Implementation of the Proposed Project could increase GHG emissions through new construction and increase in vehicle miles traveled due to converting neighborhood commercial uses to residential, while the actual vehicle trips generated from the Proposed Project are reduced compared to the existing commercial uses (LSA 2018). Further evaluation in the EIR is required to determine the increase and effect on GHG emissions. The EIR will evaluate the potential for the Proposed Project to generate a substantial increase in GHG emissions, and mitigation measures will be recommended as needed.

**b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

**Potentially Significant Impact.** The California Air Resources Board's Scoping Plan is California's GHG reduction strategy to achieve the state's GHG emissions reduction target established by AB 32 of 1990 emission levels by year 2020. The Southern California Association of Governments' 2016 Regional Transportation Plan/Sustainable Communities Strategy sets forth a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would

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reduce GHG emissions from transportation (excluding goods movement) in accordance with the region's per capita GHG reduction goals under SB 375.

The EIR will evaluate the project's consistency with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. Further evaluation in the EIR is required to determine the increase and effect on GHG emissions. Mitigation measures will be recommended as needed.

#### 3.8 HAZARDS AND HAZARDOUS MATERIALS

The analysis in this section is based, in part, upon the following report:

- *Phase I Environmental Site Assessment, 6501–6513 East Serrano Avenue, Anaheim, California*, Leighton and Associates, Inc., September 21, 2018. (Appendix B to the Initial Study)

Would the project:

- a) **Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?**

**Less Than Significant Impact.** Construction of the Proposed Project would likely involve the use of some hazardous materials, such as vehicle fuels, lubricants, greases, and transmission fluids in construction equipment, and paints and coatings in building construction. Operation of the Proposed Project would involve the use of small amounts of hazardous materials for cleaning and maintenance purposes typical of residential developments, such as paints, household cleaners, and pesticides. The use, storage, transport, and disposal of hazardous materials by construction workers and tenants and residents of the Proposed Project would be required to comply with existing regulations of several agencies, including the Department of Toxic Substances Control, US Environmental Protection Agency (EPA), Occupational Safety & Health Administration (OSHA), California Department of Transportation (Caltrans), and Anaheim Fire & Rescue (AF&R). Implementation of the Proposed Project would not involve the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant, and this issue will not be addressed further in the EIR.

- 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?**

**Less Than Significant Impact.** A Phase I Environmental Site Assessment was prepared for the Project Site to identify any potential hazardous materials impacts pursuant to the processes prescribed in ASTM International (ASTM) E1527-13, recognized environmental conditions (RECs), historical RECs (HRECs), or controlled RECs (CRECs) in connection with the Project Site.

RECs are defined by ASTM E1527-13 as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions

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indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not RECs.”

HRECs are defined, by ASTM E1527-13 as “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls”.

CRECs are defined by ASTM E1527-13 as “an REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls”.

The Phase I determined that the Project Site does not contain any onsite RECs, CRECs, or HRECs, and there are no offsite RECs that would negatively impact the Project Site. Therefore, impacts would not be significant.

It should be noted that the Phase I did not include testing of electrical equipment for the presence of polychlorinated biphenyl (PCB) or collection of other environmental samples such as soil, groundwater, air, building materials, paint, or other media for hazardous materials such as asbestos containing materials, lead based paint, radon gas, methane gas, etc. However, the existing neighborhood commercial center was constructed circa 1980 when asbestos-containing material (ACM) and lead-based paint (LBP) could have been used during construction (such as roofing shingles, composite siding, linoleum flooring, acoustic ceiling tiles, furnace and water heater exhaust piping and insulation, glues and mastics, stucco, joint compounds, and composite wallboards). These materials are not a safety threat if undisturbed, but could create hazardous conditions when disturbed during demolition.

The presence of ACM and LBP are presumed until sampling and laboratory analysis determine otherwise. Suspected ACMs could be present in exterior stucco, wall and ceiling plaster, vinyl floor tiles and mastic, and thermal system insulation (for hot and cold water plumbing). Any handling, use, or disposal of hazardous materials is subject to federal, state, and local health and safety requirements, including SCAQMD Rule 1403, which governs the demolition of buildings containing ACMs, and OSHA Rule 29 CFR Part 1926, which establishes standards for occupational health and environmental control for lead exposure. Title 29, Code of Federal Regulations, Section 1926.62, and California Health and Safety Code, Sections 17920.10 and 105255, also provide standards for lead exposure and lead containment. Handling and disposal of hazardous waste and/or hazardous material, including ACMs, are required to be conducted in a manner specified by the State of California Hazardous Substances Control Law (Health and Safety Code, Division, 20, Chapter 6.5), and according to the requirements of the California Administrative Code, Title 30, Chapter 22. Therefore, the required compliance with applicable regulations would ensure that impacts related to ACMs and LBPs are reduced to a less than significant level.

Therefore, it is anticipated that the Proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous

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materials into the environment. Construction activities would not expose the public and, in particular, construction personnel, to hazardous substances. This issue will not be addressed further in the EIR.

**c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**Potentially Significant Impact.** Anaheim Hills Elementary School is within one-quarter mile of the Project Site. An air quality analysis is required to determine if the potential mobile and stationary air emissions associated with the project could result in exposure of sensitive receptors to significant concentrations of air pollutants. This evaluation will need to address potential impacts to sensitive receptors that would be exposed on a recurring basis to substantial air emissions associated with the Proposed Project. Additionally, temporary handling of hazardous materials could occur during demolition activities. Therefore, further evaluation in the EIR will be provided to analyze potential impacts related to the release of hazardous materials near schools. This issue will be further addressed in the EIR.

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

**No Impact.** California Government Code Section 65962.5 specifies lists of the following types of hazardous materials sites: hazardous waste facilities; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated. A search of selected government databases was conducted as part of the Phase I, and the search result is included in Appendix E of the Phase I (see Appendix B, *Phase I Environmental Site Assessment*). According to the records search, the Project Site is not located on a Section 65962.5 listed site and would not be impacted by any offsite Section 65962.5 listed sites. A significant hazard to the public or the environment would not occur, and this issue will not be addressed further in the EIR.

**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?**

**No Impact.** The nearest airport to the Project Site is Corona Municipal Airport, approximately 10 miles to the northeast (Airlines.com 2018). There are no public airports within two miles, and the Project Site is not part of the Riverside County Airport Land Use Compatibility Plan for Corona Municipal Airport or any other airports. The Project Site is outside of the areas where land uses are regulated respecting air crash hazards and where heights of structures are limited to prevent airspace obstructions for aircraft approaching or departing an airport. The Proposed Project would not result in safety hazards related to aircraft operations. This issue will not be further addressed in the EIR.

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- 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?**

**No Impact.** The Project Site is not within the vicinity of a private airstrip, and the nearest heliport is SCE Serrano Substation Heliport, approximately two miles to the west of the Project Site (Airnav.com 2018). Implementation of the Proposed Project would not result in a safety hazard for people residing or working in the project area. No impact would occur and no mitigation measures are required. This topic will not be discussed in the EIR.

- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Potentially Significant Impact.** The Proposed Project would result in a net decrease in traffic volumes and would not conflict with any adopted emergency response or evacuation plans. The Project Site's surrounding roadways would continue to provide emergency access through the project area and to surrounding properties during the project's construction. However, during the construction phase of future development projects, construction-related activities could interfere with an adopted emergency response plan and/or with the daily operations of the Anaheim Fire & Rescue. Therefore, this topic will be addressed in the EIR, and mitigation measures will be identified as necessary.

- 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?**

**Potentially Significant Impact.** The Project Site and its vicinity are within a Very High Fire Hazard Severity Zone or Special Protection Area identified by the Anaheim General Plan Safety Element, Figure S-5, Fire Protection Areas. Development of the Proposed Project would expose people or structure to significant safety impacts due to wildland fires. This issue will be addressed further in the EIR.

- i) Would the project include a new or retrofitted stormwater treatment control Best Management Practice (BMP), (e.g., water quality treatment basin, constructed treatment wetlands, etc.), the operation of which could result in significant environmental effects (e.g., increased vectors and noxious odors)?**

**Potentially Significant Impact.** The Proposed Project would remove the existing commercial development and provide a stormwater treatment control best management practice (BMP) that would include bioretention with underlain systems, where appropriate. The EIR will describe whether or not the proposed BMPs would result in significant environmental effects, such as increased vectors and noxious odors. Impacts will be analyzed in the EIR.

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## 3.9 HYDROLOGY AND WATER QUALITY

Would the project:

**a) Violate any water quality standards or waste discharge requirements?**

**Potentially Significant Impact.** The Proposed Project would generate typical urban pollutants (e.g., sediment, petroleum hydrocarbons, pesticides, and cleaning agents) that could be discharged into the local and regional drainage systems. Also, the Proposed Project could result in short-term construction impacts to surface water quality from grading and other construction-related activities (e.g., erosion, sediment, spills and leaks from construction equipment). Further evaluation in the EIR is required. The EIR will describe current water quality conditions and provide an analysis of potential short-term and long-term water quality impacts associated with the project. Additionally, the EIR will address compliance with existing water quality regulations, and mitigation measures will be identified, if necessary. This issue will be further addressed in the EIR.

**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)?**

**Less Than Significant Impact.** The Project Site is 92 percent impervious. The development of the Proposed Project is anticipated to result in a decrease in impervious surfaces to 84 percent (Hunsaker 2018). The City of Anaheim owns and operates a network of groundwater wells to supply potable water to their users (Anaheim 2004). The Project Site is not a groundwater recharge area, and the Proposed Project would not interfere substantially with groundwater recharge.

The City receives approximately 75 percent of its water supply from groundwater and 25 percent from imported water. The Proposed Project could lead to an increased demand for water, which could lead to an increase in groundwater pumping. However, a replenishment assessment fee is levied on cities in accordance with the Orange County Water District Act for the amount of groundwater extracted, and this fee is used by Orange County Water District (OCWD) for various groundwater replenishment programs to ensure that no overdraft of local groundwater resources occurs. OCWD's groundwater is recharged primarily through artificial replenishment, not natural recharge. Therefore, the Proposed Project would not result in substantial groundwater supply impacts, and this issue will not be addressed further in the EIR.

**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 a substantial erosion or siltation on- or off-site.**

**Potentially Significant Impact.** The Project Site is developed with neighborhood commercial uses and is 92 percent impervious. The Proposed Project would decrease the impervious surface areas to 84 percent and provide infrastructure upgrades that would alter the existing drainage pattern of the Project Site. The Proposed Project would be required to comply with the National Pollutant Discharge Elimination System

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(NPDES) Construction General Permit (CGP), which would require preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would include construction BMPs to reduce erosion and siltation. While the Proposed Project would not involve alteration of a waterway's course, new development could potentially result in substantial erosion or siltation from grading and construction activities. Therefore, this topic will be evaluated in the EIR.

- d) Substantially alter the existing drainage pattern of the site or area, including through 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?**

**Less Than Significant Impact.** The Project Site is currently 92 percent impervious, and the Proposed Project would increase the pervious landscaped area within the Project Site from 0.30 acre to 0.61 acre. Therefore, the Project Site would be 84 percent impervious at project completion. The Proposed Project's drainage area and flow direction would generally be consistent with existing conditions and would connect to the existing storm drain system in Nohl Ranch Road to the west and Serrano Avenue to the south. The Proposed Project would provide various nonstructural and structural source-control BMPs, including but not limited to use of efficient irrigation systems and landscape design, water conservation, smart controllers, and source control to decrease the stormwater runoff volume. Therefore, the Proposed Project would not require or result in substantial increase in the rate or amount of surface runoff in a manner to cause on- or offsite flooding. Impacts would be less than significant, and this issue will not be addressed further in the EIR.

- e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?**

**Potentially Significant Impact.** See response to Section 3.9(d), above. The Proposed Project would decrease the impervious surface area within the Project Site, and therefore would not create or contribute runoff water which would exceed the capacity of existing stormwater drainage system. Soil disturbance during construction and changes in land use could result in polluted runoff different than the existing conditions. The EIR will discuss any issues related to potential additional sources of polluted runoff. This issue will be addressed in the EIR.

- f) Otherwise substantially degrade water quality?**

**Less Than Significant Impact.** No other water quality issues other than topics included in the Initial Study are anticipated to degrade water quality. No further discussion is necessary in the EIR. This issue will not be further addressed in the EIR.

- 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?**

**Less Than Significant Impact.** According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps, the Project Site is not within the 100-year flood hazard zone ((Flood Insurance Rate Map ID#06059C0159J) (FEMA 2009)). The Project Site is identified as Zone X, an area of minimal flood

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hazard. The proposed housing units would not be placed within a 100-year flood hazard area. This issue will not be addressed further in the EIR.

#### **h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

**Less Than Significant Impact.** The Project Site is outside of the 100-year flood zone and would not place structures in the 100-year flood hazard area. The Proposed Project would not redirect flood flows, and this issue will not be addressed further in the EIR.

#### **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?**

**Less Than Significant Impact.** According to the General Plan Safety Element Dam Inundation Map, the Project Site is not in the inundation zone for Prado Dam, Carbon Canyon Dam, and Walnut Canyon Reservoir (Anaheim 2004). Development of the Proposed Project would not expose people or structures to a significant inundation impacts from the failure of a levee or dam. This issue will not be addressed in the EIR.

#### **j) Inundation by seiche, tsunami, or mudflow?**

**Less Than Significant Impact.** Development of the Proposed Project would not result in any hazards arising from a seiche, tsunami, or mudflow.

- **Tsunami:** A tsunami is a large wave generated by an earthquake, landslide, or volcanic eruption. The Project Site is approximately 18 miles from the Pacific Ocean and is well outside of the tsunami inundation zone.
- **Seiche:** Seiches are waves that oscillate in enclosed water bodies, such as reservoirs, lakes, ponds, or semi-enclosed bodies of water. Seiches may be triggered by moderate or large submarine earthquakes or sometimes by large onshore earthquakes. Walnut Canyon Reservoir is approximately 0.6 mile to the northeast. However, the Project Site is not within the Walnut Canyon Reservoir's inundation zone. No significant impacts from an earthquake-induced seiche would occur.
- **Mudflow:** Mud and debris flows are mass movements of dirt and debris that occur after intense rainfall, earthquakes, and severe wildfires. The speed of a slide depends on the amount of precipitation and steepness of the slope. Based on the State of California Seismic Hazard Zones Map for the Orange Quadrangle, the Project Site is not in an area that has been identified as being potentially susceptible to seismically induced landslides. Therefore, there is no expectation of mudflows or debris slides on the Project Site.

Significant impacts involving arising from a seiche, tsunami, or mudflow would not occur, and these issues will not be addressed further in the EIR.

#### **k) Substantially degrade water quality by contributing pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste**

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**handling, hazardous materials handling, or storage, delivery areas, loading docks or other outdoor work areas?**

**Less Than Significant Impact.** The Proposed Project involves development of attached residential units. Use of hazardous materials would be limited to widely available household cleaning and maintenance items, and the Proposed Project would not include areas such as material storage; vehicle or equipment fueling; vehicle or equipment maintenance (including washing); waste handling; hazardous materials handling; or storage, delivery areas, loading docks, or other outdoor work areas. The Project Site was already developed with urban uses, and the Proposed Project would not increase the use of hazardous materials in the area. Impacts would be less than significant, and no further assessment of this issue in the EIR is warranted. This issue will not be further addressed in the EIR.

**l) Substantially degrade water quality by discharge which affects the beneficial uses (i.e., swimming, fishing, etc.) of the receiving or downstream waters?**

**Potentially Significant Impact.** The Project Site is currently developed with neighborhood commercial uses. The proposed residential units are not anticipated to result in greater water pollutants in runoff water compared to the existing conditions. The anticipated pollutants of concern include typical urban water pollutants such as suspended solid sediments, nutrients, pathogens, pesticides, oil and grease, and trash and debris. Receiving downstream waters include Santiago Creek, Oak Canyon, Santa Ana River, and the Pacific Ocean. Impacts related to water quality are potentially significant and will be further analyzed in the EIR.

**m) Potentially impact stormwater runoff from construction activities?**

**Potentially Significant Impact.** The proposed construction would generate increased pollutants during construction. However, to minimize these potential impacts, the project will be required to comply with the NPDES GCP as well as prepare a SWPPP. Impacts related to water quality are potentially significant and will be further analyzed in the EIR.

**n) Potentially impact stormwater runoff from post-construction activities?**

**Potentially Significant Impact.** The Proposed Project would reduce impervious area from 92 percent to 84 percent. A Preliminary Water Quality Management Plan was prepared for the Proposed Project, and the EIR will describe various post-construction BMPs and low-impact-development measures that would minimize the stormwater runoff effects. Impacts related to water quality are potentially significant and will be further analyzed in the EIR.

**o) Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?**

**Less Than Significant Impact.** As discussed in Section 3.9(d), post-development drainage area and flow direction of the Proposed Project would be generally consistent with pre-project conditions, and the Proposed Project would reduce the existing impervious surface area. Therefore, the Proposed Project would not create the potential for significant changes in the flow velocity or volume of stormwater runoff. The Proposed Project would not cause environmental harm through pollutants or flooding. Impacts related to

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stormwater runoff flow or volume would be less than significant. This issue will not be addressed further in the EIR.

**p) Create significant increases in erosion of the project site or surrounding areas?**

**Potentially Significant Impact.** Implementation of the Proposed Project could result in soil erosion during grading activities. Grading activities would be temporary and would incorporate standard erosion control measures as part of the SWPPP per the NPDES requirements. The SWPPP includes an erosion control plan that prescribes measures such as phasing grading, limiting areas of disturbance, designating restricted-entry zones, diverting runoff away from disturbed areas, protecting sensitive areas, protecting outlets, and requiring revegetation or mulching. Impacts related to water quality are potentially significant and will be further analyzed in the EIR.

### 3.10 LAND USE AND PLANNING

Would the project:

**a) Physically divide an established community?**

**No Impact.** The Project Site is developed with commercial uses and surrounded by residential uses and an elementary school. The Project Site does not physically divide any community, and redevelopment of the Project Site would not physically divide an established community. No impact would occur, and no further discussion in the EIR would be provided. This issue will not be further addressed in the EIR.

**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?**

**Potentially Significant Impact.** The Project Site is designated by the General Plan for Neighborhood Center Commercial land use and within "C-G" General Commercial Zone and the Scenic Corridor (SC) Overlay Zone. Implementation of the Proposed Project would require a change in General Plan land use designation to Low-Medium Density Residential (18 du/ac) and a zoning reclassification from the "C-G" General Commercial Zone to "RM-3" Multiple-Family Residential. CUP approval is also required to allow single-family attached residential use in the RM-3 Zone as part of a Residential Planned Unit Development with modified standards. Therefore, further evaluation in the EIR is required to address potential land use impacts due to implementation of the Proposed Project. Mitigation measures will be identified as necessary. This issue will not be further addressed in the EIR.

**c) Conflict with any applicable habitat conservation plan or natural community conservation plan?**

**No Impact.** The Project Site is within the NCCP area. However, the Project Site is already developed with commercial uses, and the proposed redevelopment would not disturb area that has not been previously developed. The Project Site does not contain any native habitat or natural community. The Proposed Project

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would not conflict with the NCCP or any other applicable habitat or natural conservation plans. No impact would occur and no mitigation measures are required. This issue will not be further addressed in the EIR.

#### 3.11 MINERAL RESOURCES

Would the project:

**a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?**

**No Impact.** The California Geological Survey Mineral Resources Project provides information about California's nonfuel mineral resources. The Mineral Resources Project classifies lands throughout the state that contain regionally significant mineral resources, as mandated by the Surface Mining and Reclamation Act (SMARA) of 1975. The state classifies the mineral resource areas into one of the four Mineral Resource Zones (MRZs). The Anaheim General Plan Green Element indicates that parts of the East Anaheim, Canyon, and Hill and Canyon areas are in a MRZ-2, and General Plan Figure G-3, Mineral Resource Map, shows three sectors with mineral resources of regional significance. MRZ-2 is defined as an area with adequate information that significant mineral deposits are present or there is a high likelihood for their presence, and development should be controlled. The Project Site is not in MRZ-2 and is not designated as having regionally significant mineral resources. No loss of availability of known resources would result from project implementation. Therefore, no impact would occur, and no mitigation measures are required. This issue will not be further addressed in the EIR.

**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?**

**No Impact.** The Project Site is not a locally important mineral resource recovery site delineated in the Anaheim General Plan. Implementation of the Proposed Project would not result in the loss of availability of a locally important mineral resource. No impact would occur, and no mitigation measures are required. This issue will not be further addressed in the EIR.

#### 3.12 NOISE

**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?**

**Potentially Significant Impact.** Future development of the Proposed Project would have the potential to increase noise levels in the project vicinity from outdoor use of lounges and recreation area, and stationary sources, including mechanical systems. The Proposed Project could also increase mobile source noise if project-generated trips are more than the existing conditions. In addition, Project-related demolition and construction activities could generate noise affecting existing sensitive receptors near the Project Site boundaries. Further evaluation in the EIR is required to determine the level of significance and to identify mitigation measures which reduce impacts to below a level of significance, if required. This issue will be addressed in the EIR.

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**b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**

**Potentially Significant Impact.** Groundborne vibration or noise would primarily be associated with construction activities. These temporary increased levels of vibration could impact vibration-sensitive land uses in and surrounding the Project Site. This topic will be addressed in the EIR, and mitigation measures will be recommended as needed.

**c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Potentially Significant Impact.** The Proposed Project could result in new sources of noise from vehicular traffic, if project-related traffic is more than the existing conditions. The EIR will evaluate the potential for noise generated by the proposed residential land use to substantially increase existing noise levels in the vicinity of the Project Site. Mitigation measures will be recommended as needed. This issue will be addressed in the EIR.

**d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Potentially Significant Impact.** See responses to Sections 3.12(a) and (b), above.

Demolition and construction activities would result in a temporary increase in noise levels near the Project Site. These impacts will be addressed in the EIR, and mitigation measures will be recommended as needed.

**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?**

**Potentially Significant Impact.** The nearest airport to the Project Site is Corona Municipal Airport, approximately 10 miles to the northeast (Airnav.com 2018). There are no public airports within 2 miles, and the Project Site is not part of the Riverside County Airport Land Use Compatibility Plan for Corona Municipal Airport, or any other airports. The Proposed Project would not expose people residing or working in the project area to excessive noise levels. This topic will not be discussed in the EIR.

**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 levels?**

**No Impact.** The nearest heliport is SCE Serrano Substation Heliport, approximately two miles to the west of the Project Site (Airnav.com 2018). Landings and takeoffs at this heliport would not be affected by the Proposed Project with maximum height of 40 feet. No private airstrip-related impacts would occur, and no mitigation measures are necessary. This issue will not be further addressed in the EIR.

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#### 3.13 PALEONTOLOGICAL RESOURCES

Would the project:

- a) **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Potentially Significant Impact.** Unique paleontological resources may be present on the Project Site. Although the Project Site is currently developed, redevelopment that requires deeper excavations into sedimentary rocks has the potential to encounter paleontological resources. Thus, the EIR will evaluate potential impacts of the Proposed Project on unique paleontological resources and geologic features.

#### 3.14 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)?**

**Less Than Significant Impact.** The Proposed Project would result in direct population growth in the area by adding approximately 202 people, based on the average household size of 3.47 for Anaheim for the proposed 58 residential units (DOF 2018). The City of Anaheim adopted its 2014–2021 Housing Element in February 2014, anticipating an additional 32,842 people, or an increase of approximately 9.8 percent, between 2010 and 2020. The Housing Element forecast that city population would increase from 336,265 to 369,107 by 2020, creating the need for an additional 5,702 units for the 2014–2021 period.

According to the American FactFinder, Anaheim’s 2017 population estimate is 352,479, an increase of 16,232 from 2010 to 2017. Therefore, an additional 16,610 people are projected by 2020, and the Proposed Project would represent approximately 1.2 percent of the anticipated population growth by 2020. Therefore, although the Proposed Project would induce population growth in the project area directly, this growth was already anticipated by the City and is consistent with the City’s General Plan. Therefore, impacts would be considered less than significant, and this issue will not be addressed further in the EIR.

- b) **Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

**No Impact.** The Project Site is developed with commercial uses. No housing units would be demolished as part of the project. Therefore, no replacement housing construction would be necessary, and no impact would occur. No mitigation measures are required, and this issue will not be further addressed in the EIR.

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**c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

**No Impact.** The Project Site is developed with commercial uses. No residential units would be demolished as part of the project, and no people would be displaced necessitating replacement housing construction. No mitigation measures are required, and this topic will not be examined in the EIR.

#### 3.15 PUBLIC SERVICES

This section addresses public services: fire protection and emergency services, police protection, school services, and library services.

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

**a) Fire protection?**

**Potentially Significant Impact.** The Project Area is served by the Anaheim Fire & Rescue (AF&R) for fire protection services. Implementation of the Proposed Project may increase the demand for public services, including fire protection due to change in land use, and increase in development intensity. Consultation with AF&R will be conducted to estimate the level and type of demand associated with the Proposed Project. Further evaluation in the EIR is required to determine the level of significance and to identify mitigation measures that reduce impacts to below a level of significance, if required. This issue will be addressed in the EIR.

**b) Police protection?**

**Potentially Significant Impact.** The Project Site is served by the Anaheim Police Department (APD). APD is responsible for patrol, investigations, traffic enforcement, traffic control, vice and narcotics enforcement, airborne patrol, crime suppression, community policing, tourist-oriented policing, and detention facilities. Implementation of the Proposed Project may increase the demand for public services, including police protection. Consultation with APD will be conducted to estimate the level and type of demand associated with the Proposed Project. Further evaluation in the EIR is required to determine the level of significance and to identify mitigation measures that reduce impacts to below a level of significance, if required. This issue will be addressed in the EIR.

**c) Schools?**

**Potentially Significant Impact.** The Proposed Project is served by the Orange Unified School District (OUSD), and development of 58 residential units would increase the demands for school facilities. Consultation with OUSD will be conducted to estimate the level and type of demand associated with the Proposed Project. Project impacts on schools will be analyzed in the EIR.

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#### d) Parks?

**Less Than Significant Impact.** Parks and recreational facilities in the City are maintained and operated by the City's Parks and Recreation Commission. The proposed 58 residential units would lead to an increase in population, and may lead to increased use of parks and recreational facilities in the surrounding community.

The additional residents due to the project would worsen the parkland shortage by creating the need for additional passive and active park amenities. Although the Proposed Project would provide various onsite recreational and artificial turf play areas, residents would likely use the existing city parks in the area. The nearest park is Oak Canyon Natural Center at 6700 E. Walnut Canyon Road, approximately 0.5 mile to the northeast. Oak Canyon Natural Center is a 58-acre natural park that features 4 miles of hiking trails; restroom; and the John J. Collier Interpretive Center, a small museum with live animal and regional natural history exhibits. Oak Park is at 6400 E. Nohl Ranch Road, approximately 0.7 mile to the northwest, a 4-acre park that provides picnic tables and trail head.

The Anaheim Municipal Code, Section 17.34.010, Provision for Park and Recreational Facilities, requires the project applicant to dedicate land for parks or payment of in-lieu fees based on the number and type of dwelling units. The payment of in-lieu fees would offset increased parkland demands created by the Proposed Project. The Quimby Act (California Government Code § 66477) authorizes dedication of parkland and/or payment of in-lieu fees as a condition of approval of certain types of residential development projects. Furthermore, Assembly Bill 1359 allows cities and counties to use developer-paid Quimby Act fees to provide parks in neighborhoods other than the one in which the developer's subdivision is located.

Although the Proposed Project would increase the demand for parks services, there is a community use park and a special use park in the area, and the payment of fees would allow the City to provide necessary improvements to reduce impacts to a less than significant level. No additional mitigation measures are required, and this issue will not be addressed in the EIR.

#### e) Other public facilities?

**Less Than Significant Impact.** Library services are provided to the City by Anaheim Public Libraries. The nearest library from the Project Site is Canyon Hills Branch Library at 400 Scout Trail, in Anaheim Hills, less than two miles to the northeast. Implementation of the Proposed Project would increase the population by approximately 202 residents, representing an increase of 0.05 percent to the city's 2017 population. Anaheim Public Library system needs are assessed annually, and budget allocations are revised accordingly to ensure that adequate levels of service are maintained throughout the city. Library service demand is population based, and an increase of 0.05 percent to city's population is anticipated to have minimal effect on library resources and would not result in the need for physical expansion of library resources. Impacts would not be significant, and no mitigation measures are required. This issue will not be addressed further in the EIR.

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#### 3.16 RECREATION

Would the project:

- 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?**

**Less Than Significant Impact.** As discussed in Section 3.14(d), *Public Services*, the Proposed Project would result in increased use of existing parks, including, but not limited to the nearest public parks, the Oak Canyon Natural Center and the Oak Park. However, the required payment of parkland in-lieu fees—pursuant to Anaheim Municipal Code Section 17.34.010 and authorized by the Quimby Act and AB 1359—would ensure that adequate improvements are made and impacts are less than significant. No additional mitigation measures are required, and this issue will not be addressed further in the EIR.

- 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?**

**Less Than Significant Impact.** The Proposed Project includes two communal outdoor lounges, an outdoor dining room, an outdoor living room; and, three artificial turf play areas. The environmental effects of the development of these facilities are analyzed as part of the overall project. Additionally, the required payment of parkland in-lieu fees based on dwelling unit type would be used to maintain, expand, or construct citywide recreational facilities. This issue will not be addressed further in the EIR.

#### 3.17 TRANSPORTATION/TRAFFIC

- a) **Conflict with an applicable plan, ordinance or policy establishing measures 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?**

**Potentially Significant Impact.** The Proposed Project would convert existing neighborhood commercial uses to residential uses. This change is expected to result in redistribution of vehicle trips, although the actual overall trips would be decreased. The existing uses on the Project Site currently generate 1,003 average daily trips, and the Proposed Project is anticipated to generate 439 average daily trips based on the preliminary draft traffic impact analysis (LSA 2018). A final traffic analysis will be conducted and included in the EIR to assess the future traffic conditions compared to existing conditions and future cumulative scenarios. This analysis will estimate the number of trips associated with the intensification, alteration, and redistribution of land uses and analyze the impact of the Proposed Project to roadways and study-area intersections. Impacts related to compliance with plans and policies that establish measures of effective performance of the circulation system would be potentially significant, and this issue will be discussed in more detail in the EIR.

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- 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?**

**Less Than Significant Impact.** The Orange County Transportation Authority (OCTA) implements the county's congestion management program (CMP) for a system of arterial roadways and freeways. The CMP for Orange County requires a traffic impact for: 1) an individual development project of potential regional significance; 2) a project with the potential to create an impact of more than 3 percent of LOS "E" capacity on CMP highway system links; 3) a project generating 2,400 or more daily trips; and 4) a project generating 1,600 or more daily trips if that project will have direct access to a CMP link. There are no CMP facilities near the Project Site, and the Proposed Project would result in overall decrease in trip generation (LSA 2018). Therefore, impacts would not be significant, and this issue will not be addressed further in the EIR.

- 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?**

**No Impact.** The nearest airport to the Project Site is Corona Municipal Airport, approximately 10 miles to the northeast (Airnav.com 2018). There are no public airports within 2 miles, and the Project Site is not part of the Riverside County Airport Land Use Compatibility Plan for Corona Municipal Airport, or any other airports. Therefore, the Proposed Project would not cause a change in the directional patterns of aircrafts flying to and from Corona Municipal Airport or any other airports. Thus, no impact would occur, and this issue will not be discussed in the EIR.

- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**Potentially Significant Impact.** The Proposed Project would not introduce incompatible uses to area roadways. However, the Proposed Project would change the existing access and circulation pattern in the area. Therefore, further analysis in the EIR is necessary for their potential to create hazardous conditions (e.g., modifications to existing roadways and intersections, new driveway approaches). This topic will be evaluated in the EIR, and mitigation measures will be identified as necessary.

- e) Result in inadequate emergency access?**

**Potentially Significant Impact.** The Proposed Project is situated in a residential neighborhood, and the Anaheim Hills Elementary School is located diagonally across from the Project Site. Changes in land uses and circulation patterns could affect the circulation system of emergency access routes. This topic will be evaluated in the EIR, and mitigation measures will be identified as necessary.

- f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

**Potentially Significant Impact.** Future development in accordance with the Proposed Project would decrease traffic generated from the Project Site but may increase pedestrian and bicycle traffic in the area due to increased development density. The EIR will describe the presence and/or absence of public transit,

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bicycle, and pedestrian facilities near the Project Site and evaluate impacts from the project implementation. The EIR will consider whether or not the Proposed Project would conflict with the City's adopted alternative transportation plans and programs. This issue will be addressed in the EIR.

#### 3.18 TRIBAL CULTURAL RESOURCES

- a) **Cause a substantial adverse change in the significance of a Tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:**
- **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or**
  - **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe?**

**Potentially Significant Impact.** Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources (Public Resources Code § 21074). In order to determine whether there are any tribal cultural resources that could be impacted by the Proposed Project, California Native American tribes that are traditionally and culturally affiliated with the Project Site will be contacted (Public Resources Code § 21080.3.1). The EIR will evaluate potential impacts of the Proposed Project on tribal cultural resources.

#### 3.19 UTILITIES AND SERVICE SYSTEMS

- a) **Exceed waste water treatment requirements of the applicable Regional Water Quality Control Board?**

**Less Than Significant Impact.** The City of Anaheim's local sanitary sewer collection system serves the project vicinity and is tributary to the Orange County Sanitation District (OCSD). The OCSD service area comprises 480 square miles of northern and central Orange County and has 579 miles of sewer lines, 15 offsite pumping stations, 2 regional wastewater treatment plants, and an ocean disposal system. Wastewater flows by gravity from the City sewer system to OCSD's trunk and interceptor sewers, then to regional treatment and disposal facilities. Anaheim is in State Water Resources Control Board Region 8, which is under the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB).

The Proposed Project would be subject to an OCSD fee to connect to the City's existing sewer system and would be required to comply with SARWQCB requirements governing discharges to municipal storm drainage systems. The existing sewer system has adequate capacity to serve the Proposed Project; therefore,

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the addition of wastewater by the Proposed Project would not exceed the wastewater treatment requirements of the SARWQCB (Psomas 2018). Impacts would not be significant, and this issue will not be addressed further in the EIR.

- b) Require or result in the construction of new water or waste water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**Less Than Significant Impact.**

#### Water

Anaheim Public Utilities (APU) provides water to the Project Site. There are existing water pipelines along Nohl Ranch Road and Serrano Road. The Proposed Project would connect to the existing 12-inch water lines on both Nohl Ranch Road and Serrano Road for domestic and fire water services. New connections to existing water lines would be coordinated through the Water Engineering Division of APU during the building permitting process to ensure that the existing water distribution system provides the peak flow rate and fire flow requirements. Water distribution system improvements would comply with Rule No. 15 of the APU's Water Rates, Rules, and Regulations. Individual water service and/or fire line connections are required for each residential unit by Rule No. 18 of the Water Rates, Rules, and Regulations. Compliance with the existing regulations would ensure that connection to existing water facilities do not result in significant impact. This issue will not be addressed further in the EIR.

#### Wastewater

The Proposed Project would increase the total average daily flow to the sewer collection system by 3,690 gallons per day (gpd) from 10,710 gpd to 14,400 gpd (Psomas 2018). The wastewater from the project area sewer lines would be transported to OCSD Plant 1 in Fountain Valley and/or Plant 2 in Huntington Beach. Plant No. 1 receives wastewater from six major trunk sewer pipes and provides advanced primary and secondary treatment. The combined maximum secondary treatment capacity of both Plant No. 1 and Plant No. 2 is 332 million gallons per day (mgd), and they currently operate with an average daily influent of 199 mgd. There are no plans for expansion of the treatment capacity of either plant. The Proposed Project would represent a negligible increase (<0.000028 percent) to the combined surplus wastewater treatment capacity. Therefore, no new or expanded wastewater treatment facility would be necessary. Impacts would be less than significant, and this issue will not be addressed further in the EIR.

- 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?**

**Less Than Significant Impact.** The Project Site is currently 92 percent impervious, and the Proposed Project would increase the pervious landscaped area within the Project Site from 0.30 acre to 0.61 acre; therefore, the Project Site would be 84 percent impervious at project completion (Hunsaker 2018). The Proposed Project will connect to the existing storm drain system in Nohl Ranch Road to the west and Serrano Avenue to the south. The Proposed Project would provide various nonstructural and structural

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source-control BMPs, including but not limited to use of efficient irrigation systems and landscape design, water conservation, smart controllers, and source control to decrease the stormwater runoff volume. Therefore, the Proposed Project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities. Impacts would be less than significant, and this issue will not be addressed further in the EIR.

**d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

**Potentially Significant Impact.** The City currently obtains water from naturally and artificially recharged local groundwater and 2) imported water. The City utilizes a small volume of recycled water per year (about 0.1 percent of its total demand). The City's 2015 Urban Water Management Plan (UWMP) was adopted in 2016, and Table 2-4 of the UWMP, "Demands for Potable and Raw Water: Projected," is a projection of the City's potable and raw water demand for the next 25 years (not including recycled water demand), and shows a demand of 61,895 acre-feet (af) to 66,988 af within the City. The UWMP assumes that the City's water service area population would increase by 16 percent in the next 25 years. Residential water use accounts for the majority of the City's water demands, with the single-family residential sector accounting for approximately 39 percent and multifamily for approximately 20 percent of total demand. The UWMP's water consumption by residential sector was projected based on anticipated growth in housing units.

The Proposed Project could generate an increase in demand for water for domestic and irrigation purposes. The EIR will evaluate the existing water demands from the existing neighborhood commercial center compared to the proposed 58 residential units. Further evaluation in the EIR is required to determine the level of significance and to identify mitigation measures that reduce impacts to below a level of significance, if required. This issue will be further addressed in the EIR.

**e) Result in a determination by the waste water 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?**

**Less Than Significant Impact.** Implementation of the Proposed Project would generate an increase in wastewater. A Sewer Technical Memorandum was prepared on October 3, 2018, to evaluate sewer capacity impacts from development of a 60-unit residential project on the Project Site (see Appendix C, Sewer Study). It should be noted that the proposed number of units decreased from 60 units to 58 units, and the sewer impacts would also be less than described in the Sewer Technical Memorandum. According to the Sewer Technical Memorandum, the Project Site is subject to the Combined East Anaheim Area Master Plan of Sanitary Sewers (CEAAMPSS), and the downstream tributary basin for the Project Site spans three different models: Model 58, Model 56, and Model 46. The downstream tributary area for the project crosses from Model 58 to Model 56 and finally to Model 46 before discharging into the OCSD trunk sewer.

The Proposed Project would be loaded to manhole SW286216 on the existing 8-inch Serrano Avenue sewer. The existing and proposed manhole flow loading volumes are shown in Table 1, *Existing and Proposed Flow Demands*. As shown in Table 1, the Proposed Project would increase the total average daily flow to the sewer collection system by 3,690 gpd, from 10,710 gpd to 14,400 gpd. Commercial flows peak at a slightly higher

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factor than residential land uses (2.2 vs. 1.8); therefore, the peak flows would increase by 2,358 gpd or 1.64 gallons per minute (gpm). The Sewer Technical Memorandum evaluated depth-to-diameter (d/D) ratios for the sewer collection system from the hydraulic Hydra models and concluded that the existing downstream sewer system does not have any capacity deficiencies under the buildout conditions without the Proposed Project. The five greatest d/D ratios in any downstream sewer reaches in the buildout condition without the additional project flows are 0.51 in an 8-inch reach, 0.52 in a 10-inch reach, 0.53 and 0.58 in two 15-inch reaches, and 0.60 in an 18-inch reach. The d/D deficiency criteria is a ratio greater than 0.67 for pipes less than 12 inches in diameter, and greater than 0.75 for pipes greater than or equal to 12 inches in diameter. An increase of 2,358 gpd or 1.64 gpm to the downstream sewer reaches would result in a maximum of 2 percent increase in d/D. Thus, the Proposed Project would not result in exceedance of d/D deficiency criteria. Sewer capacity impacts would be less than significant, and this issue will not be addressed further in the EIR.

**Table 1 Existing and Proposed Flow Demands**

Land Use	Units	Flow Factor (gpd/unit)	Average Flow	Peaking Factor	Peak Flow (gpd)
<b>Existing Flow to SW0286216</b>					
Commercial	3.06 acres	3,500	10,710 gpd	2.2	23,562
<b>Proposed Flow to SW0286216</b>					
Condominiums	60 units	240 <sup>1</sup>	14,400 gpd	1.8	25,920
<b>Total Change</b>			<b>3,690</b>		<b>2,358</b>
					2,358 gpd = 1.64 gallons per minute

<sup>1</sup> Because the CEAAMPSS is currently being revised, the more recently calibrated land use flows (240 gpd/unit for condominium) from the First Revision to the Combined Central Anaheim Area Master Plan of Sanitary Sewers (CCAAMPSS) was used in the calculation.

**f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?**

**Potentially Significant Impact.** The Proposed Project would change the existing solid waste generation through converting commercial uses to residential. The Proposed Project would also generate demolition and construction wastes. Project solid waste generation will be assessed in the EIR relative to existing and planned landfill capacity in the region.

**g) Comply with federal, state, and local statutes and regulations related to solid waste?**

**Less Than Significant Impact.** The Proposed Project would be required to comply with all federal, state, and local agency regulations regarding solid waste. Under AB 939, the Integrated Waste Management Act of 1989, the City is required to develop source reduction, reuse, recycling, and composting programs to reduce the amount of solid waste entering landfills. Local jurisdictions are mandated to divert at least 50 percent of their solid waste generation to recycling. The City implements municipal codes and ordinances that help to reduce the waste source and increase the diversion rate. The City program, Recycle Anaheim, consists of an automated trash collection program and a broader recycling and yard waste collection system. In collaboration with Republic Services, the City’s franchise contractor, the City provides an automated curbside

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recycling program for solid waste disposal that uses the three-can automated collection system for trash, commingled recyclable materials, and yard waste.

The City currently exceeds the AB 939 diversion goal of 50 percent with a diversion rate of 65 percent. The Proposed Project would comply with the City's waste collection and diversion programs and would not conflict with any of the existing regulations or programs. Waste generated by the Proposed Project would enter the City's waste stream but would not substantially affect diversion rates. Implementation of the Proposed Project would result in a negligible increase to the City's waste stream, and impacts would be less than significant. This issue will not be addressed further in the EIR.

#### **h) Result in a need for new systems or supplies, or substantial alterations related to electricity?**

**Potentially Significant Impact.** APU provides electricity to the City of Anaheim, including the Project Site. The Proposed Project would require modification and upgrades to the existing electrical facilities (underground and overhead cables, conduits, transformers, switches, high voltage lines, etc.). The Proposed Project would be developed in compliance with the latest Building Energy Efficiency Standards. The Proposed Project would be required to coordinate with the City's Electrical Engineering Division and comply with the City of Anaheim's Rates, Rules, and Regulations. Potential impacts to electricity will be analyzed in the EIR.

#### **i) Result in a need for new systems or supplies, or substantial alterations related to natural gas?**

**Potentially Significant Impact.** Southern California Gas Company (SCG) provides gas service in the City of Anaheim and has facilities throughout the City, including the Project Site. The Proposed Project would result in changes of land use from neighborhood commercial to residential, which could require changes in the supply system. The availability of natural gas service is based on present gas supply and regulatory policies of the SCG under the Public Utilities Commission (PUC). As a public utility, SCG is under the auspices of the PUC and federal regulatory agencies. Potential impacts to natural gas will be analyzed in the EIR.

#### **j) Result in a need for new systems or supplies, or substantial alterations related to telephone service?**

**Less Than Significant Impact.** The Project Site is already developed as a neighborhood commercial center and served by local telephone service such as AT&T. The Proposed Project would require reconfiguration and improvements to the existing telephone facilities to accommodate the proposed development. Because the Project Site is already being served by a local telephone service, and considering its size (3.03 acre) and density (19.14 unit/acre), the Proposed Project is not anticipated to result in substantial adverse impacts to telephone service. Provision of telephone service improvements would not cause substantial or unusual adverse physical impacts to the environment. Impacts would be less than significant, and this issue will not be addressed further in the EIR.

### 3. Environmental Analysis

- k) **Result in a need for new systems or supplies, or substantial alterations related to television service/reception?**

**Less Than Significant Impact.** The Project Site is in a highly urbanized setting and already served by television service/reception. No major alterations to existing systems or supplies would be necessary to accommodate the proposed development. No significant impact is anticipated, and this issue will not be addressed further in the EIR.

#### 3.20 MANDATORY FINDINGS OF SIGNIFICANCE

- a) **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?**

**Potentially Significant Impact.** Implementation of the Proposed Project could degrade the quality of the environment. As discussed in this Initial Study, the Proposed Project could result in impacts to biological resources, cultural resources, and tribal cultural resources. Therefore, these topics will be evaluated in the EIR, and mitigation measures will be identified as necessary.

- 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.)**

**Potentially Significant Impact.** Implementation of the Proposed Project may result in cumulative impacts to aesthetics, air quality, biological resources, cultural resources, greenhouse gas emissions, hazards and hazardous conditions, hydrology and water quality, land use, noise, population and housing, public services, transportation and traffic, tribal cultural resources, and utilities and service systems. Further analysis is needed to estimate the extent and significance of potential cumulative impacts resulting from the combined effects of the Proposed Project plus other past, present, and reasonably foreseeable future projects. Cumulative impacts will be evaluated in the EIR, and mitigation measures will be identified as necessary.

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

**Potentially Significant Impact.** Potentially significant impacts that could substantially affect human beings, directly or indirectly, are identified in this Initial Study in the areas of aesthetics, air quality, cultural resources, greenhouse gas emissions, hazards and hazardous conditions, hydrology and water quality, land use, noise, population and housing, public services, transportation and traffic, tribal cultural resources, and utilities and service systems. Impacts in each of these areas will be discussed in the appropriate topical section of the EIR, and mitigation measures will be identified as necessary.

### 3. Environmental Analysis

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# Appendix A Geotechnical Exploration Report

## Appendices

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GEOTECHNICAL EXPLORATION REPORT  
PROPOSED RESIDENTIAL DEVELOPMENT  
6501-6513 EAST SERRANO AVENUE  
ANAHEIM, CALIFORNIA

Prepared for:

**6509 Serrano L.P.**

4040 MacArthur Boulevard, Suite 300  
Newport Beach, California 92660

Project No. 11737.001

October 9, 2017



Leighton and Associates, Inc.

A LEIGHTON GROUP COMPANY

A-1



Leighton and Associates, Inc.  
A LEIGHTON GROUP COMPANY

October 9, 2017

Project No. 11737.001

6509 Serrano L.P.  
4040 MacArthur Boulevard, Suite 300  
Newport Beach, California 92660

Attention: Mr. John Saunders

**Subject: Geotechnical Exploration Report  
Proposed Residential Development  
6501-6513 East Serrano Avenue  
Anaheim, California**

In accordance with our proposal dated July 12, 2017, authorized by you on July 25, 2017, Leighton and Associates, Inc. (Leighton) is pleased to present this geotechnical exploration report for the proposed residential development project located at 6501-6513 East Serrano Avenue in Anaheim California.

The purpose of our study was to evaluate the geotechnical conditions at the site and to provide geotechnical recommendations for the design and construction of the project as currently proposed. The results of our exploration and recommendations are presented in this report.

We appreciate this opportunity to be of service. If you have any questions regarding this report or if we can be of further service, please call us at your convenience at (866) LEIGHTON, directly at the phone extensions or e-mail addresses listed below.

Respectfully submitted,  
LEIGHTON AND ASSOCIATES, INC.



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Appendix E – General Earthwork and Grading Recommendations

## 1.0 INTRODUCTION

### 1.1 Site Description and Proposed Improvements

The project site is roughly 3 acres in size and is located at the northeast corner of Serrano Avenue and Nohl Ranch Road (6501, 6503, 6505, 6507, 6509, 6511 and 6513 East Serrano Avenue) in the city of Anaheim, California. The site is bordered by Serrano Avenue to the south, Nohl Ranch Road to the west, and single-family residential properties to the north and east. The site is relatively flat and is currently occupied by a commercial/retail development consisting of seven (7) one-story buildings situated in the central portion of the site surrounded by asphalt concrete (AC) paved surface parking and access drive aisles. Based on our observations, the existing improvements (i.e. pavement and buildings) generally appear to be in good condition with no obvious signs of distress. The northeast corner of the site is currently occupied by a playground area associated with a children's day care facility. The site location (latitude 33.8317°, longitude 117.7600°) and surrounding area are shown on Figure 1, *Site Location Map*. Review of the *City of Anaheim Base Map 286* (December, 2016) indicates a 5-foot wide electrical easement within the southern and western parking areas.

Based on preliminary review of historical aerial photographs and topography maps, the project site was mass graded as a part of a larger development between approximately 1966 and 1972, and the seven (7) existing structures were constructed to its current configuration by approximately 1980 (NETR, 2017). Historic topographic contours that existed within the project site boundary prior to mass grading suggest that cut and fill grading of the previously existing natural topography was required to achieve the current grade. Maximum depth of artificial fill materials below this site is greater than 75 feet in thickness in the central region of the site.

We understand the proposed residential development includes complete demolition of the existing commercial buildings and improvements at the site to allow grading and construction for a residential development consisting of several two- to three-story attached multi-family residential buildings, private drive aisles and guest parking. No subterranean level is currently planned for the buildings. It is our understanding that onsite biofiltration is being considered for best management practice for storm water treatment. Although loading information for the proposed new structures has not been provided at this time, we expect

the loading will be similar to typical two- to three-story attached residential structures.

## 1.2 **Purpose and Scope**

The purpose of our geotechnical exploration was to evaluate the soil and groundwater conditions at the site through review of available data, exploratory borings and onsite percolation testing, in order to provide geotechnical recommendations for design and construction of the proposed improvements.

The scope of this geotechnical exploration included the following tasks:

- **Background Review** – A background review was performed of readily available, relevant geotechnical and geological literature pertinent to the site. References used in preparation of this report are listed in Section 6.0. In addition, we submitted a request for public records with the City of Anaheim with the intent to obtain a copy of the as-graded geotechnical report documenting the mass/rough grading of the site. City of Anaheim approved grading plans for the surrounding tract (Tract 8375) to the north and east of the project site were available; however, the as-graded geotechnical report documenting the mass/rough grading of the site was not available for our review.
- **Pre-Field Exploration Activities** – A site visit was performed by a member of our technical staff to mark the boring locations. Underground Service Alert (USA) was notified to locate and mark existing underground utilities prior to our subsurface exploration.
- **Field Exploration** – Our field exploration was performed on August 16, 2017, and consisted of six, 8-inch diameter hollow-stem auger borings (LB-1 through LB-6) each drilled to depths ranging between approximately 9.8 and 76.5 feet below existing ground surface (bgs). The approximate locations of the borings are shown on Figure 2, *Boring Location Map*.

During drilling of the hollow-stem auger borings (LB-1 through LB-6), both bulk and drive samples were obtained from the borings for geotechnical laboratory testing. Drive samples were collected from the borings using a Modified California Ring sampler in accordance with ASTM Test Method D 3550. Standard Penetration Tests (SPT) were also performed within the

hollow-stem auger borings in accordance with ASTM Test Method D 1586 to help in evaluating the density and consistency of the site soils. The SPT and California Ring samplers were driven for a total penetration of 18 inches, unless practical refusal was encountered, using a 140-pound automatic hammer falling freely for 30 inches. The number of blows per 6 inches of penetration was recorded on the boring logs.

The borings were logged in the field by a certified engineering geologist. Each soil sample collected was reviewed and described in accordance with the Unified Soil Classification System (USCS). The samples were sealed and packaged for transportation to our laboratory. After completion of drilling, the borings (LB-1 through LB-6) were backfilled to the ground surface with excess soils generated during the exploration and patched with cold-mix asphalt concrete. The boring logs are presented in Appendix A, *Field Exploration Logs*.

- Laboratory Tests – Laboratory tests were performed on selected soil samples obtained during our field investigation. The laboratory testing program was designed to evaluate the physical and engineering characteristics of the onsite soil. Tests performed during this investigation include:
  - In- situ Moisture Content and Dry Density (ASTM D2216 and ASTM D2937);
  - Atterberg Limits (ASTM D 4318);
  - Gradation (ASTM D 6913);
  - Percent Passing No. 200 Sieve (ASTM D 1140);
  - Direct Shear (ASTM D 3080)
  - Consolidation (ASTM D 2435);
  - Maximum Dry Density (ASTM D 1557);
  - R-Value (California Test Method 301); and
  - Corrosivity Suite – pH, Sulfate, Chloride, and Resistivity (California Test Methods 417, 422, and 532/643).

Results of the in-situ moisture content and dry density testing are presented on the boring logs in Appendix A. Other laboratory test results are presented in Appendix B, *Laboratory Test Results*.

- Percolation Testing – During our field exploration performed on August 16, 2017, two additional 8-inch diameter hollow-stem auger borings (LP-1 and LP-2) located in the southern portion of the site in the vicinity of the proposed stormwater infiltration areas were each drilled to an approximate depth of 9 feet bgs and converted to a temporary percolation test well for subsequent percolation testing. Refer to the discussion of infiltration rate presented in Section 2.4 and the field percolation test data provided in Appendix C, *Percolation Test Results*.
- Engineering Analysis - The data obtained from our background review, field exploration, and laboratory testing program were evaluated and analyzed to develop geotechnical recommendations for the project as currently planned.
- Report Preparation - The results of the exploration are summarized in this report presenting our findings, conclusions and recommendations.

## 2.0 GEOTECHNICAL FINDINGS

### 2.1 Geologic Setting

The project site is located within the Peninsular Ranges geomorphic province of California along the eastern margins of the Los Angeles Basin. The Los Angeles Basin is bounded to the north by the east-west trending Transverse Ranges and to the east and southeast by the northwest trending Peninsular Ranges. The Los Angeles Basin is a large structural depression formed as the San Andreas fault shifted eastward to its present location. The basin has since been filled with sediments eroded from the surrounding highlands interpreted to have a maximum thickness of over 30,000 feet (Yerkes, 1965).

The project site is located in the Santa Ana Mountains in the eastern portion of the Peralta Hills. These low-lying hills extend westward from the Santa Ana Mountains toward the Los Angeles Basin and are primarily underlain by Tertiary age (between about 2.6 to 65 million years old) mostly marine sediments deposited in the Los Angeles Basin spanning the Miocene to Pliocene Epoch (about 2.6 to 23.3 million years ago). The project site is located in an area mapped to be underlain by Miocene age Puente Formation bedrock (Soquel and La Vida Members) primarily consisting of sandstone and siltstone (Morton and Miller, 2006). The mapped geologic units in the vicinity of the project site is presented as Figure 3, *Regional Geology Map*.

### 2.2 Subsurface Soil Conditions

As interpreted from our subsurface explorations (hollow-stem auger borings), the site is underlain by previously placed artificial fill overlying Tertiary age sandstone and siltstone bedrock materials. The stratigraphy of the subsurface soil and bedrock materials encountered in each soil boring is presented on the boring logs (Appendix A), a general description of the earth materials as encountered are described below:

#### Artificial Fill

The previously placed artificial fill soil as encountered in our exploratory borings is on the order of less than a foot to over 76.5 feet thick across the site, consisting primarily of orange brown to gray brown, moist to very moist, medium dense to dense silty sand and clayey sand interlayered with medium stiff to very

stiff clay, silty clay and sandy clay. Based on review of the documents provided by the City of Anaheim, the artificial fill materials encountered at the site are associated with the previous mass/rough grading of the area. No report documenting the grading activities associated with the current site development was available for review; however, based on our understanding of the City's policy, it is reasonable to assume that previous grading activities associated with the site and its vicinity were permitted and performed under the observation and testing of geotechnical consultants.

### Puente Formation Bedrock

Encountered below the artificial fill in borings LB-1, LB-3, LB-4 and LB-5 at various depths was upper Miocene age marine sedimentary rocks of the Puente Formation.

The La Vida Member (Map Symbol: Tplv) is the basal stratigraphic unit of the Puente Formation encountered in boring LB-3 (Figure 2). The La Vida Member consists of orange brown to light grey brown, laminated, brittle shaley siltstone with lesser amounts of slightly well cemented sandstone. The sandstone content increases as the La Vida Member grades into the Soquel Member (Map Symbol: Tpsq) which is present below a majority of the site as encountered in borings LB-1, LB-4 and LB-5 (Figure 2). The Soquel Member consists of orange brown, massive, fine to medium grained pebbly sandstone with interbedded grey brown moderately fractured fissile siltstone. Based on blow counts and visual classification, the bedrock materials encountered were generally characterized as dense, hard and moderately oxidized.

## **2.3 Groundwater Conditions**

Groundwater was not encountered in our borings excavated at the site to a maximum depth of approximately 76.5 feet bgs during drilling. Based on the currently proposed development scheme, groundwater is not expected to pose a constraint during and after construction.

Although groundwater is not considered a constraint for the project, seasonal fluctuations in groundwater level, localized zones of perched water including water due to nearby landscaping, and an increase in soil moisture should be anticipated during and following locally intense rainfall or stormwater runoff.

## 2.4 Infiltration Capacity

In-situ percolation testing was performed to evaluate the infiltration capacity of the site soils in general accordance with the Orange County *Technical Guidance Document (TGD) for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Programs (WQMPs)* (OCPW, 2013).

Borings LP-1 and LP-2 located in the general vicinity of the planned biofiltration treatment areas were both converted to temporary percolation test wells upon completion of drilling and sampling (Figure 2, *Exploration Location Map*). The temporary wells consisted of a 2-inch-diameter, PVC pipe with perforations from 4 to 9 feet bgs placed within each borehole. The annulus was filled with clean sand (#3 Monterey Sand) to approximately 1 foot above the perforated pipe. In general accordance with the Orange County TGD (OCPW, 2013), each percolation test well was pre-soaked prior to the testing. After the conclusion of the percolation test, the PVC pipe was removed and the test holes were backfilled with excess soil cuttings and patched with cold-mix asphalt concrete.

The test was performed using the falling-head method which records the drop of water level inside the well over each testing period. The measured infiltration rate for the percolation tests was calculated by dividing the rate of discharge (i.e., volume of water discharged from the well during the test) by the infiltration surface area, or flow area. Detailed results of the field testing data and measured infiltration rate for the test wells are presented in Appendix C, *Percolation Test Results*. Presented in the table below is a summary of the measured infiltration rate results.

**Table 1 – Measured Infiltration Rate**

<b>Boring-Percolation Test Well Designation</b>	<b>Approximate Depth of Test Zone Below Existing Ground Surface (feet)</b>	<b>Measured Infiltration Rate (inches per hour)</b>
LP-1	5 to 9	0.06
LP-2	5 to 9	0.05

The percolation tests performed at test well locations LP-1 and LP-2 (Figure 2) yielded very low measured infiltration rates of approximately 0.06 and 0.05 inch per hour within the test zone between 5 to 9 feet bgs. These rates do not meet

the minimum requirement for stormwater infiltration feasibility (0.3 inch per hour) per the Orange County (OCPW, 2013) guidelines.

Based on our current subsurface exploration, the artificial fill soils beneath the site within the zones tested generally do not provide adequate infiltration potential as indicated by the very low infiltration rates. Direct infiltration to the site soils is not recommended.

### 3.0 GEOLOGIC AND SEISMIC HAZARDS

Geologic and seismic hazards include surface fault rupture, seismic shaking, liquefaction, seismically-induced settlement, lateral spreading, seismically-induced landslides, flooding, seismically-induced flooding, seiches and tsunamis. The following sections discuss these hazards and their potential impact at the project site.

#### 3.1 Surface Fault Rupture

Our review of available in-house literature indicates that no known active faults have been mapped across the site, and the site is not located within a designated Alquist-Priolo Earthquake Fault Zone (Bryant and Hart, 2007). Therefore, a surface fault rupture hazard evaluation is not mandated for this site.

The location of the closest active faults to the site was evaluated using the United States Geological Survey (USGS) Earthquake Hazards Program National Seismic Hazard Maps (USGS, 2008c). The closest active faults to the site are the Elsinore Fault Zone (Whittier fault), Puente Hills fault, Chino fault and the San Joaquin Hills fault, located approximately 3.6 miles, 7.7 miles, 8.2 miles and 10.5 miles from the site, respectively. The Puente Hills and San Joaquin Hills faults are both blind thrust faults that are concealed at depth, without the potential for surface fault rupture. The San Andreas fault, which is the largest active fault in California, is approximately 35 miles northeast of the site. Major regional faults with surface expression in proximity to the site are shown on Figure 4, *Regional Fault Map*).

The project site is located near the eastern mapped terminus of the Peralta Hills Fault, see Figure 4, *Regional Fault Map*. The Peralta Hills Fault has long been recognized to have thrust bedrock of the La Vida Member over stream terrace deposits of probable Pleistocene age (1.8 million to 11,700 years ago). Investigations by others have suggest there is scant evidence for Holocene activity (11,700 years to present) along the Peralta Hills fault (Converse Ward Dixon, 1979). Fault investigation by Leighton and Associates Inc. (1986) did **not** encounter evidence for Holocene offsets along the Peralta Hills or secondary faults associated with the system. The California Geological Survey (CGS) based on the current zoning criteria (Bryant and Hart, 2007) has not zoned the Peralta Hills Fault.

### 3.2 Strong Ground Shaking

The site is located within a seismically active region, as is Southern California in general. The intensity of ground shaking at a given location depends primarily upon the earthquake magnitude, the distance from the source, and the site response characteristics. Peak Horizontal Ground Accelerations (PHGA) are generally used to evaluate the intensity of ground motion.

The code-based Maximum Considered Earthquake (MCE) corresponds to an earthquake with a probability of exceedance of 2 percent in 50 years (i.e., 2475-year return period). Using United States Geological Survey (USGS) web-based Seismic Design Maps application (USGS, 2008a), the corresponding PHGA was calculated at 0.599g. The ground motion parameters for the MCE in terms of spectra accelerations at 5 percent damping are presented in the following table:

**Table 2 – 2016 CBC Based Ground Motion Parameters (Mapped Values)**

<b>Categorization/Coefficient <sup>(1)</sup></b>	
Site Latitude	33.831715°
Site Longitude	-117.760025°
Site Class	D
Mapped Spectral Response Acceleration at Short Period (0.2 sec), $S_S$	1.569g
Mapped Spectral Response Acceleration at Long Period (1 sec), $S_1$	0.604g
Short Period (0.2 sec) Site Coefficient, $F_a$	1.0
Long Period (1 sec) Site Coefficient, $F_v$	1.5
Adjusted Spectral Response Acceleration at Short Period (0.2 sec), $S_{MS}$	1.569g
Adjusted Spectral Response Acceleration at Long Period (1 sec), $S_{M1}$	0.906g
Design Spectral Response Acceleration at Short Period (0.2 sec), $S_{DS}$	1.046g
Design Spectral Response Acceleration at Long Period (1 sec), $S_{D1}$	0.604g

(1) Source: Ground motion values were calculated using United States Geological Survey (USGS) web-based Seismic Design Maps application (USGS, 2008a)

Accordingly, the site-adjusted geometric mean Peak Ground Acceleration ( $PGA_m$ ) was calculated at 0.599g (i.e.,  $F_{PGA}=1.0$ ). By deaggregating the  $PGA_m$ , the corresponding earthquake is an  $M_w$  6.9 event with a distance of approximately 5.6 miles from the site (USGS, 2008b).

The seismicity data are included in Appendix D, *Seismicity Data*. For a general view of recorded historical seismic activity see Figure 5, *Historic Seismicity Map*.

### **3.3 Liquefaction**

As shown on the State of California Seismic Hazard Zones Map for the Orange Quadrangle (CGS, 1998), the project site is **not** located within an area that has been identified by the State of California as being potentially susceptible to liquefaction (Figure 6, *Seismic Hazard Map*). In addition, based on our subsurface exploration, groundwater was not encountered at the project site to the maximum depth explored of 76.5 feet bgs. Based on these considerations, the potential for liquefaction occurring at the site is low.

### **3.4 Earthquake-Induced Settlement**

Strong ground motion during earthquakes tends to rearrange looser soils particles into a more compact arrangement, especially in granular soil deposits. The cumulative effects of soil particles rearrangement during earthquake ground shaking will result in settlement of the soil column. In general, a poorly graded granular deposit is more susceptible to settlement than a fine-grained or well-graded soil. Due to the dense nature of the existing fill at the site, the potential for seismically-induced settlement is considered negligible at the site.

### **3.5 Earthquake-Induced Lateral Spreading**

Based on the consideration that the site is not located in an area with potential for liquefaction, lateral spreading induced by soil liquefaction is not likely to occur at the site.

### **3.6 Earthquake-Induced Landslides**

Based on the State of California Seismic Hazard Zones Map for the Orange Quadrangle (CGS, 1998), the site is **not** located within an area that has been identified by the State of California as being potentially susceptible to seismically induced landslides (Figure 6, *Seismic Hazard Map*). Based on these considerations, the potential for seismically-induced landsliding is considered low. Proposed slopes, if any, should be engineered and constructed at a gradient of 2:1 (horizontal:vertical) or flatter.

It should be noted that the project site is located within the general vicinity, approximately 0.4 mile to the west of the Santiago Landslide that occurred in Anaheim Hills in 1993 as mapped by Cotton, Shires & Associates (2005). Topographic features expressive of landsliding were observed in the foothills to the south and east of the project site (Leighton, 1987). These landslides have occurred primarily within the Vaqueros Sespe Formation Sandstone and the La Vida Member of the Puente Formation. The landslides in the Vaqueros Sespe Formation likely involve highly fractured and sheared siltstone beds. Landslides in the La Vida Member are primarily located on north facing slopes and are probably bedding plain failures where local stream incision has undercut weak bedding planes. Other landslides mapped in the hills to the south and east may be failures along faults or fault derived fractures.

Based on the location of the Santiago Landslide and consideration of the geologic and topographic conditions of the project site and immediate vicinity, the potential for landsliding associated with the 1993 Santiago Landslide to occur at the site is considered low.

### **3.7 Earthquake-Induced Flooding**

Earthquake-induced flooding can be caused by failure of dams or other water-retaining structures as a result of earthquakes. The project site is **not** located within a flood impact zone as indicated on Figure 7, *Dam Inundation Map*. With the site located above all major water bodies in the area, the potential for seismically induced flooding to affect the site due to dam failure is negligible.

### **3.8 Seiches and Tsunamis**

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. Since no enclosed body of water is located in the vicinity of the site, the potential hazard for seiches is negligible. Tsunamis are waves generated in large bodies of water by fault displacement or major ground movement. Based on the inland location of the site and the lack of large enclosed water bodies nearby, seiche and tsunami risks are not considered hazards for the project site.

### 3.9 Flooding Hazard

According to a Federal Emergency Management Agency (FEMA) flood insurance rate map (FEMA, 2008), the site is **not** located within a flood hazard zone (Figure 8, *Flood Hazard Map*). Flooding in the vicinity of the project site is generally isolated to the main drainage channels downstream of Villa Park Dam and Walnut Canyon Reservoir. The site is located within “Zone X”, or is an area determined to be outside of the 0.2 percent annual chance floodplain (FEMA, 2008).

## 4.0 DESIGN RECOMMENDATIONS

Geotechnical recommendations for the proposed development are presented in the following sections and are intended to provide sufficient geotechnical information to develop the project in general accordance with 2016 CBC requirements. The following recommendations are considered minimal from a geotechnical viewpoint as there may be more restrictive requirements of the architect, structural engineer, governing agencies and the City of Anaheim.

The geotechnical consultant should review the grading plan, foundation plan and specifications as they become available to verify that the recommendations presented in this report have been incorporated into the plans prepared for the project.

### 4.1 Earthwork

We recommend all earthwork for the project be performed in accordance with the following recommendations, future grading plan review report(s), the City of Anaheim grading requirements. The General Earthwork and Grading Specifications provided in Appendix E may be used as guidelines to develop grading specifications. In case of conflict the following recommendations shall supersede those provided in Appendix E.

#### 4.1.1 Site Preparation

After demolition, the project site should be cleared of any vegetation, trash and debris, which should be properly disposed of offsite. Efforts should be made to remove or reroute any existing utility lines that interfere the proposed construction. Any resulting cavities should be properly backfilled and compacted.

#### 4.1.2 Site Grading

The project area is generally underlain by previously placed artificial fill overlying Tertiary age sedimentary bedrock. To provide a uniform support and reduce the potential for differential settlement, the existing artificial fill and bedrock materials should be removed and replaced with engineered fill to provide supports for the proposed building and other structural improvements. The removals should extend to a depth of at least 2 feet below the foundation bottom or 5 feet below pad grade, whichever is

deeper. It should be noted that very hard sandstone bedrock materials are likely to be encountered in the eastern portion of the site and may be encountered in the western portion of the site within the zone recommended for removal and recompaction. Where feasible, overexcavation and recompaction should extend a minimum horizontal distance of 2 feet from the edges of the foundations (i.e., approximate 1:1 projection from the bottom edges of the foundations).

Leighton should verify the vertical and lateral removal and overexcavation limits during grading as local conditions may require additional removals (i.e., encountering soft or unsuitable existing fill or other deleterious materials).

#### Subgrade Preparation

After completion of the overexcavations and prior to fill placement, the exposed soils should be scarified to a minimum depth of 4 inches, moisture conditioned to at least 2 to 4 percentage points above optimum moisture content and compacted to at least 90 percent relative compaction based on ASTM Test Method D 1557. Any soft or unsuitable earth materials encountered at the bottom of the excavations should be removed and replaced with compacted fill.

#### Fill Placement

The onsite soils, less any deleterious material (construction debris) or organic matter, can be reused as fills. Oversized material greater than 6 inches in maximum dimension should not be placed in the fill. It should be noted that excavation in the sandstone bedrock is likely to produce oversized materials. Any soil to be placed as fill, whether onsite soils or imported material, should be reviewed and possibly tested by Leighton.

All fill soils should be placed in loose lifts not exceeding 8 inches, moisture-conditioned to at least 2 to 4 percentage points above optimum moisture content, and compacted to a minimum of 90 percent of the maximum dry density as determined by ASTM Test Method D 1557. The optimum lift thickness to produce a uniformly compacted fill will depend on the type and size of compaction equipment used.

Any required import material should consist of non-corrosive and predominantly granular soils with an Expansion Index (EI) of 20 or less. The imported materials should contain sufficient fines (binder material) so as to result in a stable subgrade when compacted. All proposed import materials should be approved by the geotechnical engineer of record prior to being transported to the site.

### Shrinkage and Subsidence

The change in volume of excavated and recompacted soil varies according to soil type and location. This volume change is represented as a percentage increase (bulking) or decrease (shrinkage) in volume of fill after removal and recompaction. Field and laboratory data used in our calculations included laboratory-measured maximum dry density for the general soil type encountered at the subject site, the measured in-place densities of near surface soils encountered and our experience. We preliminarily estimate the onsite artificial fill materials requiring removal and recompaction will have a shrinkage factor of approximately 5 percent ( $\pm 3$  percent) during grading and bedrock materials requiring removal and recompaction will have a bulking factor of approximately 5 percent ( $\pm 3$  percent) during grading.

The level of fill compaction, variations in the dry density of the existing soil and bedrock and other factors influence the amount of volume change. Some adjustments to earthwork volume should be anticipated during grading of the site.

## **4.2 Trench Backfill**

Utility trenches should be backfilled with compacted fill in accordance with Sections 306-1.2 and 306-1.3 of the Standard Specifications for Public Works Construction, ("Greenbook"), 2015 Edition. Utility trenches can be backfilled with onsite material free of rubble, debris, organic and oversized material up to 3 inches in largest dimension. Prior to backfilling trenches, pipes should be bedded in and covered with either:

- (1) **Sand:** A uniform, sand material that has a Sand Equivalent (SE) greater-than-or-equal-to 30, passing the No. 4 U.S. Standard Sieve (or as specified by the pipe manufacturer), or

- (2) **CLSM:** Controlled Low Strength Material (CLSM) conforming to Section 201-6 of the *Standard Specifications for Public Works Construction*, (“Greenbook”), 2015 Edition.

Pipe bedding should extend at least 4 inches below the pipeline invert and at least 12 inches over the top of the pipeline. Native and clean fill soils can be used as backfill over the pipe bedding zone, and should be placed in thin lifts, moisture conditioned above optimum, and mechanically compacted to at least 90 percent relative compaction, relative to the ASTM D 1557 laboratory maximum density.

### **4.3 Foundation Recommendations**

Conventional shallow foundations with slab-on-grade established on engineered fill may be used to support the proposed structures. Overexcavation and recompaction of the footing subgrade soil should be performed as detailed in Section 4.1

Based on the blow counts recorded during drilling and results of the laboratory testing results, the existing fill materials below the depth of recommended overexcavation and recompaction are considered suitable to support new structures. The laboratory tests indicate that the existing fill soils exhibit a low potential for hydro-consolidation.

#### *Conventional Shallow Foundations*

The design recommendations for working stress design are as follows:

**Table 3 – Recommendations for Conventional Shallow Foundations**

	<b>Isolated Column Foundations</b>	<b>Continuous Strip Foundations</b>
Width	2 feet	1 foot
Embedment	1.0 feet	
<b>Sustained Dead plus Live Loads</b>		
Bearing Pressure	3,000 pounds per square foot (psf) May increased by 200 psf per foot increase in depth or width to a maximum of 4,000psf and 4,500 psf for strip and isolated column footing.	
Frictional Resistance	0.40	
Passive Resistance	280 pounds per cubic foot (pcf) Maximum 4,000 psf	
<b>Short-term Loads (i.e., Seismic and Wind)</b>		
Bearing pressure, friction, and passive resistance can be increased by one-third for short-term loading. The passive resistance should be reduced by one-third when combined with frictional resistance to calculate total resistance where seismically induced lateral displacement potential does not exist.		

The estimated settlement of the foundation under the recommended bearing pressure will be less than 1 inch. Because the foundation will be established in compacted fill consisting of predominately granular materials, most of the settlement will occur during construction. Furthermore, the existing fill was placed at least 45 years ago and has undergone most of the consolidation under its own weight as suggested by the consolidation test results. Therefore, we do not expect the new buildings will experience adverse effects due to long-term settlement of the fill.

#### Slab-on-Grade

Based on our subsurface explorations, the existing shallow fill materials at the site are predominately granular. Therefore, from a geotechnical standpoint, conventional slabs-on-grade should be at least 4 inches thick with No. 3 rebar placed at center of the slab at 18 inches on center at each direction. The structural engineer should design the actual thickness and reinforcement based on anticipated loading conditions in accordance with the current California Building Code (CBC) for a soil with low expansion potential. The recommended maximum joint spacing for the slab should not exceed 15 feet. Where conventional light floor loading conditions exist, the following minimum

recommendations should be used. More stringent requirements may be required by local agencies, the structural engineer, the architect, or the CBC. Laboratory testing should be conducted at finish grade to evaluate the Expansion Index (EI) of near-surface subgrade soils upon completion of grading.

The following parameters may be used to design the slab-on-grade:

**Table 4 – Recommendations for Conventional Slabs-on-Grade**

Parameters	Recommended Values
Expansion Potential	Low
Slab Thickness	4 inches (minimum)
Subgrade Reaction	200 pounds per cubic inch (pci)
Bearing Capacity	1,500 psf
<p>Maximum joint spacing should not exceed 15 feet.</p> <p>The moisture of the subgrade soils should be at 120% optimum moisture to a depth of 16 inches below the slab. The subgrade soils should be evaluated by the geotechnical engineer to verify adequate moisture conditioning has been maintained prior to pouring concrete.</p>	

Minor cracking of the concrete as it cures, due to drying and shrinkage is normal and should be expected. However, cracking is often aggravated by a high water/cement ratio, high concrete temperature at the time of placement, small nominal aggregate size, and rapid moisture loss due to hot, dry, and/or windy weather conditions during placement and curing. Cracking due to temperature and moisture fluctuations can also be expected. Low slump concrete can reduce the potential for shrinkage cracking. The structural engineer may consider using additional reinforcement in slabs and foundations to reduce the potential for concrete cracking.

Interior slabs-on-grade are recommended to be underlain by a synthetic sheeting to serve as a retarder to moisture vapor transmission in areas where moisture-sensitive floor covering (such as vinyl, tile, or carpet) or equipment is planned. The sheeting is recommended to be a minimum 15-mil thick Stego® Wrap installed per manufacturer's specifications. Prior to installing the synthetic sheeting, the

exposed subgrade surface should be clear of all extruding rock and gravel that could damage the sheeting. The sheeting should be evaluated for the presence of punctures or tears by the installer prior to pouring concrete. Installation of the sheeting should include proper overlap and taping of seams.

Leighton does not practice in the field of moisture vapor transmission evaluation, since this is not specifically a geotechnical issue. Therefore, we recommend that a qualified person, such as the flooring subcontractor and/or structural engineer, be consulted with to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction. That person should provide recommendations for mitigation of potential adverse impact of moisture vapor transmission on various components of the structures as deemed appropriate.

These recommended design parameters are based on responsibly maintained improvements. Such improvements include properly designed planters, if adjacent to structures. In utilizing these parameters, the structural engineer should design the foundation system to the acceptable deflection criteria determined by the architect.

We recommend that soil moisture around the immediate perimeter of the slab be maintained near optimum-moisture content (or above) during construction and up to occupancy of the structures.

Our recommendations assume a reasonable degree of owner responsibility. Property owners should be informed and educated regarding the importance of maintaining a constant level of soil moisture. Owners should be made aware of the potential negative consequences of both excessive watering, as well as allowing expansive soils to become too dry (i.e., the soil will undergo shrinkage as it dries up, followed by swelling during the rainy season or when irrigation is resumed, resulting in potential distress to improvements and structures). Planters should not be located adjacent to foundations unless they are properly designed with drainage. Trees should also not be planted adjacent to foundations. Lawn and other landscaped areas should have proper drainage, and should not allow water to pond adjacent to structures. If the owners do not adequately maintain correct irrigation and drainage, some degree of foundation movement may occur.

#### 4.4 Surface Drainage

Positive drainage of surface water away from structures is very important. Water should not be allowed to pond adjacent to buildings. Positive drainage may be accomplished by providing drainage away from buildings a minimum of 2 percent for earthen surfaces for a lateral distance of at least five feet and further maintained by a swale or drainage path at a gradient of at least 1 percent. Where necessary, drainage paths may be shortened by the use of area drains and collector pipes. Eave gutters are recommended and should reduce water infiltration into the subgrade materials. Downspouts should be connected to appropriate outlet devices.

Irrigation of landscaping should be controlled to maintain, as much as possible, consistent moisture content sufficient to provide healthy plant growth without over watering.

#### 4.5 Corrosion Protection Measures

For screening purposes, a representative near-surface bulk soil sample was tested for corrosivity to preliminarily evaluate corrosion potential to buried concrete (e.g., footings, retaining walls) and buried ferrous pipes. The chemical analysis test results are included in Appendix B of this report and are summarized in the table below:

**Table 5 – Corrosivity Test Results**

Test Parameter	Test Results	General Classification of Hazard
Water-Soluble Sulfate in Soil (ppm)	91	Negligible sulfate exposure to buried concrete
Water-Soluble Chloride in Soil (ppm)	11	Non-corrosive to buried concrete
pH	7.74	Mildly alkaline
Minimum Resistivity (saturated, ohm-cm)	2400	Corrosive to buried ferrous pipes (per Caltrans)

Based on the measured water-soluble sulfate content from the tested soil sample, concrete in contact with the soil is expected to have negligible exposure to sulfate attack per ACI 318-11. The sample tested for water-soluble chloride

content indicate a low potential for corrosion of steel in concrete due to the chloride content of the soil. Therefore, common Type II cement may be used for concrete construction onsite and the concrete should be designed in accordance with CBC 2016 requirements. Type V cement should be used for concrete exposed to recycled water.

The results of the resistivity test indicate that the underlying soil is corrosive to buried ferrous metals per ASTM STP 1013. A registered corrosion engineer may be consulted to provide specific mitigation measures for protection of buried metals in direct contact with onsite soils.

#### 4.6 **Retaining Walls**

We recommend that retaining walls be backfilled with very low expansive soil and constructed with a backdrain in accordance with the recommendations provided on Figure 9, *Retaining Wall Backfill and Subdrain Detail*. Using expansive soil as retaining wall backfill will result in higher lateral earth pressures exerted on the wall.

Based on these recommendations, the following parameters may be used for the design of conventional retaining walls:

- Active Pressure Coefficient,  $k_a$  : 0.307
- At-rest Pressure Coefficient,  $k_0$  : 0.441
- Seismic Pressure Coefficient,  $k_E$  : 0.41 (for walls taller than 12 feet)

The passive pressure coefficient for a level ground surface is as follows:

- Passive Pressure Coefficient,  $k_p$  : 3.537

The equivalent fluid pressure (EFP) can be calculated using a moist unit weight of 120 pounds per cubic foot (pcf) for the onsite granular soils. The seismic pressure should be applied as an invert triangle with the resultant at 0.6 times the height of the wall.

Recommendations for strip foundation presented in Section 4.3 may be used for designing the foundations for free-standing retaining walls.

In addition to the above lateral forces due to retained earth, surcharge due to improvements, such as an adjacent structure or traffic loading, should be considered in the design of the retaining wall. Loads applied within a 1:1 projection from the surcharging structure on the stem of the wall should be considered in the design.

#### **4.7 Concrete Flatwork**

Exterior concrete slabs-on-grade should have a minimum thickness of 4 inches. Common Type II cement should be adequate for concrete flatwork not exposed to recycled water. Type V cement should be used for concrete exposed to recycled water. Concrete flatwork should be placed on previously compacted fill. If this material has been disturbed, the subgrade soil to a depth of 12 inches should be moisture conditioned to slightly above optimum moisture content and recompacted to minimum 90 percent relative compaction.

Exterior concrete driveways, ramps, curbs, gutters, sidewalks, patio slabs, and swimming pool decks, often crack. Inclusion of joints at frequent intervals and reinforcement will help control the locations of the cracks, and thus reduce *the* unsightly appearance. Construction or weakened plane joints should be spaced at intervals of 8 feet or less for driveways, ramps, sidewalks, patio slabs, pool decks, curbs and gutters. If cracking occurs, repairs may be needed to mitigate the trip hazard and/or improve the appearance.

Cracking of concrete is often not due to settlement or heave of soils, but often due to other factors such as the use of too high a water/cement ratio and/or inadequate steps being taken to prevent moisture loss during curing. These causes of concrete distress can be reduced by proper design of the concrete mix, and by proper placement and curing of the concrete.

#### **4.8 Additional Geotechnical Services**

The geotechnical recommendations presented in this report are based on subsurface conditions as interpreted from limited subsurface explorations, limited laboratory testing and information available at the time the report is prepared. Additional geotechnical investigation and analysis may be required based on final improvement plans. Leighton should review the site and grading plans when available and comment further on the geotechnical aspects of the project.

Geotechnical observation and testing should be conducted during excavation and all phases of grading operations. Our conclusions and recommendations should be reviewed and verified by Leighton during construction and revised accordingly if geotechnical conditions encountered vary from our preliminary findings and interpretations.

Geotechnical observation and testing should be provided during the following activities:

- Grading and excavation of the site;
- During overexcavation and removal of unsuitable soil;
- Subgrade preparation;
- Compaction of all fill materials;
- Utility trench backfilling and compaction;
- Footing excavation and slab-on-grade preparation;
- Pavement subgrade and base preparation;
- Placement of asphalt concrete and/or concrete; and
- When any unusual conditions are encountered.

## 5.0 LIMITATIONS

This report was based solely on data obtained from a limited number of geotechnical exploration, and soil samples and tests. Such information is, by necessity, incomplete. The nature of many sites is such that differing soil or geologic conditions can be present within small distances and under varying climatic conditions. Changes in subsurface conditions can and do occur over time. Therefore, the findings, conclusions, and recommendations presented in this report are only valid if Leighton has the opportunity to observe subsurface conditions during grading and construction, to confirm that our preliminary data are representative for the site. Leighton should also review the construction plans and project specifications, when available, to comment on the geotechnical aspects.

This report was prepared using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical consultants practicing in this or similar localities. The findings, conclusion, and recommendations included in this report are considered preliminary and are subject to verification. We do not make any warranty, either expressed or implied.

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# Important Information about This

# Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

**The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can construction project.**

## Geotechnical-Engineering Services Are Performed for

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical-engineering report prepared for a different client can be seriously misled.* No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one – not even you – should apply this report for any purpose or project except the one originally contemplated.*

## Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full.*

## You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk-management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities.

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.*

## This Report May Not Be Reliable

*Do not rely on this report* if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical-engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an "apply-by" date on the report, ask what it should be, and, in general, if you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying it.* A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.

## Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.

## This Report's Recommendations Are

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

## This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design-team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

## Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only*. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may

perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

## Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely*. Ask questions. Your geotechnical engineer should respond fully and frankly.

## Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures*. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. As a general rule, *do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old*.

## Obtain Professional Assistance to Deal with Moisture

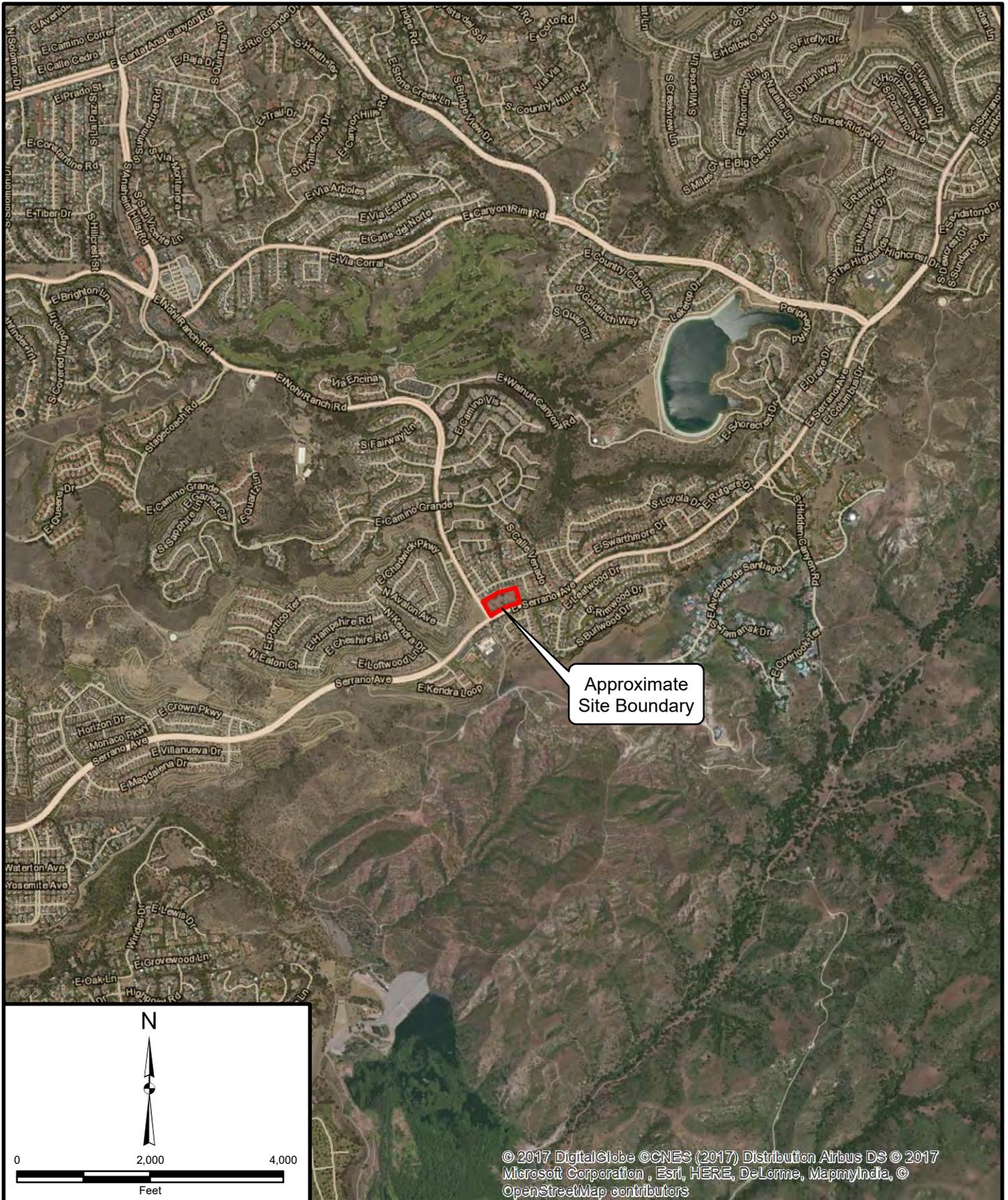
While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration*. Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists*.



Telephone: 301/565-2733

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Project: 11737.001	Eng/Geol: VPI/JMP
Scale: 1" = 2,000'	Date: October 2017
Base Map: ESRI ArcGIS Online 2017 Thematic Information: Leighton Author: Leighton Geomatics (btran)	

# SITE LOCATION MAP

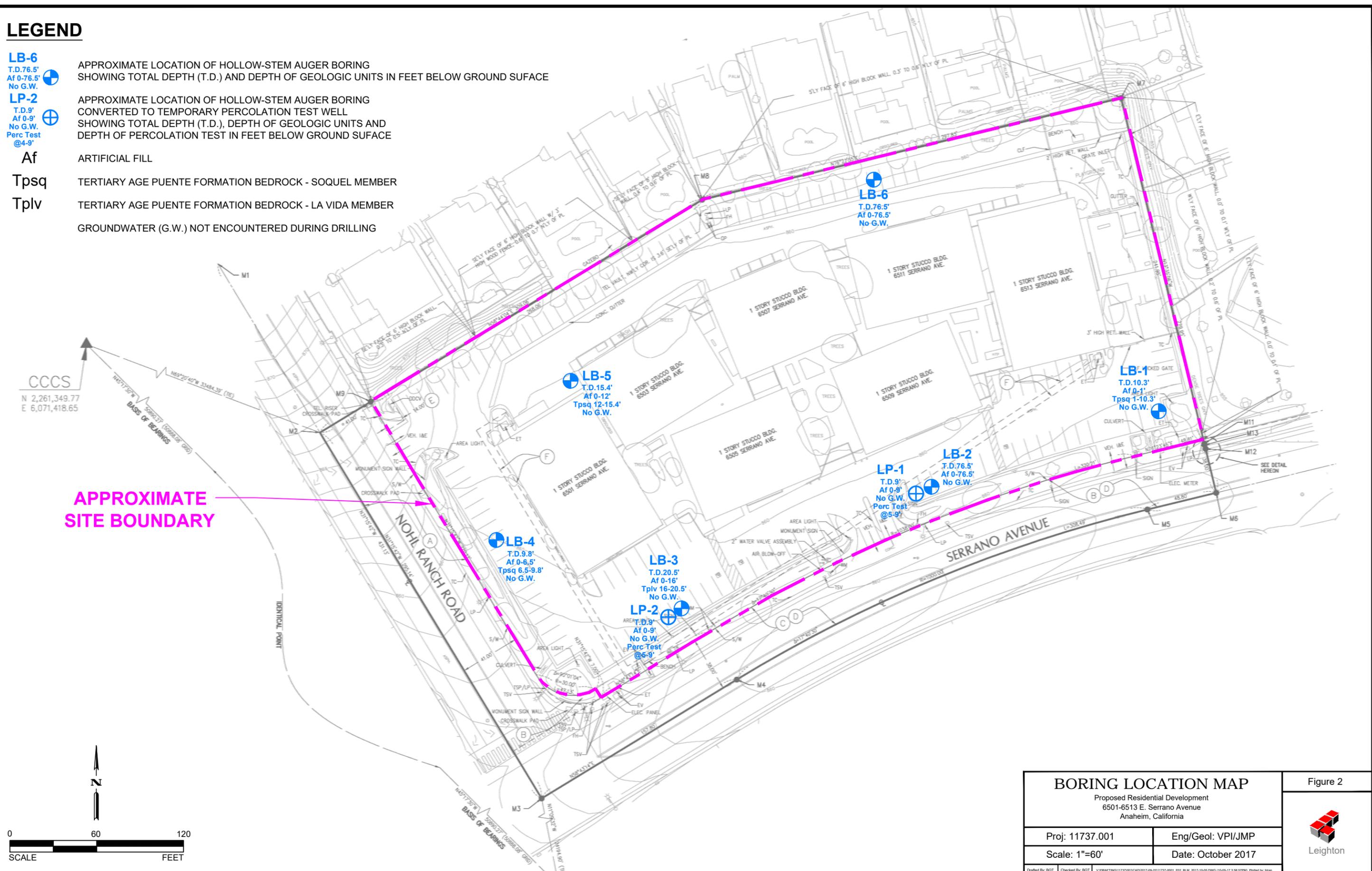
Proposed Residential Development  
6501-6513 E. Serrano Avenue  
Anaheim, California

Figure 1

Leighton

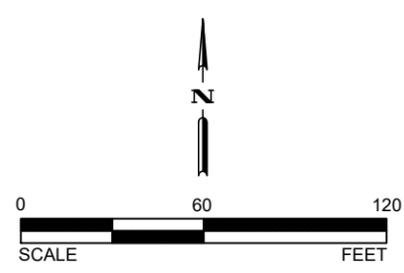
# LEGEND

- LB-6**  
T.D. 76.5'  
Af 0-76.5'  
No G.W. 
- LP-2**  
T.D. 9'  
Af 0-9'  
No G.W.  
Perc Test @4-9' 
- Af** ARTIFICIAL FILL
- Tpsq** TERTIARY AGE PUENTE FORMATION BEDROCK - SOQUEL MEMBER
- Tplv** TERTIARY AGE PUENTE FORMATION BEDROCK - LA VIDA MEMBER
- GROUNDWATER (G.W.) NOT ENCOUNTERED DURING DRILLING



CCCS  
N 2,261,349.77  
E 6,071,418.65

APPROXIMATE  
SITE BOUNDARY

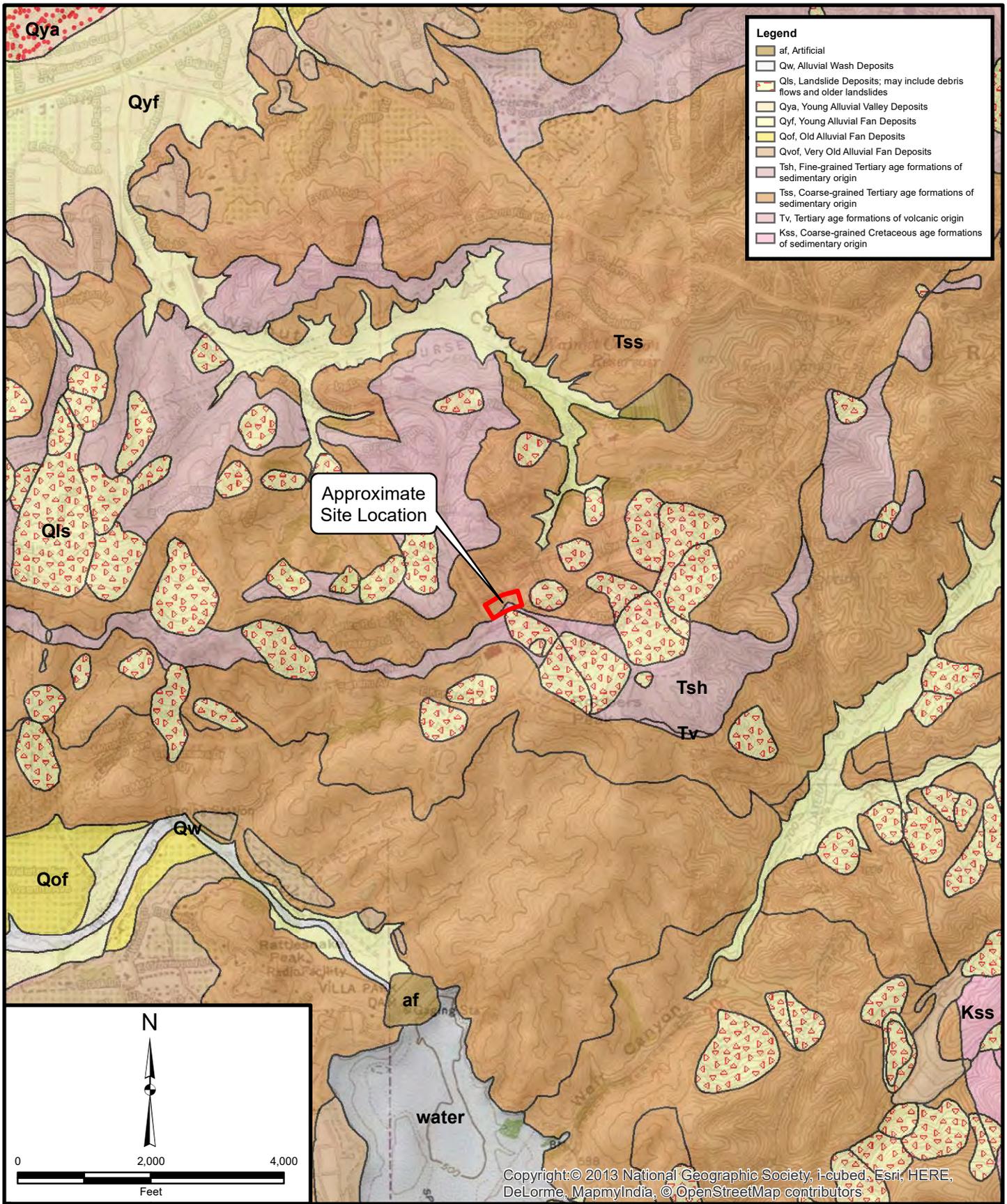


BORING LOCATION MAP	
Proposed Residential Development 6501-6513 E. Serrano Avenue Anaheim, California	
Proj: 11737.001	Eng/Geol: VPI/JMP
Scale: 1"=60'	Date: October 2017
<small>Drafted By: BOT    Checked By: BOT    V:\DRAFT\11737\001\CAD\2017-09-20\11737-0001_F02_BLM_2017-10-05.DWG (10-05-17 3:58:57PM) Plotted by: bman</small>	

Figure 2



Leighton



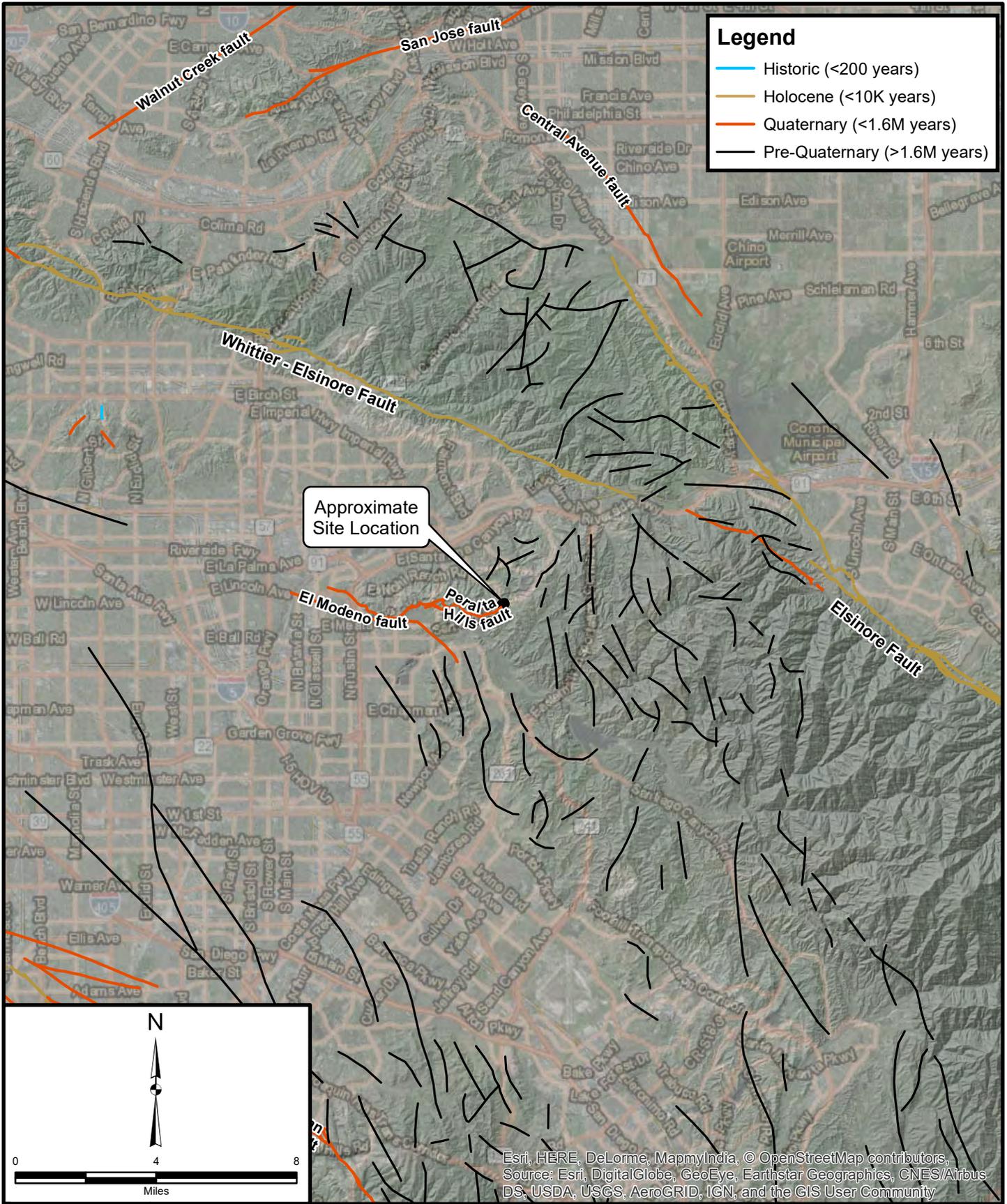
Project: 11737.001	Eng/Geol: VPI/JMP
Scale: 1" = 2,000'	Date: October 2017
Base Map: ESRI ArcGIS Online 2017 Thematic Information: Leighton, USGS Author: Leighton Geomatics (btran)	

## REGIONAL GEOLOGY MAP

Proposed Residential Development  
6501-6513 E. Serrano Avenue  
Anaheim, California

Figure 3

Leighton



**Legend**

- Historic (<200 years)
- Holocene (<10K years)
- Quaternary (<1.6M years)
- Pre-Quaternary (>1.6M years)

Approximate Site Location

N

0 4 8

Miles

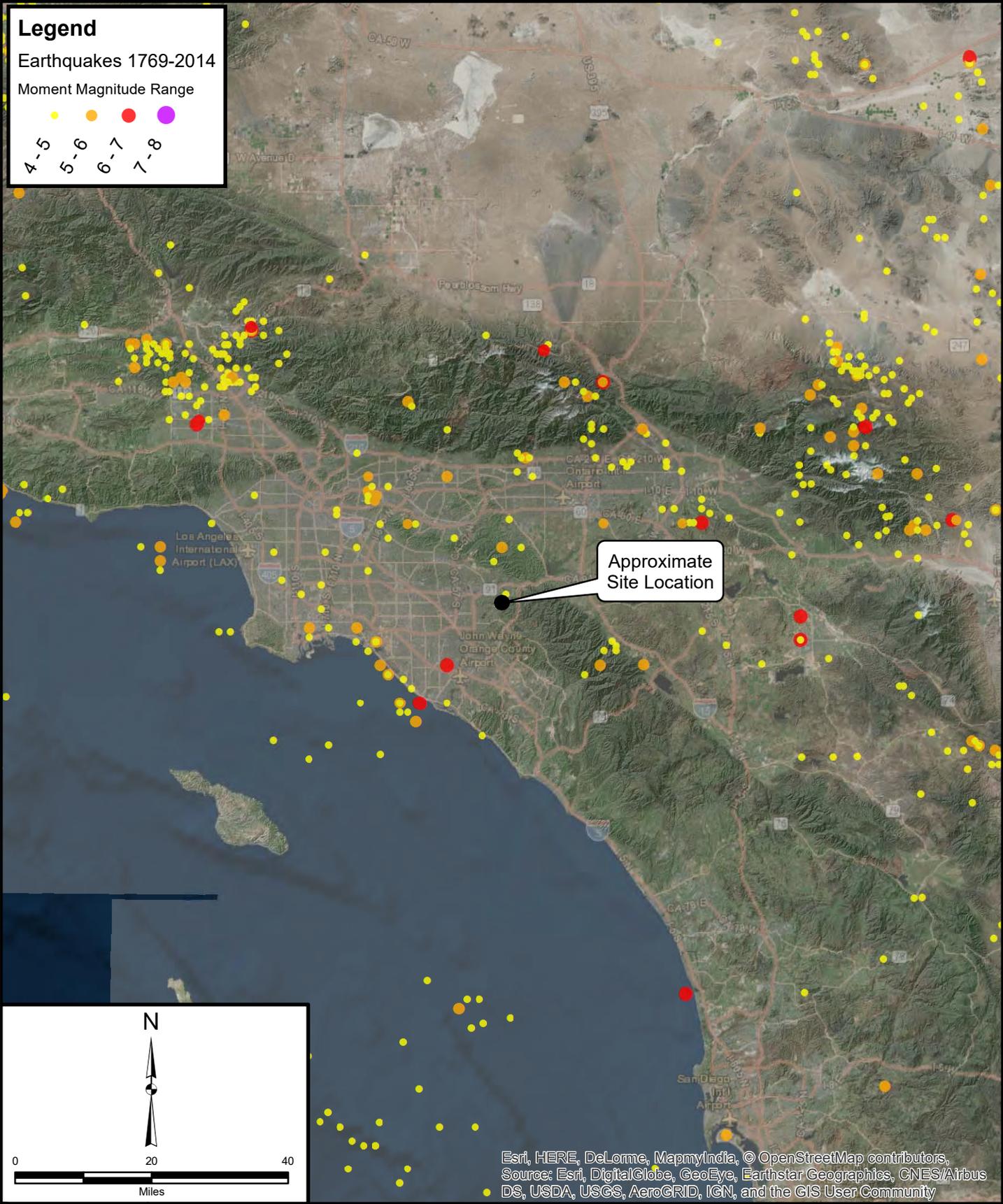
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Project: 11737.001	Eng/Geol: VPI/JMP
Scale: 1" = 4 miles	Date: October 2017
Base Map: ESRI ArcGIS Online 2017 Thematic Information: Leighton, Bryant, W. A. (compiler), 2005, Digital Database of Quaternary and Younger Faults from the Fault Activity Map of California, version 2.0; CGS Author: Leighton Geomatics (btran)	

**REGIONAL FAULT MAP**  
 Proposed Residential Development  
 6501-6513 E. Serrano Avenue  
 Anaheim, California

Figure 4

Leighton



**Legend**

Earthquakes 1769-2014

Moment Magnitude Range

4-5    5-6    6-7    7-8

Approximate Site Location

N

0    20    40

Miles

Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors,  
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
 DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Project: 11737.001	Eng/Geol: VPI/JMP
Scale: 1" = 20 miles	Date: October 2017
Base Map: ESRI ArcGIS Online 2017 Thematic Information: Leighton, USGS, SCEC Author: Leighton Geomatics (btran)	

# HISTORIC SEISMICITY MAP

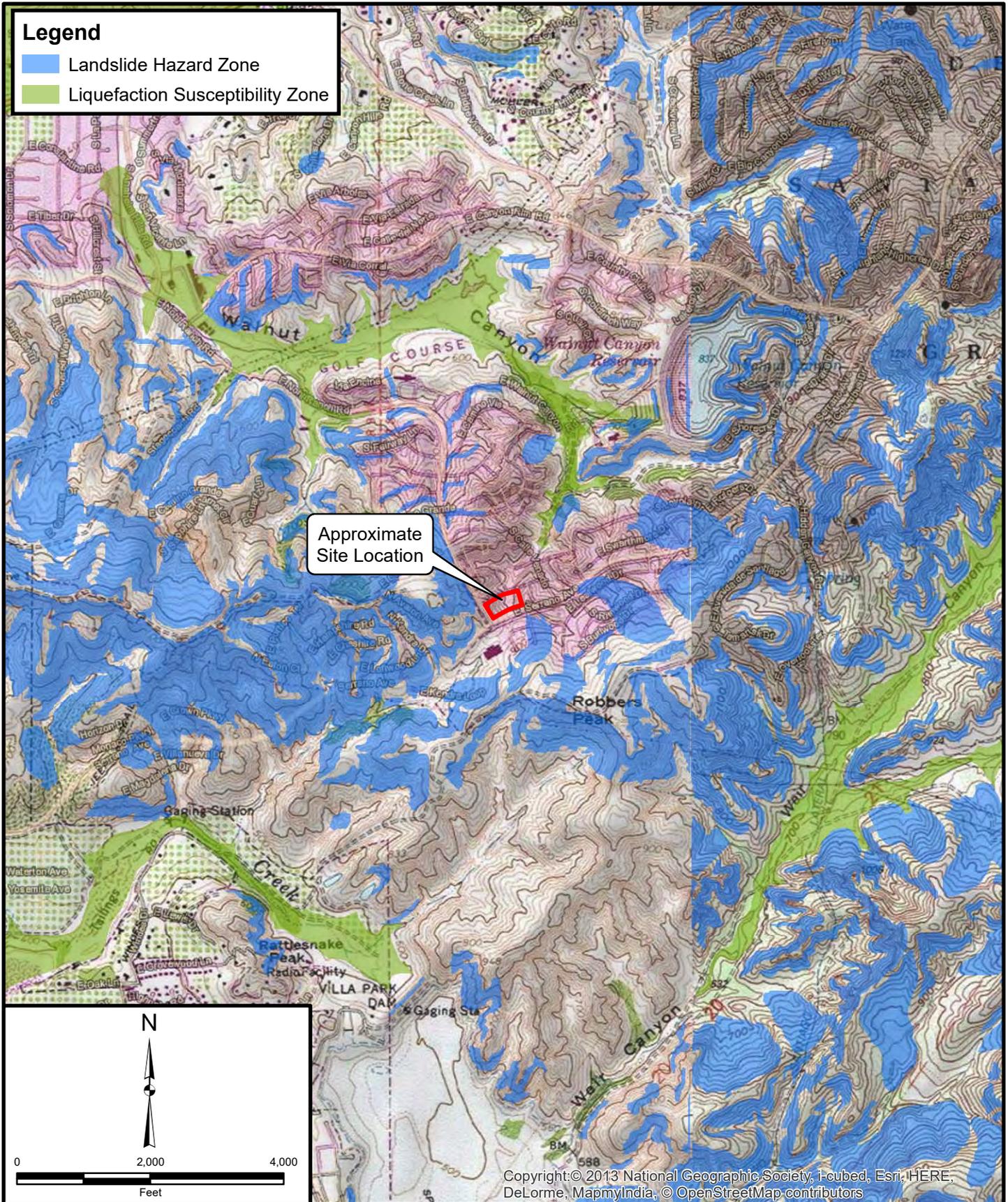
Proposed Residential Development  
 6501-6513 E. Serrano Avenue  
 Anaheim, California

Figure 5

Leighton

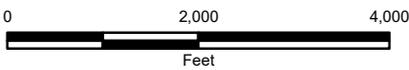
**Legend**

- Landslide Hazard Zone
- Liquefaction Susceptibility Zone



Approximate Site Location

N



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Project: 11737.001	Eng/Geol: VPI/JMP
Scale: 1" = 2,000'	Date: October 2017
Base Map: ESRI ArcGIS Online 2017 Thematic Information: Leighton, CGS Author: Leighton Geomatics (btran)	

# SEISMIC HAZARD MAP

Proposed Residential Development  
6501-6513 E. Serrano Avenue  
Anaheim, California

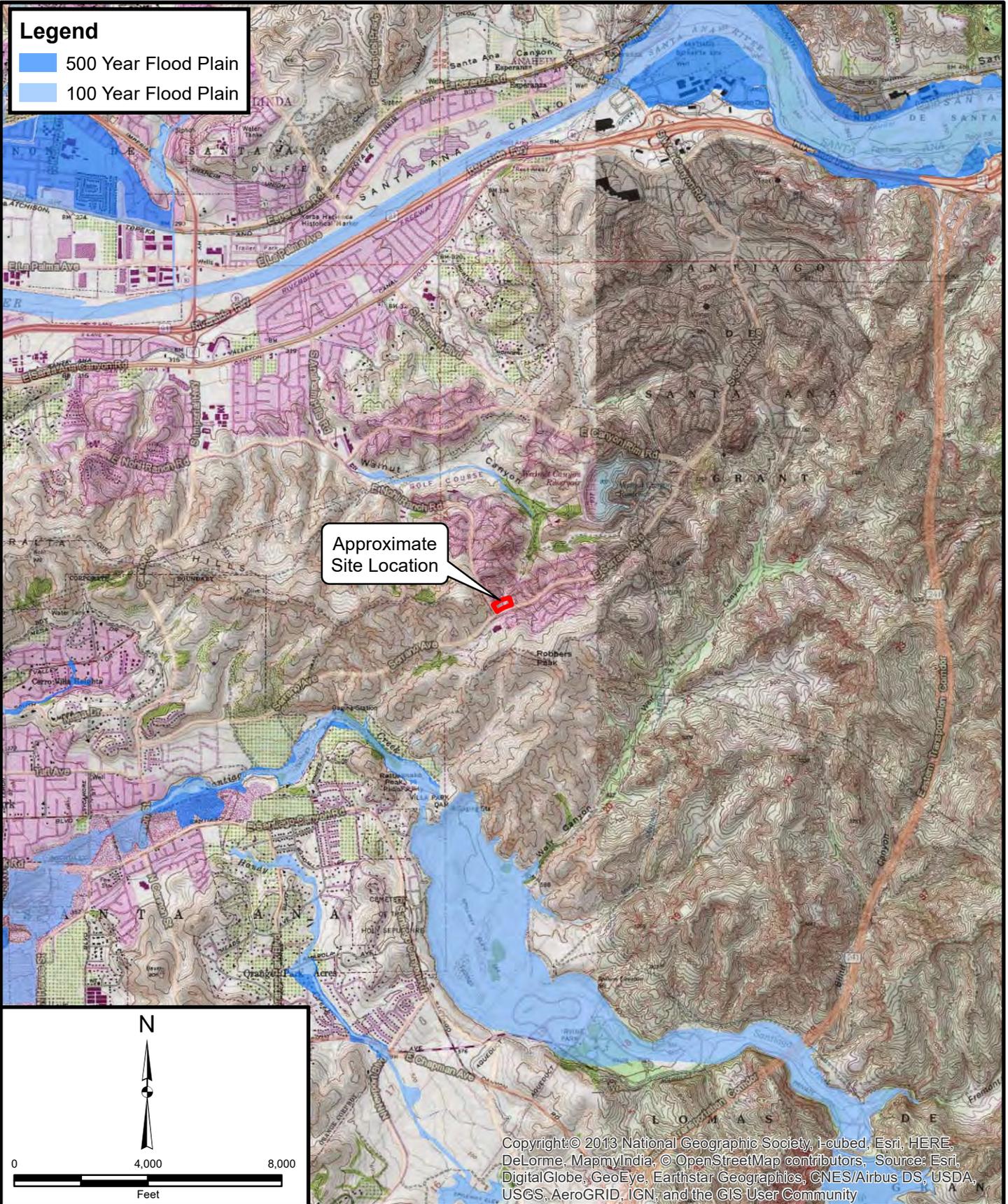
Figure 6



Leighton

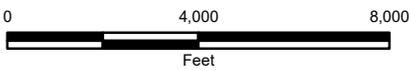
**Legend**

- 500 Year Flood Plain
- 100 Year Flood Plain



Approximate Site Location

N



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Project: 11737.001	Eng/Geol: VPI/JMP
Scale: 1" = 4,000'	Date: October 2017
Base Map: ESRI ArcGIS Online 2017 Thematic Information: Leighton, CA DWR, FEMA Author: Leighton Geomatics (btran)	

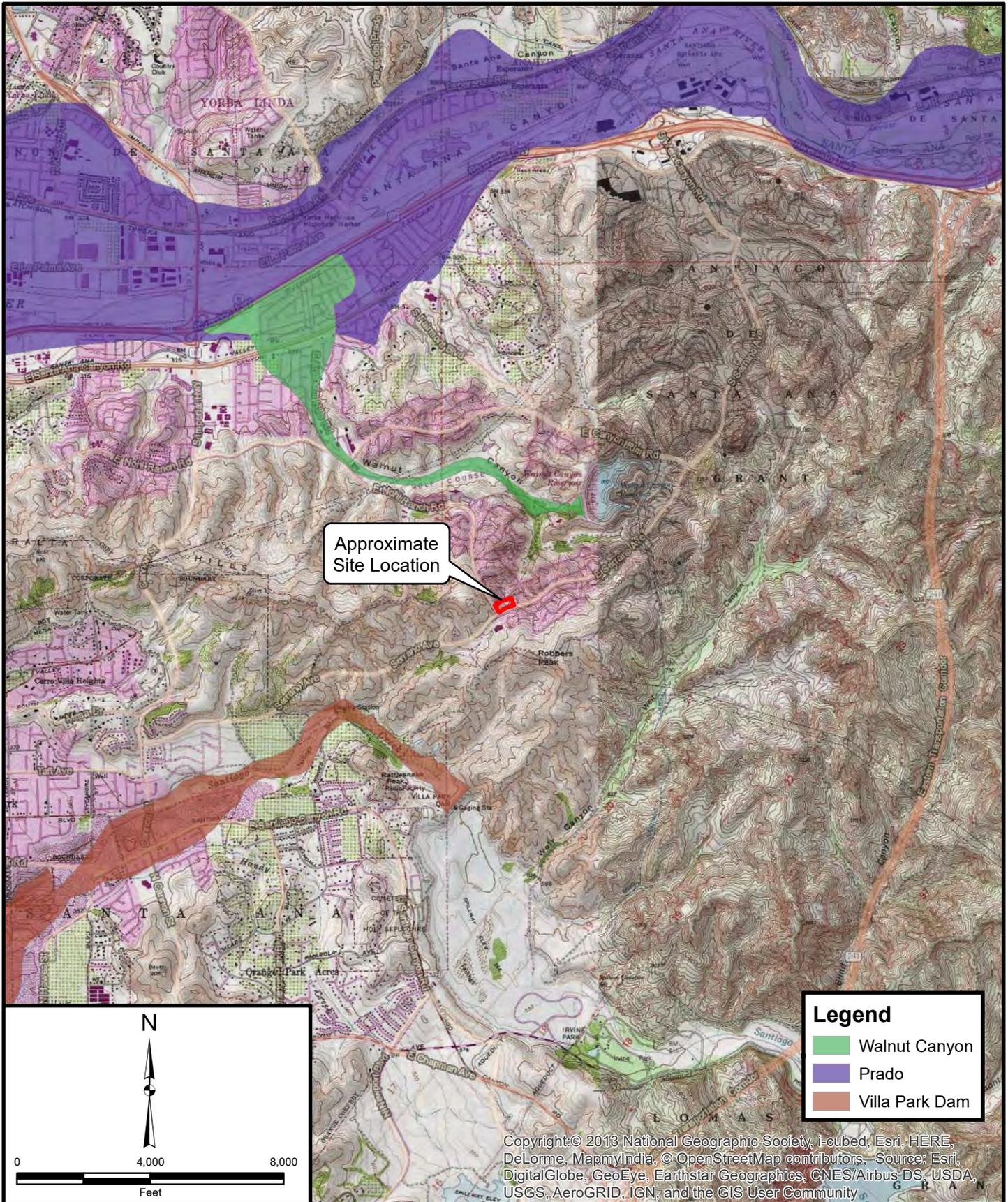
# FLOOD HAZARD ZONE MAP

Proposed Residential Development  
6501-6513 E. Serrano Avenue  
Anaheim, California

Figure 7



Leighton



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Project: 11737.001	Eng/Geol: VPI/JMP
Scale: 1" = 4,000'	Date: October 2017
Base Map: ESRI ArcGIS Online 2017 Thematic Information: Leighton, CA DWR, FEMA Author: Leighton Geomatics (btran)	

# DAM INUNDATION MAP

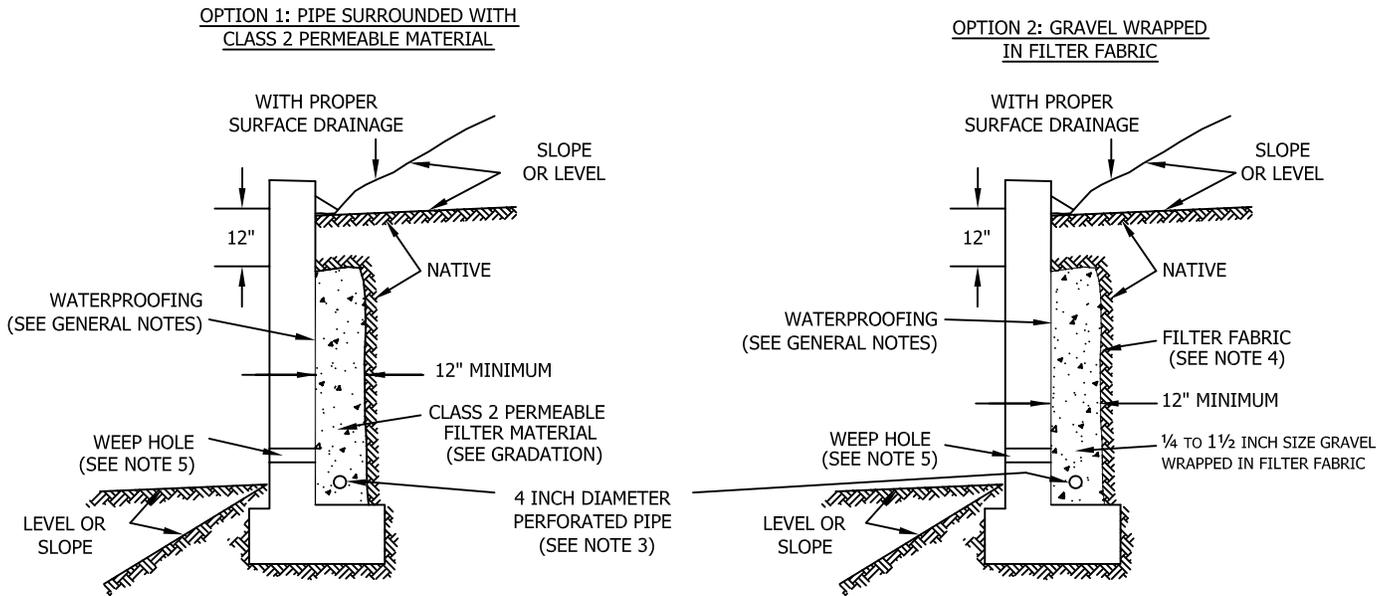
## Proposed Residential Development 6501-6513 E. Serrano Avenue Anaheim, California

Figure 8



Leighton

## SUBDRAIN OPTIONS AND BACKFILL WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF $\leq 50$



Class 2 Filter Permeable Material Gradation  
Per Caltrans Specifications

Sieve Size	Percent Passing
1"	100
3/4"	90-100
3/8"	40-100
No. 4	25-40
No. 8	18-33
No. 30	5-15
No. 50	0-7
No. 200	0-3

### GENERAL NOTES:

- \* Waterproofing should be provided where moisture nuisance problem through the wall is undesirable.
- \* Water proofing of the walls is not under purview of the geotechnical engineer
- \* All drains should have a gradient of 1 percent minimum
- \* Outlet portion of the subdrain should have a 4-inch diameter solid pipe discharged into a suitable disposal area designed by the project engineer. The subdrain pipe should be accessible for maintenance (rodding)
- \* Other subdrain backfill options are subject to the review by the geotechnical engineer and modification of design parameters.

### Notes:

- 1) Sand should have a sand equivalent of 30 or greater and may be densified by water jetting.
- 2) 1 Cu. ft. per ft. of 1/4- to 1 1/2-inch size gravel wrapped in filter fabric
- 3) Pipe type should be ASTM D1527 Acrylonitrile Butadiene Styrene (ABS) SDR35 or ASTM D1785 Polyvinyl Chloride plastic (PVC), Schedule 40, Armco A2000 PVC, or approved equivalent. Pipe should be installed with perforations down. Perforations should be 3/8 inch in diameter placed at the ends of a 120-degree arc in two rows at 3-inch on center (staggered)
- 4) Filter fabric should be Mirafi 140NC or approved equivalent.
- 5) Weepholes should be 3-inch minimum diameter and provided at 10-foot maximum intervals. If exposure is permitted, weepholes should be located 12 inches above finished grade. If exposure is not permitted such as for a wall adjacent to a sidewalk/curb, a pipe under the sidewalk to be discharged through the curb face or equivalent should be provided. For a basement-type wall, a proper subdrain outlet system should be provided.
- 6) Retaining wall plans should be reviewed and approved by the geotechnical engineer.
- 7) Walls over six feet in height are subject to a special review by the geotechnical engineer and modifications to the above requirements.

## RETAINING WALL BACKFILL AND SUBDRAIN DETAIL FOR WALLS 6 FEET OR LESS IN HEIGHT

WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF  $\leq 50$

A-126  
A-44



Leighton  
Figure 9

APPENDIX A  
FIELD EXPLORATION LOGS

# GEOTECHNICAL BORING LOG LB-1

**Project No.** 11737.001  
**Project** Serrano - Nohl Ranch Condos  
**Drilling Co.** Martini Drilling Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** 6501-6513 Serrano Avenue, Anaheim, CA

**Date Drilled** 8-16-17  
**Logged By** JMP  
**Hole Diameter** 8"  
**Ground Elevation** 858'  
**Sampled By** JMP

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
855	0	[Graphic Log: 0-5 ft]		BB-1					@surface: 5-inches asphalt concrete over 5-inches aggregate base <b>Bedrock: Puente Formation - Soquel Member (Tpsq):</b> @0.8': SANDSTONE, gray brown to orange brown, moist, dense, fine to medium sand	DS, CR, MD, RV, SA
850	5	[Graphic Log: 5-10 ft]		R1	33 50/4"				@5': very dense	
845	10	[Graphic Log: 10-15 ft]		R2	50/4"				@10': limited recovery in sampler shoe only	
840	15								Total Depth of Boring: 10.3 feet bgs No groundwater encountered during drilling Boring backfilled with soil cuttings and patched with cold-mix asphalt	
835	20									
830	25									
830	30									

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LB-2

**Project No.** 11737.001  
**Project** Serrano - Nohl Ranch Condos  
**Drilling Co.** Martini Drilling Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** 6501-6513 Serrano Avenue, Anaheim, CA

**Date Drilled** 8-16-17  
**Logged By** JMP  
**Hole Diameter** 8"  
**Ground Elevation** 859'  
**Sampled By** JMP

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
	0	N S		BB-1				SM	@surface: 5.5-inches asphalt concrete over 3-inches aggregate base <b>Artificial Fill (Af):</b> @0.7': Silty SAND, orange brown, moist, tight, fine to medium sand, material derived from local bedrock	SA
855	5			R1	10 11 12	104	21	CL-SC	@5': Sandy CLAY to Clayey SAND, orange brown, moist, stiff/medium dense, some siltstone clasts	
850	10			S1	10 7 10			SM	@7.5': Silty SAND with clay, orange brown, slightly moist to moist, medium dense, fine to medium sand	
845	15			R2	11 14 31	117	13		@10': Silty SAND with clay, orange brown, moist, medium dense, fine to medium sand, some siltstone/sandstone clasts	-200
840	20			R3	16 28 50/5"				@15': Silty SAND, orange brown, moist, very dense, fine to medium sand, some clasts of sandstone	
835	25			R4	10 24 43	119	13		@20': Silty SAND with clay, orange brown, moist, dense, fine to medium sand, some siltstone clasts	-200
830	30			R5	10 18 28			SM-ML	@25': Silty SAND to Sandy SILT, orange brown to gray brown, medium dense/very stiff, fine to medium sand, some sandstone clasts	

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
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# GEOTECHNICAL BORING LOG LB-2

**Project No.** 11737.001  
**Project** Serrano - Nohl Ranch Condos  
**Drilling Co.** Martini Drilling Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** 6501-6513 Serrano Avenue, Anaheim, CA

**Date Drilled** 8-16-17  
**Logged By** JMP  
**Hole Diameter** 8"  
**Ground Elevation** 859'  
**Sampled By** JMP

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
		N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
30		•••••		S2	2 3 7			SM	@30': Silty SAND with clay, orange brown to gray brown, moist, stiff, some siltstone/sandstone clasts	-200
825		•••••		R6	10 18 29	109	16	SM-SC	@35': Silty SAND to Clayey SAND, orange brown, moist, medium dense, fine to medium sand, some siltstone/sandstone clasts	
820		•••••		S3	7 7 11				@40': same as above	
815		•••••		R7	15 40 45			SC	@45': Clayey SAND with gravel, orange brown, very moist, hard/very dense, fine to medium sand	-200, CN
810		•••••		S4	4 5 7			CL	@50': Sandy Lean CLAY with silt, orange brown to gray brown, moist to very moist, medium stiff, some siltstone/sandstone clasts	AL
805		•••••		R8	7 20 30	99	24	SC	@55': Clayey SAND to Sandy CLAY, orange brown to gray brown, moist to very moist, dense/very stiff, fine to medium sand, some siltstone/sandstone clasts	
800		•••••								
60		•••••								

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
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- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
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# GEOTECHNICAL BORING LOG LB-2

**Project No.** 11737.001  
**Project** Serrano - Nohl Ranch Condos  
**Drilling Co.** Martini Drilling Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** 6501-6513 Serrano Avenue, Anaheim, CA

**Date Drilled** 8-16-17  
**Logged By** JMP  
**Hole Diameter** 8"  
**Ground Elevation** 859'  
**Sampled By** JMP

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	<b>SOIL DESCRIPTION</b>	Type of Tests
		N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
60				S5	6 7 9			SC	@60': Clayey SAND, orange brown, moist to very moist, medium dense, some siltstone/sandstone clasts	-200
795				R9	7 16 37	96	28	SM	@65': Silty SAND, gray to bluish green, moist to very moist, very dense, fine to medium sand, abundant siltstone/sandstone clasts	
790				S6	4 9 12			CL	@70': Sandy Lean CLAY, gray to orange brown, moist to very moist, very stiff, with abundant siltstone/sandstone clasts	-200
785				R10	8 24 34	97	27		@75': Silty CLAY, gray brown to bluish green, moist to very moist, hard, with siltstone clasts	
780									Total Depth of Boring: 76.5 feet bgs No groundwater encountered during drilling Boring backfilled with soil cuttings and patched with cold-mix asphalt	
80										
775										
85										
770										
90										

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
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- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LB-3

**Project No.** 11737.001  
**Project** Serrano - Nohl Ranch Condos  
**Drilling Co.** Martini Drilling Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** 6501-6513 Serrano Avenue, Anaheim, CA

**Date Drilled** 8-16-17  
**Logged By** JMP  
**Hole Diameter** 8"  
**Ground Elevation** 859'  
**Sampled By** JMP

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
855	0	[Diagonal Hatching]		BB1				SM	@surface: 3.5-inches asphalt concrete over 3-inches aggregate base <b>Artificial Fill (Af):</b> @0.6': Silty SAND with clay, orange brown to gray brown, moist, tight, fine to medium sand	SA
850	5	[Diagonal Hatching]		R1	5 21 45			CL-SC	@5': Sandy CLAY to Clayey SAND, orange brown to brown, moist, hard/dense, fine to medium sand	
		[Dotted Pattern]		S1	8 9 10			SM	@7.5': Silty SAND, orange brown to gray, moist, medium dense, fine to medium sand, some siltstone/sandstone clasts	
845	10	[Dotted Pattern]		R2	16 21 27				@10': Silty SAND, orange brown to blue gray, moist, dense, fine to medium sand, some siltstone/sandstone clasts	
		[Diagonal Hatching]		R3	8 35 50/2"			CL	@15': Sandy CLAY, orange brown, moist, stiff, fine sand, some siltstone/sandstone clasts <b>Bedrock: Puente Formation - La Vida Member (Tplv):</b> @16': SILTSTONE, gray to orange brown, slightly moist, hard	
840	20	[Dotted Pattern]		R4	50/5"				@20': SILTSTONE, orange brown to gray, slightly moist, hard, oxidized	
835	25	[Dotted Pattern]							Total Depth of Boring: 20.5 feet bgs No groundwater encountered during drilling Boring backfilled with soil cuttings and patched with cold-mix asphalt	
830	30	[Dotted Pattern]								

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LB-4

**Project No.** 11737.001  
**Project** Serrano - Nohl Ranch Condos  
**Drilling Co.** Martini Drilling Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** 6501-6513 Serrano Avenue, Anaheim, CA

**Date Drilled** 8-16-17  
**Logged By** JMP  
**Hole Diameter** 8"  
**Ground Elevation** 860'  
**Sampled By** JMP

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
<i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i>										
860	0	N S							@surface: 3.5-inches asphalt concrete over 3-inches aggregate base <b>Artificial Fill (Af):</b> @0.6': Silty SAND, orange brown, slightly moist, tight, fine to medium sand, few gravels	
855	5			R1	11 15 20			SM	@5': Silty SAND, orange brown to gray brown, slightly moist, medium dense, fine to medium sand, some sandstone clasts	SA
				R2	50/5"				<b>Bedrock: Puente Formation - Soquel Member (Tpsq):</b> @6.5': harder drilling, approximate bedrock contact assumed @8': no recovery, hard	
850	10			S1	37 50/4"				@9': SANDSTONE, light yellow brown, slightly moist, hard, fine to medium sand	
Total Depth of Boring: 9.8 feet bgs No groundwater encountered during drilling Boring backfilled with soil cuttings and patched with cold-mix asphalt										
845	15									
840	20									
835	25									
830	30									

- |   |  |   |  |
|---|--|---|--|
| <b>SAMPLE TYPES:</b><br>B BULK SAMPLE<br>C CORE SAMPLE<br>G GRAB SAMPLE<br>R RING SAMPLE<br>S SPLIT SPOON SAMPLE<br>T TUBE SAMPLE | <b>TYPE OF TESTS:</b><br>-200 % FINES PASSING<br>AL ATTERBERG LIMITS<br>CN CONSOLIDATION<br>CO COLLAPSE<br>CR CORROSION<br>CU UNDRAINED TRIAXIAL | DS DIRECT SHEAR<br>EI EXPANSION INDEX<br>H HYDROMETER<br>MD MAXIMUM DENSITY<br>PP POCKET PENETROMETER<br>RV R VALUE | SA SIEVE ANALYSIS<br>SE SAND EQUIVALENT<br>SG SPECIFIC GRAVITY<br>UC UNCONFINED COMPRESSIVE STRENGTH |
|---|--|---|--|



# GEOTECHNICAL BORING LOG LB-5

**Project No.** 11737.001  
**Project** Serrano - Nohl Ranch Condos  
**Drilling Co.** Martini Drilling Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** 6501-6513 Serrano Avenue, Anaheim, CA

**Date Drilled** 8-16-17  
**Logged By** JMP  
**Hole Diameter** 8"  
**Ground Elevation** 861'  
**Sampled By** JMP

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
860	0	[Graphic Log Symbols]		BB1				SM	@surface: 3.5-inches asphalt concrete over 3-inches aggregate base <b>Artificial Fill (Af):</b> @0.6': Silty SAND, medium brown to orange brown, moist, tight, fine to medium sand, few gravels	SA
855	5	[Graphic Log Symbols]		R1	11 13 17				@5': Silty SAND, medium brown to orange brown, moist, medium dense, fine to medium sand, some fine siltstone/sandstone clasts	
850	10	[Graphic Log Symbols]		R2	17 40 41				@10': dense	
									<b>Bedrock: Puente Formation - Soquel Member (Tpsq):</b> @12': harder drilling, approximate bedrock contact assumed	
845	15	[Graphic Log Symbols]		R3	50/5"				@15': SANDSTONE, light gray with orange oxidation, moist, hard, fine to medium sand	
									Total Depth of Boring: 15.4 feet bgs No groundwater encountered during drilling Boring backfilled with soil cuttings and patched with cold-mix asphalt	
840	20	[Graphic Log Symbols]								
835	25	[Graphic Log Symbols]								
	30	[Graphic Log Symbols]								

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LB-6

**Project No.** 11737.001  
**Project** Serrano - Nohl Ranch Condos  
**Drilling Co.** Martini Drilling Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** 6501-6513 Serrano Avenue, Anaheim, CA

**Date Drilled** 8-16-17  
**Logged By** JMP  
**Hole Diameter** 8"  
**Ground Elevation** 860'  
**Sampled By** JMP

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
860	0	N S		BB1				SM	This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.  @surface: 2.5-inches asphalt concrete over 3.5-inches aggregate base <b>Artificial Fill (Af):</b> @0.6': Silty SAND, medium orange brown, moist, tight, fine to medium sand	
855	5			R1	14 27 50/5"	119	10		@5': Silty SAND, orange brown, moist, very dense, fine to medium sand, some sandstone clasts	
850	10			R2	10 21 48				@10': some large siltstone clasts	
845	15			R3	9 15 21	95	23	SC-CL	@15': Clayey SAND to Sandy CLAY, orange brown to gray, moist, medium dense/very stiff, some siltstone clasts	
840	20			R4	8 31 50/5"			SM	@20': Silty SAND, orange brown, moist, very dense, fine to medium sand, some sandstone clasts	
835	25			R5	20 50/6"	116	12			
830	30									

- |   |  |   |  |
|---|--|---|--|
| <b>SAMPLE TYPES:</b><br>B BULK SAMPLE<br>C CORE SAMPLE<br>G GRAB SAMPLE<br>R RING SAMPLE<br>S SPLIT SPOON SAMPLE<br>T TUBE SAMPLE | <b>TYPE OF TESTS:</b><br>-200 % FINES PASSING<br>AL ATTERBERG LIMITS<br>CN CONSOLIDATION<br>CO COLLAPSE<br>CR CORROSION<br>CU UNDRAINED TRIAXIAL | DS DIRECT SHEAR<br>EI EXPANSION INDEX<br>H HYDROMETER<br>MD MAXIMUM DENSITY<br>PP POCKET PENETROMETER<br>RV R VALUE | SA SIEVE ANALYSIS<br>SE SAND EQUIVALENT<br>SG SPECIFIC GRAVITY<br>UC UNCONFINED COMPRESSIVE STRENGTH |
|---|--|---|--|



\*\*\* This log is a part of a report by Leighton and should not be used as a stand-alone document. \*\*\*

# GEOTECHNICAL BORING LOG LB-6

**Project No.** 11737.001  
**Project** Serrano - Nohl Ranch Condos  
**Drilling Co.** Martini Drilling Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** 6501-6513 Serrano Avenue, Anaheim, CA

**Date Drilled** 8-16-17  
**Logged By** JMP  
**Hole Diameter** 8"  
**Ground Elevation** 860'  
**Sampled By** JMP

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.										
830	30			R6	22 42 50/5"			SM-SC	@30': Silty SAND to Clayey SAND, orange brown, moist, very dense, fine to medium sand, some fine siltstone/sandstone clasts	
825	35		R7	15 28 49	117	14	@35': dense, abundant siltstone			
820	40		R8	38 38 42			@40': dense, abundant siltstone/sandstone clasts			
815	45		R9	7 21 50/4"	116	14	@45': orange brown to blue gray, dense, abundant siltstone/sandstone clasts			
810	50		R10	50/4"			@50': no recovery, possible cobble at head of auger			
805	55		R11	25 50/6"			@55': no recovery, possible cobble at head of auger			
800	60									

**SAMPLE TYPES:**  
 B BULK SAMPLE  
 C CORE SAMPLE  
 G GRAB SAMPLE  
 R RING SAMPLE  
 S SPLIT SPOON SAMPLE  
 T TUBE SAMPLE

**TYPE OF TESTS:**  
 -200 % FINES PASSING  
 AL ATTERBERG LIMITS  
 CN CONSOLIDATION  
 CO COLLAPSE  
 CR CORROSION  
 CU UNDRAINED TRIAXIAL

DS DIRECT SHEAR  
 EI EXPANSION INDEX  
 H HYDROMETER  
 MD MAXIMUM DENSITY  
 PP POCKET PENETROMETER  
 RV R VALUE

SA SIEVE ANALYSIS  
 SE SAND EQUIVALENT  
 SG SPECIFIC GRAVITY  
 UC UNCONFINED COMPRESSIVE STRENGTH



\*\*\* This log is a part of a report by Leighton and should not be used as a stand-alone document. \*\*\*

# GEOTECHNICAL BORING LOG LB-6

**Project No.** 11737.001  
**Project** Serrano - Nohl Ranch Condos  
**Drilling Co.** Martini Drilling Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** 6501-6513 Serrano Avenue, Anaheim, CA

**Date Drilled** 8-16-17  
**Logged By** JMP  
**Hole Diameter** 8"  
**Ground Elevation** 860'  
**Sampled By** JMP

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
800	60	[Hatched pattern]		S1	39 38 42				@60': limited recovery in sampler shoe limited to mechanically broken cobble fragments	
795	65	[Dotted pattern]		S2	6 8 18			SM	@65': Silty SAND, orange brown to gray brown, moist, medium dense, fine to medium sand, some siltstone/sandstone clasts	
790	70	[Hatched pattern]		R12	12 28 50/4"	102	22	CL	@70': Silty CLAY, blue gray, moist, hard, large siltstone clasts	
785	75	[Dotted pattern]		R13	15 19 20			SM	@75': Silty SAND, blue gray, very moist to wet, medium dense, fine to medium sand, some sandstone clasts	CN, AL
780	80								Total Depth of Boring: 76.5 feet bgs No groundwater encountered during drilling Boring backfilled with soil cuttings and patched with cold-mix asphalt	
775	85									
770	90									

**SAMPLE TYPES:**  
 B BULK SAMPLE  
 C CORE SAMPLE  
 G GRAB SAMPLE  
 R RING SAMPLE  
 S SPLIT SPOON SAMPLE  
 T TUBE SAMPLE

**TYPE OF TESTS:**  
 -200 % FINES PASSING  
 AL ATTERBERG LIMITS  
 CN CONSOLIDATION  
 CO COLLAPSE  
 CR CORROSION  
 CU UNDRAINED TRIAXIAL

DS DIRECT SHEAR  
 EI EXPANSION INDEX  
 H HYDROMETER  
 MD MAXIMUM DENSITY  
 PP POCKET PENETROMETER  
 RV R VALUE

SA SIEVE ANALYSIS  
 SE SAND EQUIVALENT  
 SG SPECIFIC GRAVITY  
 UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LP-1

**Project No.** 11737.001  
**Project** Serrano - Nohl Ranch Condos  
**Drilling Co.** Martini Drilling Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** 6501-6513 Serrano Avenue, Anaheim, CA

**Date Drilled** 8-16-17  
**Logged By** JMP  
**Hole Diameter** 8"  
**Ground Elevation** 859'  
**Sampled By** JMP

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
855	0	[Hatched pattern]						SM	@surface: 5.5-inches asphalt concrete over 3-inches aggregate base <b>Artificial Fill (Af):</b> @0.7': Silty SAND, orange brown, moist, tight, fine to medium sand, material derived from local bedrock	
850	5	[Diagonal hatching]						CL-SC	@5': Sandy CLAY to Clayey SAND, orange brown, moist, some siltstone fragments	
850	7.5	[Dotted pattern]						SM	@7.5': Silty SAND with clay, orange brown, slightly moist to moist, fine to medium sand	
845	10								No sampling performed, lithology inferred from adjacent boring LB-2  Total Depth of Boring: 9 feet bgs No groundwater encountered during drilling Temporary percolation well installed: 2-inch solid PVC @ 0-4 feet bgs 2-inch slotted PVC (0.020") @ 4-9 feet bgs #3 Monterey Sand @ 3-9 feet bgs Well casing removed upon completion of testing and boring backfilled with soil cuttings and patched with cold-mix asphalt	
840	15									
835	20									
830	25									
830	30									

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG LP-2

**Project No.** 11737.001  
**Project** Serrano - Nohl Ranch Condos  
**Drilling Co.** Martini Drilling Corp.  
**Drilling Method** Hollow Stem Auger - 140lb - Autohammer - 30" Drop  
**Location** 6501-6513 Serrano Avenue, Anaheim, CA

**Date Drilled** 8-16-17  
**Logged By** JMP  
**Hole Diameter** 8"  
**Ground Elevation** 859'  
**Sampled By** JMP

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
855	0	0						SM	@surface: 3.5-inches asphalt concrete over 3-inches aggregate base <b>Artificial Fill (Af):</b> @0.6': Silty SAND with clay, orange brown to gray brown, moist, tight, fine to medium sand	
850	5	5						CL-SC	@5': Sandy CLAY to Clayey SAND, orange brown to brown, moist, fine to medium sand	
850	7.5	7.5						SM	@7.5': Silty SAND, orange brown to gray, moist, fine to medium sand, some siltstone/sandstone clasts	
845	10	10							No sampling performed, lithology inferred from adjacent boring LB-3  Total Depth of Boring: 9 feet bgs No groundwater encountered during drilling Temporary percolation well installed: 2-inch solid PVC @ 0-4 feet bgs 2-inch slotted PVC (0.020") @ 4-9 feet bgs #3 Monterey Sand @ 3-9 feet bgs Well casing removed upon completion of testing and boring backfilled with soil cuttings and patched with cold-mix asphalt	
840	15	15								
835	20	20								
830	25	25								
830	30	30								

**SAMPLE TYPES:**

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

**TYPE OF TESTS:**

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



APPENDIX B  
LABORATORY TEST RESULTS

GRAVEL				SAND						FINES	
COARSE		FINE		COARSE	MEDIUM		FINE		SILT		CLAY

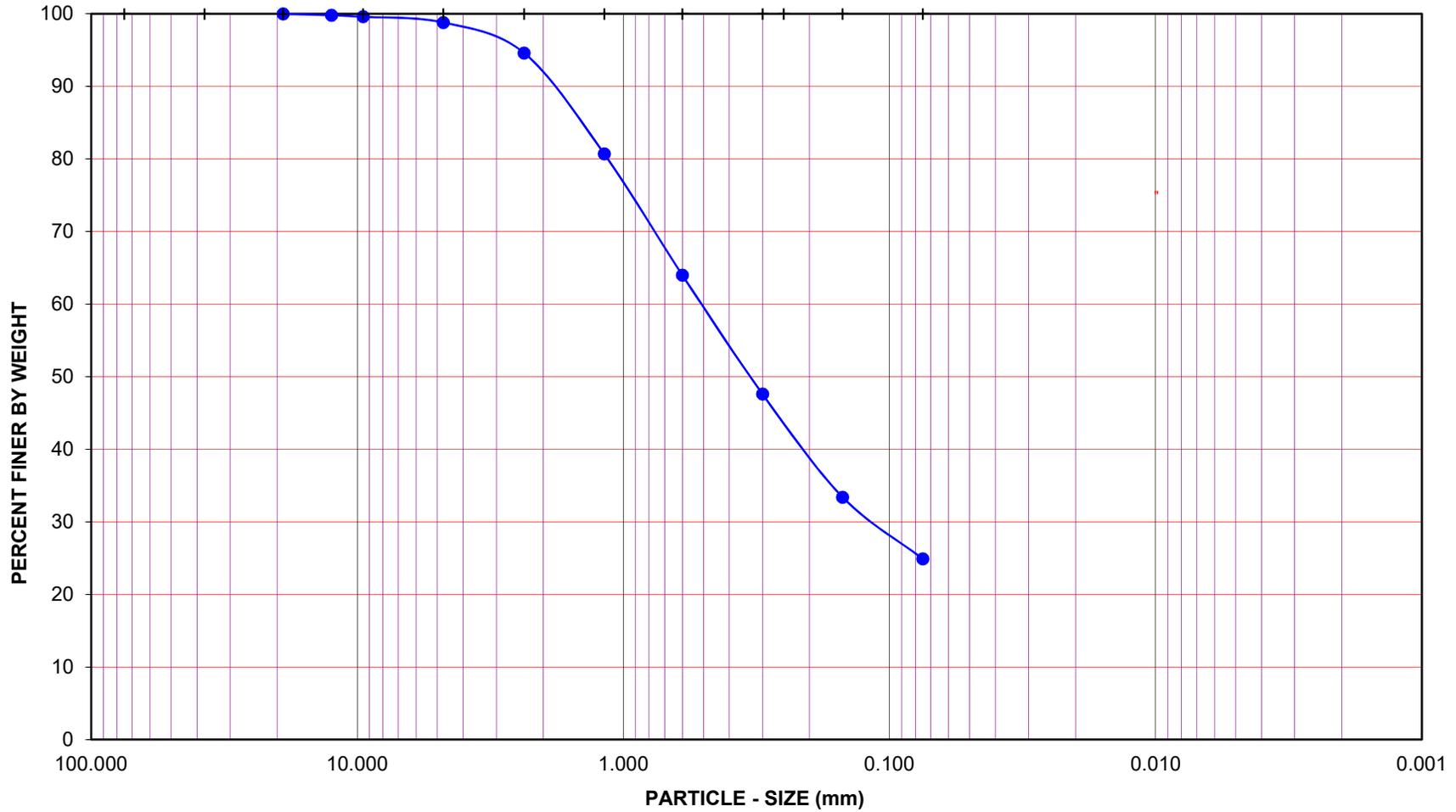
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: Serrano  
 Project No.: 11737.001

Boring No.: LB-1      Sample No.: BB1  
 Depth (feet): 0-5      Soil Type : SC  
 Soil Identification: Olive brown silty, clayey sand (SC-SM)

GR:SA:FI : (%)      **1 : 74 : 25**

**PARTICLE - SIZE  
DISTRIBUTION  
ASTM D 6913**

Sep-17

A-141  
A-59

GRAVEL				SAND						FINES	
COARSE		FINE		COARSE	MEDIUM		FINE		SILT		CLAY

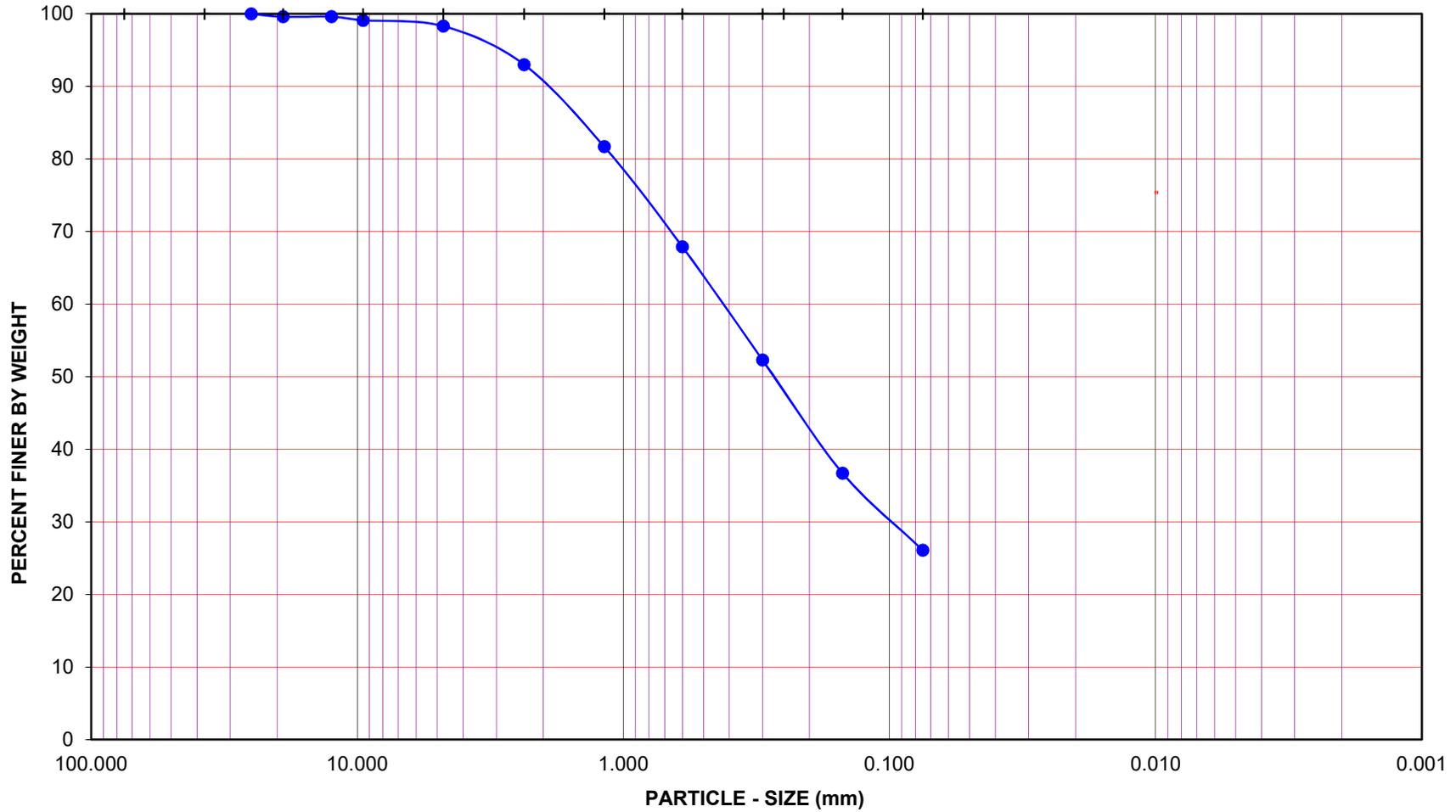
U.S. STANDARD SIEVE OPENING

3.0" 1 1/2" 3/4" 3/8"

U.S. STANDARD SIEVE NUMBER

#4 #8 #16 #30 #50 #100 #200

HYDROMETER



Project Name: Serrano  
 Project No.: 11737.001

Boring No.: LB-2      Sample No.: BB1  
 Depth (feet): 0-5      Soil Type : SM  
 Soil Identification: Yellowish brown silty sand (SM)

GR:SA:FI : (%)      **2 : 72 : 26**

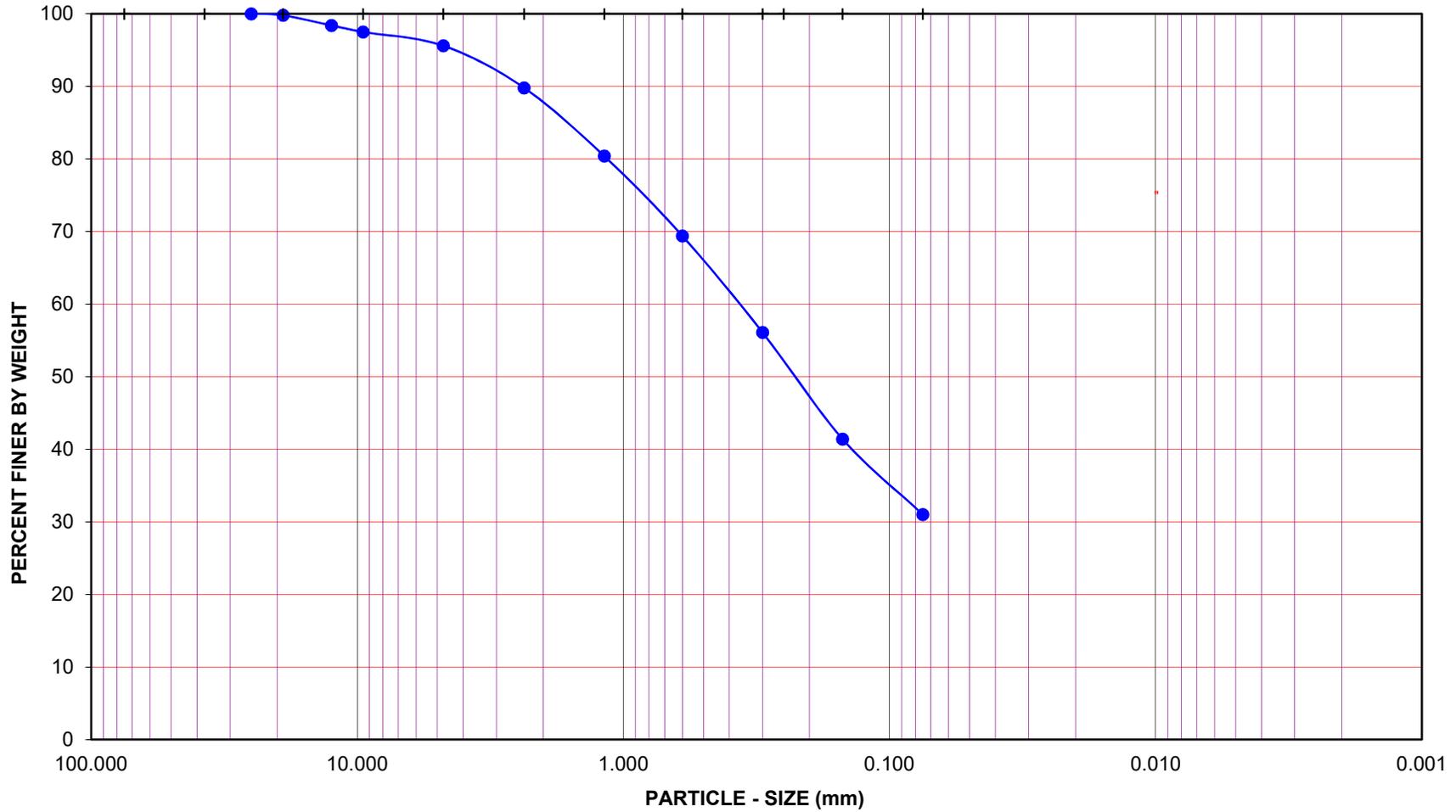


**PARTICLE - SIZE DISTRIBUTION**  
**ASTM D 6913**

Sep-17

A-142  
A-60

GRAVEL				SAND				FINES				
COARSE		FINE		COARSE	MEDIUM	FINE		SILT		CLAY		
U.S. STANDARD SIEVE OPENING				U.S. STANDARD SIEVE NUMBER				HYDROMETER				
3.0"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200		



Project Name: Serrano  
 Project No.: 11737.001

Boring No.: LB-3                      Sample No.: BB1  
 Depth (feet): 0-5                      Soil Type : SM  
 Soil Identification: Yellowish brown silty sand (SM)

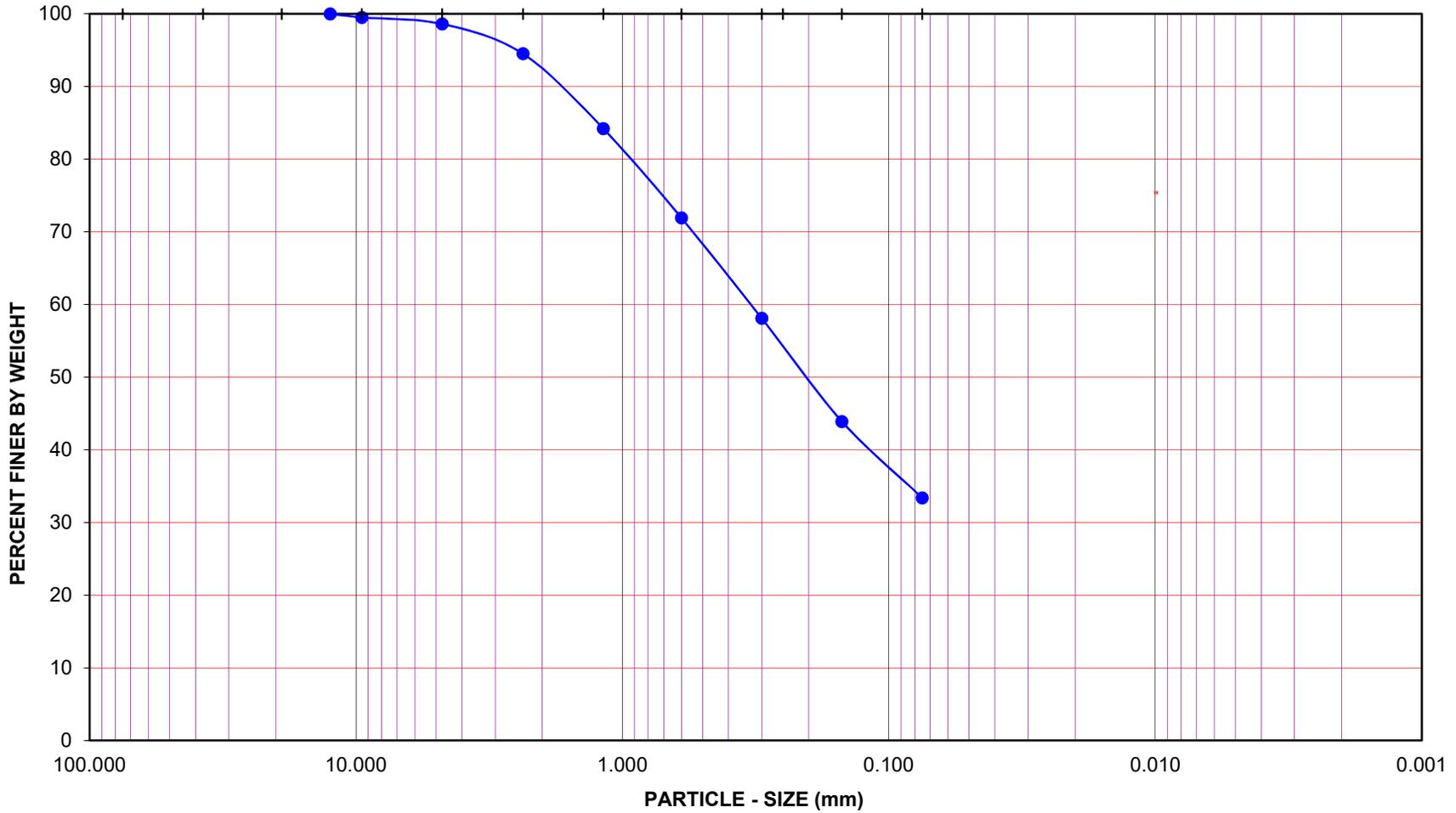
GR:SA:FI : (%)                      4 : 65 : 31

**PARTICLE - SIZE  
DISTRIBUTION  
ASTM D 6913**

Sep-17

A-143  
A-61

GRAVEL				SAND						FINES	
COARSE		FINE		COARSE	MEDIUM		FINE		SILT		CLAY
U.S. STANDARD SIEVE OPENING				U.S. STANDARD SIEVE NUMBER						HYDROMETER	
3.0"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200	



Project Name: Serrano  
 Project No.: 11737.001

Boring No.: LB-4                      Sample No.: R1  
 Depth (feet): 5.0                      Soil Type : SM  
 Soil Identification: Yellowish brown silty sand (SM)

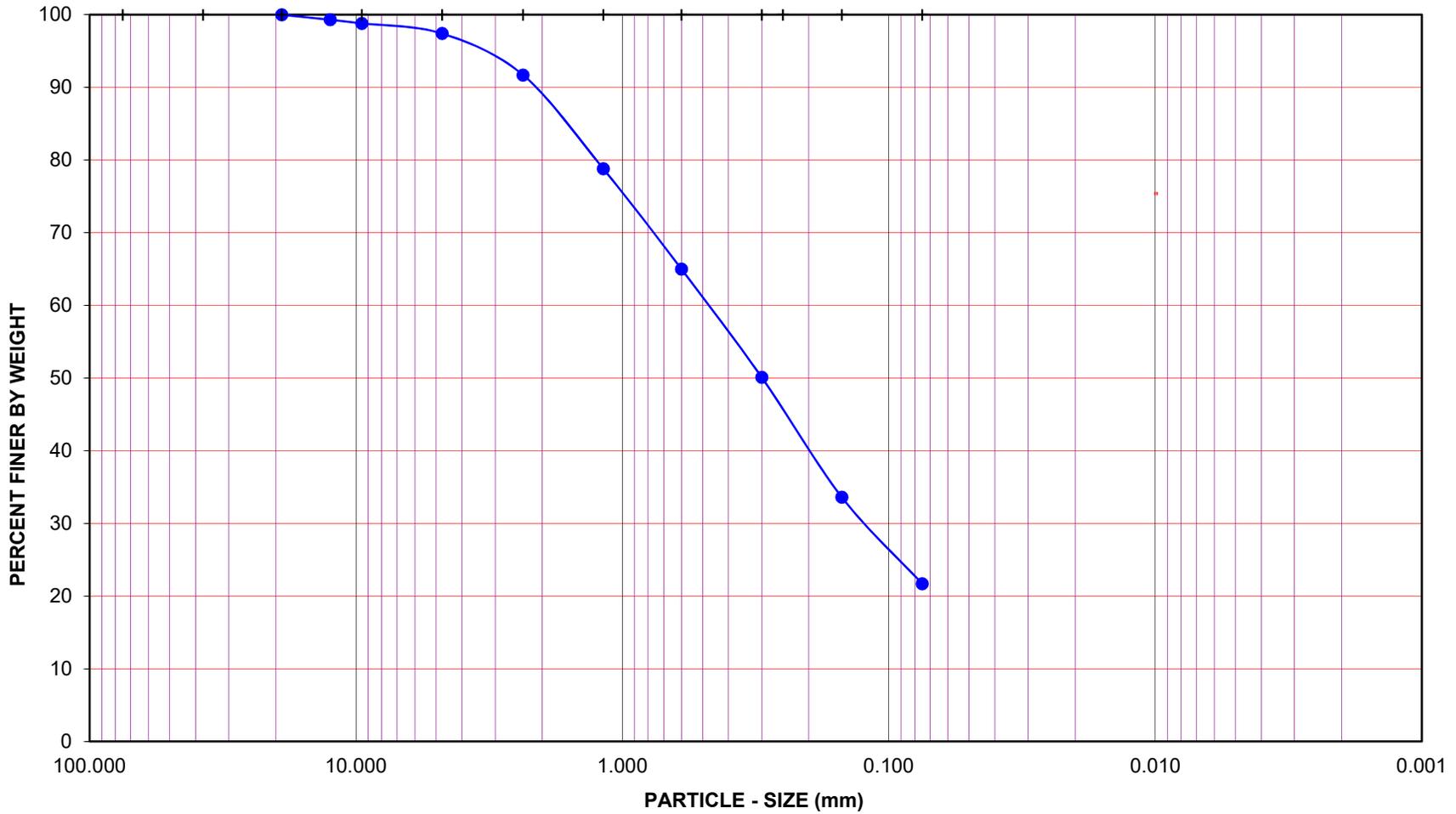
GR:SA:FI : (%)                      **1 : 66 : 33**

 <b>Leighton</b>	<b>PARTICLE - SIZE          DISTRIBUTION          ASTM D 6913</b>
---	---

Sep-17

A-144  
A-62

GRAVEL				SAND						FINES	
COARSE		FINE		COARSE	MEDIUM		FINE		SILT		CLAY
U.S. STANDARD SIEVE OPENING				U.S. STANDARD SIEVE NUMBER						HYDROMETER	
3.0"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200	



Project Name: Serrano  
 Project No.: 11737.001

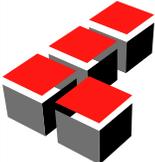
Boring No.: LB-5                      Sample No.: BB1  
 Depth (feet): 0-5                      Soil Type : SM  
 Soil Identification: Yellowish brown silty sand (SM)

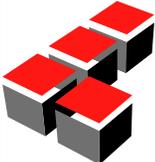
GR:SA:FI : (%)                      **3 : 75 : 22**

**PARTICLE - SIZE  
DISTRIBUTION  
ASTM D 6913**

A-145  
A-63

Sep-17

Boring No.	LB-2	LB-2	LB-2	LB-2	LB-2	LB-2		
Sample No.	R2	R4	S2	R7	S5	S6		
Depth (ft.)	10.0	20.0	30.0	45.0	60.0	70.0		
Sample Type	Ring	Ring	SPT	Ring	SPT	SPT		
Soil Identification	Brown silty sand (SM)	Brown silty sand (SM)	Brown silty sand (SM)	Olive yellow clayey sand with gravel (SC)g (one 2.5" gravel, 227.8 g)	Grayish brown clayey sand (SC)	Grayish brown sandy lean clay s(CL)		
<b>Moisture Correction</b>								
Wet Weight of Soil + Container (g)	0.0	0.0	0.0	0.0	0.0	0.0		
Dry Weight of Soil + Container (g)	0.0	0.0	0.0	0.0	0.0	0.0		
Weight of Container (g)	1.0	1.0	1.0	1.0	1.0	1.0		
Moisture Content (%)	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Sample Dry Weight Determination</b>								
Weight of Sample + Container (g)	863.4	811.6	1087.7	997.6	1014.2	955.6		
Weight of Container (g)	108.5	107.8	201.4	96.0	215.1	206.4		
Weight of Dry Sample (g)	754.9	703.8	886.3	901.6	799.1	749.2		
Container No.:	929	57	XP	IP-2	PHD	D-7		
<b>After Wash</b>								
Method (A or B)	A	A	A	A	A	A		
Dry Weight of Sample + Cont. (g)	713.6	652.2	741.2	835.4	747.1	566.0		
Weight of Container (g)	108.5	107.8	201.4	96.0	215.1	206.4		
Dry Weight of Sample (g)	605.1	544.4	539.8	739.4	532.0	359.6		
<b>% Passing No. 200 Sieve</b>	<b>19.8</b>	<b>22.6</b>	<b>39.1</b>	<b>18.0</b>	<b>33.4</b>	<b>52.0</b>		
<b>% Retained No. 200 Sieve</b>	80.2	77.4	60.9	82.0	66.6	48.0		
 <b>Leighton</b>	<b>PERCENT PASSING No. 200 SIEVE ASTM D 1140</b>				Project Name: <u>Serrano</u>			
					Project No.: <u>11737.001</u>			
					Client Name: <u>6509 Serrano LP</u>			
					Tested By: <u>S. Felter</u>		Date: <u>08/24/17</u>	

Boring No.	LB-6	LB-6	LB-6	LB-6	LB-6	LB-6		
Sample No.	R1	R3	R5	R7	R9	R12		
Depth (ft.)	5.0	15.0	25.0	35.0	45.0	70.0		
Sample Type	Ring	Ring	Ring	Ring	Ring	Ring		
Soil Identification	Grayish brown silty sand (SM)	Grayish brown silty sand (SM)	Grayish brown silty sand (SM)	Grayish brown silty sand (SM)	Grayish brown silty, clayey sand (SC-SM)	Grayish brown silty, clayey sand (SC-SM)		
<b>Moisture Correction</b>								
Wet Weight of Soil + Container (g)	0.0	0.0	0.0	0.0	0.0	0.0		
Dry Weight of Soil + Container (g)	0.0	0.0	0.0	0.0	0.0	0.0		
Weight of Container (g)	1.0	1.0	1.0	1.0	1.0	1.0		
Moisture Content (%)	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Sample Dry Weight Determination</b>								
Weight of Sample + Container (g)	850.5	625.8	824.3	838.0	1011.9	757.6		
Weight of Container (g)	106.7	108.4	107.5	109.0	300.3	108.0		
Weight of Dry Sample (g)	743.8	517.4	716.8	729.0	711.6	649.6		
Container No.:	912	934	A-15	927	IMC-1	R-2		
<b>After Wash</b>								
Method (A or B)	A	A	A	A	A	A		
Dry Weight of Sample + Cont. (g)	714.2	452.7	673.9	662.1	856.5	550.9		
Weight of Container (g)	106.7	108.4	107.5	109.0	300.3	108.0		
Dry Weight of Sample (g)	607.5	344.3	566.4	553.1	556.2	442.9		
<b>% Passing No. 200 Sieve</b>	<b>18.3</b>	<b>33.5</b>	<b>21.0</b>	<b>24.1</b>	<b>21.8</b>	<b>31.8</b>		
<b>% Retained No. 200 Sieve</b>	81.7	66.5	79.0	75.9	78.2	68.2		
 <b>Leighton</b>	<b>PERCENT PASSING No. 200 SIEVE ASTM D 1140</b>				Project Name: <u>Serrano</u>			
					Project No.: <u>11737.001</u>			
					Client Name: <u>6509 Serrano LP</u>			
					Tested By: <u>S. Felter</u>		Date: <u>08/24/17</u>	



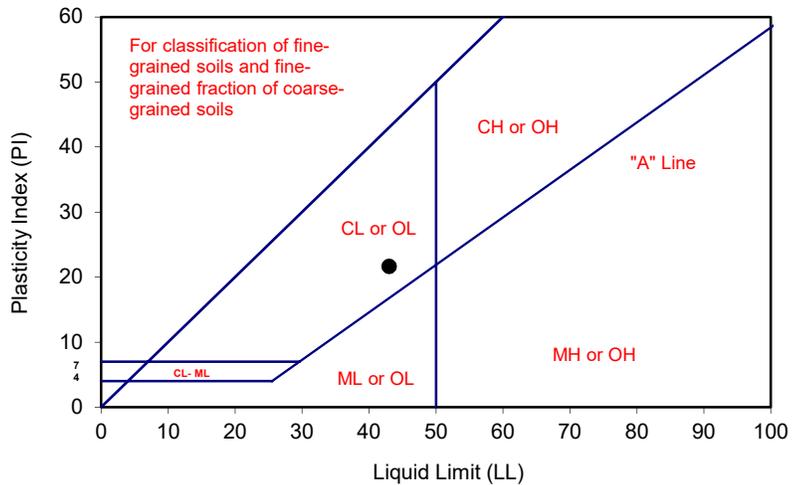
# ATTERBERG LIMITS

ASTM D 4318

Project Name: <u>Serrano</u>	Tested By: <u>R. Manning</u>	Date: <u>09/01/17</u>
Project No. : <u>11737.001</u>	Input By: <u>G. Bathala</u>	Date: <u>09/13/17</u>
Boring No.: <u>LB-2</u>	Checked By: <u>J. Ward</u>	
Sample No.: <u>S4</u>	Depth (ft.) <u>50.0</u>	
Soil Identification: <u>Yellowish brown sandy lean clay s(CL)</u>		

TEST NO.	PLASTIC LIMIT		LIQUID LIMIT			
	1	2	1	2	3	4
Number of Blows [N]			35	27	22	
Wet Wt. of Soil + Cont. (g)	20.33	20.49	24.85	23.17	22.42	
Dry Wt. of Soil + Cont. (g)	19.15	19.27	21.61	20.33	19.72	
Wt. of Container (g)	13.64	13.55	13.61	13.63	13.60	
Moisture Content (%) [Wn]	21.42	21.33	40.50	42.39	44.12	

<b>Liquid Limit</b>	<b>43</b>
<b>Plastic Limit</b>	<b>21</b>
<b>Plasticity Index</b>	<b>22</b>
<b>Classification</b>	<b>CL</b>



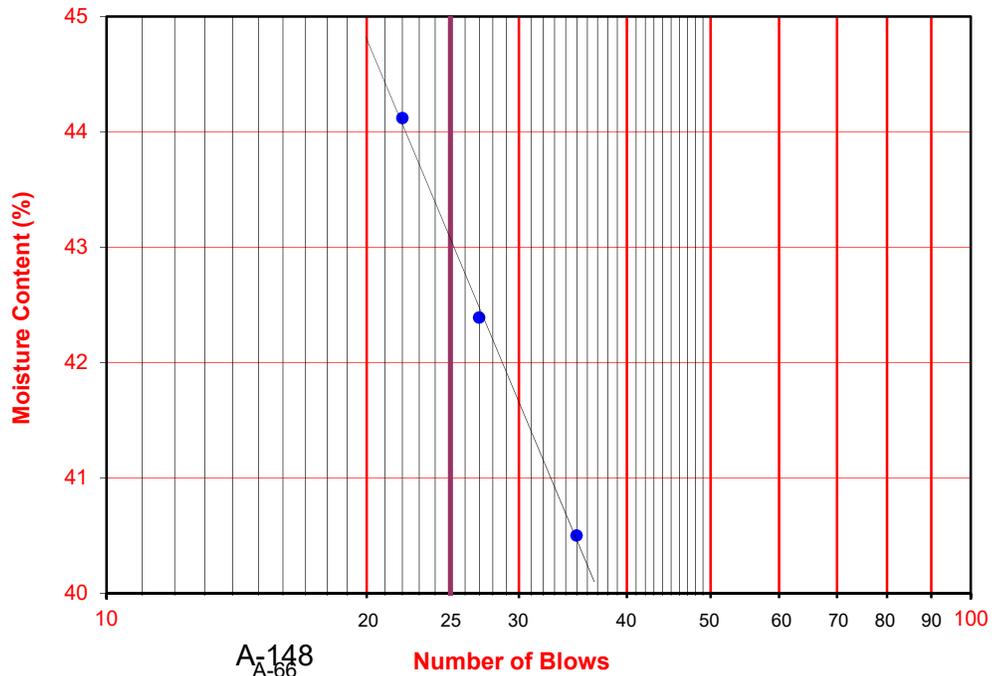
PI at "A" - Line =  $0.73(LL-20)$  16.79

One - Point Liquid Limit Calculation

$$LL = Wn(N/25)^{0.121}$$

### PROCEDURES USED

- Wet Preparation  
Multipoint - Wet
- Dry Preparation  
Multipoint - Dry
- Procedure A  
Multipoint Test
- Procedure B  
One-point Test





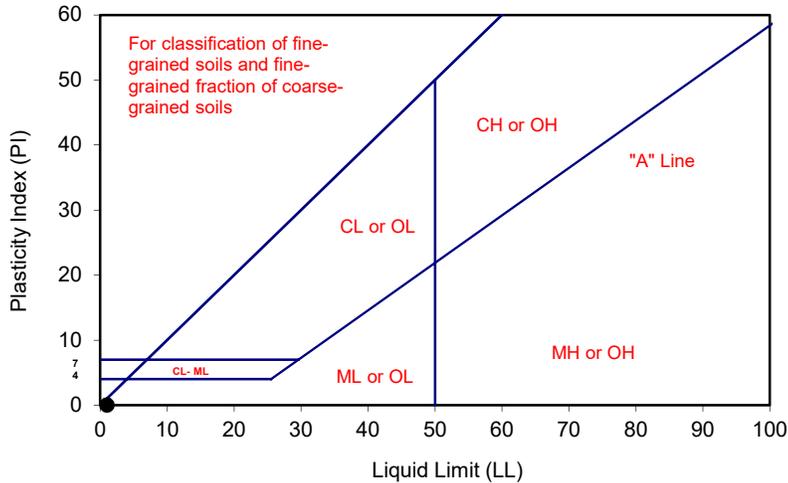
# ATTERBERG LIMITS

ASTM D 4318

Project Name: <u>Serrano</u>	Tested By: <u>R. Manning</u>	Date: <u>08/30/17</u>
Project No. : <u>11737.001</u>	Input By: <u>G. Bathala</u>	Date: <u>09/13/17</u>
Boring No.: <u>LB-6</u>	Checked By: <u>J. Ward</u>	
Sample No.: <u>R13</u>	Depth (ft.) <u>75.0</u>	
Soil Identification: <u>Olive yellow silty sand (SM)</u>		

TEST NO.	PLASTIC LIMIT		LIQUID LIMIT			
	1	2	1	2	3	4
Number of Blows [N]			13			
Wet Wt. of Soil + Cont. (g)	<b>Cannot be rolled:</b>		26.29	<b>Cannot get more than 13 blows:</b>		
Dry Wt. of Soil + Cont. (g)	<b>NonPlastic</b>		23.84	<b>NonPlastic</b>		
Wt. of Container (g)			13.67			
Moisture Content (%) [Wn]			24.09			

<b>Liquid Limit</b>	<b>NP</b>
<b>Plastic Limit</b>	<b>NP</b>
<b>Plasticity Index</b>	<b>NP</b>
<b>Classification</b>	<b>NP</b>



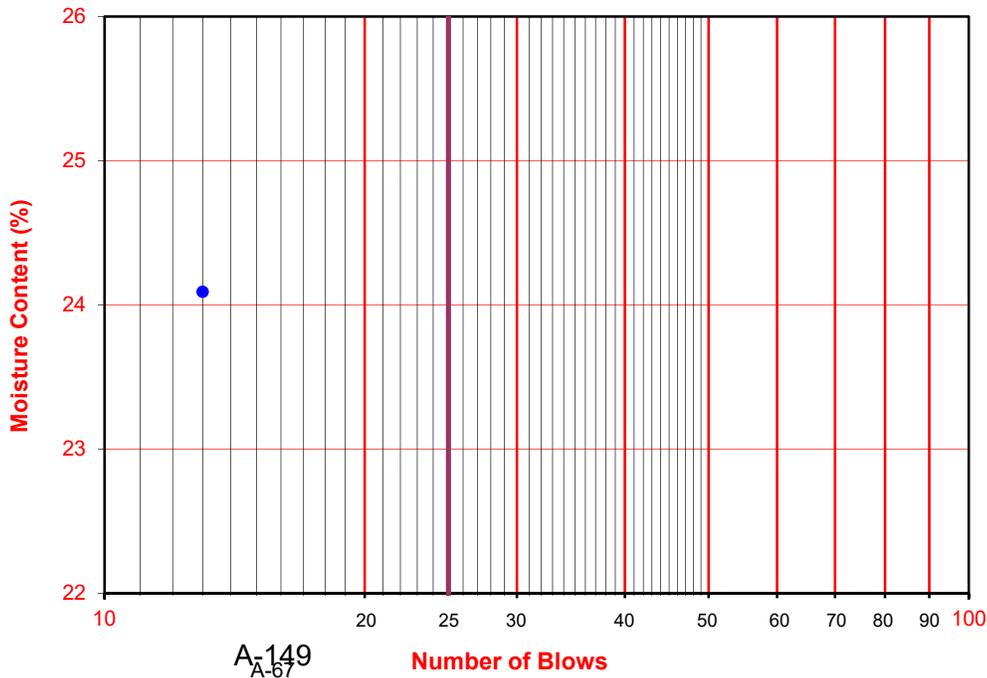
PI at "A" - Line =  $0.73(LL-20)$  =

One - Point Liquid Limit Calculation

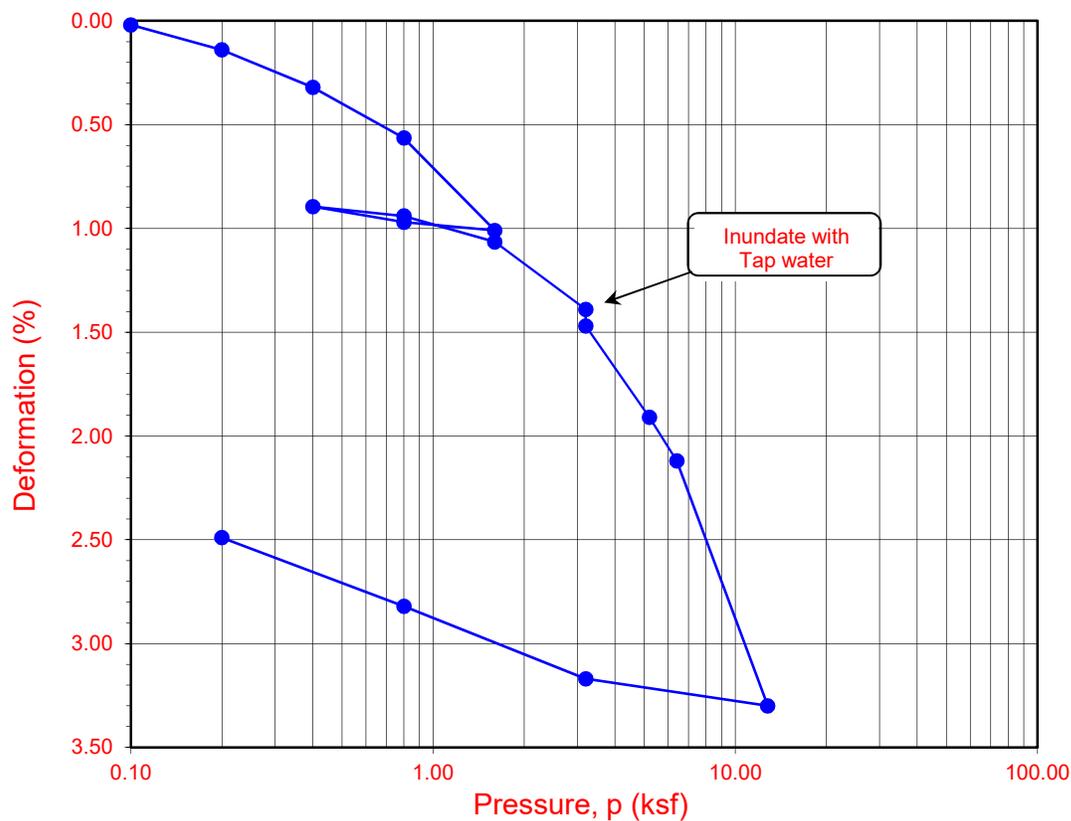
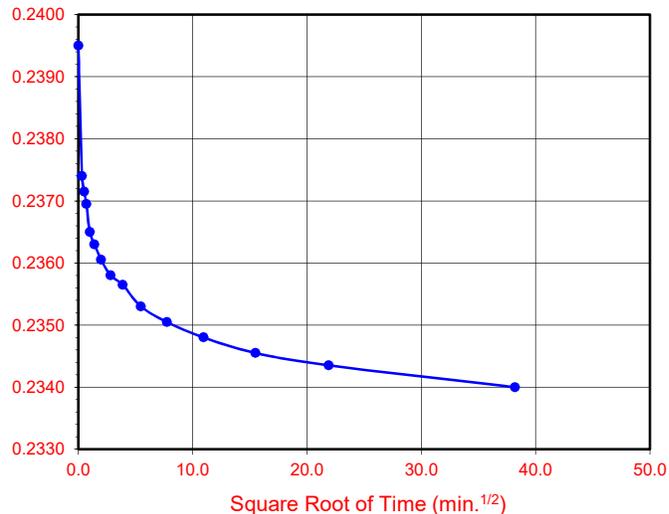
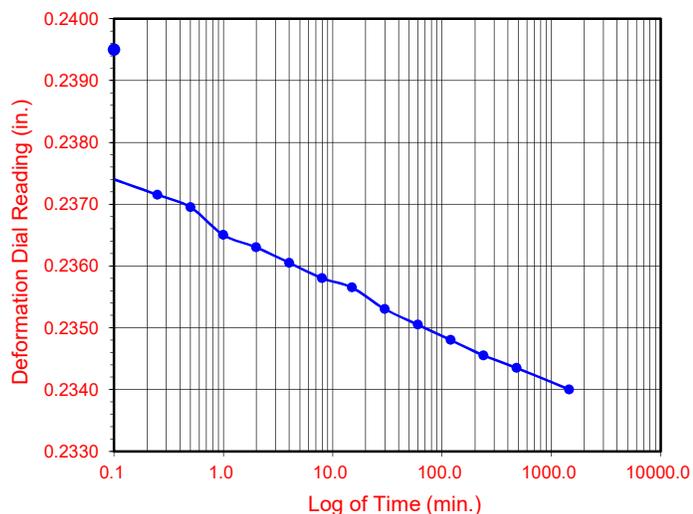
$$LL = Wn(N/25)^{0.121}$$

### PROCEDURES USED

- Wet Preparation  
Multipoint - Wet
- Dry Preparation  
Multipoint - Dry
- Procedure A  
Multipoint Test
- Procedure B  
One-point Test



Time Readings @ 5.2 ksf



Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
LB-2	R7	45.0	13.3	12.7	116.4	120.3	0.448	0.412	80	86

Soil Identification: Olive yellow clayey sand with gravel (SC)g



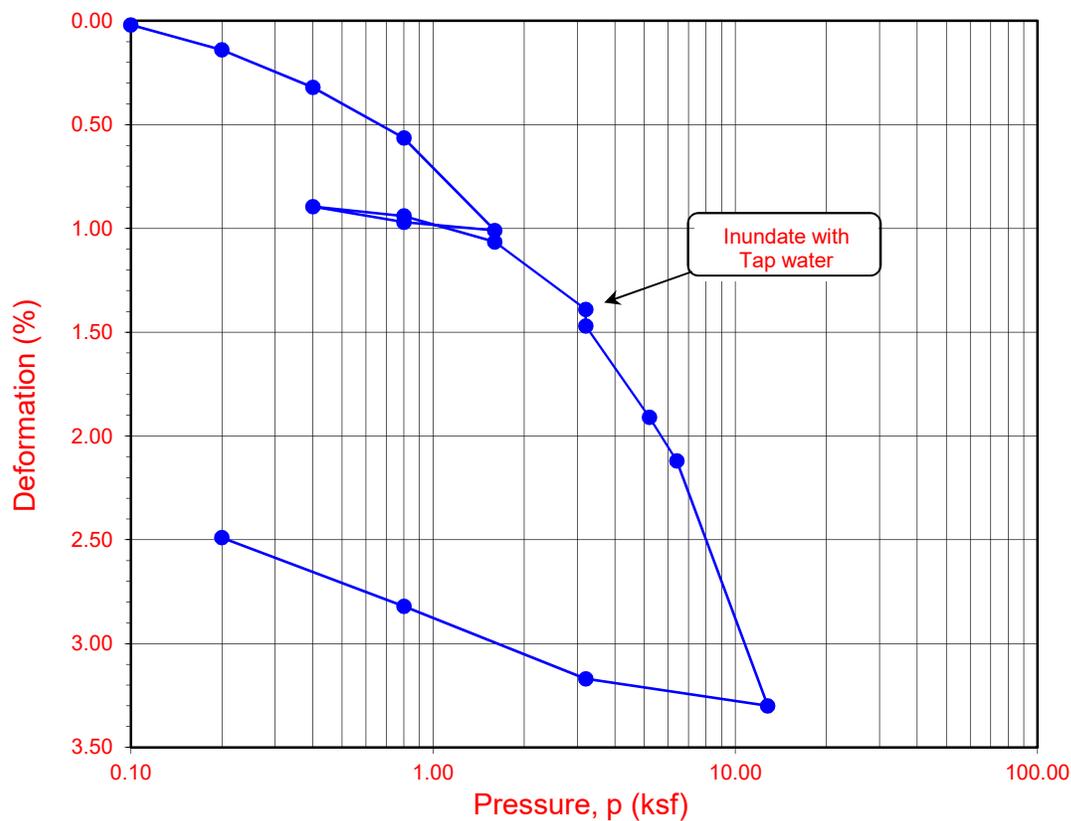
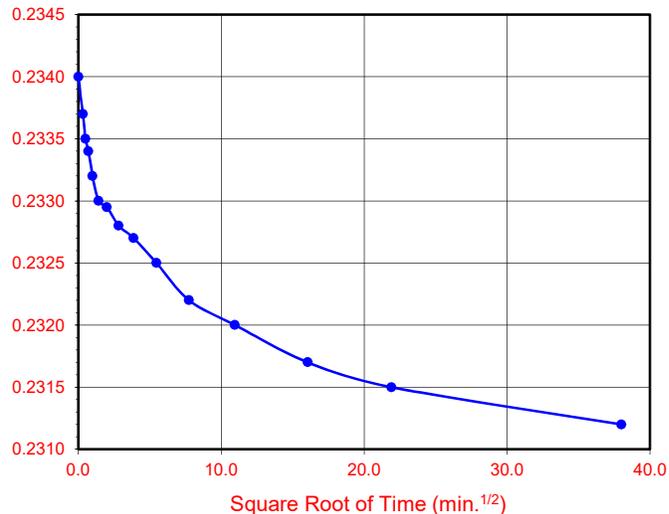
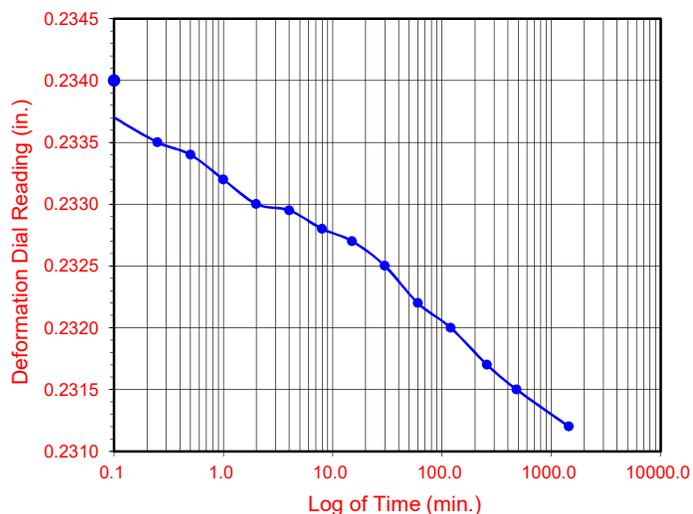
**ONE-DIMENSIONAL CONSOLIDATION  
PROPERTIES of SOILS  
ASTM D 2435**

Project No.: 11737.001

Serrano

09-17

Time Readings @ 6.4 ksf



Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
LB-2	R7	45.0	13.3	12.7	116.4	120.3	0.448	0.412	80	86

Soil Identification: Olive yellow clayey sand with gravel (SC)g



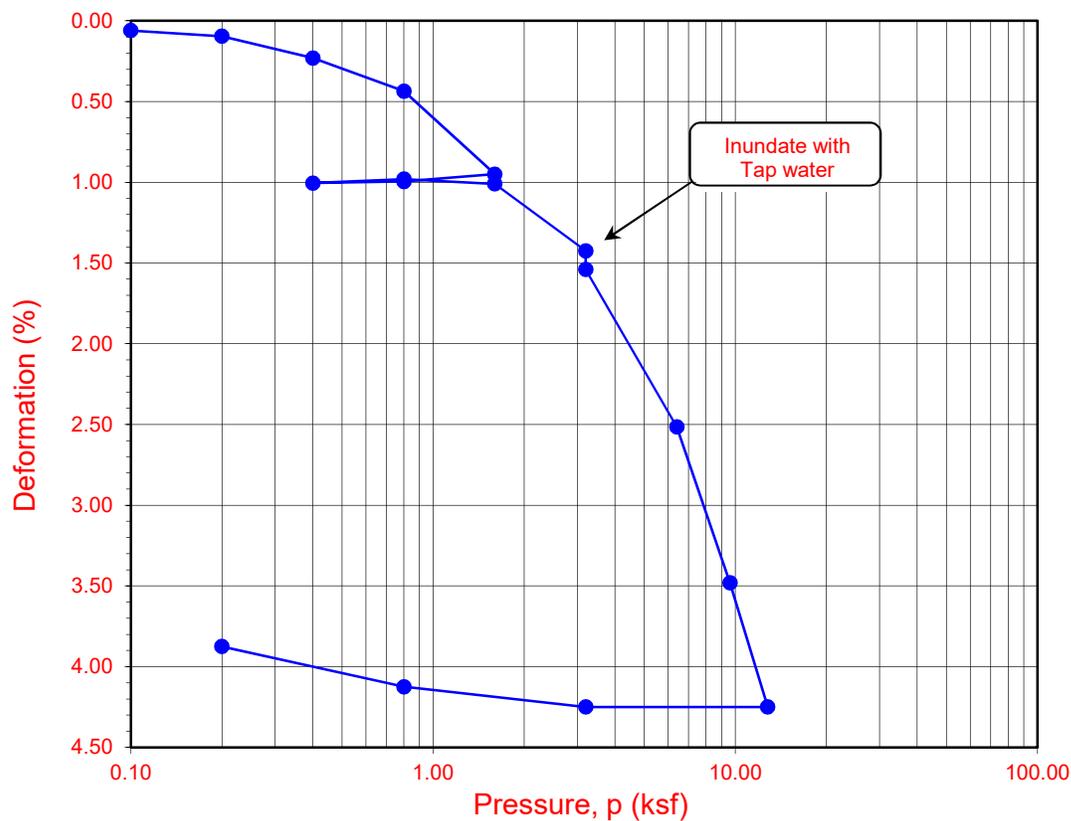
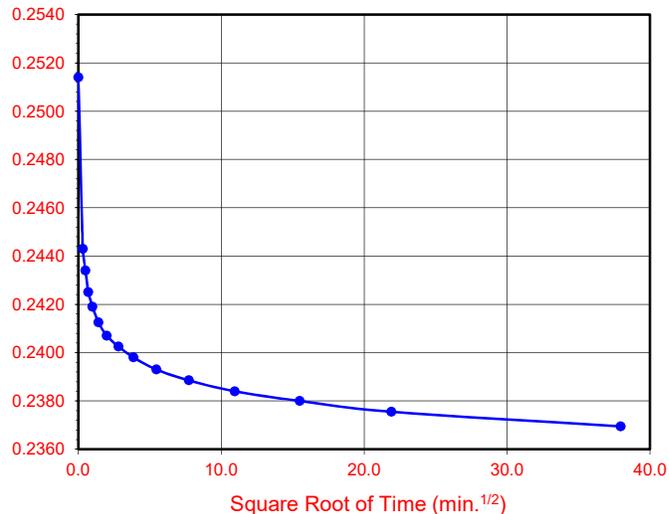
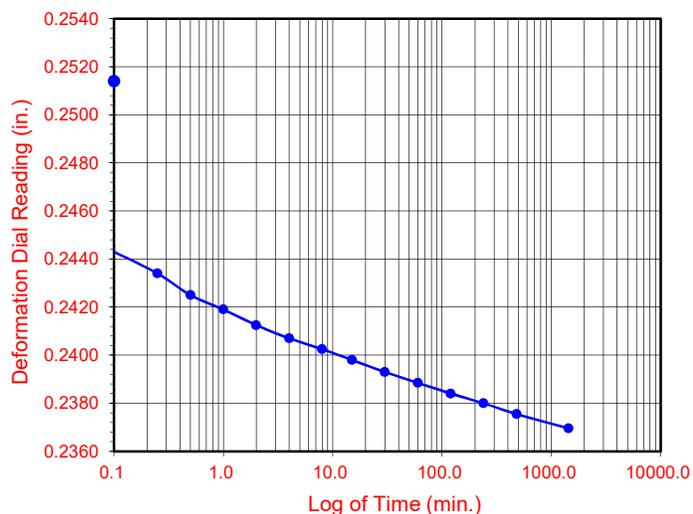
**ONE-DIMENSIONAL CONSOLIDATION  
PROPERTIES of SOILS  
ASTM D 2435**

Project No.: 11737.001

Serrano

09-17

Time Readings @ 6.4 ksf



Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
LB-6	R13	75.0	8.8	18.2	114.9	109.5	0.468	0.411	51	91

Soil Identification: Olive yellow silty sand (SM)



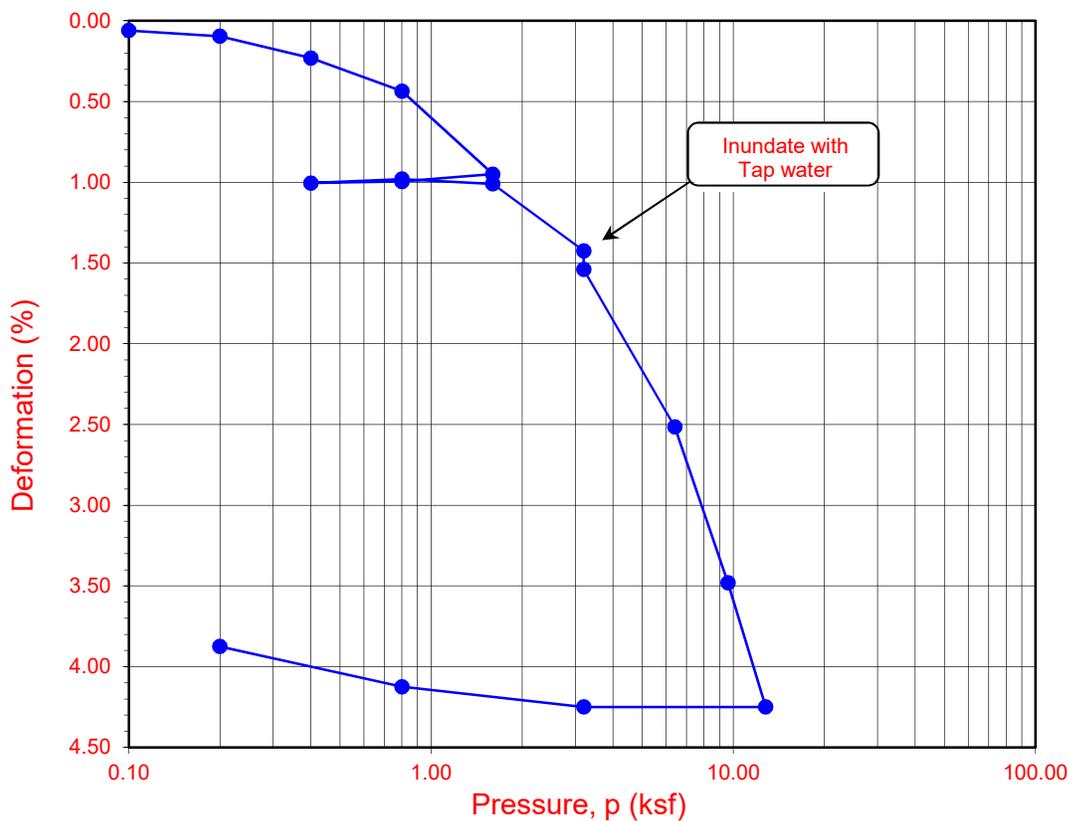
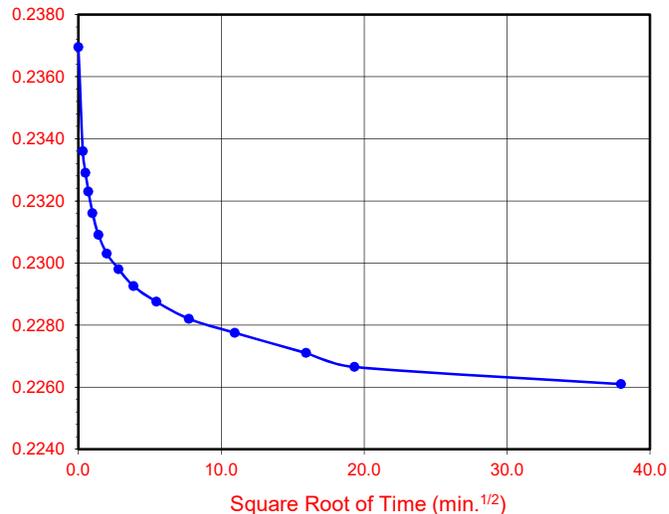
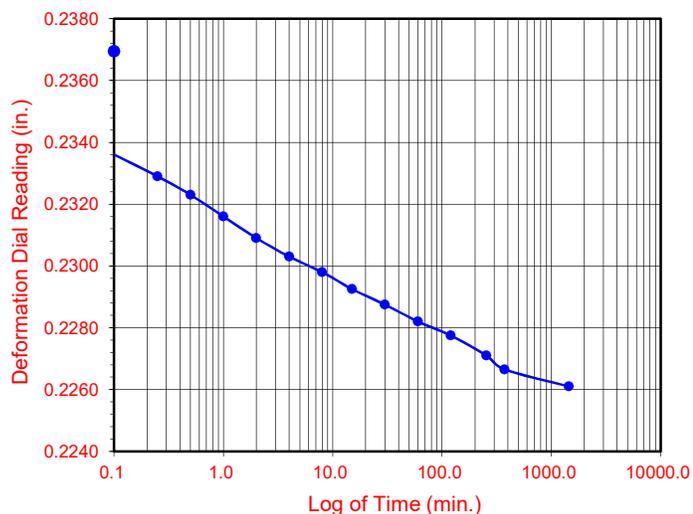
ONE-DIMENSIONAL CONSOLIDATION  
 PROPERTIES of SOILS  
 ASTM D 2435

Project No.: 11737.001

Serrano

09-17

Time Readings @ 9.6 ksf



Boring No.	Sample No.	Depth (ft.)	Moisture Content (%)		Dry Density (pcf)		Void Ratio		Degree of Saturation (%)	
			Initial	Final	Initial	Final	Initial	Final	Initial	Final
LB-6	R13	75.0	8.8	18.2	114.9	109.5	0.468	0.411	51	91

Soil Identification: Olive yellow silty sand (SM)



ONE-DIMENSIONAL CONSOLIDATION  
 PROPERTIES of SOILS  
 ASTM D 2435

Project No.: 11737.001

Serrano

09-17



**ONE-DIMENSIONAL SWELL OR SETTLEMENT  
POTENTIAL OF COHESIVE SOILS  
ASTM D 4546**

Project Name: Serrano  
 Project No.: 11737.001  
 Boring No.: LB-1  
 Sample No.: R1  
 Sample Description: Olive gray silty, clayey sand (SC-SM)

Tested By: G. Bathala Date: 08/28/17  
 Checked By: J. Ward Date: 09/21/17  
 Sample Type: Ring  
 Depth (ft.): 5.0

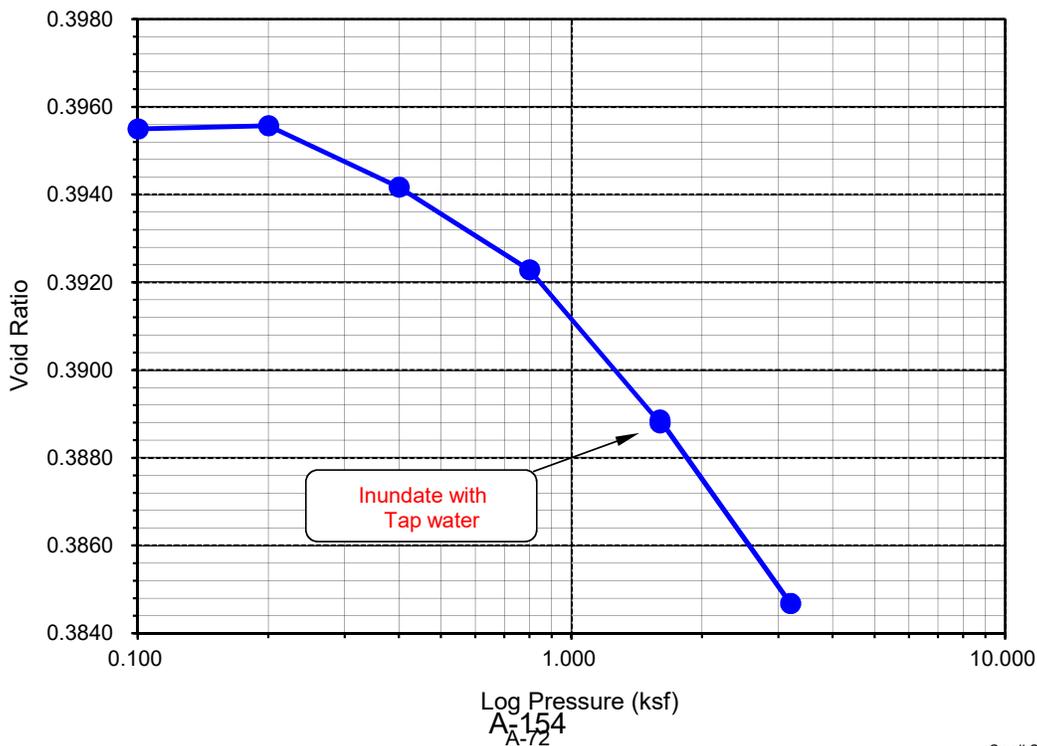
Initial Dry Density (pcf):	120.8
Initial Moisture (%):	11.10
Initial Length (in.):	1.0000
Initial Dial Reading:	0.2950
Diameter(in):	2.370

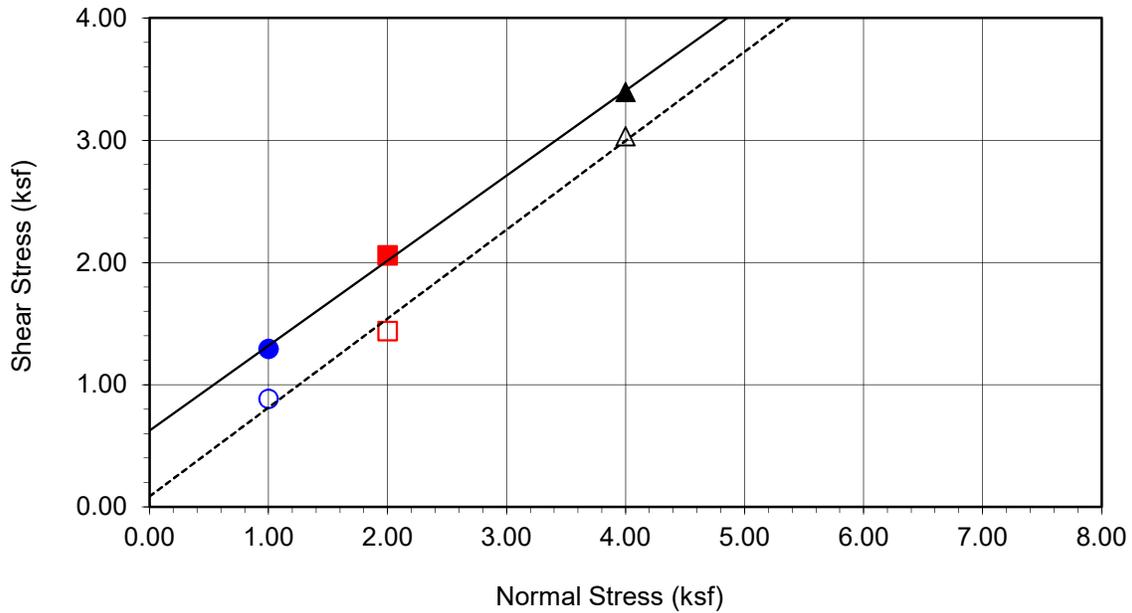
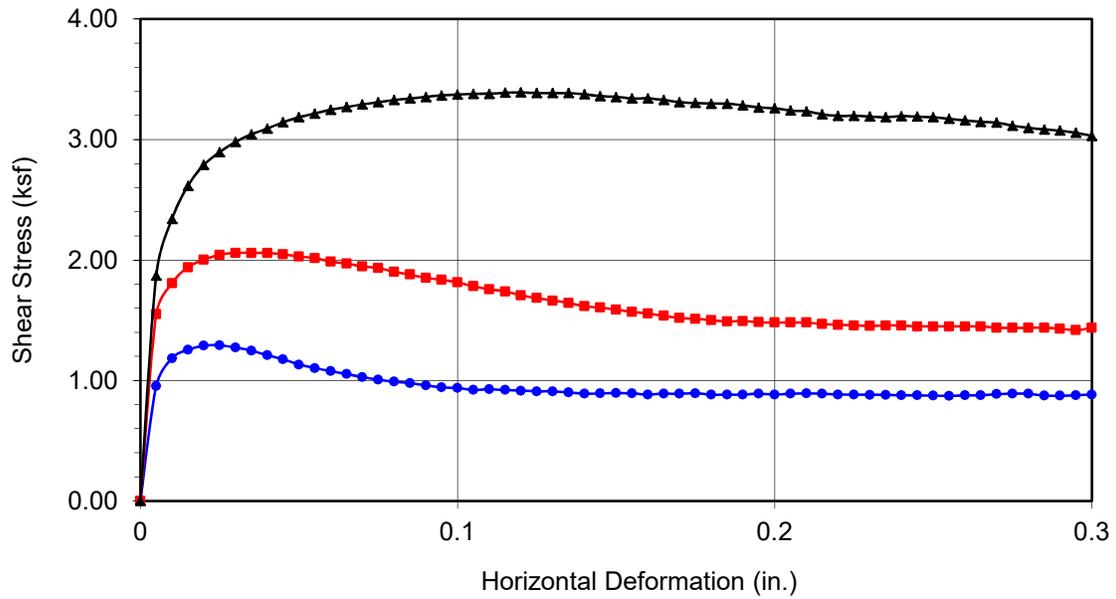
Final Dry Density (pcf):	121.7
Final Moisture (%):	12.3
Initial Void ratio:	0.3958
Specific Gravity(assumed):	2.70
Initial Saturation (%):	75.7

Pressure (p) (ksf)	Final Reading (in)	Apparent Thickness (in)	Load Compliance (%)	Swell (+) Settlement (-) % of Sample Thickness	Void Ratio	Corrected Deformation (%)
0.10	0.2947	0.9998	0.00	-0.02	0.3955	-0.02
0.20	0.2941	0.9991	0.07	-0.09	0.3956	-0.02
0.40	0.2917	0.9967	0.21	-0.33	0.3942	-0.12
0.80	0.2896	0.9947	0.28	-0.53	0.3923	-0.25
1.60	0.2858	0.9909	0.41	-0.91	0.3888	-0.50
H2O	0.2859	0.9909	0.41	-0.91	0.3889	-0.50
3.20	0.2817	0.9867	0.53	-1.33	0.3847	-0.80

**Percent Swell (+) / Settlement (-) After Inundation = 0.01**

Void Ratio - Log Pressure Curve





<b>Boring No.</b>	<b>LB-1</b>	
<b>Sample No.</b>	<b>BB1</b>	
<b>Depth (ft)</b>	<b>0-5</b>	
Sample Type: 90% Remold		
Soil Identification: Olive brown silty, clayey sand (SC-SM)		
<b>Strength Parameters</b>		
	C (psf)	$\phi$ (°)
Peak	626	35
Ultimate	86	36

Normal Stress (kip/ft <sup>2</sup> )	1.000	2.000	4.000
Peak Shear Stress (kip/ft <sup>2</sup> )	● 1.292	■ 2.059	▲ 3.392
Shear Stress @ End of Test (ksf)	○ 0.883	□ 1.437	△ 3.031
Deformation Rate (in./min.)	0.0500	0.0500	0.0500
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	8.70	8.70	8.70
Dry Density (pcf)	117.9	117.9	117.8
Saturation (%)	54.6	54.6	54.6
Soil Height Before Shearing (in.)	0.9935	0.9916	0.9820
Final Moisture Content (%)	14.1	13.7	13.4



Leighton

**DIRECT SHEAR TEST RESULTS**  
Consolidated Undrained

Project No.: 11737.001

Serrano

08-17

A-155  
A-73



# MODIFIED PROCTOR COMPACTION TEST

ASTM D 1557

Project Name: Serrano Tested By: O. Figueroa Date: 08/25/17  
 Project No.: 11737.001 Input By: J. Ward Date: 08/28/17  
 Boring No.: LB-1 Depth (ft.): 0-5  
 Sample No.: BB1  
 Soil Identification: Olive brown silty, clayey sand (SC-SM)

Preparation Method:  Moist  Dry  Mechanical Ram  Manual Ram  
 Mold Volume (ft<sup>3</sup>) 0.03330 Ram Weight = 10 lb.; Drop = 18 in.

TEST NO.	1	2	3	4	5	6
Wt. Compacted Soil + Mold (g)	3901	4002	3958			
Weight of Mold (g)	1857	1857	1857			
Net Weight of Soil (g)	2044	2145	2101			
Wet Weight of Soil + Cont. (g)	340.2	416.4	445.1			
Dry Weight of Soil + Cont. (g)	323.0	386.8	404.6			
Weight of Container (g)	39.2	39.6	39.5			
Moisture Content (%)	6.06	8.53	11.09			
Wet Density (pcf)	135.3	142.0	139.1			
Dry Density (pcf)	127.6	130.9	125.2			

Maximum Dry Density (pcf) 131.0 Optimum Moisture Content (%) 8.5

### PROCEDURE USED

**Procedure A**  
 Soil Passing No. 4 (4.75 mm) Sieve  
 Mold : 4 in. (101.6 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 25 (twenty-five)  
 May be used if + #4 is 20% or less

**Procedure B**  
 Soil Passing 3/8 in. (9.5 mm) Sieve  
 Mold : 4 in. (101.6 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 25 (twenty-five)  
 Use if + #4 is >20% and + 3/8 in. is 20% or less

**Procedure C**  
 Soil Passing 3/4 in. (19.0 mm) Sieve  
 Mold : 6 in. (152.4 mm) diameter  
 Layers : 5 (Five)  
 Blows per layer : 56 (fifty-six)  
 Use if + 3/8 in. is >20% and + 3/4 in. is <30%

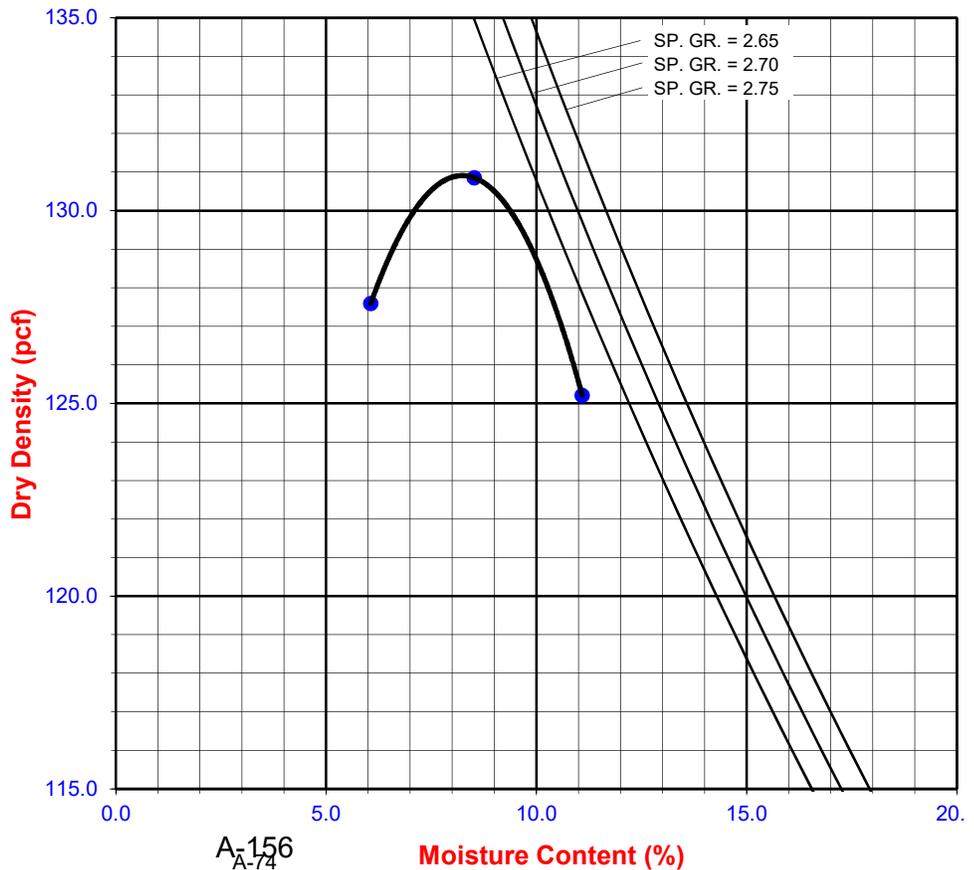
### Particle-Size Distribution:

**1:74:25**

GR:SA:FI

### Atterberg Limits:

LL,PL,PI





## R-VALUE TEST RESULTS

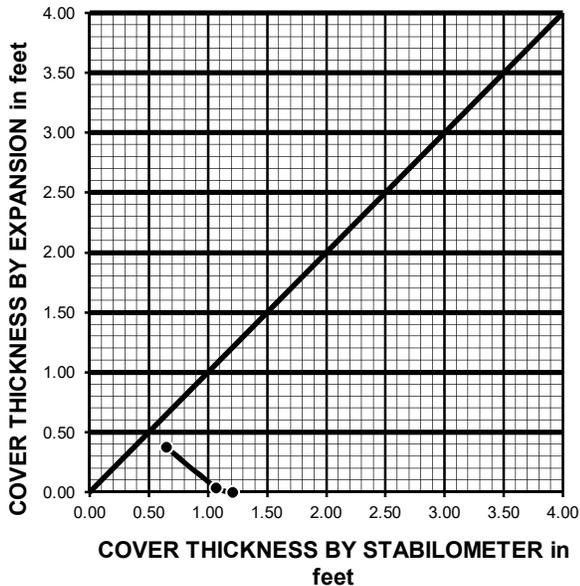
### ASTM D 2844

Project Name:	<u>Serrano</u>	Date:	<u>09/07/17</u>
Project Number:	<u>11737.001</u>	Technician:	<u>F. Mina</u>
Boring Number:	<u>LB-1</u>	Depth (ft.):	<u>0-5</u>
Sample Number:	<u>B-1</u>	Sample Location:	<u>N/A</u>
Sample Description:	<u>Olive brown silty, clayey sand (SC-SM)</u>		

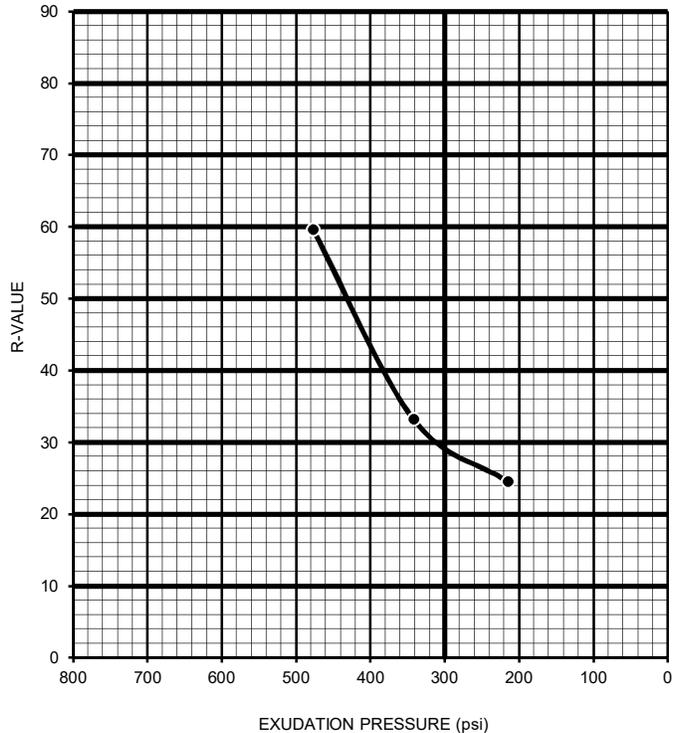
TEST SPECIMEN	A	B	C
MOISTURE AT COMPACTION %	10.4	11.5	12.6
HEIGHT OF SAMPLE, Inches	2.46	2.48	2.53
DRY DENSITY, pcf	124.0	124.3	120.8
COMPACTOR AIR PRESSURE, psi	200	150	125
EXUDATION PRESSURE, psi	477	342	215
EXPANSION, Inches x 10exp-4	10	1	0
STABILITY Ph 2,000 lbs (160 psi)	45	85	100
URNS DISPLACEMENT	4.33	4.44	4.62
R-VALUE UNCORRECTED	60	33	25
R-VALUE CORRECTED	60	33	25

DESIGN CALCULATION DATA	a	b	c
GRAVEL EQUIVALENT FACTOR	1.0	1.0	1.0
TRAFFIC INDEX	5.0	5.0	5.0
STABILOMETER THICKNESS, ft.	0.65	1.07	1.21
EXPANSION PRESSURE THICKNESS, ft.	0.38	0.04	0.00

EXPANSION PRESSURE CHART



EXUDATION PRESSURE CHART



R-VALUE BY EXPANSION:	<u>69</u>
R-VALUE BY EXUDATION:	<u>29</u>
EQUILIBRIUM R-VALUE:	<u>29</u>



**TESTS for SULFATE CONTENT  
CHLORIDE CONTENT and pH of SOILS**

Project Name: Serrano  
Project No. : 11737.001

Tested By : G. Berdy Date: 08/24/17  
Data Input By: G. Bathala Date: 09/15/17

Boring No.	LB-1			
Sample No.	BB1			
Sample Depth (ft)	0-5			
Soil Identification:	Olive brown (SC-SM)			
Wet Weight of Soil + Container (g)	208.31			
Dry Weight of Soil + Container (g)	195.72			
Weight of Container (g)	58.70			
Moisture Content (%)	9.19			
Weight of Soaked Soil (g)	100.54			

**SULFATE CONTENT, DOT California Test 417, Part II**

Beaker No.	92			
Crucible No.	26			
Furnace Temperature (°C)	860			
Time In / Time Out	9:00/9:45			
Duration of Combustion (min)	45			
Wt. of Crucible + Residue (g)	20.9369			
Wt. of Crucible (g)	20.9349			
Wt. of Residue (g) (A)	0.0020			
PPM of Sulfate (A) x 41150	82.30			
<b>PPM of Sulfate, Dry Weight Basis</b>	<b>91</b>			

**CHLORIDE CONTENT, DOT California Test 422**

ml of Extract For Titration (B)	30			
ml of AgNO <sub>3</sub> Soln. Used in Titration (C)	0.3			
PPM of Chloride (C -0.2) * 100 * 30 / B	10			
<b>PPM of Chloride, Dry Wt. Basis</b>	<b>11</b>			

**pH TEST, DOT California Test 643**

pH Value	7.74			
Temperature °C	20.5			



## SOIL RESISTIVITY TEST

### DOT CA TEST 643

Project Name: Serrano  
 Project No. : 11737.001  
 Boring No.: LB-1  
 Sample No. : BB1

Tested By : G. Berdy Date: 08/28/17  
 Data Input By: G. Bathala Date: 09/15/17  
 Depth (ft.) : 0-5

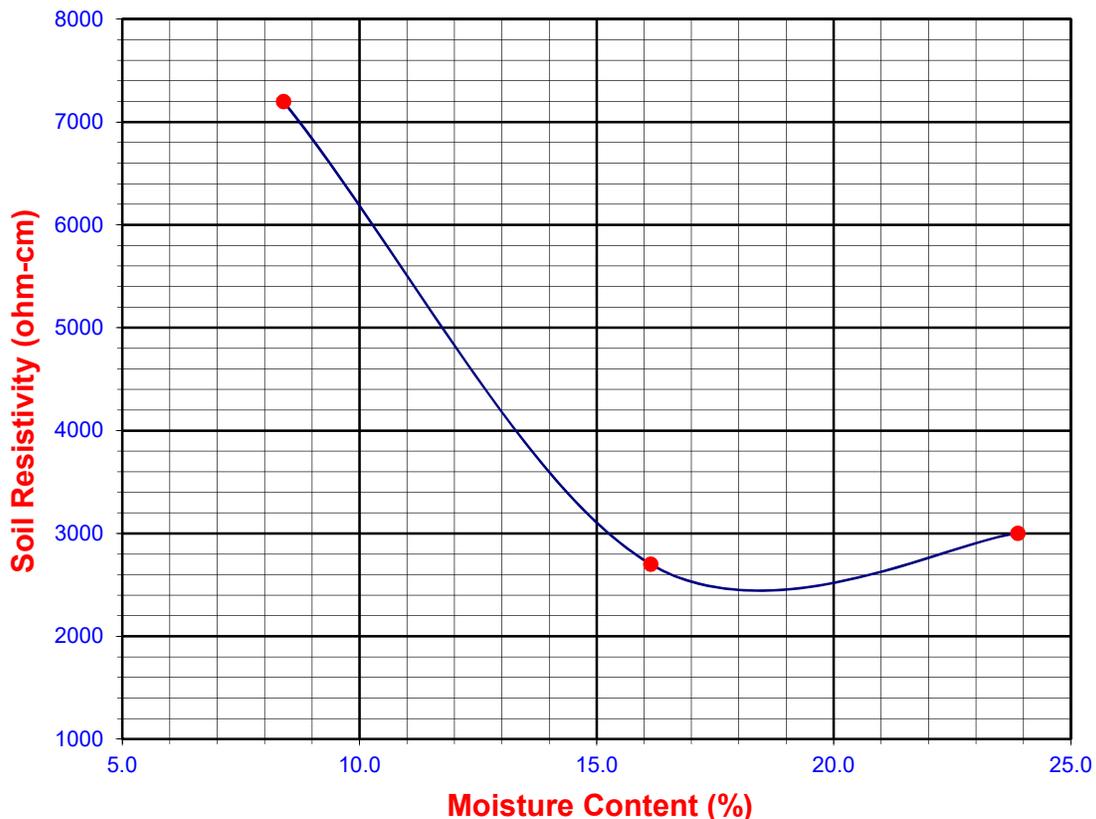
Soil Identification:\* Olive brown (SC-SM)

\*California Test 643 requires soil specimens to consist only of portions of samples passing through the No. 8 US Standard Sieve before resistivity testing. Therefore, this test method may not be representative for coarser materials.

Specimen No.	Water Added (ml) (Wa)	Adjusted Moisture Content (MC)	Resistance Reading (ohm)	Soil Resistivity (ohm-cm)
1	10	8.40	7200	7200
2	20	16.14	2700	2700
3	30	23.88	3000	3000
4				
5				

Moisture Content (%) (Mci)	0.66
Wet Wt. of Soil + Cont. (g)	90.64
Dry Wt. of Soil + Cont. (g)	90.47
Wt. of Container (g)	64.68
Container No.	
Initial Soil Wt. (g) (Wt)	130.03
Box Constant	1.000
$MC = (((1 + Mci/100) \times (Wa/Wt + 1)) - 1) \times 100$	

Min. Resistivity (ohm-cm)	Moisture Content (%)	Sulfate Content (ppm)	Chloride Content (ppm)	Soil pH	
				pH	Temp. (°C)
DOT CA Test 643		DOT CA Test 417 Part II		DOT CA Test 643	
<b>2400</b>	<b>18.4</b>	<b>91</b>	<b>11</b>	<b>7.74</b>	<b>20.5</b>



APPENDIX C  
PERCOLATION TEST RESULTS

**Boring Percolation Test Data Sheet**

<b>Project Number:</b>	11737.001	<b>Test Hole Number:</b>	LP-1
<b>Project Name:</b>	Serrano	<b>Date Excavated:</b>	8/16/2017
<b>Earth Description:</b>	Artificial Fill	<b>Date Tested:</b>	8/17/2017
<b>Liquid Description:</b>	Tap water	<b>Depth of boring (ft):</b>	9
<b>Tested By:</b>	JMP	<b>Diameter of boring (in):</b>	8
<b><u>Time Interval Standard</u></b>		<b>Diameter of casing (in):</b>	2
<b>Start Time for Pre-Soak:</b>	8/16/2017 9:00AM	<b>Length of slotted of casing (ft):</b>	5
<b>Start Time for Standard:</b>	8/17/2017 7:47AM	<b>Depth to Initial Water Depth (ft):</b>	4
<b>Standard Time Interval</b>		<b>Porosity of Annulus Material, <i>n</i> :</b>	0.35
<b>Between Readings, mins:</b>	30	<b>Bentonite Plug at Bottom:</b>	No

Percolation Data

Reading	Time	Time Interval, Δt (min.)	Initial/Final Depth to Water (ft.)	Initial/Final Water Height, H <sub>0</sub> /H <sub>f</sub> (in.)	Total Water Drop, Δd (in.)	Percolation Rate (min./in.)	Infiltration Rate (in./hr.)
1	7:47	30	4.40	55.2	3.4	8.93	0.09
	8:17		4.68	51.8			
2	8:17	30	4.68	51.8	2.4	12.50	0.07
	8:47		4.88	49.4			
3	8:47	30	4.88	49.4	2.0	14.71	0.06
	9:17		5.05	47.4			
4	9:17	30	4.95	48.6	1.9	15.63	0.06
	9:47		5.11	46.7			
5	9:47	30	4.95	48.6	2.5	11.90	0.08
	10:17		5.16	46.1			
6	10:17	30	4.96	48.5	2.4	12.50	0.08
	10:47		5.16	46.1			
7	10:47	30	4.97	48.4	2.2	13.89	0.07
	11:17		5.15	46.2			
8	11:17	30	4.95	48.6	2.3	13.16	0.07
	11:47		5.14	46.3			
9	11:47	30	4.97	48.4	2.0	14.71	0.06
	12:17		5.14	46.3			
10	12:17	30	4.96	48.5	2.0	14.71	0.06
	12:47		5.13	46.4			
11	12:47	30	4.97	48.4	1.9	15.63	0.06
	13:17		5.13	46.4			
12	13:17	30	4.96	48.5	1.9	15.63	0.06
	13:47		5.12	46.6			

Infiltration Rate (I) = Flow Volume/Flow Area/Δt

Infiltration Rate, I (Last Reading) = 0.06 in./hr.

**Boring Percolation Test Data Sheet**

<b>Project Number:</b>	11737.001	<b>Test Hole Number:</b>	LP-2
<b>Project Name:</b>	Serrano	<b>Date Excavated:</b>	8/16/2017
<b>Earth Description:</b>	Artificial Fill	<b>Date Tested:</b>	8/17/2017
<b>Liquid Description:</b>	Tap water	<b>Depth of boring (ft):</b>	9
<b>Tested By:</b>	JMP	<b>Diameter of boring (in):</b>	8
<b><u>Time Interval Standard</u></b>		<b>Diameter of casing (in):</b>	2
<b>Start Time for Pre-Soak:</b>	8/16/2017 9:00AM	<b>Length of slotted of casing (ft):</b>	5
<b>Start Time for Standard:</b>	8/17/2017 8:01AM	<b>Depth to Initial Water Depth (ft):</b>	4
<b>Standard Time Interval</b>		<b>Porosity of Annulus Material, <i>n</i> :</b>	0.35
<b>Between Readings, mins:</b>	30	<b>Bentonite Plug at Bottom:</b>	No

Percolation Data

Reading	Time	Time Interval, Δt (min.)	Initial/Final Depth to Water (ft.)	Initial/Final Water Height, H <sub>0</sub> /H <sub>f</sub> (in.)	Total Water Drop, Δd (in.)	Percolation Rate (min./in.)	Infiltration Rate (in./hr.)																																																																																																																				
1	8:01	30	4.25	57.0	1.4	20.83	0.04																																																																																																																				
	8:31		4.37	55.6				2	8:31	30	4.37	55.6	1.3	22.73	0.04	9:01	4.48	54.2	3	9:01	30	4.48	54.2	1.2	25.00	0.03	9:31	4.58	53.0	4	9:31	30	4.58	53.0	1.2	25.00	0.03	10:01	4.68	51.8	5	10:01	30	4.68	51.8	1.1	27.78	0.03	10:31	4.77	50.8	6	10:31	30	4.77	50.8	1.2	25.00	0.04	11:01	4.87	49.6	7	11:01	30	4.87	49.6	1.1	27.78	0.03	11:31	4.96	48.5	8	11:31	30	4.96	48.5	1.2	25.00	0.04	12:01	5.06	47.3	9	12:01	30	4.99	48.1	-10.6	-2.84	-0.30	12:31	4.11	58.7	10	12:31	30	4.97	48.4	1.6	19.23	0.05	13:01	5.10	46.8	11	13:01	30	4.96	48.5	1.6	19.23	0.05	13:31	5.09	46.9	12	13:31	30	4.98	48.2	1.4
2	8:31	30	4.37	55.6	1.3	22.73	0.04																																																																																																																				
	9:01		4.48	54.2				3	9:01	30	4.48	54.2	1.2	25.00	0.03	9:31	4.58	53.0	4	9:31	30	4.58	53.0	1.2	25.00	0.03	10:01	4.68	51.8	5	10:01	30	4.68	51.8	1.1	27.78	0.03	10:31	4.77	50.8	6	10:31	30	4.77	50.8	1.2	25.00	0.04	11:01	4.87	49.6	7	11:01	30	4.87	49.6	1.1	27.78	0.03	11:31	4.96	48.5	8	11:31	30	4.96	48.5	1.2	25.00	0.04	12:01	5.06	47.3	9	12:01	30	4.99	48.1	-10.6	-2.84	-0.30	12:31	4.11	58.7	10	12:31	30	4.97	48.4	1.6	19.23	0.05	13:01	5.10	46.8	11	13:01	30	4.96	48.5	1.6	19.23	0.05	13:31	5.09	46.9	12	13:31	30	4.98	48.2	1.4	20.83	0.05	14:01	5.10	46.8						
3	9:01	30	4.48	54.2	1.2	25.00	0.03																																																																																																																				
	9:31		4.58	53.0				4	9:31	30	4.58	53.0	1.2	25.00	0.03	10:01	4.68	51.8	5	10:01	30	4.68	51.8	1.1	27.78	0.03	10:31	4.77	50.8	6	10:31	30	4.77	50.8	1.2	25.00	0.04	11:01	4.87	49.6	7	11:01	30	4.87	49.6	1.1	27.78	0.03	11:31	4.96	48.5	8	11:31	30	4.96	48.5	1.2	25.00	0.04	12:01	5.06	47.3	9	12:01	30	4.99	48.1	-10.6	-2.84	-0.30	12:31	4.11	58.7	10	12:31	30	4.97	48.4	1.6	19.23	0.05	13:01	5.10	46.8	11	13:01	30	4.96	48.5	1.6	19.23	0.05	13:31	5.09	46.9	12	13:31	30	4.98	48.2	1.4	20.83	0.05	14:01	5.10	46.8																	
4	9:31	30	4.58	53.0	1.2	25.00	0.03																																																																																																																				
	10:01		4.68	51.8				5	10:01	30	4.68	51.8	1.1	27.78	0.03	10:31	4.77	50.8	6	10:31	30	4.77	50.8	1.2	25.00	0.04	11:01	4.87	49.6	7	11:01	30	4.87	49.6	1.1	27.78	0.03	11:31	4.96	48.5	8	11:31	30	4.96	48.5	1.2	25.00	0.04	12:01	5.06	47.3	9	12:01	30	4.99	48.1	-10.6	-2.84	-0.30	12:31	4.11	58.7	10	12:31	30	4.97	48.4	1.6	19.23	0.05	13:01	5.10	46.8	11	13:01	30	4.96	48.5	1.6	19.23	0.05	13:31	5.09	46.9	12	13:31	30	4.98	48.2	1.4	20.83	0.05	14:01	5.10	46.8																												
5	10:01	30	4.68	51.8	1.1	27.78	0.03																																																																																																																				
	10:31		4.77	50.8				6	10:31	30	4.77	50.8	1.2	25.00	0.04	11:01	4.87	49.6	7	11:01	30	4.87	49.6	1.1	27.78	0.03	11:31	4.96	48.5	8	11:31	30	4.96	48.5	1.2	25.00	0.04	12:01	5.06	47.3	9	12:01	30	4.99	48.1	-10.6	-2.84	-0.30	12:31	4.11	58.7	10	12:31	30	4.97	48.4	1.6	19.23	0.05	13:01	5.10	46.8	11	13:01	30	4.96	48.5	1.6	19.23	0.05	13:31	5.09	46.9	12	13:31	30	4.98	48.2	1.4	20.83	0.05	14:01	5.10	46.8																																							
6	10:31	30	4.77	50.8	1.2	25.00	0.04																																																																																																																				
	11:01		4.87	49.6				7	11:01	30	4.87	49.6	1.1	27.78	0.03	11:31	4.96	48.5	8	11:31	30	4.96	48.5	1.2	25.00	0.04	12:01	5.06	47.3	9	12:01	30	4.99	48.1	-10.6	-2.84	-0.30	12:31	4.11	58.7	10	12:31	30	4.97	48.4	1.6	19.23	0.05	13:01	5.10	46.8	11	13:01	30	4.96	48.5	1.6	19.23	0.05	13:31	5.09	46.9	12	13:31	30	4.98	48.2	1.4	20.83	0.05	14:01	5.10	46.8																																																		
7	11:01	30	4.87	49.6	1.1	27.78	0.03																																																																																																																				
	11:31		4.96	48.5				8	11:31	30	4.96	48.5	1.2	25.00	0.04	12:01	5.06	47.3	9	12:01	30	4.99	48.1	-10.6	-2.84	-0.30	12:31	4.11	58.7	10	12:31	30	4.97	48.4	1.6	19.23	0.05	13:01	5.10	46.8	11	13:01	30	4.96	48.5	1.6	19.23	0.05	13:31	5.09	46.9	12	13:31	30	4.98	48.2	1.4	20.83	0.05	14:01	5.10	46.8																																																													
8	11:31	30	4.96	48.5	1.2	25.00	0.04																																																																																																																				
	12:01		5.06	47.3				9	12:01	30	4.99	48.1	-10.6	-2.84	-0.30	12:31	4.11	58.7	10	12:31	30	4.97	48.4	1.6	19.23	0.05	13:01	5.10	46.8	11	13:01	30	4.96	48.5	1.6	19.23	0.05	13:31	5.09	46.9	12	13:31	30	4.98	48.2	1.4	20.83	0.05	14:01	5.10	46.8																																																																								
9	12:01	30	4.99	48.1	-10.6	-2.84	-0.30																																																																																																																				
	12:31		4.11	58.7				10	12:31	30	4.97	48.4	1.6	19.23	0.05	13:01	5.10	46.8	11	13:01	30	4.96	48.5	1.6	19.23	0.05	13:31	5.09	46.9	12	13:31	30	4.98	48.2	1.4	20.83	0.05	14:01	5.10	46.8																																																																																			
10	12:31	30	4.97	48.4	1.6	19.23	0.05																																																																																																																				
	13:01		5.10	46.8				11	13:01	30	4.96	48.5	1.6	19.23	0.05	13:31	5.09	46.9	12	13:31	30	4.98	48.2	1.4	20.83	0.05	14:01	5.10	46.8																																																																																														
11	13:01	30	4.96	48.5	1.6	19.23	0.05																																																																																																																				
	13:31		5.09	46.9				12	13:31	30	4.98	48.2	1.4	20.83	0.05	14:01	5.10	46.8																																																																																																									
12	13:31	30	4.98	48.2	1.4	20.83	0.05																																																																																																																				
	14:01		5.10	46.8																																																																																																																							

Infiltration Rate (I) = Flow Volume/Flow Area/Δt

Infiltration Rate, I (Last Reading) = 0.05 in./hr.

APPENDIX D  
SEISMICITY DATA


**Design Maps Detailed Report**

ASCE 7-10 Standard (33.83172°N, 117.76003°W)

Site Class D – “Stiff Soil”, Risk Category I/II/III

**Section 11.4.1 — Mapped Acceleration Parameters**

Note: Ground motion values provided below are for the direction of maximum horizontal spectral response acceleration. They have been converted from corresponding geometric mean ground motions computed by the USGS by applying factors of 1.1 (to obtain  $S_s$ ) and 1.3 (to obtain  $S_1$ ). Maps in the 2010 ASCE-7 Standard are provided for Site Class B.

Adjustments for other Site Classes are made, as needed, in Section 11.4.3.

From [Figure 22-1](#) <sup>[1]</sup>  $S_s = 1.569 \text{ g}$

---

From [Figure 22-2](#) <sup>[2]</sup>  $S_1 = 0.604 \text{ g}$

---

**Section 11.4.2 — Site Class**

The authority having jurisdiction (not the USGS), site-specific geotechnical data, and/or the default has classified the site as Site Class D, based on the site soil properties in accordance with Chapter 20.

Table 20.3-1 Site Classification

Site Class	$\bar{v}_s$	$\bar{N}$ or $\bar{N}_{ch}$	$\bar{s}_u$
A. Hard Rock	>5,000 ft/s	N/A	N/A
B. Rock	2,500 to 5,000 ft/s	N/A	N/A
C. Very dense soil and soft rock	1,200 to 2,500 ft/s	>50	>2,000 psf
D. Stiff Soil	600 to 1,200 ft/s	15 to 50	1,000 to 2,000 psf
E. Soft clay soil	<600 ft/s	<15	<1,000 psf
Any profile with more than 10 ft of soil having the characteristics:			
<ul style="list-style-type: none"> <li>• Plasticity index <math>PI &gt; 20</math>,</li> <li>• Moisture content <math>w \geq 40\%</math>, and</li> <li>• Undrained shear strength <math>\bar{s}_u &lt; 500 \text{ psf}</math></li> </ul>			
F. Soils requiring site response analysis in accordance with Section 21.1	See Section 20.3.1		

For SI: 1ft/s = 0.3048 m/s 1lb/ft<sup>2</sup> = 0.0479 kN/m<sup>2</sup>

### Section 11.4.3 — Site Coefficients and Risk-Targeted Maximum Considered Earthquake (MCE<sub>R</sub>) Spectral Response Acceleration Parameters

Table 11.4-1: Site Coefficient  $F_a$ 

Site Class	Mapped MCE <sub>R</sub> Spectral Response Acceleration Parameter at Short Period				
	$S_s \leq 0.25$	$S_s = 0.50$	$S_s = 0.75$	$S_s = 1.00$	$S_s \geq 1.25$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of  $S_s$

For Site Class = D and  $S_s = 1.569$  g,  $F_a = 1.000$

Table 11.4-2: Site Coefficient  $F_v$ 

Site Class	Mapped MCE <sub>R</sub> Spectral Response Acceleration Parameter at 1-s Period				
	$S_1 \leq 0.10$	$S_1 = 0.20$	$S_1 = 0.30$	$S_1 = 0.40$	$S_1 \geq 0.50$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.7	1.6	1.5	1.4	1.3
D	2.4	2.0	1.8	1.6	1.5
E	3.5	3.2	2.8	2.4	2.4
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of  $S_1$

For Site Class = D and  $S_1 = 0.604$  g,  $F_v = 1.500$

Equation (11.4-1):  $S_{MS} = F_a S_s = 1.000 \times 1.569 = 1.569 \text{ g}$

Equation (11.4-2):  $S_{M1} = F_v S_1 = 1.500 \times 0.604 = 0.906 \text{ g}$

Section 11.4.4 — Design Spectral Acceleration Parameters

Equation (11.4-3):  $S_{DS} = \frac{2}{3} S_{MS} = \frac{2}{3} \times 1.569 = 1.046 \text{ g}$

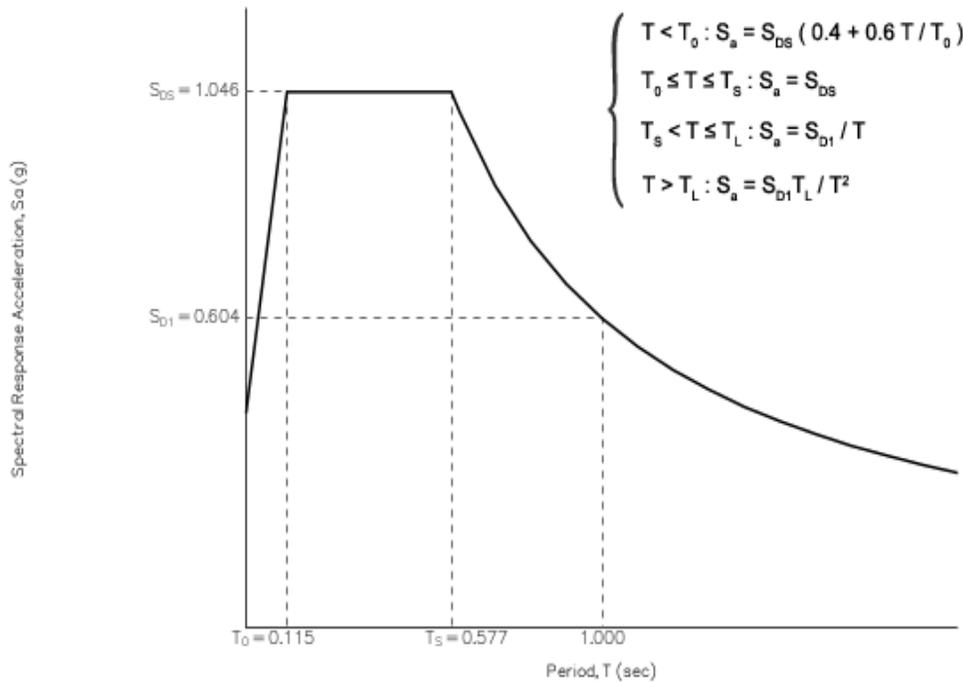
Equation (11.4-4):  $S_{D1} = \frac{2}{3} S_{M1} = \frac{2}{3} \times 0.906 = 0.604 \text{ g}$

Section 11.4.5 — Design Response Spectrum

From [Figure 22-12](#) <sup>[3]</sup>

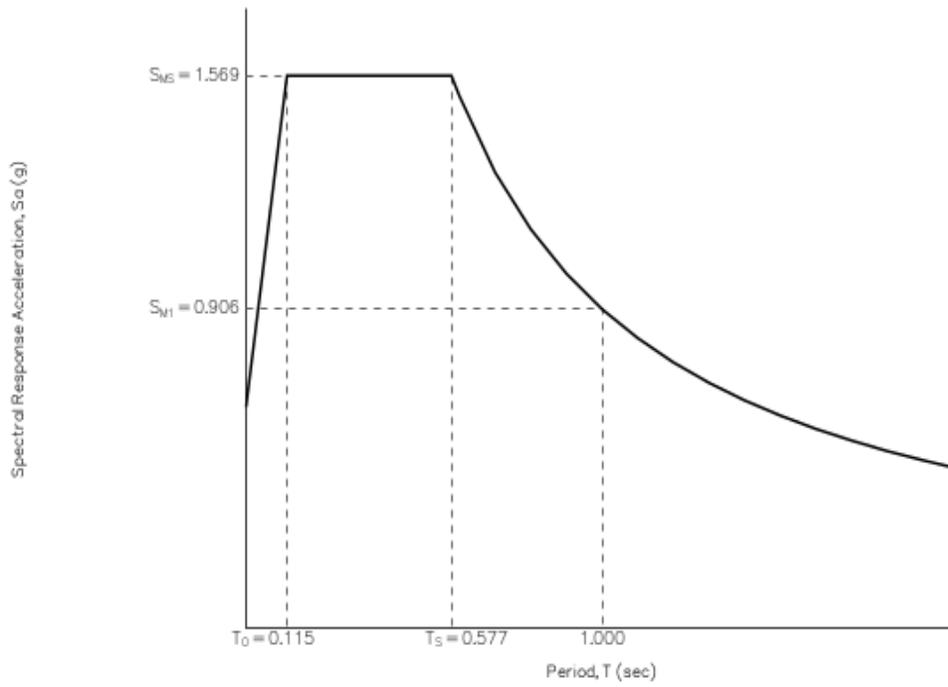
$T_L = 8 \text{ seconds}$

Figure 11.4-1: Design Response Spectrum



### Section 11.4.6 — Risk-Targeted Maximum Considered Earthquake (MCE<sub>R</sub>) Response Spectrum

The MCE<sub>R</sub> Response Spectrum is determined by multiplying the design response spectrum above by 1.5.



### Section 11.8.3 — Additional Geotechnical Investigation Report Requirements for Seismic Design Categories D through F

From [Figure 22-7](#) <sup>[4]</sup>

$$PGA = 0.599$$

Equation (11.8-1):

$$PGA_M = F_{PGA} PGA = 1.000 \times 0.599 = 0.599 \text{ g}$$

Table 11.8-1: Site Coefficient  $F_{PGA}$

Site Class	Mapped MCE Geometric Mean Peak Ground Acceleration, PGA				
	PGA ≤ 0.10	PGA = 0.20	PGA = 0.30	PGA = 0.40	PGA ≥ 0.50
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of PGA

For Site Class = D and PGA = 0.599 g,  $F_{PGA} = 1.000$

### Section 21.2.1.1 — Method 1 (from Chapter 21 – Site-Specific Ground Motion Procedures for Seismic Design)

From [Figure 22-17](#) <sup>[5]</sup>

$$C_{RS} = 1.003$$

From [Figure 22-18](#) <sup>[6]</sup>

$$C_{R1} = 1.020$$

## Section 11.6 — Seismic Design Category

Table 11.6-1 Seismic Design Category Based on Short Period Response Acceleration Parameter

VALUE OF $S_{DS}$	RISK CATEGORY		
	I or II	III	IV
$S_{DS} < 0.167g$	A	A	A
$0.167g \leq S_{DS} < 0.33g$	B	B	C
$0.33g \leq S_{DS} < 0.50g$	C	C	D
$0.50g \leq S_{DS}$	D	D	D

For Risk Category = I and  $S_{DS} = 1.046 g$ , Seismic Design Category = D

Table 11.6-2 Seismic Design Category Based on 1-S Period Response Acceleration Parameter

VALUE OF $S_{D1}$	RISK CATEGORY		
	I or II	III	IV
$S_{D1} < 0.067g$	A	A	A
$0.067g \leq S_{D1} < 0.133g$	B	B	C
$0.133g \leq S_{D1} < 0.20g$	C	C	D
$0.20g \leq S_{D1}$	D	D	D

For Risk Category = I and  $S_{D1} = 0.604 g$ , Seismic Design Category = D

Note: When  $S_1$  is greater than or equal to 0.75g, the Seismic Design Category is E for buildings in Risk Categories I, II, and III, and F for those in Risk Category IV, irrespective of the above.

Seismic Design Category  $\equiv$  "the more severe design category in accordance with Table 11.6-1 or 11.6-2" = D

Note: See Section 11.6 for alternative approaches to calculating Seismic Design Category.

### References

1. Figure 22-1: [https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-1.pdf](https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-1.pdf)
2. Figure 22-2: [https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-2.pdf](https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-2.pdf)
3. Figure 22-12: [https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-12.pdf](https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-12.pdf)
4. Figure 22-7: [https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-7.pdf](https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-7.pdf)
5. Figure 22-17: [https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-17.pdf](https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-17.pdf)
6. Figure 22-18: [https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-18.pdf](https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-18.pdf)

APPENDIX E  
GENERAL EARTHWORK AND  
GRADING RECOMMENDATIONS

APPENDIX E  
 LEIGHTON AND ASSOCIATES, INC.  
 GENERAL EARTHWORK AND GRADING SPECIFICATIONS FOR ROUGH GRADING

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LEIGHTON AND ASSOCIATES, INC.

GENERAL EARTHWORK AND GRADING SPECIFICATIONS FOR ROUGH GRADING

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## 1.0 GENERAL

### 1.1 Intent

These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

### 1.2 The Geotechnical Consultant of Record

Prior to commencement of work, the owner shall employ the Geotechnical Consultant of Record (Geotechnical Consultant). The Geotechnical Consultants shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required. Subsurface areas to be geotechnically observed, mapped, elevations recorded, and/or tested include natural ground after it has been cleared for receiving fill but before fill is placed, bottoms of all "remedial removal" areas, all key bottoms, and benches made on sloping ground to receive fill.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to determine the attained level of compaction.

The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

### **1.3 The Earthwork Contractor**

The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing the grading in accordance with the plans and specifications.

The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of "spreads" of work and the estimated quantities of daily earthwork contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate observations and tests can be planned and accomplished. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified.

## **2.0 PREPARATION OF AREAS TO BE FILLED**

### **2.1 Clearing and Grubbing**

Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). No fill lift shall contain more than 5 percent of organic matter. Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed.

## **2.2 Processing**

Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be overexcavated as specified in the following section. Scarification shall continue until soils are broken down and free of large clay lumps or clods and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

## **2.3 Overexcavation**

In addition to removals and overexcavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be overexcavated to competent ground as evaluated by the Geotechnical Consultant during grading.

## **2.4 Benching**

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical

Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise overexcavated to provide a flat subgrade for the fill.

## **2.5 Evaluation/Acceptance of Fill Areas**

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

## **3.0 FILL MATERIAL**

### **3.1 General**

Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

### **3.2 Oversize**

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 8 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.

### **3.3 Import**

If importing of fill material is required for grading, proposed import material shall meet the requirements of Section 3.1. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

## **4.0 FILL PLACEMENT AND COMPACTION**

### **4.1 Fill Layers**

Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

### **4.2 Fill Moisture Conditioning**

Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557).

### **4.3 Compaction of Fill**

After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

### **4.4 Compaction of Fill Slopes**

In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557.

### **4.5 Compaction Testing**

Field-tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify

adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

#### **4.6 Frequency of Compaction Testing**

Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.

#### **4.7 Compaction Test Locations**

The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than 5 feet apart from potential test locations shall be provided.

### **5.0 SUBDRAIN INSTALLATION**

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

### **6.0 EXCAVATION**

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of

the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

## 7.0 TRENCH BACKFILLS

### 7.1 Safety

The Contractor shall follow all OSHA and Cal/OSHA requirements for safety of trench excavations.

### 7.2 Bedding and Backfill

All bedding and backfill of utility trenches shall be performed in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum of 90 percent of relative compaction from 1 foot above the top of the conduit to the surface.

The Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

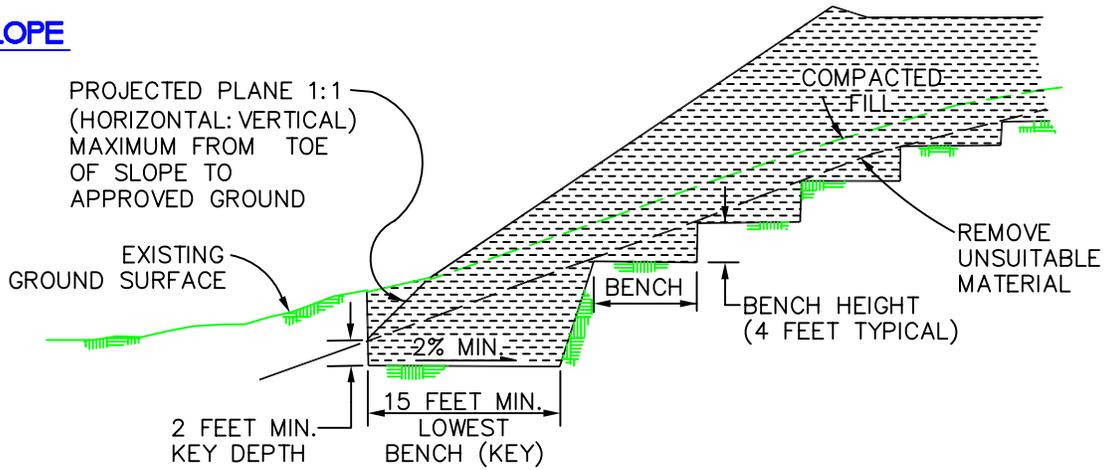
### 7.3 Lift Thickness

Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

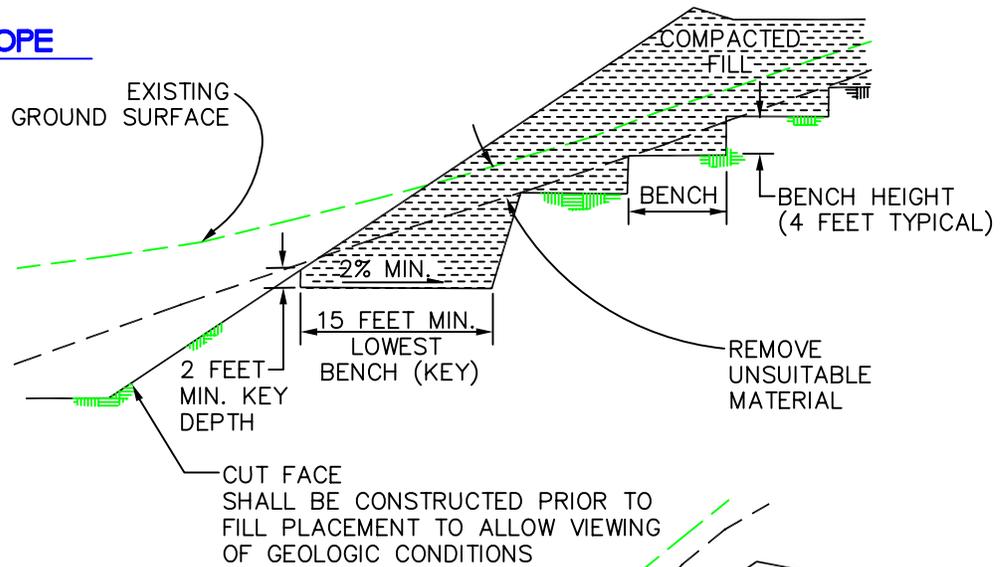
### 7.4 Observation and Testing

The jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.

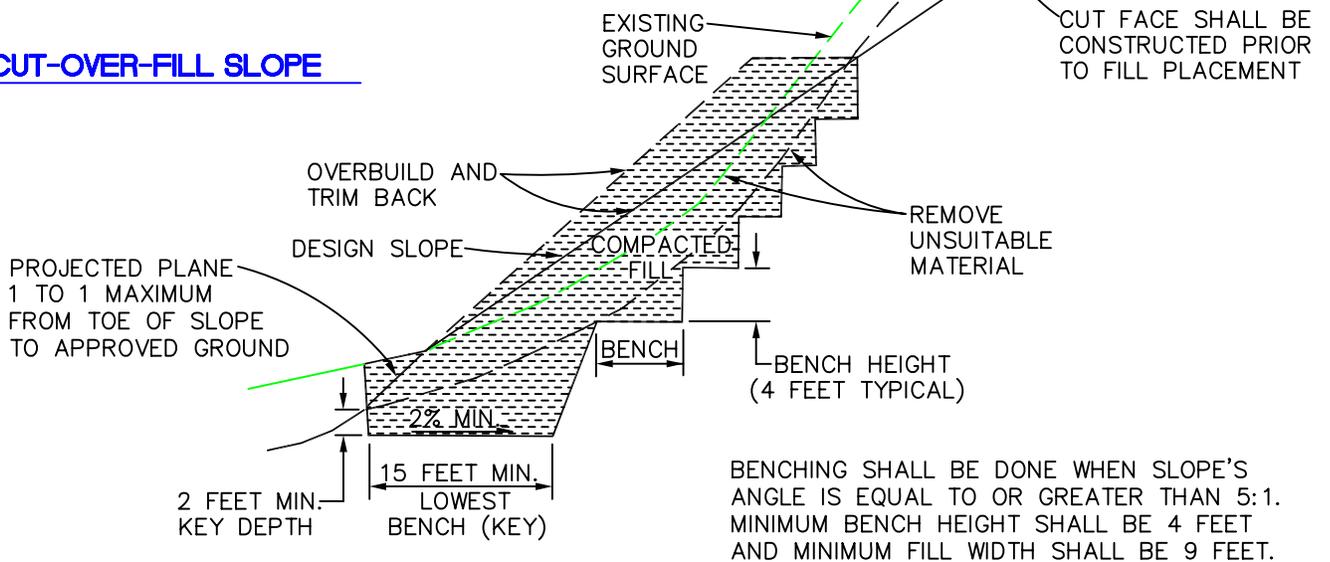
**FILL SLOPE**



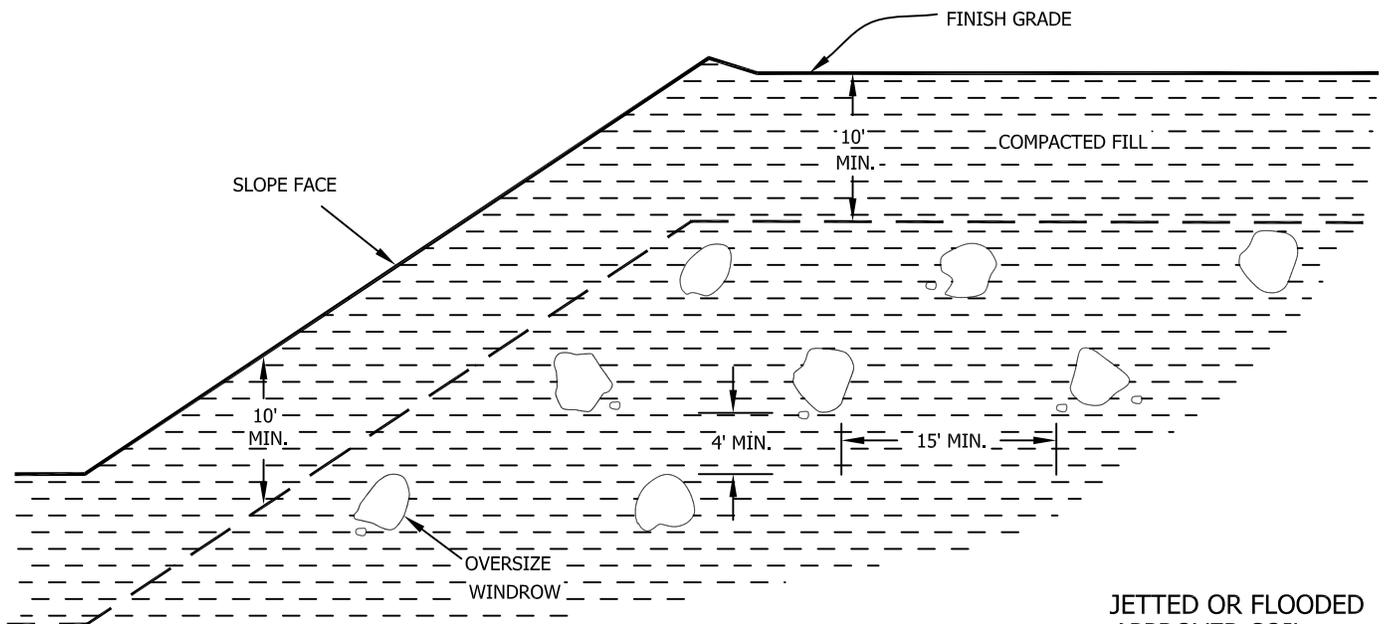
**FILL-OVER-CUT SLOPE**



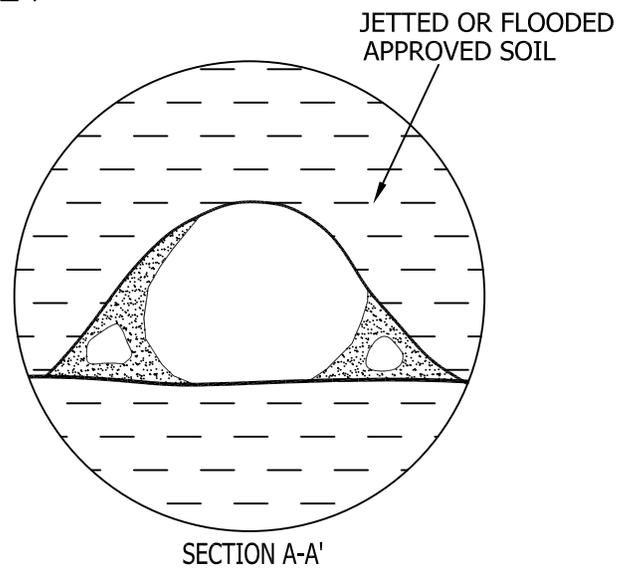
**CUT-OVER-FILL SLOPE**



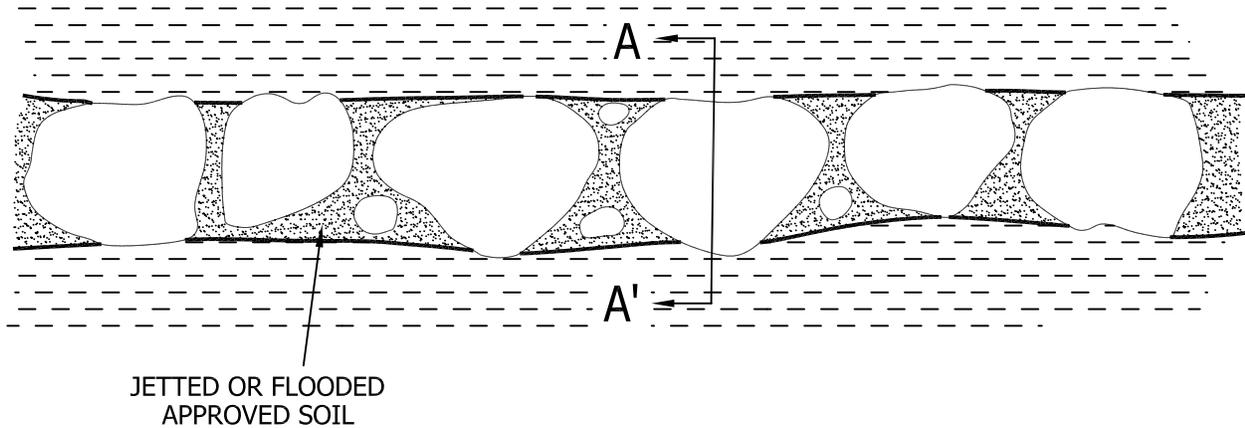
BENCHING SHALL BE DONE WHEN SLOPE'S ANGLE IS EQUAL TO OR GREATER THAN 5:1. MINIMUM BENCH HEIGHT SHALL BE 4 FEET AND MINIMUM FILL WIDTH SHALL BE 9 FEET.



- Oversize rock is larger than 8 inches in largest dimension.
- Backfill with approved soil jetted or flooded in place to fill all the voids.
- Do not bury rock within 10 feet of finish grade.
- Windrow of buried rock shall be parallel to the finished slope face.



PROFILE ALONG WINDROW

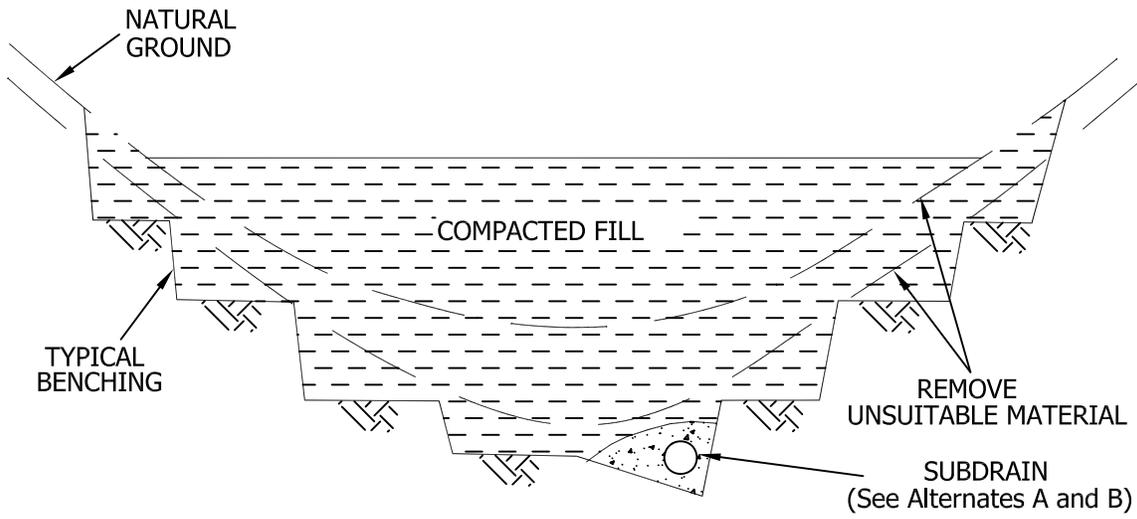


# OVERSIZE ROCK DISPOSAL

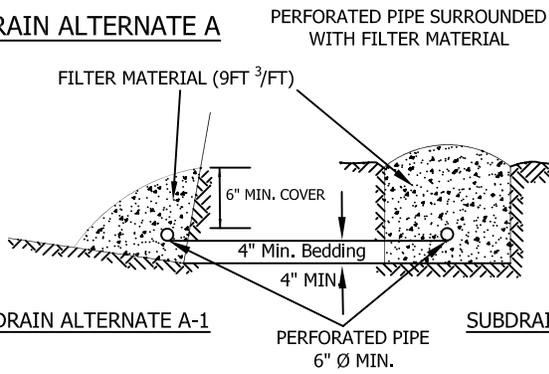
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**SUBDRAIN ALTERNATE A**

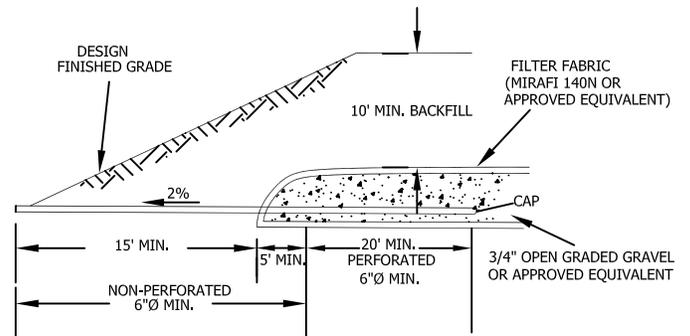
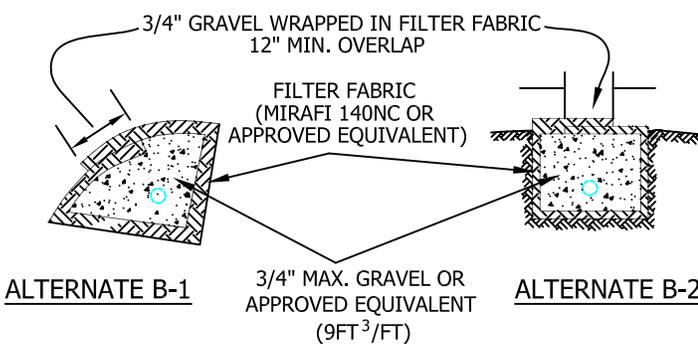


**FILTER MATERIAL**  
 FILTER MATERIAL SHALL BE CLASS 2 PERMEABLE MATERIAL PER STATE OF CALIFORNIA STANDARD SPECIFICATION, OR APPROVED ALTERNATE.  
 CLASS 2 GRADING AS FOLLOWS:

Sieve Size	Percent Passing
1"	100
3/4"	90-100
3/8"	40-100
No. 4	25-40
No. 8	18-33
No. 30	5-15
No. 50	0-7
No. 200	0-3

**SUBDRAIN ALTERNATE B**

**DETAIL OF CANYON SUBDRAIN TERMINAL**

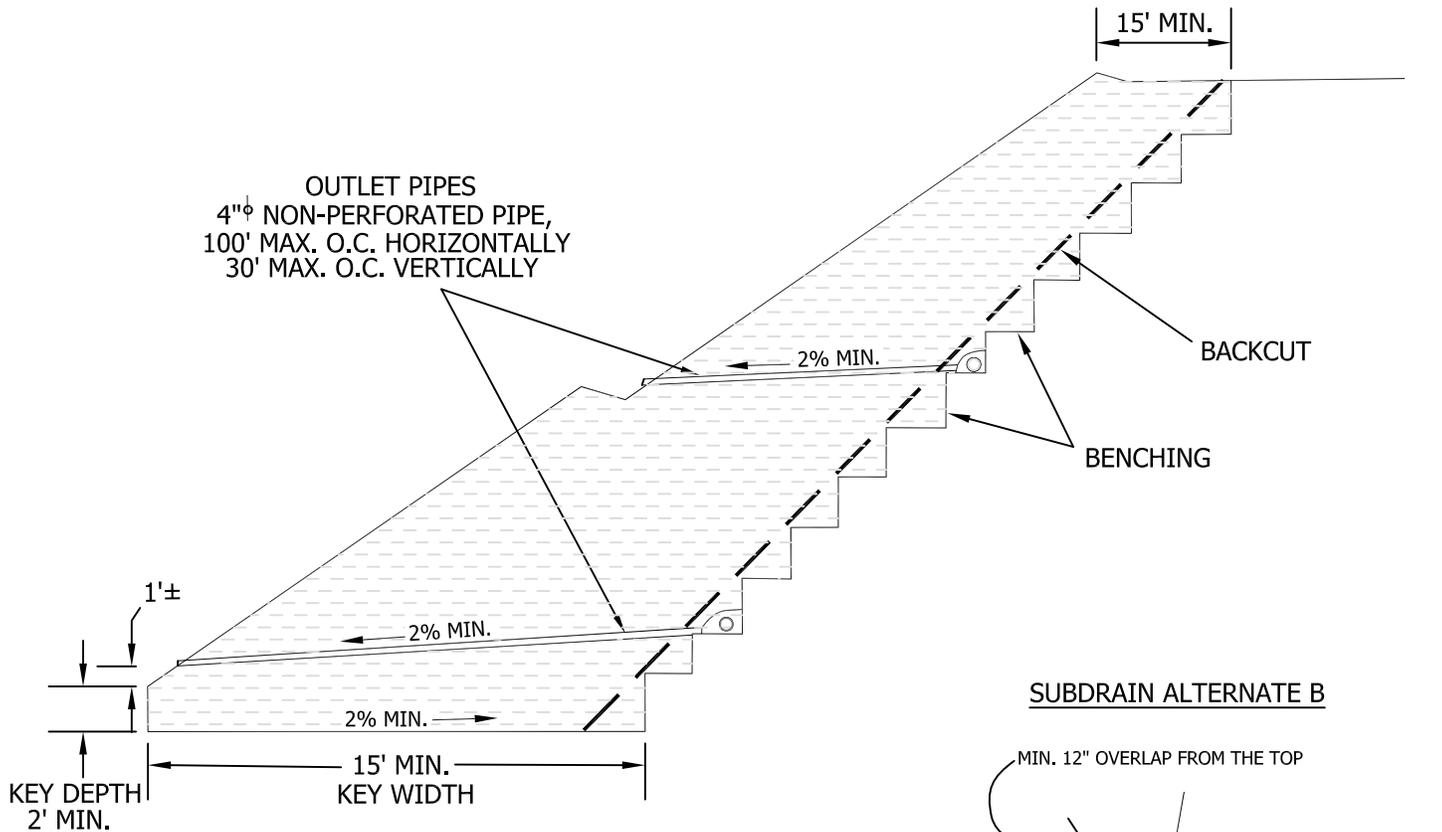


○ PERFORATED PIPE IS OPTIONAL PER GOVERNING AGENCY'S REQUIREMENTS

CANYON  
SUBDRAIN

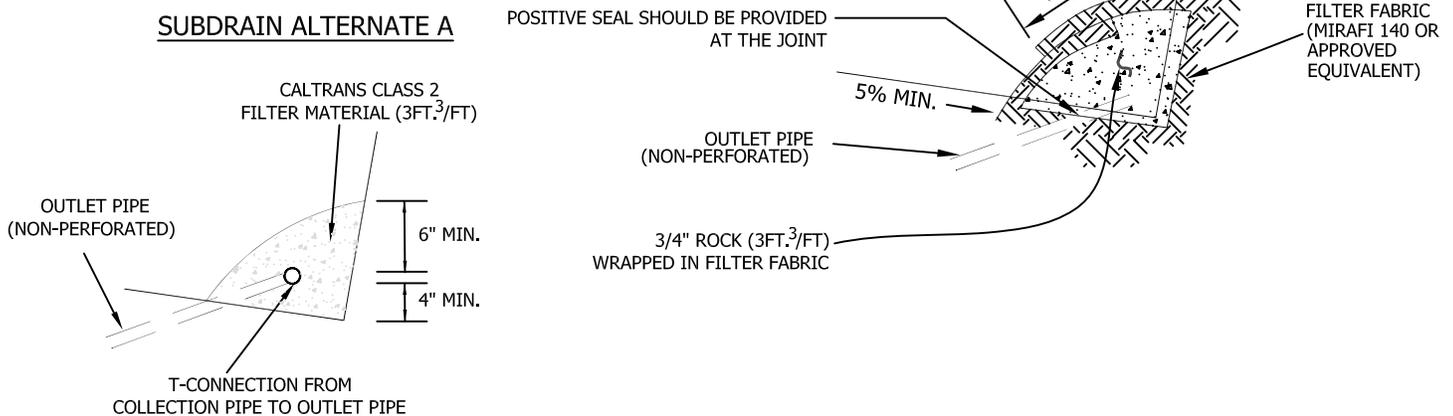
GENERAL EARTHWORK AND GRADING  
SPECIFICATIONS  
STANDARD DETAILS C





**SUBDRAIN ALTERNATE A**

**SUBDRAIN ALTERNATE B**



- **SUBDRAIN INSTALLATION** - Subdrain collector pipe shall be installed with perforations down or, unless otherwise designated by the geotechnical consultant. Outlet pipes shall be non-perforated pipe. The subdrain pipe shall have at least 8 perforations uniformly spaced per foot. Perforation shall be 1/4" to 1/2" if drilled holes are used. All subdrain pipes shall have a gradient at least 2% towards the outlet.
- **SUBDRAIN PIPE** - Subdrain pipe shall be ASTM D2751, ASTM D1527 (Schedule 40) or SDR 23.5 ABS pipe or ASTM D3034 (Schedule 40) or SDR 23.5 PVC pipe.
- All outlet pipe shall be placed in a trench and, after fill is placed above it, rodded to verify integrity.

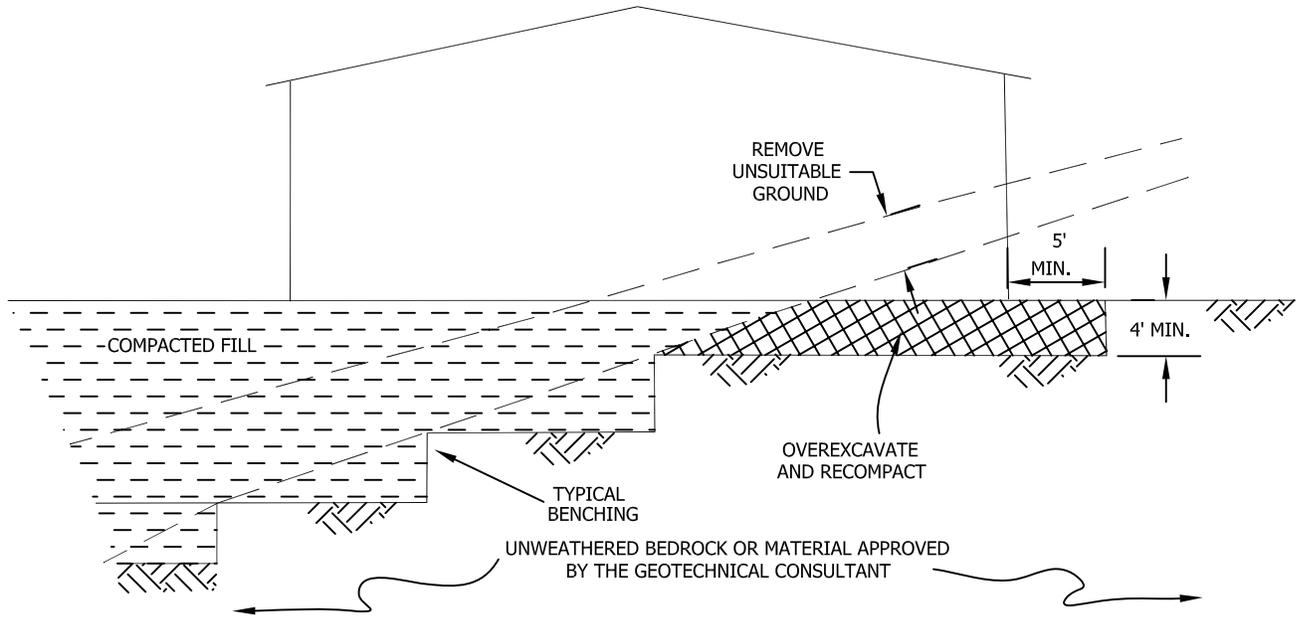
**BUTTRESS OR  
REPLACEMENT FILL  
SUBDRAINS**

**GENERAL EARTHWORK AND GRADING  
SPECIFICATIONS  
STANDARD DETAILS D**

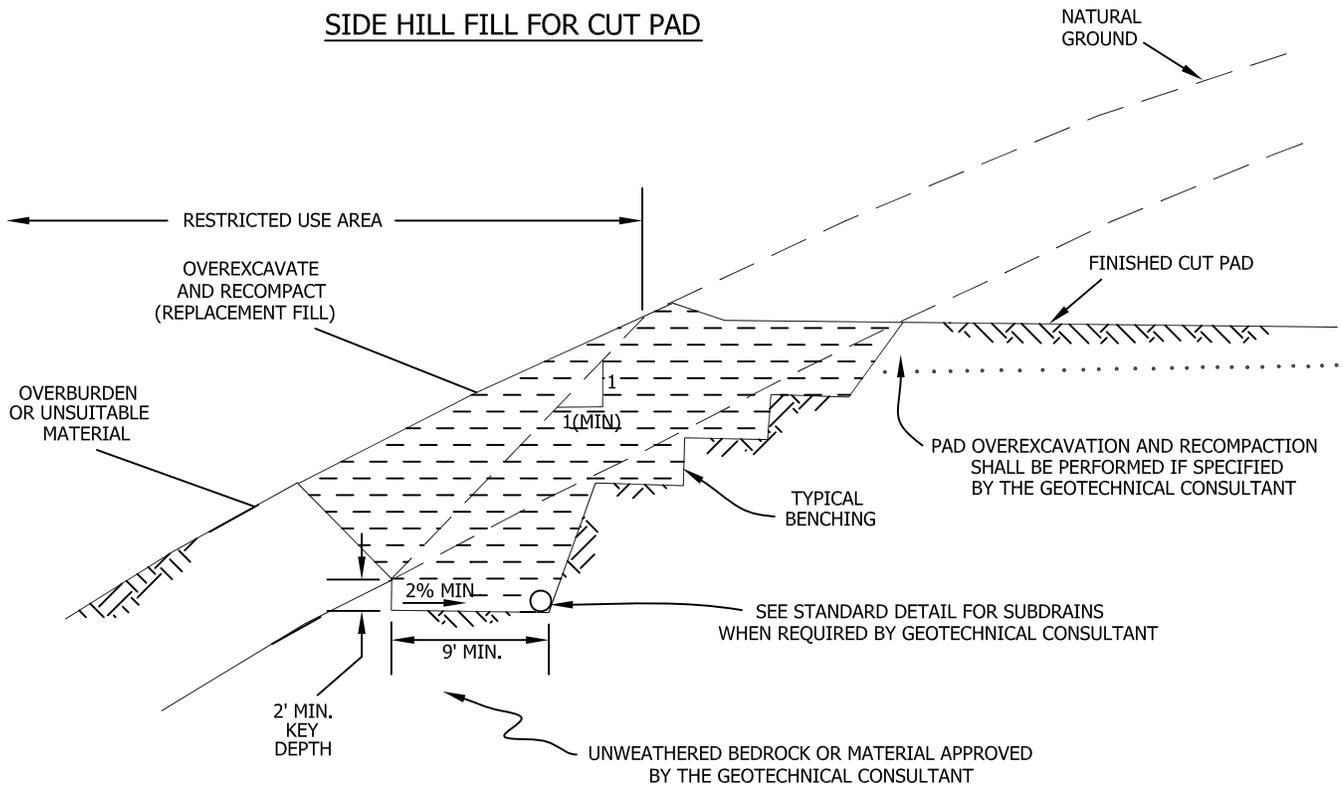
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### CUT-FILL TRANSITION LOT OVEREXCAVATION



### SIDE HILL FILL FOR CUT PAD



**TRANSITION LOT FILLS  
AND SIDE HILL FILLS**

GENERAL EARTHWORK AND GRADING  
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# Appendix B Phase I Environmental Site Assessment

## Appendices

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PHASE I ENVIRONMENTAL SITE ASSESSMENT  
6501 THROUGH 6513 EAST SERRANO AVENUE,  
ANAHEIM, CALIFORNIA

Prepared For:

**6509 SERRANO L.P.**

4040 MacArthur Boulevard, Suite 300  
Newport Beach, California 92660

Project No. 11737.003

September 21, 2018



Leighton and Associates, Inc.

A LEIGHTON GROUP COMPANY

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B-1



Leighton and Associates, Inc.  
A LEIGHTON GROUP COMPANY

September 21, 2018

Project No. 11737.003

6509 Serrano L.P.  
4040 MacArthur Boulevard, Suite 300  
Newport Beach, California 92660

Attention: Mr. Robert Kim

**Subject: Phase I Environmental Site Assessment  
6501 through 6513 East Serrano Avenue  
Anaheim, California**

Leighton and Associates, Inc. (Leighton) is pleased to present this Phase I Environmental Site Assessment Report for the property located at 6501 through 6513 East Serrano Avenue in the city of Anaheim, California (subject site). Leighton declares that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 Code of Federal Regulations (CFR) 312, and the ASTM International (ASTM) Standard E1527-13.

Leighton has the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject site. Leighton has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

If you have questions regarding this report, please contact us. We appreciate the opportunity to be of service to 6509 Serrano L.P.

Respectfully submitted,

LEIGHTON AND ASSOCIATES, INC.



  
Brynn McCulloch, PG 8798  
Associate Geologist

BFM/gv

Distribution: (1 PDF) Addressee

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## 1.0 INTRODUCTION

### 1.1 Authorization

Leighton and Associates, Inc. (Leighton) performed a Phase I Environmental Site Assessment (ESA) of the property located at 6501 through 6513 East Serrano Avenue in the city of Anaheim, Orange County, California (subject site – Figure 1) in accordance with the authorization of 6509 Serrano L.P.

### 1.2 Purpose

The purpose of the Phase I ESA was to identify, to the extent feasible and pursuant to the processes prescribed in ASTM International (ASTM) E1527-13, recognized environmental conditions (RECs), historical RECs (HRECs), or controlled RECs (CRECs) in connection with the subject site.

RECs are defined, according to ASTM E1527-13 as *“the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not RECs.”*

HRECs are defined, according to ASTM E1527-13 as *“a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.”*

CRECs are defined, according to ASTM E1527-13 as *“a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.”* (ASTM E1527-13, 2013).

### 1.3 Scope of Work

The scope of work was performed in accordance with Leighton's proposal dated June 27, 2018 and included the following tasks:

- A reconnaissance-level visit of the subject site for evidence of the release(s) of hazardous materials and petroleum products and to assess the potential for onsite releases of hazardous materials and petroleum products;
- Records review (including review of previous environmental reports, selected governmental databases, and historical review);
- Interviews; and
- Preparation of this report presenting our findings.

### 1.4 Significant Assumptions

Leighton assumes that the purpose of this Phase I ESA is to provide appropriate inquiry into the previous ownership and use of the subject site so that the Client may qualify for the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) landowner liability protections as defined in CERCLA, 42 USC §9601(35)(B). Leighton also assumes that the information provided by the Client and its agents, regulatory database provider, and regulatory agencies is true and reliable.

### 1.5 Limitations and Exceptions

Leighton performed the Phase I ESA in conformance with the scope and limitations of ASTM E1527-13 of the subject site. Other than the non-scope items shown in Section 1.6 that were not applicable, there were no exceptions to, or deletions from, this practice.

Property specific activities performed by Leighton and information collected regarding these activities are summarized within this report. The findings of the Phase I ESA are presented in Section 7.0. Opinions, and conclusions drawn by Leighton, based on the information collected as part of the Phase I ESA, are presented in Sections 8.0 and 9.0, respectively. References are included as Appendix A. Subject site photographs are presented in Appendix B. Completed interview forms are included as Appendix C. An Environmental Lien and

Activities and Use Limitations (AUL) Search report is included in Appendix D. The Environmental Radius Report and Vapor Encroachment Screen are included as Appendix E. Historical documentation is provided in Appendix F.

This Phase I ESA was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions.

The observations and conclusions presented in this report are professional opinions based on the scope of activities, work schedule, and information obtained through the Phase I ESA described herein. Opinions presented herein apply to property conditions existing at the time of our study and cannot necessarily be taken to apply to property conditions or changes that we are not aware of or have not had the opportunity to evaluate. It must be recognized that conclusions drawn from these data are limited to the amount, type, distribution, and integrity of the information collected at the time of the investigation, the methods utilized to collect and evaluate the data, and that a full and complete determination of environmental risks cannot be made. Although Leighton has taken steps to obtain true copies of available information, we make no representation or warranty with respect to the accuracy or completeness of this information.

This practice does not address whether requirements in addition to all appropriate inquiry have been met in order to qualify for the landowner liability protections including the continuing obligation not to impede the integrity and effectiveness of activity and use limitations, or the duty to take reasonable steps to prevent releases, or the duty to comply with legally required release reporting obligations. Users should also be aware that there are likely to be other legal obligations with regard to hazardous substances or petroleum products discovered on the subject site that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for non-compliance.

#### 1.6 Special Terms and Conditions

The scope of work for this Phase I ESA did not include testing of electrical equipment for the presence of PCBs or collection of other environmental samples such as soil, groundwater, air, building materials, paint, or other media; assessment of natural hazards such as naturally occurring asbestos, radon gas or methane gas; assessment of the potential presence of radionuclides; or

assessment of nonchemical hazards such as the potential for damage from earthquakes or floods, or the presence of endangered species or wildlife habitats. This Phase I ESA also did not include an extensive assessment of the environmental compliance status of the subject site or of businesses operating at the subject site.

1.7 User Reliance

This report is for the exclusive use of 6509 Serrano L.P. Use of this report by any other party shall be at such party's sole risk.

1.8 Important Information about Geoenvironmental Reports

6509 Serrano L.P. is referred to Appendix G regarding important information provided by Geoprofessional Business Association (GBA) on geoenvironmental studies and reports.

## 2.0 SITE DESCRIPTION

### 2.1 Location and Legal Description

The subject site is located on the northeast corner of East Serrano Avenue and Nohl Ranch Road at the addresses of 6501 through 6513 East Serrano Avenue city of Anaheim, Orange County, California (Figure 1). The Orange County Assessor's office designated the subject site as Assessor Parcel Number (APN) 365-062-09. A legal description for the subject site is included in the Environmental Lien and AUL Report attached in Appendix D.

### 2.2 Subject Site Vicinity General Characteristics

The subject site vicinity is generally developed for residential use. Anaheim Hills Elementary School is located southwest of the subject site.

### 2.3 Current Use of the Subject Site

The subject site is comprised of approximately 3 acres of land currently occupied by a commercial center (Appendix B, Photos 1 through 8). The current tenant list includes, but is not limited to, the following: Orange County Performing Arts Academy, Kumon, a dentist office, several insurance offices, Bodies by Us (gym), a couple salons, a martial arts studio, Aqua Duks (swim school), Green Earth Cleaners, and Serrano Heights Academy.

### 2.4 Descriptions of Structures, Roads and Other Improvements on the Property

The subject site is developed with seven one-story, multi-suite structures in the central portion of the subject site, surrounded by asphalt-paved surface parking. The subject site buildings were constructed circa 1980.

The following utilities will provide service to the subject site.

Natural Gas:	Southern California Gas Company
Source of Potable Water:	City of Anaheim
Electric:	City of Anaheim
Sewage Disposal:	City of Anaheim
Solid Waste Disposal:	Republic Services

## 2.5 Current Uses of Adjoining Properties

The subject site is bordered to the north and east by residential properties; to the south by East Serrano Avenue, followed by residential properties; and to the west by Nohl Ranch Road, followed by a vacant lot.

### 3.0 USER PROVIDED INFORMATION

The user of this Phase I ESA is identified as 6509 Serrano L.P. As a part of the ASTM E1527-13 process, Mr. Robert Kim, Project Manager for 6509 Serrano L.P., completed a questionnaire for the subject site. A copy of this questionnaire is provided in Appendix C.

#### 3.1 Environmental Liens or Activity and Use Limitations

Mr. Kim indicated that she was not aware of environmental liens or AULs filed or recorded for the subject site.

No environmental liens or AULs were identified in the Environmental Lien and AUL Search report provided by Environmental Data Resources, Inc. (EDR), dated July 10, 2018. A copy of the Environmental Lien and AUL Search report is included in Appendix D.

#### 3.2 Specialized Knowledge

Mr. Kim does not have any specialized knowledge or experience with the subject site or nearby properties.

#### 3.3 Commonly Known or Reasonably Ascertainable Information

Mr. Kim was not aware of any commonly known or reasonably ascertainable information related to the subject site, except for the current and past use of the subject site as a commercial/retail center.

#### 3.4 Valuation Reduction for Environmental Issues

Mr. Kim indicated that the purchase price being paid for the subject site is based on fair market value.

#### 3.5 Owner, Property Manager, and Occupant Information

According to the Environmental Lien and AUL Search report, the subject site is currently owned by 401 Dyer L.P.; however, Mr. Kim indicated that the title is now vested in 6509 Serrano L.P. The subject site is currently managed by Ms. Kem Braswell and Ms. Monica McDonnell of Optima Asset Management Services, Inc. and occupied by several tenants.

3.6 Reason for Performing Phase I ESA

According to Mr. Kim, the reason for requesting this Phase I ESA is for the redevelopment of the subject site from commercial to multi-family residential use.

3.7 Other

No additional information was provided by 6509 Serrano L.P.

## 4.0 RECORDS REVIEW

### 4.1 Physical Setting Source(s)

Leighton reviewed pertinent maps and readily available literature for information on the physiography and hydrogeology of the subject site. A summary of this information is presented in the following subsections.

#### 4.1.1 Topography

The subject site is located in Section 18 of Township 4 South, Range 8 West of the San Bernardino Baseline and Meridian. Topographic map coverage of the subject site vicinity is provided by the United States Geological Survey (USGS) Orange, California Quadrangle (2012). The elevation of the subject site is approximately 795 feet above mean sea level and topography slopes gently to the west-southwest.

#### 4.1.2 Surface Water

Surface water was not observed on the subject site. The Walnut Canyon Reservoir is located approximately 0.6 miles northeast of the subject site.

#### 4.1.3 Geology and Soils

The subject site is located within the Peninsular Ranges geomorphic province of California along the eastern margins of the Los Angeles Basin. The Los Angeles Basin is bounded to the north by the east-west trending Transverse Ranges and to the east and southeast by the northwest trending Peninsular Ranges. The Los Angeles Basin is a large structural depression formed as the San Andreas Fault shifted eastward to its present location. The Basin has since been filled with sediments eroded from the surrounding highlands interpreted to have a maximum thickness of over 30,000 feet (Leighton, 2017).

The subject site is located in the Santa Ana Mountains in the eastern portion of the Peralta Hills. These low-lying hills extend westward from the Santa Ana Mountains toward the Los Angeles Basin and are primarily underlain by Tertiary age (between about 2.6 to 65 million years old) mostly marine sediments deposited in the Los Angeles Basin spanning the Miocene to Pliocene Epoch (about 2.6 to 23.3 million years ago). The

subject site is located in an area mapped to be underlain by Miocene age Puente Formation bedrock (Soquel and La Vida Members) primarily consisting of sandstone and siltstone (Leighton, 2017).

As interpreted from our previous geotechnical investigation of the subject site, the subject site is underlain by previously placed artificial fill overlying the Tertiary age sandstone and siltstone bedrock materials. The previously placed artificial fill soil as encountered in our exploratory borings is on the order of less than a foot to over 76.5 feet thick across the subject site, consisting primarily of orange brown to gray brown, moist to very moist, medium dense to dense silty sand and clayey sand interlayered with medium stiff to very stiff clay, silty clay and sandy clay. Based on review of documents provided by the City of Anaheim, the artificial fill materials encountered at the subject site are associated with the previous mass/rough grading of the area. No report documenting the grading activities associated with the current subject site development was available for review; however, based on our understanding of the City's policy, it is reasonable to assume that previous grading activities associated with the subject site and its vicinity were permitted and performed under the observation and testing of geotechnical consultants (Leighton, 2017).

#### 4.1.4 Hydrogeology

The subject site is situated in the East Coastal Plain Hydrologic Sub-Area, within the Lower Santa Ana River Hydrologic Area of the Santa Ana River Hydrologic Unit (California Regional Water Quality Control Board, Santa Ana Region [SARWQCB], 1986). The beneficial uses of groundwater within the subject site vicinity are municipal, agricultural, and industrial service and supply (SARWQCB, 1986).

Groundwater was not encountered in our geotechnical investigation borings drilled at the subject site to a maximum depth of approximately 76.5 feet bgs. Groundwater in the subject site vicinity is estimated to be at least 200 feet bgs. Groundwater is expected to flow to the west-southwest following topography.

#### 4.1.5 Oil and Gas Fields

Leighton reviewed the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR), Online Mapping System, on July 20, 2018. Evidence of oil wells or oil field-related facilities was not indicated on the subject site or within 0.25-miles of the subject site:

#### 4.2 Standard Environmental Record Sources

A search of selected government databases was conducted by Leighton using the EDR Radius Map™ Report with GeoCheck® environmental database report system. Details and descriptions of the database search are provided in the EDR database report. The database report meets the government records search requirements of ASTM E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The database listings were reviewed within the specified radii established by the ASTM E1527-13. A copy of this report is included in Appendix E.

##### 4.2.1 Subject Site

The subject site was not identified in the EDR database report.

##### 4.2.2 Offsite

One offsite property (SAS Properties Inc.) was listed as a historic automotive service station in 2011 through 2013 at the address of 6540 East Carnegie Avenue, adjacent to the north of the subject site. Review of aerial photographs from 2009 through 2016 indicates that the address of 6540 East Carnegie Avenue is the location of a residence and not an automotive service station; therefore, this offsite listing is not considered a concern with potential to adversely impact the subject site.

**Unmapped Listings:** Orphan listings in the EDR report, are properties without a complete street address and therefore cannot be located on a map. The eight unmapped listings identified in the radius report were reviewed and not interpreted to represent an adverse effect to the subject site.

No offsite properties with potential to adversely impact the subject site were identified in the EDR database report.

#### 4.2.3 Vapor Encroachment

Leighton reviewed the Vapor Encroachment Screen (VES) produced using EDR's Vapor Encroachment Worksheet application that gathers regulatory database information from the accompanying Radius Report and allows the user to integrate groundwater information, regional geology, and other information to evaluate the concern for potential vapor encroachment from onsite activities and from adjacent properties. The VES application was designed by EDR 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 (E2600-10), also referred to as the Tier 1 VES, as defined by ASTM E2600-10.

Using the VES application, no offsite database listings with potential to negatively impact the subject site were identified near the subject site; therefore, vapor encroachment is not considered a REC. A copy of the VES report has been included as Appendix E.

#### 4.2.4 Regulatory Agency Contacts

On July 9, 2018, Leighton requested regulatory records for the addresses and APN associated with the subject site. The following agencies were contacted or their respective online databases were researched:

- DTSC (Cypress and Chatsworth offices);
- Santa Ana Regional Water Quality Control Board (SARWQCB);
- Anaheim Fire Department (AFD);
- Anaheim Public Utilities Department (APUC);
- Orange County Health Care Agency (OCHCA); and
- South Coast Air Quality Management District (SCAQMD).

Records were not found for the subject site at the DTSC, AFD, APUC, and SCAQMD. It should be noted that a response has not yet been received from the OCHCA. If records are identified at this agency that alters the findings and conclusions of this report, an addendum will be issued.

### National Pipeline Mapping System (NPMS)

Leighton reviewed records posted on the National Pipeline Mapping System's NPMS Public Map Viewer on July 20, 2018. No pipelines were shown on or adjacent to the subject site (NPMS, 2017).

### State of California Radon Survey

The State of California conducts ongoing radon monitoring in the state. The results of the survey indicate that of the 59 indoor air samples collected from zip code 92807, five samples contained radon concentrations greater than the U. S. Environmental Protection Agency (EPA) radon action level of 4 pCi/l of air. Therefore, the potential for elevated radon levels at the subject site appears to be low.

#### 4.2.5 Other Reports

No other reports were reviewed in preparation of this Phase I ESA.

### 4.3 Historical Use Information on the Property

Leighton reviewed selected historical information on the subject site. These references were reviewed for evidence of activities, which would suggest the presence of hazardous substances at the subject site and to evaluate the potential for the subject site to be impacted by offsite sources of contamination. The following paragraphs are a chronological summary of the review.

#### 4.3.1 Aerial Photographs

Historical aerial photographs were reviewed for information regarding past subject site uses. Aerial photographs dated 1938, 1946, 1952, 1963, 1966, 1972, 1985, 1989, 1994, 2005, 2009, 2012, and 2016, provided by EDR, were reviewed. Copies of these photographs are included in Appendix F.

In the **1938, 1946, 1952, 1963, and 1966** aerial photographs, the subject site and surrounding properties are observed to be vacant, undeveloped land. Small dirt roads are observed transecting the western and eastern portions of the subject site.

In the **1972** aerial photograph, the subject site and surrounding properties are observed to be graded in preparation for the construction of the current developments.

In the **1985** aerial photograph, the present-day seven commercial structures and surrounding parking lot are observed on the subject site. The present-day residential properties are observed to the north and east of the subject site. East Serrano Avenue is observed to the south of the subject site followed by the present-day residential properties. Nohl Ranch Road is observed to the west of the subject site, followed by the present-day vacant lot.

In the **1989, 1994, 2005, 2009, 2012, and 2016** aerial photograph, land use changes are not observed on the subject site and surrounding properties.

#### 4.3.2 Historical Topographic Maps

Historical topographic maps provided in the EDR Historical Topographic Map Report were reviewed for information regarding past subject site uses, and include the following quadrangles: Anaheim (1896, 1898, 1901, and 1942), Corona (1902), and Orange (1949, 1950, 1964, 1981, and 2012). Copies of these maps are provided in Appendix F.

**1896, 1898, 1901, 1902, and 1942:** No structures, roads, tanks, or wells are depicted on the subject site and surrounding properties.

**1949, 1950, and 1964:** No structures, roads, tanks, or wells are depicted on the subject site and surrounding properties. The Walnut Canyon Wash transects the subject site.

**1981:** The subject site and surrounding properties are located with a red-shaded area in which only landmark buildings are depicted, and typically represent an area of residential development. East Serrano Avenue is depicted to the south of the subject site and Nohl Ranch Road is depicted to the west of the subject site.

**2012:** Only landmark buildings are depicted on the topographic map. Structures are not depicted on the subject site and surrounding properties.

#### 4.3.3 Fire Insurance Maps

Fire insurance maps, or Sanborn® maps, are detailed city plans showing building footprints, construction details, use of structure, street address, etc. The maps were designed to assist fire insurance agents in determining the degree of hazard associated with a particular property. Sanborn Maps were produced from approximately 1867 to the present for commercial, industrial, and residential sections of approximately 12,000 cities and towns in the United States.

Sanborn® Fire Insurance Maps are not available for subject site and surrounding properties. A copy of this report has been provided in Appendix F.

#### 4.3.4 Historical City Directories

City Directories have been published for cities and towns across the US since the 1700s. Originally a list of residents, the City Directory developed into a tool for locating individuals and businesses in particular. For each street address listed, the directory recorded the name of the resident or business that operated from this addresses. While City Directory coverage is usually comprehensive for major cities, it may be sporadic for rural areas and small towns. The purpose of the City Directory research was to attempt to determine the businesses that were historically located at the subject site and adjacent addresses.

Leighton reviewed the EDR City Directory Abstract dated July 10, 2018 (Appendix F). Records were reviewed from 1920 to 2014 at approximate 5-year intervals. The subject site addresses were identified in the city directory search in 1980, 1986, 1991, and 1995 as the following businesses: Sigma Sales, Terry's Claws and Paws, Mitchell Mary Jane Acorn Realty, Anaheim Hills Community Church, Aqua Duks Swim School, various insurance agencies, Martial Arts Academy, Anaheim Hills Liquor, and other commercial office listings.

Surrounding property listings consisted primarily of residential listings and some commercial listings. No surrounding properties of concern were identified in the city directory report.

#### 4.3.5 Building Department Records

Building permits for the subject site addresses were downloaded from the City of Anaheim Building Department online permit database. Permits of environmental concern were not noted for the subject site.

#### 4.3.6 Other Historical Sources

Other historical sources were not reviewed as a part of this Phase I ESA.

#### 4.3.7 Summary of Historical Land Use

Based on historical records, land usage is summarized as follows:

<b>Time Period</b>	<b>Land Usage</b>	<b>Reference</b>
Prior to 1896	Unknown	None Available
Approximately 1896 to 1980	Vacant, undeveloped land	Aerial Photographs Topographic Maps Building Permits
Approximately 1980 to present	Commercial/Retail Center	Site Reconnaissance Aerial Photographs Building Permits

## 5.0 SITE RECONNAISSANCE

### 5.1 Methodology and Limiting Conditions

On July 17, 2018, a representative of Leighton conducted a reconnaissance-level assessment of the subject site, which consisted of observing and documenting existing conditions of the subject site and nature of the neighboring development. Photographs of the subject site are presented in Appendix B and their view directions are noted on Figure 2. Items noted during the subject site reconnaissance are also depicted on Figure 2.

### 5.2 General Property Setting

The subject site vicinity is generally developed for residential use. Anaheim Hills Elementary School is located southwest of the subject site.

The subject site is comprised of approximately 3 acres of land currently occupied by a commercial center (Appendix B, Photos 1 through 8). The current tenant list includes, but is not limited to, the following: Orange County Performing Arts Academy, Kumon, a dentist office, several insurance offices, Bodies by Us (gym), a couple salons, a martial arts studio, Aqua Duks (swim school), Green Earth Cleaners, and Serrano Heights Academy.

### 5.3 Exterior and Interior Observations

#### 5.3.1 Hazardous Substances, Drums, and Other Chemical Containers

Several suites contained numerous bottles (less than 5 gallons in size) of general cleaning supplies. These cleaning supplies are not considered a REC associated with the subject site.

Pool chemicals and other disinfectants were stored outdoors adjacent to the north of the Aqua Duks suite, located in the northeast portion of the subject site. No excessive spills or leaks were observed on the concrete within the storage area. These chemicals are not considered a REC associated with the subject site.

Several containers of paint, 1-gallon to 5-gallon in size, were observed on the porch located on the western side of the 6501 Serrano Avenue

building located in the western portion of the subject site. No leaks or spills were observed on the wood beneath the paint containers. These paint containers are not considered a REC associated with the subject site.

No other hazardous substances, drums, or other chemical containers were observed onsite.

### 5.3.2 Storage Tanks

Evidence of underground storage tanks (USTs) (such as vent lines, fill or overfill ports) and aboveground storage tanks (ASTs) was not observed on the subject site.

### 5.3.3 Polychlorinated Biphenyls (PCBs)

Four pad-mounted transformers were observed onsite. No leaks or stains were observed on the concrete pads beneath the transformers. These transformers are not considered RECs associated with the subject site.

### 5.3.4 Waste Disposal

General waste is stored within onsite dumpsters and regularly removed from the subject site by the Republic Services.

### 5.3.5 Dumping

Evidence of active dumping was not observed on the subject site.

### 5.3.6 Pits, Ponds, Lagoons, Septic Systems, Wastewater, Drains, Cisterns, and Sumps

Evidence of pits, ponds, lagoons, septic systems, wastewater, cisterns, and sumps was not observed on the subject site.

Several floor drains and storm water drains were observed throughout the subject site. No oil or other debris was observed within the drains.

### 5.3.7 Pesticide Use

Evidence of pesticide use was not observed on the subject site.

5.3.8 Staining, Discolored Soils, Corrosion

Stained, discolored soil or evidence of corrosion was not observed on the subject site.

5.3.9 Stressed Vegetation

Evidence of stressed vegetation was not observed on the subject site.

5.3.10 Unusual Odors

Unusual odors were not detected on the subject site.

5.3.11 Onsite Wells

Oil, gas production, or water wells were not observed on the subject site.

5.3.12 Other Observations

Green Earth Cleaners is located in the southeast corner of the 6509 Serrano Avenue building in the southeast portion of the subject site. According to the onsite manager interview during our site reconnaissance, cleaning activities are, and have been, conducted offsite and no hazardous chemicals are stored onsite with the Green Earth Cleaners suite.

## 6.0 INTERVIEWS

Leighton conducted interviews with persons having knowledge of current or past subject site usage. Interviews were conducted either orally or in the form of a written questionnaire. Written responses, if any, are included as Appendix C.

### 6.1 Interview with Owner

An Owner Questionnaire was forwarded to a representative of the current owner of the subject site on July 12, 2018. As of the date of this report, a completed interview form has not been returned to Leighton.

### 6.2 Interview with Property Manager

Ms. Monica McDonnell of Optima Asset Management Services, Inc., the current property manager was interviewed during our subject site reconnaissance completed on July 17, 2018. Ms. McDonnell was not aware of any environmental concerns, USTs, or other hazardous chemicals stored onsite, with the exception of the pool chemicals located at the Aqua Duk suite.

### 6.3 Interviews with Occupants

The subject site is unoccupied; therefore, occupants were not interviewed as part of this Phase I ESA.

### 6.4 Interviews with Local Government Officials

Leighton did not interview employees with local government agencies to request information regarding historic and current uses of the Site with the exception of those noted in Section 4.2.

### 6.5 Interviews with Others

Leighton did not conduct additional interviews for this Phase I ESA.

## 7.0 FINDINGS

Leighton performed a Phase I ESA of the property located at 6501 through 6513 East Serrano Avenue in the city of Anaheim, Orange County, California (subject site – Figure 1) in accordance with 6509 Serrano L.P.'s authorization.

### 7.1 Onsite

Historically, the subject site was vacant, undeveloped until 1972 when the subject site was graded for the present-day commercial/retail center, which was constructed circa 1980.

Currently, the subject site is comprised of approximately 3 acres of land currently occupied by a commercial center (Appendix B, Photos 1 through 8). The current tenant list includes, but is not limited to, the following: Orange County Performing Arts Academy, Kumon, a dentist office, several insurance offices, Bodies by Us (gym), a couple salons, a martial arts studio, Aqua Duks (swim school), Green Earth Cleaners, and Serrano Heights Academy.

A search of selected government databases was conducted by Leighton using the EDR Radius Report environmental database report system. Details of the database search along with descriptions of each database researched are provided in the EDR report included in Appendix E. The report meets the government records search requirements of ASTM E1527-13 Standard Practice for Environmental site Assessments: Phase I Environmental Site Assessment Process. The database listings were reviewed within the specified radii established by the ASTM E1527-13. The subject site was not listed in the EDR report.

No onsite RECs were identified in preparation of this Phase I ESA.

### 7.2 Offsite

Historically, the adjacent properties were vacant, undeveloped land until development began in the early 1970s.

Currently, the subject site is bordered to the north and east by residential properties; to the south by East Serrano Avenue, followed by residential properties; and to the west by Nohl Ranch Road, followed by a vacant lot.

Environmental concerns with potential to impact the subject site were not identified for the properties located in vicinity to the subject site.

### 7.3 Data Gaps

The following data gaps were identified by Leighton:

- Files have not been received from the OCHCA.
- A completed Owner Interview form has not been received by Leighton.

It is Leighton's opinion, based on other reasonably obtained data, that these data gaps are not significant to identifying RECs in connection with the subject site.

## 8.0 OPINION

### 8.1 Onsite

It is Leighton's opinion that no RECs, CRECs, or HRECs were identified for the subject site.

### 8.2 Offsite

No offsite RECs were identified that would negatively impact the subject site.

## 9.0 CONCLUSIONS AND RECOMMENDATIONS

Leighton has performed a Phase I ESA in conformance with the scope and limitations of ASTM E1527-13 of the property located at 6501 through 6513 East Serrano Avenue in the city of Anaheim, Orange County, California. Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report. This assessment has revealed no evidence of RECs, HRECs, or CRECs in connection with the subject site.

In general, observations should be made during future property development for areas of possible contamination such as, but not limited to, the presence of underground facilities, railroads, buried debris, waste drums, and tanks, stained soil or odorous soils. Should such materials be encountered, further investigation and analysis may be necessary at that time.

## 10.0 DEVIATIONS

Leighton did not deviate from or alter the scope of work, as defined in Section 1.3 of this report. Significant data gaps were not identified that affect the ability of Leighton to identify RECs at the subject site.

## 11.0 ADDITIONAL SERVICES

Leighton did not perform work outside the scope of work as defined in Section 1.3 of this report.

## 12.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

### 12.1 Corporate

Leighton is a California corporation, providing geotechnical and environmental consulting services throughout California. We are solely a consulting firm without interests in real property other than our office locations in Southern California. We provide professional environmental consulting services including application of science and engineering to environmental compliance, hazardous materials/waste assessment and cleanup, and management of hazardous, solid and industrial waste. Phase I Environmental Site Assessments are a part of this practice area and have been conducted by us.

### 12.2 Individual

The qualifications of the Associate Geologist and the other Leighton environmental professionals involved in this Phase I ESA meet the Leighton corporate requirements for performing Phase I ESAs as specified by ASTM E1527-13. In addition, Ms. Brynn McCulloch is a Professional Geologist (PG).

### 12.3 Environmental Professional Statement

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional, as defined by §312.10 of 40 CFR Part 312.

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. I have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Brynn McCulloch, PG  
Associate Geologist





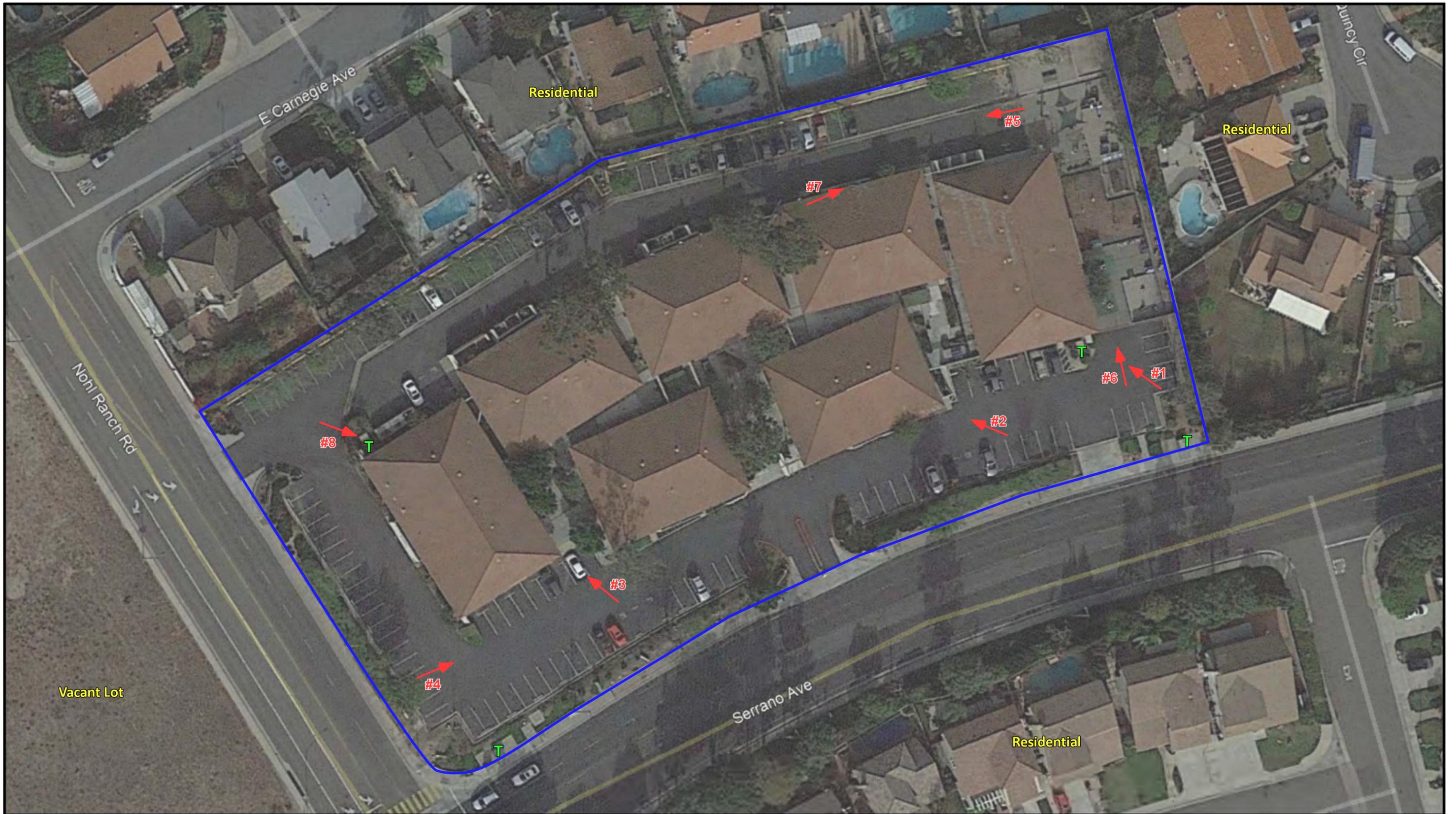
Project: 11737.003	Eng/Geol: VPI/JMP
Scale: 1" = 2,000'	Date: September 2018
Base Map: ESRI ArcGIS Online 2017 Thematic Information: Leighton Author: Leighton Geomatics (btran)	

# SITE LOCATION MAP

Proposed Residential Development  
6501-6513 E. Serrano Avenue  
Anaheim, California

Figure 1

Leighton



"#\$ D  
 Approximate Subject Site Boundary\*  
 Photo ID and Direction  
 Approximate Location of Pad-mounted Transformer

**SITE PLAN**  
 Proposed Residential Development  
 6501-6513 E. Serrano Avenue  
 Anaheim, California

Project No.	<u>11737.003</u>	
Scale	<u>Not to Scale</u>	
Engr./Geol.	<u>BFM</u>	
Drafted By	<u>BFM</u>	
Date	<u>September 2018</u>	Figure No. 2

# APPENDIX A

## APPENDIX A

### References

- ASTM International, 2013, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E1527-13, dated November 6, 2013
- California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, Online Mapping System, Accessed July 20, 2018
- Department of Toxic Substances Control, Envirostor Online Database, Accessed July 20, 2018
- EDR Aerial Photo Decade Package, July 10, 2018
- EDR Building Permit Report, July 10, 2018
- EDR Certified Sanborn Map Report, July 9, 2018
- EDR City Directory Abstract, July 10, 2018
- EDR Environmental Lien and AUL Search Report, July 10, 2018
- EDR Historical Topographic Map Report, July 9, 2018
- EDR Radius Map Report with GeoCheck<sup>®</sup>, July 9, 2018
- Leighton and Associates, Inc., 2017, Geotechnical Exploration Report Proposed Residential Development 6501-6513 East Serrano Avenue Anaheim, California, dated October 9, 2017.
- State Water Resources Control Board, Geotracker Online Database, Accessed July 20, 2018

# APPENDIX B



**Client Name: 6509 Serrano L.P.**

**Site Location: 6501 through 6513 East Serrano Avenue, Anaheim, California**

**Project No.**

**11737.003**

**Photo No. 1**

**View of Direction of Photo:**  
Northwest

**Description:**  
View of the 6513 Serrano Avenue building located in eastern portion of the subject site.



**Photo No. 2**

**View of Direction of Photo:**  
Northwest

**Description:**  
View of the 6511 Serrano Avenue building located in the southeast portion of the subject site.





Leighton and Associates, Inc.

# PHOTOGRAPHIC RECORD

July 17, 2018

**Client Name:** 6509 Serrano L.P.

**Site Location:** 6501 through 6513 East Serrano Avenue, Anaheim, California

**Project No.**

11737.003

### Photo No. 3

**View of Direction of Photo:**  
Northwest

**Description:**

View of the 6501 Serrano Avenue building located in the western portion of the subject site.



### Photo No. 4

**View of Direction of Photo:**  
East

**Description:**

View of the southern parking lot.





**Client Name:** 6509 Serrano L.P.

**Site Location:** 6501 through 6513 East Serrano Avenue, Anaheim, California

**Project No.**  
11737.003

**Photo No. 5**

**View of Direction of Photo:**  
West

**Description:**

View of the northern parking lot.



**Photo No. 6**

**View of Direction of Photo:**  
North

**Description:**

View of the playground located along the eastern boundary of the subject site associated with the Serrano Heights Academy (preschool).





**Client Name: 6509 Serrano L.P.**

**Site Location: 6501 through 6513 East Serrano Avenue, Anaheim, California**

**Project No.**  
**11737.003**

**Photo No. 7**

**View of Direction of Photo:**  
Northeast

**Description:**  
View of pool equipment located along the north side of the Aqua Duks suite in the northwest portion of the subject site.



**Photo No. 8**

**View of Direction of Photo:**  
Southeast

**Description:**  
View of a pad-mounted transformer located in the northwest portion of the subject site.



# APPENDIX C



## Phase I ESA Users Questionnaire

---

**Project Name:** THE RESIDENCES AT NOHL RANCH

---

**Complete and Correct Address(es) of the Property and APN(s):**

6501-6513 SERRANO AVE., ANAHEIM, CA

---

**User Company Name:**

6509 E. SERRANO L.P.

**User Name/Title:**

Bob Kim / Project Manager

---

**User Phone/Email:** bobkim727@gmail.com

---

**Interviewee Name and Relationship to Project:**

Bob Kim, project manager

---

**Site Owner:** 6509 E. Serrano L.P.

---

**Reason Phase I is required:**

convert the use from existing retail to a multi-family residential

---

**Type of property:**

Retail

---

**Type of property transaction (e.g., Sale, purchase, exchange):**

General Plan Amendment & Zone Change

---

**Any scope of services beyond the ASTM Practice E 1527:**

n/a

---

**All Parties that will rely on the Phase I report:**

ownership, the City of Anaheim, G.C. etc.

---

**Name and Contact Information for Site Contact:**

Bob Kim (email above)

---

**Any special terms or conditions:**

for residential use going forward

---

**Any other pertinent knowledge or experience with the property (e.g., prior reports, documents, correspondence concerning the environmental conditions of the property):**

n/a to best of our knowledge

---

**(1). Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25).**

Did a search of recorded land title records (or judicial records where appropriate) identify any environmental liens filed or recorded against the property under federal, tribal, state or local law?  Yes |  No

If Yes, Describe:

**(2). Activity and land use limitations (AULs) that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).**

Did a search of recorded land title records (or judicial records where appropriate) identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?  Yes |  No

If Yes, Describe:

**(3). Specialized knowledge or experience of the person seeking to qualify for the Landowners Liability Protections (LLP) (40 CFR 312.28).**

Do you have any specialized knowledge or experience related to the property or 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?  Yes |  No

If Yes, Describe:

**(4). Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 DRF 312.29).**

Does the purchase price being paid for this property reasonably reflect the fair market value of the property?

Yes |  No

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?  Yes |  No

If Yes, Describe:

**(5). Commonly known or reasonable 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?  Yes |  No
- (b.) Do you know of specific chemicals that are present or once were present at the property?  Yes |  No
- (c.) Do you know of spills or other chemical releases that have taken place at the property?  Yes |  No
- (d.) Do you know of any environmental cleanups that have taken place at the property?  Yes |  No

If Yes, Describe:

**(6). The degree of obviousness of the presence of likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).**

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*?  Yes |  No

If Yes, Describe:

  
Signature

9/13/18

Date



# APPENDIX D

**Serrano Anaheim**

6501-6513 Serrano Avenue  
Anaheim, CA 92807

Inquiry Number: 5355743.7  
July 10, 2018

# EDR Environmental Lien and AUL Search

## 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 1-800-352-0050  
with any questions or comments.

### Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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## EDR Environmental Lien and AUL Search

### TARGET PROPERTY INFORMATION

#### ADDRESS

6501-6513 Serrano Avenue  
Serrano Anaheim  
Anaheim, CA 92807

#### RESEARCH SOURCE

##### Source 1:

Orange Recorder  
Orange, CA

### PROPERTY INFORMATION

#### Deed 1:

Type of Deed: deed  
Title is vested in: 401 Dyer LP  
Title received from: CMC Nine  
Deed Dated: 8/17/2006  
Deed Recorded: 9/19/2006  
Book: NA  
Page: na  
Volume: na  
Instrument: na  
Docket: NA  
Land Record Comments:  
Miscellaneous Comments:

**Legal Description:** See Exhibit

**Legal Current Owner:** 401 Dyer LP

**Parcel # / Property Identifier:** 365-062-09

**Comments:** See Exhibit

### ENVIRONMENTAL LIEN

Environmental Lien: Found  Not Found

### OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found  Not Found

## **Deed Exhibit 1**

Tom Daly, Clerk-Recorder



55.00

RECORDING REQUESTED BY:  
LandAmerica Commercial Services

AND WHEN RECORDED MAIL TO:

2006000623976 04:04pm 09/19/06

401 Dyer L.P.  
c/o Saunders Property Company  
Attn: John R. Saunders  
4525 MacArthur Blvd., Suite A  
Newport Beach, CA 92860

103 49 G02 4

0.00 0.00 20.00 20.00 9.00 0.00 0.00 0.00

THIS SPACE FOR RECORDER'S USE ONLY:

Escrow No.: 7457038-DSC

Title Order No.: 09502530-88

**GRANT DEED**

THE UNDERSIGNED GRANTOR(S) DECLARE(S)  
In accordance with Section 11932 California Revenue & Taxation Code Grantor has declared Documentary Transfer Tax due by a separate statement not being recorded with this Grant Deed.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

CMC-Nine, a California general partnership

hereby GRANT(s) to:

401 Dyer L.P., a California limited partnership

the real property in the City of Anaheim, County of Orange, State of California, described as:

LEGAL DESCRIPTION ATTACHED HERETO AS EXHIBIT "A" AND MADE A PART HEREOF  
Also Known as: 6509 East Serrano Avenue, Anaheim, CA 92807  
A.P. # 365-062-09

DATED: August 17, 2006

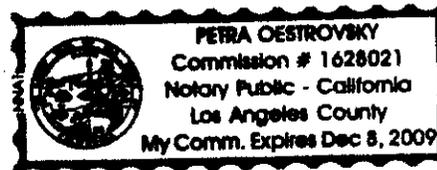
STATE OF CALIFORNIA  
COUNTY OF Los Angeles  
On August 22, 2006  
Before me, Petra Oestrovsky  
A Notary Public in and for said State, personally appeared

CMC-Nine,  
a California general partnership

By: [Signature]  
Ming-Cheng Chang, General Partner

MING-CHENG CHANG

Personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.  
WITNESS my hand and official seal.



Signature [Signature]  
MAIL TAX STATEMENTS TO PARTY SHOWN BELOW; IF NO PARTY SHOWN, MAIL AS DIRECTED ABOVE:

(This area for official notarial seal)

GOVERNMENT CODE 27361.7

I certify under penalty of perjury that the Notary Seal on the document to which this Statement is attached reads as follows:

NAME OF THE NOTARY: Petra Oestrovsky  
 DATE COMMISSION EXPIRES: 12-8-2009  
 COUNTY WHERE BOND IS FILED: Los Angeles  
 COMMISSION NUMBER: 1628021 VENDOR#: NNAI

I certify under penalty of perjury and the laws of the State of California that the illegible portion of this document to which this statement is attached reads as follows:

See attached exhibit "B" for clarity

---

---

---

---

---

---

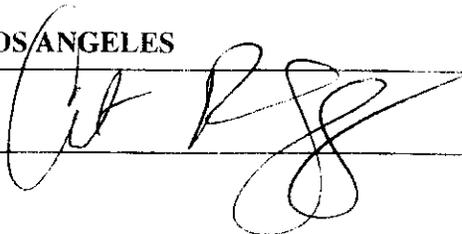
---

---

---

---

\* Personally know to me (or proved to me on the basis of satisfactory evidence) to be the person(s) is /are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or entity upon behalf of which the person(s) acted, executed the instrument.

PLACE OF EXECUTION: LOS ANGELES DATE: 9-19-09  
 SIGNATURE: 

**EXHIBIT "A"**

All that certain real property situated in the County of Orange, State of California, described as follows:

That portion of Section 7 and 18, Township 4 South, Range 8 West, in the Rancho Santiago De Santa Ana, being also a portion of the land allotted to Paula Peralta De Dominguez, as described in the Final Decree of Partition of said Rancho, in the City of Anaheim, County of Orange, State of California, which was entered September 12, 1868 in Book "B" at Page 410 of Judgments of the District Court of the 17<sup>th</sup> Judicial District, in and for Los Angeles County, California, described as follows:

Beginning at the most Westerly corner of the land described in the Deed to Hallcraft Homes, recorded October 31, 1972 in Book 10403, Page 909 of Official Records; thence along the Northerly lines of the land of Hallcraft, North 58° 44' 00" East 157.71 feet to a tangent curve concave Southeasterly and having a radius of 1000.00 feet; thence Northeasterly along said curve, through a central angle of 17° 39' 40", an arc distance of 308.25 feet; thence tangent, North 76° 23' 40" East 49.04 feet to an angle point in the land described in the Deed to Woodbine Corporation, recorded October 27, 1972 in Book 10397, Page 868 of Official Records; thence along the lines of the land of Woodbine, North 13° 36' 20" West 280.00 feet; thence South 76° 23' 40" West 297.90 feet; thence South 58° 44' 00" West 277.92 feet to an angle point in said land of Woodbine; thence continuing South, 58° 44' 00" West 31.00 feet to a line which bears North 31° 16' 00" West from the point of beginning; thence South 31° 16' 00" East 295.17 feet to the point of beginning.

Assessor's Parcel Number:      **365-062-09**

Exhibit "B"

RECORDING REQUESTED BY:  
LandAmerica Commercial Services

AND WHEN RECORDED MAIL TO:

401 Dyer L.P.  
c/o Saunders Property Company  
Attn: John R. Saunders  
4525 MacArthur Blvd., Suite A  
Newport Beach, CA 92660

THIS SPACE FOR RECORDER'S USE ONLY:

Title Order No.: 09502530-68

Escrow No.: 7457036-DSC

**GRANT DEED**

THE UNDERSIGNED GRANTOR(S) DECLARE(S)

In accordance with Section 11932 California Revenue & Taxation Code Grantor has declared Documentary Transfer Tax due by a separate statement not being recorded with this Grant Deed.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

**CMC-Nine, a California general partnership**

hereby GRANT(s) to:

**401 Dyer L.P., a California limited partnership**

the real property in the City of Anaheim, County of Orange, State of California, described as:

LEGAL DESCRIPTION ATTACHED HERETO AS **EXHIBIT "A"** AND MADE A PART HEREOF  
Also Known as: 6509 East Serrano Avenue, Anaheim, CA 92807  
A.P. # 365-062-09

**DATED: August 17, 2006**

STATE OF CALIFORNIA  
COUNTY OF \_\_\_\_\_  
On \_\_\_\_\_  
Before me, \_\_\_\_\_  
A Notary Public in and for said State, personally appeared

CMC-Nine,  
a California general partnership

**MING-CHENG CHANG**

By: \_\_\_\_\_  
Ming-Cheng Chang, General Partner

Personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature \_\_\_\_\_

(This area for official notarial seal)

MAIL TAX STATEMENTS TO PARTY SHOWN BELOW; IF NO PARTY SHOWN, MAIL AS DIRECTED ABOVE:

# APPENDIX E

**Serrano Anaheim**

6501-6513 Serrano Avenue  
Anaheim, CA 92807

Inquiry Number: 5355743.2s  
July 09, 2018

# The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

### Disclaimer - Copyright and Trademark Notice

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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 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

6501-6513 SERRANO AVENUE  
ANAHEIM, CA 92807

#### COORDINATES

Latitude (North): 33.8316770 - 33° 49' 54.03"  
Longitude (West): 117.7600870 - 117° 45' 36.31"  
Universal Transverse Mercator: Zone 11  
UTM X (Meters): 429667.1  
UTM Y (Meters): 3743558.8  
Elevation: 796 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5641308 ORANGE, CA  
Version Date: 2012

East Map: 5636465 BLACK STAR CANYON, CA  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140515, 20140603  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
6501-6513 SERRANO AVENUE  
ANAHEIM, CA 92807

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">1</a>	SAS PROPERTIES INC	6540 E CARNEGIE AVE	EDR Hist Auto	Lower	61, 0.012, North

# EXECUTIVE SUMMARY

## 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  
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***

FEDERAL FACILITY..... Federal Facility Site Information listing  
SEMS..... Superfund Enterprise Management System

### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

### ***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-SQG..... RCRA - Small Quantity Generators  
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List

## EXECUTIVE SUMMARY

US INST CONTROL..... Sites with Institutional Controls

### **Federal ERNS list**

ERNS..... Emergency Response Notification System

### **State- and tribal - equivalent NPL**

RESPONSE..... State Response Sites

### **State- and tribal - equivalent CERCLIS**

ENVIROSTOR..... EnviroStor Database

### **State and tribal landfill and/or solid waste disposal site lists**

SWF/LF..... Solid Waste Information System

### **State and tribal leaking storage tank lists**

LUST..... Geotracker's Leaking Underground Fuel Tank Report

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

CPS-SLIC..... Statewide SLIC Cases

### **State and tribal registered storage tank lists**

FEMA UST..... Underground Storage Tank Listing

UST..... Active UST Facilities

AST..... Aboveground Petroleum Storage Tank Facilities

INDIAN UST..... Underground Storage Tanks on Indian Land

### **State and tribal voluntary cleanup sites**

VCP..... Voluntary Cleanup Program Properties

INDIAN VCP..... Voluntary Cleanup Priority Listing

### **State and tribal Brownfields sites**

BROWNFIELDS..... Considered Brownfields Sites Listing

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### **Local Brownfield lists**

US BROWNFIELDS..... A Listing of Brownfields Sites

#### **Local Lists of Landfill / Solid Waste Disposal Sites**

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

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

ODI..... Open Dump Inventory

## EXECUTIVE SUMMARY

IHS OPEN DUMPS..... Open Dumps on Indian Land

### **Local Lists of Hazardous waste / Contaminated Sites**

US HIST CDL..... Delisted National Clandestine Laboratory Register  
HIST Cal-Sites..... Historical Calsites Database  
SCH..... School Property Evaluation Program  
CDL..... Clandestine Drug Labs  
Toxic Pits..... Toxic Pits Cleanup Act Sites  
US CDL..... National Clandestine Laboratory Register  
CERS HAZ WASTE..... CERS HAZ WASTE

### **Local Lists of Registered Storage Tanks**

SWEEPS UST..... SWEEPS UST Listing  
HIST UST..... Hazardous Substance Storage Container Database  
CA FID UST..... Facility Inventory Database  
CERS TANKS..... California Environmental Reporting System (CERS) Tanks

### **Local Land Records**

LIENS..... Environmental Liens Listing  
LIENS 2..... CERCLA Lien Information  
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  
Orange Co. Industrial Site..... List of Industrial Site Cleanups  
SPILLS 90..... SPILLS 90 data from FirstSearch

### **Other Ascertainable Records**

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated  
FUDS..... Formerly Used Defense Sites  
DOD..... Department of Defense Sites  
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing  
US FIN ASSUR..... Financial Assurance Information  
EPA WATCH LIST..... EPA WATCH LIST  
2020 COR ACTION..... 2020 Corrective Action Program List  
TSCA..... Toxic Substances Control Act  
TRIS..... Toxic Chemical Release Inventory System  
SSTS..... Section 7 Tracking Systems  
ROD..... Records Of Decision  
RMP..... Risk Management Plans  
RAATS..... RCRA Administrative Action Tracking System  
PRP..... Potentially Responsible Parties  
PADS..... PCB Activity Database System  
ICIS..... Integrated Compliance Information System  
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)  
MLTS..... Material Licensing Tracking System

## EXECUTIVE SUMMARY

COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
UXO.....	Unexploded Ordnance Sites
ECHO.....	Enforcement & Compliance History Information
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
EMI.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
HAZNET.....	Facility and Manifest Data
ICE.....	ICE
HIST CORTESE.....	Hazardous Waste & Substance Site List
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
Notify 65.....	Proposition 65 Records
UIC.....	UIC Listing
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
PROJECT.....	PROJECT (GEOTRACKER)
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
CERS.....	CERS
UIC GEO.....	UIC GEO (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
CIWQS.....	California Integrated Water Quality System
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)

### **EDR HIGH RISK HISTORICAL RECORDS**

#### ***EDR Exclusive Records***

EDR MGP..... EDR Proprietary Manufactured Gas Plants

# EXECUTIVE SUMMARY

EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

## EDR RECOVERED GOVERNMENT ARCHIVES

### **Exclusive Recovered Govt. Archives**

RGA LF..... Recovered Government Archive Solid Waste Facilities List  
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

## 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.

## EDR HIGH RISK HISTORICAL RECORDS

### **EDR Exclusive Records**

EDR Hist Auto: 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 Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

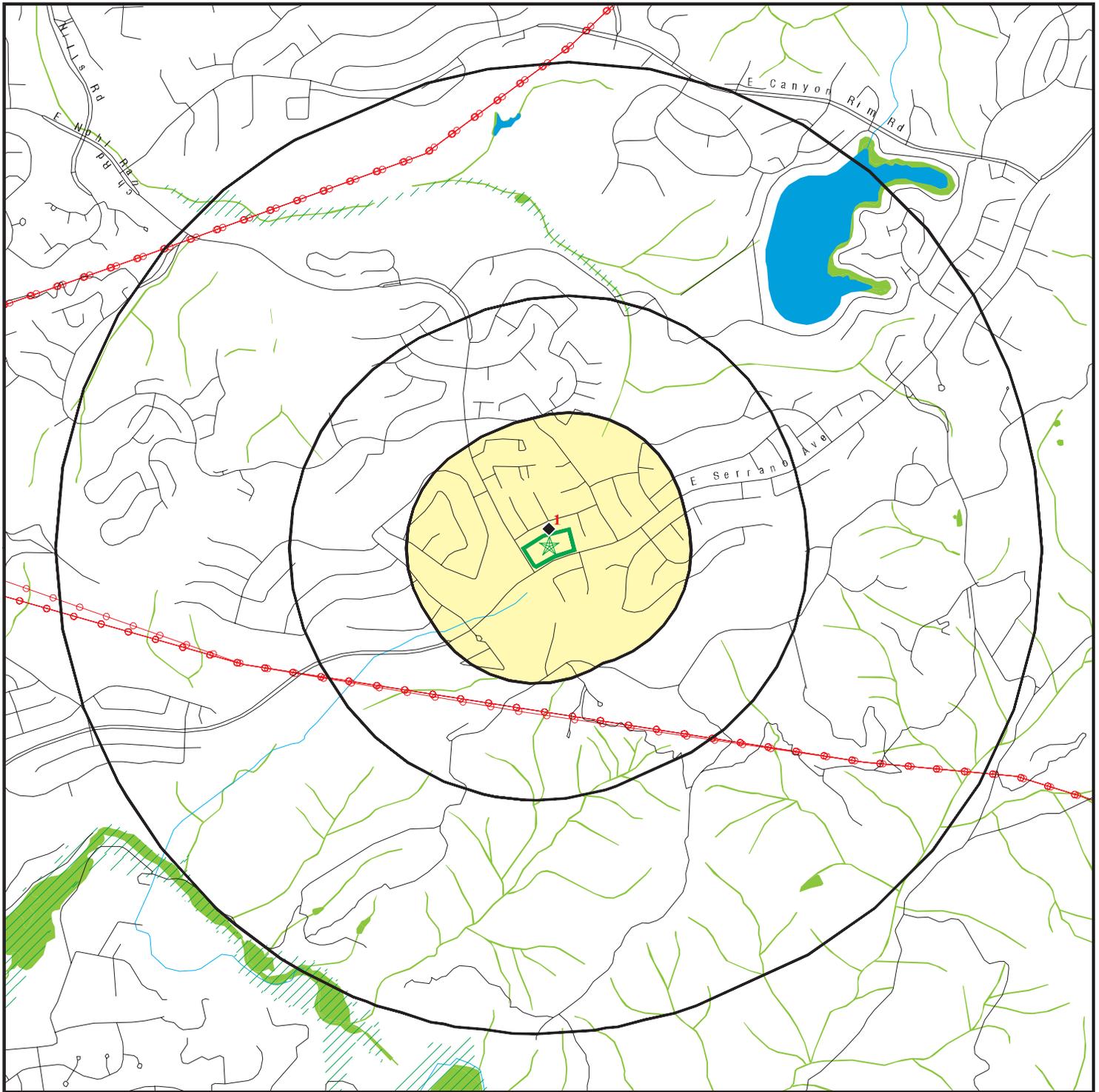
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SAS PROPERTIES INC	6540 E CARNEGIE AVE	N 0 - 1/8 (0.012 mi.)	1	8

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 8 records.

<u>Site Name</u>	<u>Database(s)</u>
ANAHEIM HILLS RD NOHL RNCH RD	CIWQS
SERRANO AVE SUNSET RIDGE RD	CIWQS
ST ALBANS RIDGE SERRANO RIDGE	CIWQS
BELLA VISTA SERRANO HEIGHTS	CIWQS
BELLAGIO SERRANO HEIGHTS	CIWQS
ANAHEIM HILLS GOLF COURSE	RGA LUST
ANAHEIM FIRE STATION #09	RGA LUST
ANAHEIM PUBLIC UTILITIES SUMMIT PU	FINDS

# OVERVIEW MAP - 5355743.2S



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

Power transmission lines

100-year flood zone

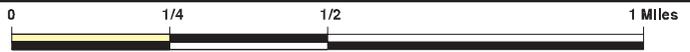
500-year flood zone

National Wetland Inventory

State Wetlands

Upgradient Area

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.

SITE NAME: Serrano Anaheim  
 ADDRESS: 6501-6513 Serrano Avenue  
 Anaheim CA 92807  
 LAT/LONG: 33.831677 / 117.760087

CLIENT: Leighton and Associates, Inc.  
 CONTACT: Brynn Mcculloch  
 INQUIRY #: 5355743.2s  
 DATE: July 09, 2018 4:51 pm



## 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>STANDARD ENVIRONMENTAL RECORDS</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	0.001		0	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>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<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	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	0.001		0	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	0	0	NR	0
<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		0	0	0	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
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
<b>State and tribal registered storage tank lists</b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN 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>State and tribal Brownfields sites</b>								
BROWNFIELDS	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>								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US HIST CDL	0.001		0	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
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
<b>Local Lists of Registered Storage Tanks</b>								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
<b>Local Land Records</b>								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	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
DEED	0.500		0	0	0	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
Orange Co. Industrial Site	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0



MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**1**  
**North**  
**< 1/8**  
**0.012 mi.**  
**61 ft.**

**SAS PROPERTIES INC**  
**6540 E CARNEGIE AVE**  
**ANAHEIM, CA 92807**

**EDR Hist Auto**    **1020618036**  
                                  **N/A**

**Relative:**  
**Lower**

EDR Hist Auto

**Actual:**  
**785 ft.**

Year:	Name:
2011	SAS PROPERTIES INC
2012	SAS PROPERTIES INC
2013	SAS PROPERTIES INC

Type:
Gasoline Service Stations
Gasoline Service Stations
Gasoline Service Stations

Count: 8 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ANAHEIM	S121620093	ANAHEIM HILLS RD NOHL RNCH RD	ANAHEIM HILLS RD NOHL RANCH RD		CIWQS
ANAHEIM	S121672904	SERRANO AVE SUNSET RIDGE RD	SERRANO AVE SUNSET RIDGE RD	92808	CIWQS
ANAHEIM	1023248784	ANAHEIM PUBLIC UTILITIES SUMMIT PU	8377 E SERRANO AVE	92808	FINDS
ORANGE	S121676183	ST ALBANS RIDGE SERRANO RIDGE	ST ALBANS RIDGE SERRANO RIDGE		CIWQS
ORANGE	S121623024	BELLA VISTA SERRANO HEIGHTS	BELLA VISTA SERRANO HEIGHTS		CIWQS
ORANGE	S121623035	BELLAGIO SERRANO HEIGHTS	BELLAGIO SERRANO HEIGHTS		CIWQS
ORANGE	S114571603	ANAHEIM HILLS GOLF COURSE	6501 NOHL RANCH RD		RGA LUST
ORANGE	S114571561	ANAHEIM FIRE STATION #09	6300 NOHL RANCH RD		RGA LUST

# 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: 05/13/2018	Source: EPA
Date Data Arrived at EDR: 05/30/2018	Telephone: N/A
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 07/06/2018
Number of Days to Update: 23	Next Scheduled EDR Contact: 10/15/2018
	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: 05/13/2018	Source: EPA
Date Data Arrived at EDR: 05/30/2018	Telephone: N/A
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 07/06/2018
Number of Days to Update: 23	Next Scheduled EDR Contact: 10/15/2018
	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: 05/13/2018	Source: EPA
Date Data Arrived at EDR: 05/30/2018	Telephone: N/A
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 07/06/2018
Number of Days to Update: 23	Next Scheduled EDR Contact: 10/15/2018
	Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

### 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: 11/07/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/05/2017	Telephone: 703-603-8704
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 07/06/2018
Number of Days to Update: 92	Next Scheduled EDR Contact: 10/15/2018
	Data Release Frequency: Varies

### SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list 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). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 05/18/2018	Source: EPA
Date Data Arrived at EDR: 05/30/2018	Telephone: 800-424-9346
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 07/06/2018
Number of Days to Update: 23	Next Scheduled EDR Contact: 10/15/2018
	Data Release Frequency: Quarterly

## ***Federal CERCLIS NFRAP site list***

### SEMS-ARCHIVE: Superfund Enterprise Management System Archive

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS 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 the 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. The 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 potential NPL site.

Date of Government Version: 05/18/2018	Source: EPA
Date Data Arrived at EDR: 05/30/2018	Telephone: 800-424-9346
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 07/06/2018
Number of Days to Update: 23	Next Scheduled EDR Contact: 07/30/2018
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/01/2018	Source: EPA
Date Data Arrived at EDR: 03/28/2018	Telephone: 800-424-9346
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 06/28/2018
Number of Days to Update: 86	Next Scheduled EDR Contact: 10/08/2018
	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: 03/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/28/2018	Telephone: (415) 495-8895
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 06/28/2018
Number of Days to Update: 86	Next Scheduled EDR Contact: 10/08/2018
	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: 03/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/28/2018	Telephone: (415) 495-8895
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 06/28/2018
Number of Days to Update: 86	Next Scheduled EDR Contact: 10/08/2018
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 03/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/28/2018	Telephone: (415) 495-8895
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 06/28/2018
Number of Days to Update: 86	Next Scheduled EDR Contact: 10/08/2018
	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: 03/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/28/2018	Telephone: (415) 495-8895
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 06/28/2018
Number of Days to Update: 86	Next Scheduled EDR Contact: 10/08/2018
	Data Release Frequency: Quarterly

## ***Federal institutional controls / engineering controls registries***

### 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: 02/16/2018	Source: Department of the Navy
Date Data Arrived at EDR: 02/22/2018	Telephone: 843-820-7326
Date Made Active in Reports: 05/11/2018	Last EDR Contact: 05/09/2018
Number of Days to Update: 78	Next Scheduled EDR Contact: 08/27/2018
	Data Release Frequency: Varies

### 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 effect human health.

Date of Government Version: 02/13/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/27/2018	Telephone: 703-603-0695
Date Made Active in Reports: 05/11/2018	Last EDR Contact: 05/29/2018
Number of Days to Update: 73	Next Scheduled EDR Contact: 09/10/2018
	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: 02/13/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/27/2018	Telephone: 703-603-0695
Date Made Active in Reports: 05/11/2018	Last EDR Contact: 05/29/2018
Number of Days to Update: 73	Next Scheduled EDR Contact: 09/10/2018
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **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: 03/19/2018  
Date Data Arrived at EDR: 03/27/2018  
Date Made Active in Reports: 06/08/2018  
Number of Days to Update: 73

Source: National Response Center, United States Coast Guard  
Telephone: 202-267-2180  
Last EDR Contact: 06/27/2018  
Next Scheduled EDR Contact: 10/08/2018  
Data Release Frequency: Quarterly

## **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: 04/30/2018  
Date Data Arrived at EDR: 05/02/2018  
Date Made Active in Reports: 06/22/2018  
Number of Days to Update: 51

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 05/02/2018  
Next Scheduled EDR Contact: 08/13/2018  
Data Release Frequency: Quarterly

## **State- and tribal - equivalent CERCLIS**

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: 04/30/2018  
Date Data Arrived at EDR: 05/02/2018  
Date Made Active in Reports: 06/22/2018  
Number of Days to Update: 51

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 05/02/2018  
Next Scheduled EDR Contact: 08/13/2018  
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: 05/14/2018  
Date Data Arrived at EDR: 05/16/2018  
Date Made Active in Reports: 06/22/2018  
Number of Days to Update: 37

Source: Department of Resources Recycling and Recovery  
Telephone: 916-341-6320  
Last EDR Contact: 05/16/2018  
Next Scheduled EDR Contact: 08/27/2018  
Data Release Frequency: Quarterly

## **State and tribal leaking storage tank lists**

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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

## 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 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: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/14/2018	Telephone: see region list
Date Made Active in Reports: 03/21/2018	Last EDR Contact: 06/13/2018
Number of Days to Update: 7	Next Scheduled EDR Contact: 09/24/2018
	Data Release Frequency: Quarterly

## 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

## 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, Calveras, 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/2008  
Date Data Arrived at EDR: 07/22/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-4834  
Last EDR Contact: 07/01/2011  
Next Scheduled EDR Contact: 10/17/2011  
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  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-622-2433  
Last EDR Contact: 09/19/2011  
Next Scheduled EDR Contact: 01/02/2012  
Data Release Frequency: Quarterly

## 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  
Date Data Arrived at EDR: 05/19/2003  
Date Made Active in Reports: 06/02/2003  
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-542-4786  
Last EDR Contact: 07/18/2011  
Next Scheduled EDR Contact: 10/31/2011  
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  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6710  
Last EDR Contact: 09/06/2011  
Next Scheduled EDR Contact: 12/19/2011  
Data Release Frequency: No Update Planned

## 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  
Date Data Arrived at EDR: 04/23/2001  
Date Made Active in Reports: 05/21/2001  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-637-5595  
Last EDR Contact: 09/26/2011  
Next Scheduled EDR Contact: 01/09/2012  
Data Release Frequency: No Update Planned

## INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/24/2017  
Date Data Arrived at EDR: 01/23/2018  
Date Made Active in Reports: 04/13/2018  
Number of Days to Update: 80

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 05/18/2018  
Next Scheduled EDR Contact: 08/06/2018  
Data Release Frequency: Varies

## 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: 09/30/2017  
Date Data Arrived at EDR: 01/23/2018  
Date Made Active in Reports: 04/13/2018  
Number of Days to Update: 80

Source: Environmental Protection Agency  
Telephone: 415-972-3372  
Last EDR Contact: 05/18/2018  
Next Scheduled EDR Contact: 08/06/2018  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 10/12/2017	Source: EPA Region 8
Date Data Arrived at EDR: 01/23/2018	Telephone: 303-312-6271
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/12/2017	Source: EPA Region 7
Date Data Arrived at EDR: 01/23/2018	Telephone: 913-551-7003
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/06/2018	Source: EPA Region 6
Date Data Arrived at EDR: 01/23/2018	Telephone: 214-665-6597
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	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: 10/14/2017	Source: EPA Region 4
Date Data Arrived at EDR: 01/23/2018	Telephone: 404-562-8677
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/16/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## 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: 10/14/2017	Source: EPA Region 1
Date Data Arrived at EDR: 01/23/2018	Telephone: 617-918-1313
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/16/2017	Source: EPA, Region 5
Date Data Arrived at EDR: 01/23/2018	Telephone: 312-886-7439
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/14/2018	Telephone: 866-480-1028
Date Made Active in Reports: 03/21/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 7	Next Scheduled EDR Contact: 09/24/2018
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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  
Date Data Arrived at EDR: 04/07/2003  
Date Made Active in Reports: 04/25/2003  
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)  
Telephone: 707-576-2220  
Last EDR Contact: 08/01/2011  
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  
Date Data Arrived at EDR: 10/20/2004  
Date Made Active in Reports: 11/19/2004  
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)  
Telephone: 510-286-0457  
Last EDR Contact: 09/19/2011  
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  
Date Data Arrived at EDR: 05/18/2006  
Date Made Active in Reports: 06/15/2006  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)  
Telephone: 805-549-3147  
Last EDR Contact: 07/18/2011  
Next Scheduled EDR Contact: 10/31/2011  
Data Release Frequency: Semi-Annually

## 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  
Date Data Arrived at EDR: 11/18/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600  
Last EDR Contact: 07/01/2011  
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  
Date Data Arrived at EDR: 04/05/2005  
Date Made Active in Reports: 04/21/2005  
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)  
Telephone: 916-464-3291  
Last EDR Contact: 09/12/2011  
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  
Date Data Arrived at EDR: 05/25/2005  
Date Made Active in Reports: 06/16/2005  
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch  
Telephone: 619-241-6583  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region  
Telephone: 530-542-5574  
Last EDR Contact: 08/15/2011  
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  
Date Data Arrived at EDR: 11/29/2004  
Date Made Active in Reports: 01/04/2005  
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region  
Telephone: 760-346-7491  
Last EDR Contact: 08/01/2011  
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  
Date Data Arrived at EDR: 04/03/2008  
Date Made Active in Reports: 04/14/2008  
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)  
Telephone: 951-782-3298  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: Semi-Annually

## 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  
Date Data Arrived at EDR: 09/11/2007  
Date Made Active in Reports: 09/28/2007  
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-467-2980  
Last EDR Contact: 08/08/2011  
Next Scheduled EDR Contact: 11/21/2011  
Data Release Frequency: Annually

## **State and tribal registered storage tank lists**

### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017  
Date Data Arrived at EDR: 05/30/2017  
Date Made Active in Reports: 10/13/2017  
Number of Days to Update: 136

Source: FEMA  
Telephone: 202-646-5797  
Last EDR Contact: 04/13/2018  
Next Scheduled EDR Contact: 07/23/2018  
Data Release Frequency: Varies

### MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 03/12/2018  
Date Data Arrived at EDR: 03/14/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 51

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/12/2018  
Next Scheduled EDR Contact: 09/24/2018  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/12/2018	Source: SWRCB
Date Data Arrived at EDR: 03/14/2018	Telephone: 916-341-5851
Date Made Active in Reports: 03/29/2018	Last EDR Contact: 06/13/2018
Number of Days to Update: 15	Next Scheduled EDR Contact: 09/24/2018
	Data Release Frequency: Semi-Annually

## UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/08/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/14/2018	Telephone: 916-327-7844
Date Made Active in Reports: 05/04/2018	Last EDR Contact: 06/13/2018
Number of Days to Update: 51	Next Scheduled EDR Contact: 09/24/2018
	Data Release Frequency: Varies

## AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2016	Telephone: 916-327-5092
Date Made Active in Reports: 09/19/2016	Last EDR Contact: 06/21/2018
Number of Days to Update: 69	Next Scheduled EDR Contact: 10/01/2018
	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: 10/24/2017	Source: EPA Region 10
Date Data Arrived at EDR: 01/23/2018	Telephone: 206-553-2857
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## 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: 09/30/2017	Source: EPA Region 9
Date Data Arrived at EDR: 01/23/2018	Telephone: 415-972-3368
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## 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: 10/12/2017	Source: EPA Region 8
Date Data Arrived at EDR: 01/23/2018	Telephone: 303-312-6137
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

# 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: 01/13/2018	Source: EPA Region 7
Date Data Arrived at EDR: 01/23/2018	Telephone: 913-551-7003
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	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: 04/24/2017	Source: EPA Region 6
Date Data Arrived at EDR: 07/27/2017	Telephone: 214-665-7591
Date Made Active in Reports: 12/08/2017	Last EDR Contact: 05/18/2018
Number of Days to Update: 134	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## 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: 10/14/2017	Source: EPA, Region 1
Date Data Arrived at EDR: 01/23/2018	Telephone: 617-918-1313
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	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: 10/14/2017	Source: EPA Region 4
Date Data Arrived at EDR: 01/23/2018	Telephone: 404-562-9424
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/16/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## 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: 10/16/2017	Source: EPA Region 5
Date Data Arrived at EDR: 01/23/2018	Telephone: 312-886-6136
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 80	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## ***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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 06/22/2018
Number of Days to Update: 142	Next Scheduled EDR Contact: 10/08/2018
	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: 04/30/2018	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/02/2018	Telephone: 916-323-3400
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 05/02/2018
Number of Days to Update: 51	Next Scheduled EDR Contact: 08/13/2018
	Data Release Frequency: Quarterly

## **State and tribal Brownfields sites**

### BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 03/26/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/27/2018	Telephone: 916-323-7905
Date Made Active in Reports: 05/04/2018	Last EDR Contact: 06/27/2018
Number of Days to Update: 38	Next Scheduled EDR Contact: 10/08/2018
	Data Release Frequency: Quarterly

## **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: 03/19/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2018	Telephone: 202-566-2777
Date Made Active in Reports: 06/08/2018	Last EDR Contact: 06/20/2018
Number of Days to Update: 79	Next Scheduled EDR Contact: 10/01/2018
	Data Release Frequency: Semi-Annually

### **Local Lists of Landfill / Solid Waste Disposal Sites**

#### 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/2000  
Date Data Arrived at EDR: 04/10/2000  
Date Made Active in Reports: 05/10/2000  
Number of Days to Update: 30

Source: State Water Resources Control Board  
Telephone: 916-227-4448  
Last EDR Contact: 05/03/2018  
Next Scheduled EDR Contact: 08/13/2018  
Data Release Frequency: No Update Planned

## SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/12/2018  
Date Data Arrived at EDR: 03/14/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 51

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 06/13/2018  
Next Scheduled EDR Contact: 09/24/2018  
Data Release Frequency: Quarterly

## HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 02/08/2018  
Date Data Arrived at EDR: 02/09/2018  
Date Made Active in Reports: 03/20/2018  
Number of Days to Update: 39

Source: Integrated Waste Management Board  
Telephone: 916-341-6422  
Last EDR Contact: 05/22/2018  
Next Scheduled EDR Contact: 08/27/2018  
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  
Date Data Arrived at EDR: 12/03/2007  
Date Made Active in Reports: 01/24/2008  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 703-308-8245  
Last EDR Contact: 01/30/2018  
Next Scheduled EDR Contact: 05/14/2018  
Data Release Frequency: Varies

## 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  
Date Data Arrived at EDR: 05/07/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 137

Source: EPA, Region 9  
Telephone: 415-947-4219  
Last EDR Contact: 04/18/2018  
Next Scheduled EDR Contact: 08/06/2018  
Data Release Frequency: No Update Planned

## ODI: 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  
Date Data Arrived at EDR: 08/09/2004  
Date Made Active in Reports: 09/17/2004  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 800-424-9346  
Last EDR Contact: 06/09/2004  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014  
Date Data Arrived at EDR: 08/06/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service  
Telephone: 301-443-1452  
Last EDR Contact: 05/04/2018  
Next Scheduled EDR Contact: 08/13/2018  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **Local Lists of Hazardous waste / Contaminated Sites**

### **US HIST CDL: National Clandestine Laboratory Register**

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/22/2018	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 03/01/2018	Telephone: 202-307-1000
Date Made Active in Reports: 05/11/2018	Last EDR Contact: 05/30/2018
Number of Days to Update: 71	Next Scheduled EDR Contact: 09/10/2018
	Data Release Frequency: No Update Planned

### **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	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	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: 04/30/2018	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/02/2018	Telephone: 916-323-3400
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 05/02/2018
Number of Days to Update: 51	Next Scheduled EDR Contact: 08/13/2018
	Data Release Frequency: Quarterly

### **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: 06/30/2017	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/18/2017	Telephone: 916-255-6504
Date Made Active in Reports: 09/21/2017	Last EDR Contact: 07/05/2018
Number of Days to Update: 34	Next Scheduled EDR Contact: 10/22/2018
	Data Release Frequency: Varies

### **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	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/30/1995	Telephone: 916-227-4364
Date Made Active in Reports: 09/26/1995	Last EDR Contact: 01/26/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/27/2009
	Data Release Frequency: No Update Planned

### **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: 02/22/2018  
Date Data Arrived at EDR: 03/01/2018  
Date Made Active in Reports: 05/11/2018  
Number of Days to Update: 71

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 05/30/2018  
Next Scheduled EDR Contact: 09/10/2018  
Data Release Frequency: Quarterly

## CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 04/23/2018  
Date Data Arrived at EDR: 04/24/2018  
Date Made Active in Reports: 06/07/2018  
Number of Days to Update: 44

Source: CalEPA  
Telephone: 916-323-2514  
Last EDR Contact: 04/24/2018  
Next Scheduled EDR Contact: 08/06/2018  
Data Release Frequency: Quarterly

## Local Lists of Registered Storage Tanks

### 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  
Date Data Arrived at EDR: 07/07/2005  
Date Made Active in Reports: 08/11/2005  
Number of Days to Update: 35

Source: State Water Resources Control Board  
Telephone: N/A  
Last EDR Contact: 06/03/2005  
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: 02/28/2018  
Date Data Arrived at EDR: 03/01/2018  
Date Made Active in Reports: 03/28/2018  
Number of Days to Update: 27

Source: Department of Public Health  
Telephone: 707-463-4466  
Last EDR Contact: 05/22/2018  
Next Scheduled EDR Contact: 09/10/2018  
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  
Date Data Arrived at EDR: 01/25/1991  
Date Made Active in Reports: 02/12/1991  
Number of Days to Update: 18

Source: State Water Resources Control Board  
Telephone: 916-341-5851  
Last EDR Contact: 07/26/2001  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 04/19/2018  
Date Data Arrived at EDR: 04/24/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 10

Source: San Francisco County Department of Public Health  
Telephone: 415-252-3896  
Last EDR Contact: 05/02/2018  
Next Scheduled EDR Contact: 08/20/2018  
Data Release Frequency: Varies

### 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/31/1994  
Date Data Arrived at EDR: 09/05/1995  
Date Made Active in Reports: 09/29/1995  
Number of Days to Update: 24

Source: California Environmental Protection Agency  
Telephone: 916-341-5851  
Last EDR Contact: 12/28/1998  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 04/23/2018  
Date Data Arrived at EDR: 04/24/2018  
Date Made Active in Reports: 06/07/2018  
Number of Days to Update: 44

Source: California Environmental Protection Agency  
Telephone: 916-323-2514  
Last EDR Contact: 04/24/2018  
Next Scheduled EDR Contact: 08/06/2018  
Data Release Frequency: Quarterly

## Local Land Records

### LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 01/28/2018  
Date Data Arrived at EDR: 03/01/2018  
Date Made Active in Reports: 04/16/2018  
Number of Days to Update: 46

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 05/31/2018  
Next Scheduled EDR Contact: 09/17/2018  
Data Release Frequency: Varies

### 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: 05/13/2018  
Date Data Arrived at EDR: 05/30/2018  
Date Made Active in Reports: 06/29/2018  
Number of Days to Update: 30

Source: Environmental Protection Agency  
Telephone: 202-564-6023  
Last EDR Contact: 07/06/2018  
Next Scheduled EDR Contact: 08/06/2018  
Data Release Frequency: Semi-Annually

### 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: 02/08/2018  
Date Data Arrived at EDR: 02/08/2018  
Date Made Active in Reports: 02/08/2018  
Number of Days to Update: 0

Source: DTSC and SWRCB  
Telephone: 916-323-3400  
Last EDR Contact: 06/06/2018  
Next Scheduled EDR Contact: 09/17/2018  
Data Release Frequency: Semi-Annually

## Records of Emergency Release Reports

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/26/2018	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 03/27/2018	Telephone: 202-366-4555
Date Made Active in Reports: 06/08/2018	Last EDR Contact: 03/27/2018
Number of Days to Update: 73	Next Scheduled EDR Contact: 07/09/2018
	Data Release Frequency: Quarterly

## 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: 04/06/2018	Source: Office of Emergency Services
Date Data Arrived at EDR: 04/24/2018	Telephone: 916-845-8400
Date Made Active in Reports: 06/14/2018	Last EDR Contact: 04/24/2018
Number of Days to Update: 51	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Semi-Annually

## LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018	Source: State Water Quality Control Board
Date Data Arrived at EDR: 03/14/2018	Telephone: 866-480-1028
Date Made Active in Reports: 05/04/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 51	Next Scheduled EDR Contact: 09/24/2018
	Data Release Frequency: Quarterly

## MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/12/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/14/2018	Telephone: 866-480-1028
Date Made Active in Reports: 03/21/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 7	Next Scheduled EDR Contact: 09/24/2018
	Data Release Frequency: Quarterly

## 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 / No Longer Regulated

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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/01/2018  
Date Data Arrived at EDR: 03/28/2018  
Date Made Active in Reports: 06/22/2018  
Number of Days to Update: 86

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 06/28/2018  
Next Scheduled EDR Contact: 10/08/2018  
Data Release Frequency: Quarterly

## 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: 01/31/2015  
Date Data Arrived at EDR: 07/08/2015  
Date Made Active in Reports: 10/13/2015  
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers  
Telephone: 202-528-4285  
Last EDR Contact: 05/25/2018  
Next Scheduled EDR Contact: 09/03/2018  
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  
Date Data Arrived at EDR: 11/10/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 62

Source: USGS  
Telephone: 888-275-8747  
Last EDR Contact: 04/13/2018  
Next Scheduled EDR Contact: 07/23/2018  
Data Release Frequency: Semi-Annually

## FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated 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: 04/11/2018  
Next Scheduled EDR Contact: 07/23/2018  
Data Release Frequency: N/A

## 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: 01/01/2017  
Date Data Arrived at EDR: 02/03/2017  
Date Made Active in Reports: 04/07/2017  
Number of Days to Update: 63

Source: Environmental Protection Agency  
Telephone: 615-532-8599  
Last EDR Contact: 05/15/2018  
Next Scheduled EDR Contact: 08/27/2018  
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: 03/01/2018  
Date Data Arrived at EDR: 03/27/2018  
Date Made Active in Reports: 06/22/2018  
Number of Days to Update: 87

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 06/27/2018  
Next Scheduled EDR Contact: 10/08/2018  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 05/07/2018
Number of Days to Update: 88	Next Scheduled EDR Contact: 08/20/2018
	Data Release Frequency: Quarterly

## 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: 04/22/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/03/2015	Telephone: 703-308-4044
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 05/08/2018
Number of Days to Update: 6	Next Scheduled EDR Contact: 08/20/2018
	Data Release Frequency: Varies

## 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: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 06/21/2017	Telephone: 202-260-5521
Date Made Active in Reports: 01/05/2018	Last EDR Contact: 06/22/2018
Number of Days to Update: 198	Next Scheduled EDR Contact: 10/01/2018
	Data Release Frequency: Every 4 Years

## 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: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 01/10/2018	Telephone: 202-566-0250
Date Made Active in Reports: 01/12/2018	Last EDR Contact: 05/25/2018
Number of Days to Update: 2	Next Scheduled EDR Contact: 09/03/2018
	Data Release Frequency: Annually

## 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: 04/09/2018
Number of Days to Update: 77	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 05/13/2018	Source: EPA
Date Data Arrived at EDR: 05/30/2018	Telephone: 703-416-0223
Date Made Active in Reports: 06/29/2018	Last EDR Contact: 07/06/2018
Number of Days to Update: 30	Next Scheduled EDR Contact: 10/15/2018
	Data Release Frequency: Annually

## 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: 11/02/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/17/2017	Telephone: 202-564-8600
Date Made Active in Reports: 12/08/2017	Last EDR Contact: 04/20/2018
Number of Days to Update: 21	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## 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.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 07/06/2018
Number of Days to Update: 3	Next Scheduled EDR Contact: 08/20/2018
	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: 06/01/2017	Source: EPA
Date Data Arrived at EDR: 06/09/2017	Telephone: 202-566-0500
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 04/13/2018
Number of Days to Update: 126	Next Scheduled EDR Contact: 07/23/2018
	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 and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 04/09/2018
Number of Days to Update: 79	Next Scheduled EDR Contact: 07/23/2018
	Data Release Frequency: Quarterly

**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: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	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: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

## 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: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 05/03/2018
Number of Days to Update: 43	Next Scheduled EDR Contact: 08/20/2018
	Data Release Frequency: Quarterly

## COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 06/07/2018
Number of Days to Update: 76	Next Scheduled EDR Contact: 09/17/2018
	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: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 06/04/2018
Number of Days to Update: 40	Next Scheduled EDR Contact: 09/17/2018
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/30/2017	Telephone: 202-566-0517
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 04/27/2018
Number of Days to Update: 15	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## 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: 04/03/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/05/2018	Telephone: 202-343-9775
Date Made Active in Reports: 06/29/2018	Last EDR Contact: 07/05/2018
Number of Days to Update: 85	Next Scheduled EDR Contact: 10/15/2018
	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

## 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: 05/03/2018
Number of Days to Update: 42	Next Scheduled EDR Contact: 08/13/2018
	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: 03/31/2018  
Date Data Arrived at EDR: 04/16/2018  
Date Made Active in Reports: 06/29/2018  
Number of Days to Update: 74

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 06/22/2018  
Next Scheduled EDR Contact: 10/01/2018  
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: 12/31/2015  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 09/28/2017  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 06/28/2018  
Next Scheduled EDR Contact: 09/03/2018  
Data Release Frequency: Biennially

## 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: 12/31/2014  
Date Data Arrived at EDR: 07/14/2015  
Date Made Active in Reports: 01/10/2017  
Number of Days to Update: 546

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 04/11/2018  
Next Scheduled EDR Contact: 07/23/2018  
Data Release Frequency: Semi-Annually

## FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016  
Date Data Arrived at EDR: 12/27/2016  
Date Made Active in Reports: 02/17/2017  
Number of Days to Update: 52

Source: Department of Energy  
Telephone: 202-586-3559  
Last EDR Contact: 05/07/2018  
Next Scheduled EDR Contact: 08/20/2018  
Data Release Frequency: Varies

## 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: 06/23/2017  
Date Data Arrived at EDR: 10/11/2017  
Date Made Active in Reports: 11/03/2017  
Number of Days to Update: 23

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 05/18/2018  
Next Scheduled EDR Contact: 09/03/2018  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 05/13/2018  
Date Data Arrived at EDR: 05/30/2018  
Date Made Active in Reports: 06/29/2018  
Number of Days to Update: 30

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 07/06/2018  
Next Scheduled EDR Contact: 10/15/2018  
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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

## 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: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

## 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: 05/03/2018  
Date Data Arrived at EDR: 05/31/2018  
Date Made Active in Reports: 06/29/2018  
Number of Days to Update: 29

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 05/31/2018  
Next Scheduled EDR Contact: 09/10/2018  
Data Release Frequency: Semi-Annually

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 05/30/2018  
Next Scheduled EDR Contact: 09/10/2018  
Data Release Frequency: Varies

## US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011  
Date Data Arrived at EDR: 06/08/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 97

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 05/30/2018  
Next Scheduled EDR Contact: 09/10/2018  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/08/2018	Source: Department of Interior
Date Data Arrived at EDR: 03/13/2018	Telephone: 202-208-2609
Date Made Active in Reports: 06/08/2018	Last EDR Contact: 06/20/2018
Number of Days to Update: 87	Next Scheduled EDR Contact: 09/24/2018
	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: 02/21/2018	Source: EPA
Date Data Arrived at EDR: 02/23/2018	Telephone: (415) 947-8000
Date Made Active in Reports: 03/23/2018	Last EDR Contact: 06/06/2018
Number of Days to Update: 28	Next Scheduled EDR Contact: 09/17/2018
	Data Release Frequency: Quarterly

## ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 02/25/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/17/2018	Telephone: 202-564-2280
Date Made Active in Reports: 06/08/2018	Last EDR Contact: 06/06/2018
Number of Days to Update: 83	Next Scheduled EDR Contact: 09/17/2018
	Data Release Frequency: Quarterly

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2016	Source: Department of Defense
Date Data Arrived at EDR: 10/31/2017	Telephone: 703-704-1564
Date Made Active in Reports: 01/12/2018	Last EDR Contact: 04/13/2018
Number of Days to Update: 73	Next Scheduled EDR Contact: 07/30/2018
	Data Release Frequency: Varies

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 01/04/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/19/2018	Telephone: 202-564-0527
Date Made Active in Reports: 04/13/2018	Last EDR Contact: 06/01/2018
Number of Days to Update: 84	Next Scheduled EDR Contact: 09/10/2018
	Data Release Frequency: Varies

## FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/20/2018  
Date Data Arrived at EDR: 02/21/2018  
Date Made Active in Reports: 03/23/2018  
Number of Days to Update: 30

Source: EPA  
Telephone: 800-385-6164  
Last EDR Contact: 05/23/2018  
Next Scheduled EDR Contact: 09/03/2018  
Data Release Frequency: Quarterly

## 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

## 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: 03/26/2018  
Date Data Arrived at EDR: 03/27/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 38

Source: CAL EPA/Office of Emergency Information  
Telephone: 916-323-3400  
Last EDR Contact: 06/27/2018  
Next Scheduled EDR Contact: 10/08/2018  
Data Release Frequency: Quarterly

## CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 04/03/2018  
Date Data Arrived at EDR: 05/07/2018  
Date Made Active in Reports: 06/15/2018  
Number of Days to Update: 39

Source: Livermore-Pleasanton Fire Department  
Telephone: 925-454-2361  
Last EDR Contact: 05/07/2018  
Next Scheduled EDR Contact: 08/27/2018  
Data Release Frequency: Varies

## CUPA SAN FRANCISCO CO: CUPA SAN FRANCISCO CO

Cupa facilities

Date of Government Version: 04/20/2018  
Date Data Arrived at EDR: 04/24/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 10

Source: San Francisco County Department of Environmental Health  
Telephone: 415-252-3896  
Last EDR Contact: 05/02/2018  
Next Scheduled EDR Contact: 08/20/2018  
Data Release Frequency: Varies

## DRYCLEAN AVAQMD: DRYCLEAN AVAQMD

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 03/08/2018  
Date Data Arrived at EDR: 03/13/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 52

Source: Antelope Valley Air Quality Management District  
Telephone: 661-723-8070  
Last EDR Contact: 06/22/2018  
Next Scheduled EDR Contact: 09/17/2018  
Data Release Frequency: Varies

## DRYCLEAN SOUTH COAST: DRYCLEAN SOUTH COAST

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/16/2018  
Date Data Arrived at EDR: 03/20/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 45

Source: South Coast Air Quality Management District  
Telephone: 909-396-3211  
Last EDR Contact: 06/11/2018  
Next Scheduled EDR Contact: 09/10/2018  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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 launderers; laundry and garment services.

Date of Government Version: 03/27/2018	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 03/29/2018	Telephone: 916-327-4498
Date Made Active in Reports: 05/04/2018	Last EDR Contact: 05/30/2018
Number of Days to Update: 36	Next Scheduled EDR Contact: 09/17/2018
	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: 12/31/2015	Source: California Air Resources Board
Date Data Arrived at EDR: 03/21/2017	Telephone: 916-322-2990
Date Made Active in Reports: 08/15/2017	Last EDR Contact: 06/20/2018
Number of Days to Update: 147	Next Scheduled EDR Contact: 10/01/2018
	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: 04/18/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 04/24/2018	Telephone: 916-445-9379
Date Made Active in Reports: 07/06/2018	Last EDR Contact: 04/18/2018
Number of Days to Update: 73	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/18/2018	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 04/20/2018	Telephone: 916-255-3628
Date Made Active in Reports: 06/19/2018	Last EDR Contact: 04/18/2018
Number of Days to Update: 60	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## 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.

Date of Government Version: 05/14/2018	Source: California Integrated Waste Management Board
Date Data Arrived at EDR: 05/15/2018	Telephone: 916-341-6066
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 05/09/2018
Number of Days to Update: 38	Next Scheduled EDR Contact: 08/27/2018
	Data Release Frequency: Varies

## 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. This database begins with calendar year 1993.

Date of Government Version: 12/31/2016	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/12/2017	Telephone: 916-255-1136
Date Made Active in Reports: 10/17/2017	Last EDR Contact: 04/12/2018
Number of Days to Update: 97	Next Scheduled EDR Contact: 07/23/2018
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/20/2018	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 02/21/2018	Telephone: 877-786-9427
Date Made Active in Reports: 04/03/2018	Last EDR Contact: 05/23/2018
Number of Days to Update: 41	Next Scheduled EDR Contact: 09/03/2018
	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 [CALSITES]. 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

## HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/20/2018	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 02/21/2018	Telephone: 916-323-3400
Date Made Active in Reports: 04/03/2018	Last EDR Contact: 05/23/2018
Number of Days to Update: 41	Next Scheduled EDR Contact: 09/03/2018
	Data Release Frequency: Quarterly

## 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: 04/09/2018	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 04/11/2018	Telephone: 916-440-7145
Date Made Active in Reports: 06/19/2018	Last EDR Contact: 04/11/2018
Number of Days to Update: 69	Next Scheduled EDR Contact: 07/23/2018
	Data Release Frequency: Quarterly

## MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/12/2018	Source: Department of Conservation
Date Data Arrived at EDR: 03/14/2018	Telephone: 916-322-1080
Date Made Active in Reports: 05/04/2018	Last EDR Contact: 06/13/2018
Number of Days to Update: 51	Next Scheduled EDR Contact: 09/24/2018
	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: 02/27/2018	Source: Department of Public Health
Date Data Arrived at EDR: 03/05/2018	Telephone: 916-558-1784
Date Made Active in Reports: 04/16/2018	Last EDR Contact: 06/06/2018
Number of Days to Update: 42	Next Scheduled EDR Contact: 09/17/2018
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/14/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/16/2018	Telephone: 916-445-9379
Date Made Active in Reports: 07/05/2018	Last EDR Contact: 05/16/2018
Number of Days to Update: 50	Next Scheduled EDR Contact: 08/27/2018
	Data Release Frequency: Quarterly

## PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/05/2018	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 03/05/2018	Telephone: 916-445-4038
Date Made Active in Reports: 04/19/2018	Last EDR Contact: 06/06/2018
Number of Days to Update: 45	Next Scheduled EDR Contact: 09/17/2018
	Data Release Frequency: Quarterly

## PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/12/2018	Source: Department of Conservation
Date Data Arrived at EDR: 03/14/2018	Telephone: 916-323-3836
Date Made Active in Reports: 05/04/2018	Last EDR Contact: 06/13/2018
Number of Days to Update: 51	Next Scheduled EDR Contact: 09/24/2018
	Data Release Frequency: Quarterly

## 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: 03/23/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/27/2018	Telephone: 916-445-3846
Date Made Active in Reports: 05/04/2018	Last EDR Contact: 06/14/2018
Number of Days to Update: 38	Next Scheduled EDR Contact: 10/01/2018
	Data Release Frequency: No Update Planned

## UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/12/2018	Source: Department of Conservation
Date Data Arrived at EDR: 03/14/2018	Telephone: 916-445-2408
Date Made Active in Reports: 05/04/2018	Last EDR Contact: 06/13/2018
Number of Days to Update: 51	Next Scheduled EDR Contact: 09/24/2018
	Data Release Frequency: Varies

## WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 04/10/2018	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 04/13/2018	Telephone: 559-445-5577
Date Made Active in Reports: 06/19/2018	Last EDR Contact: 04/13/2018
Number of Days to Update: 67	Next Scheduled EDR Contact: 07/23/2018
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 05/16/2018
Number of Days to Update: 9	Next Scheduled EDR Contact: 09/03/2018
	Data Release Frequency: Quarterly

## 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: 06/25/2018
Number of Days to Update: 13	Next Scheduled EDR Contact: 10/08/2018
	Data Release Frequency: Varies

## CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 04/23/2018	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 04/24/2018	Telephone: 916-323-2514
Date Made Active in Reports: 06/07/2018	Last EDR Contact: 04/24/2018
Number of Days to Update: 44	Next Scheduled EDR Contact: 08/06/2018
	Data Release Frequency: Varies

## MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 03/12/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/14/2018	Telephone: 866-480-1028
Date Made Active in Reports: 05/04/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 51	Next Scheduled EDR Contact: 09/24/2018
	Data Release Frequency: Varies

## OTHER OIL GAS: OTHER OIL & GAS (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 03/12/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/14/2018	Telephone: 866-480-1028
Date Made Active in Reports: 05/04/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 51	Next Scheduled EDR Contact: 09/24/2018
	Data Release Frequency: Varies

## PROD WATER PONDS: PROD WATER PONDS (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 03/12/2018	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/14/2018	Telephone: 866-480-1028
Date Made Active in Reports: 05/04/2018	Last EDR Contact: 12/12/2018
Number of Days to Update: 51	Next Scheduled EDR Contact: 09/24/2018
	Data Release Frequency: Varies

## CIWQS: The California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/05/2018  
Date Data Arrived at EDR: 03/05/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 60

Source: State Water Resources Control Board  
Telephone: 866-794-4977  
Last EDR Contact: 06/06/2018  
Next Scheduled EDR Contact: 09/17/2018  
Data Release Frequency: Varies

## WELL STIM PROJ: WELL SAMP PROJ (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 03/12/2018  
Date Data Arrived at EDR: 03/14/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 51

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/12/2018  
Next Scheduled EDR Contact: 09/24/2018  
Data Release Frequency: Varies

## SAMPLING POINT: SAMPLING POINT (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 03/12/2018  
Date Data Arrived at EDR: 03/14/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 51

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/12/2018  
Next Scheduled EDR Contact: 09/24/2018  
Data Release Frequency: Varies

## PROJECT: PROJECT (GEOTRACKER)

Projects sites

Date of Government Version: 03/12/2018  
Date Data Arrived at EDR: 03/14/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 51

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/12/2018  
Next Scheduled EDR Contact: 09/24/2018  
Data Release Frequency: Varies

## UIC GEO: UIC GEO (GEOTRACKER)

Underground control injection sites

Date of Government Version: 03/12/2018  
Date Data Arrived at EDR: 03/14/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 51

Source: State Water Resource Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/12/2018  
Next Scheduled EDR Contact: 09/24/2018  
Data Release Frequency: Varies

## NON-CASE INFO: NON-CASE INFO (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 03/12/2018  
Date Data Arrived at EDR: 03/14/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 51

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/12/2018  
Next Scheduled EDR Contact: 09/24/2018  
Data Release Frequency: Varies

## EDR HIGH RISK HISTORICAL RECORDS

### ***EDR Exclusive Records***

#### 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## EDR Hist Auto: EDR Exclusive Historical Auto 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  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR Hist Cleaner: EDR Exclusive Historical 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  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### *Exclusive Recovered Govt. Archives*

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 01/13/2014  
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/30/2013  
Number of Days to Update: 182

Source: State Water Resources Control Board  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
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: 04/05/2018  
Date Data Arrived at EDR: 04/10/2018  
Date Made Active in Reports: 06/14/2018  
Number of Days to Update: 65

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 07/05/2018  
Next Scheduled EDR Contact: 10/22/2018  
Data Release Frequency: Semi-Annually

#### Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/05/2018  
Date Data Arrived at EDR: 04/10/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 24

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 07/05/2018  
Next Scheduled EDR Contact: 04/24/2047  
Data Release Frequency: Semi-Annually

### AMADOR COUNTY:

#### CUPA Facility List

Cupa Facility List

Date of Government Version: 03/31/2018  
Date Data Arrived at EDR: 04/05/2018  
Date Made Active in Reports: 06/14/2018  
Number of Days to Update: 70

Source: Amador County Environmental Health  
Telephone: 209-223-6439  
Last EDR Contact: 06/14/2018  
Next Scheduled EDR Contact: 09/17/2018  
Data Release Frequency: Varies

### BUTTE COUNTY:

#### CUPA Facility Listing

Cupa facility list.

Date of Government Version: 04/21/2017  
Date Data Arrived at EDR: 04/25/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 106

Source: Public Health Department  
Telephone: 530-538-7149  
Last EDR Contact: 07/05/2018  
Next Scheduled EDR Contact: 10/22/2018  
Data Release Frequency: No Update Planned

### CALVERAS COUNTY:

#### CUPA Facility Listing

Cupa Facility Listing

Date of Government Version: 05/07/2018  
Date Data Arrived at EDR: 05/09/2018  
Date Made Active in Reports: 06/14/2018  
Number of Days to Update: 36

Source: Calveras County Environmental Health  
Telephone: 209-754-6399  
Last EDR Contact: 06/25/2018  
Next Scheduled EDR Contact: 10/08/2018  
Data Release Frequency: Quarterly

### COLUSA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

Cupa facility list.

Date of Government Version: 02/26/2018  
Date Data Arrived at EDR: 03/01/2018  
Date Made Active in Reports: 03/15/2018  
Number of Days to Update: 14

Source: Health & Human Services  
Telephone: 530-458-0396  
Last EDR Contact: 05/16/2018  
Next Scheduled EDR Contact: 08/20/2018  
Data Release Frequency: Semi-Annually

## CONTRA COSTA COUNTY:

### Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/22/2018  
Date Data Arrived at EDR: 02/27/2018  
Date Made Active in Reports: 04/16/2018  
Number of Days to Update: 48

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 04/30/2018  
Next Scheduled EDR Contact: 08/13/2018  
Data Release Frequency: Semi-Annually

## DEL NORTE COUNTY:

### CUPA Facility List

Cupa Facility list

Date of Government Version: 04/27/2018  
Date Data Arrived at EDR: 05/02/2018  
Date Made Active in Reports: 06/15/2018  
Number of Days to Update: 44

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426  
Last EDR Contact: 04/25/2018  
Next Scheduled EDR Contact: 08/13/2018  
Data Release Frequency: Varies

## EL DORADO COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 03/05/2018  
Date Data Arrived at EDR: 03/08/2018  
Date Made Active in Reports: 04/16/2018  
Number of Days to Update: 39

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-6623  
Last EDR Contact: 04/30/2018  
Next Scheduled EDR Contact: 08/13/2018  
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: 03/01/2018  
Date Data Arrived at EDR: 03/05/2018  
Date Made Active in Reports: 03/14/2018  
Number of Days to Update: 9

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 06/26/2018  
Next Scheduled EDR Contact: 10/15/2018  
Data Release Frequency: Semi-Annually

## GLENN COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

Cupa facility list

Date of Government Version: 01/22/2018  
Date Data Arrived at EDR: 01/24/2018  
Date Made Active in Reports: 03/14/2018  
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District  
Telephone: 830-934-6500  
Last EDR Contact: 04/18/2018  
Next Scheduled EDR Contact: 08/06/2018  
Data Release Frequency: Varies

## HUMBOLDT COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 03/05/2018  
Date Data Arrived at EDR: 03/08/2018  
Date Made Active in Reports: 04/30/2018  
Number of Days to Update: 53

Source: Humboldt County Environmental Health  
Telephone: N/A  
Last EDR Contact: 05/21/2018  
Next Scheduled EDR Contact: 09/03/2018  
Data Release Frequency: Semi-Annually

## IMPERIAL COUNTY:

### CUPA Facility List

Cupa facility list.

Date of Government Version: 04/23/2018  
Date Data Arrived at EDR: 04/25/2018  
Date Made Active in Reports: 06/14/2018  
Number of Days to Update: 50

Source: San Diego Border Field Office  
Telephone: 760-339-2777  
Last EDR Contact: 04/18/2018  
Next Scheduled EDR Contact: 08/06/2018  
Data Release Frequency: Varies

## INYO COUNTY:

### CUPA Facility List

Cupa facility list.

Date of Government Version: 04/02/2018  
Date Data Arrived at EDR: 04/03/2018  
Date Made Active in Reports: 06/14/2018  
Number of Days to Update: 72

Source: Inyo County Environmental Health Services  
Telephone: 760-878-0238  
Last EDR Contact: 05/30/2018  
Next Scheduled EDR Contact: 09/03/2018  
Data Release Frequency: Varies

## KERN COUNTY:

### Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 02/02/2018  
Date Data Arrived at EDR: 02/02/2018  
Date Made Active in Reports: 03/28/2018  
Number of Days to Update: 54

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 05/02/2018  
Next Scheduled EDR Contact: 08/20/2018  
Data Release Frequency: Quarterly

## KINGS COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 11/14/2017  
Date Data Arrived at EDR: 11/17/2017  
Date Made Active in Reports: 12/15/2017  
Number of Days to Update: 38

Source: Kings County Department of Public Health  
Telephone: 559-584-1411  
Last EDR Contact: 05/16/2018  
Next Scheduled EDR Contact: 09/03/2018  
Data Release Frequency: Varies

## LAKE COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 05/09/2018  
Date Data Arrived at EDR: 05/11/2018  
Date Made Active in Reports: 06/14/2018  
Number of Days to Update: 34

Source: Lake County Environmental Health  
Telephone: 707-263-1164  
Last EDR Contact: 04/16/2018  
Next Scheduled EDR Contact: 07/30/2018  
Data Release Frequency: Varies

## LASSEN COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 01/22/2018  
Date Data Arrived at EDR: 01/24/2018  
Date Made Active in Reports: 03/14/2018  
Number of Days to Update: 49

Source: Lassen County Environmental Health  
Telephone: 530-251-8528  
Last EDR Contact: 04/18/2018  
Next Scheduled EDR Contact: 08/06/2018  
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: 06/13/2018  
Next Scheduled EDR Contact: 10/01/2018  
Data Release Frequency: No Update Planned

### HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/12/2018  
Date Data Arrived at EDR: 04/16/2018  
Date Made Active in Reports: 06/15/2018  
Number of Days to Update: 60

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 07/05/2018  
Next Scheduled EDR Contact: 10/22/2018  
Data Release Frequency: Semi-Annually

### List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/16/2018  
Date Data Arrived at EDR: 04/17/2018  
Date Made Active in Reports: 06/19/2018  
Number of Days to Update: 63

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 04/17/2018  
Next Scheduled EDR Contact: 07/30/2018  
Data Release Frequency: Varies

## City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2018  
Date Data Arrived at EDR: 05/01/2018  
Date Made Active in Reports: 05/14/2018  
Number of Days to Update: 13

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 04/11/2018  
Next Scheduled EDR Contact: 07/30/2018  
Data Release Frequency: Varies

## Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 04/01/2018  
Date Data Arrived at EDR: 04/17/2018  
Date Made Active in Reports: 06/19/2018  
Number of Days to Update: 63

Source: Community Health Services  
Telephone: 323-890-7806  
Last EDR Contact: 04/17/2018  
Next Scheduled EDR Contact: 07/30/2018  
Data Release Frequency: Annually

## City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017  
Date Data Arrived at EDR: 04/19/2017  
Date Made Active in Reports: 05/10/2017  
Number of Days to Update: 21

Source: City of El Segundo Fire Department  
Telephone: 310-524-2236  
Last EDR Contact: 04/11/2018  
Next Scheduled EDR Contact: 07/30/2018  
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: 03/09/2017  
Date Data Arrived at EDR: 03/10/2017  
Date Made Active in Reports: 05/03/2017  
Number of Days to Update: 54

Source: City of Long Beach Fire Department  
Telephone: 562-570-2563  
Last EDR Contact: 04/18/2018  
Next Scheduled EDR Contact: 08/06/2018  
Data Release Frequency: Annually

## City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/04/2018  
Date Data Arrived at EDR: 01/05/2018  
Date Made Active in Reports: 01/18/2018  
Number of Days to Update: 13

Source: City of Torrance Fire Department  
Telephone: 310-618-2973  
Last EDR Contact: 07/05/2018  
Next Scheduled EDR Contact: 10/22/2018  
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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/21/2018  
Date Data Arrived at EDR: 02/22/2018  
Date Made Active in Reports: 04/03/2018  
Number of Days to Update: 40

Source: Madera County Environmental Health  
Telephone: 559-675-7823  
Last EDR Contact: 05/16/2018  
Next Scheduled EDR Contact: 09/03/2018  
Data Release Frequency: Varies

## MARIN COUNTY:

### Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 03/30/2018  
Date Data Arrived at EDR: 04/06/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 28

Source: Public Works Department Waste Management  
Telephone: 415-473-6647  
Last EDR Contact: 06/27/2018  
Next Scheduled EDR Contact: 10/15/2018  
Data Release Frequency: Semi-Annually

## MERCED COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 01/11/2018  
Date Data Arrived at EDR: 01/12/2018  
Date Made Active in Reports: 02/08/2018  
Number of Days to Update: 27

Source: Merced County Environmental Health  
Telephone: 209-381-1094  
Last EDR Contact: 05/16/2018  
Next Scheduled EDR Contact: 09/03/2018  
Data Release Frequency: Varies

## MONO COUNTY:

### CUPA Facility List

CUPA Facility List

Date of Government Version: 02/22/2018  
Date Data Arrived at EDR: 02/27/2018  
Date Made Active in Reports: 03/14/2018  
Number of Days to Update: 15

Source: Mono County Health Department  
Telephone: 760-932-5580  
Last EDR Contact: 05/22/2018  
Next Scheduled EDR Contact: 09/10/2018  
Data Release Frequency: Varies

## MONTEREY COUNTY:

### CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 03/27/2018  
Date Data Arrived at EDR: 03/29/2018  
Date Made Active in Reports: 04/16/2018  
Number of Days to Update: 18

Source: Monterey County Health Department  
Telephone: 831-796-1297  
Last EDR Contact: 07/02/2018  
Next Scheduled EDR Contact: 10/15/2018  
Data Release Frequency: Varies

## NAPA COUNTY:

### Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/09/2017  
Date Data Arrived at EDR: 01/11/2017  
Date Made Active in Reports: 03/02/2017  
Number of Days to Update: 50

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 05/22/2018  
Next Scheduled EDR Contact: 09/10/2018  
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: 02/22/2018  
Date Data Arrived at EDR: 02/27/2018  
Date Made Active in Reports: 03/29/2018  
Number of Days to Update: 30

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 05/22/2018  
Next Scheduled EDR Contact: 09/10/2018  
Data Release Frequency: No Update Planned

## NEVADA COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 04/24/2018  
Date Data Arrived at EDR: 05/01/2018  
Date Made Active in Reports: 06/15/2018  
Number of Days to Update: 45

Source: Community Development Agency  
Telephone: 530-265-1467  
Last EDR Contact: 04/25/2018  
Next Scheduled EDR Contact: 08/13/2018  
Data Release Frequency: Varies

## ORANGE COUNTY:

### List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 04/02/2018  
Date Data Arrived at EDR: 05/11/2018  
Date Made Active in Reports: 06/22/2018  
Number of Days to Update: 42

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 05/07/2018  
Next Scheduled EDR Contact: 08/20/2018  
Data Release Frequency: Annually

### List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 04/02/2018  
Date Data Arrived at EDR: 05/11/2018  
Date Made Active in Reports: 06/25/2018  
Number of Days to Update: 45

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 05/07/2018  
Next Scheduled EDR Contact: 08/20/2018  
Data Release Frequency: Quarterly

### List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/02/2018  
Date Data Arrived at EDR: 02/07/2018  
Date Made Active in Reports: 03/28/2018  
Number of Days to Update: 49

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 05/08/2018  
Next Scheduled EDR Contact: 08/20/2018  
Data Release Frequency: Quarterly

## PLACER COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/15/2018  
Date Data Arrived at EDR: 03/19/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 46

Source: Placer County Health and Human Services  
Telephone: 530-745-2363  
Last EDR Contact: 05/31/2018  
Next Scheduled EDR Contact: 09/17/2018  
Data Release Frequency: Semi-Annually

## PLUMAS COUNTY:

### CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 01/22/2018  
Date Data Arrived at EDR: 01/24/2018  
Date Made Active in Reports: 03/15/2018  
Number of Days to Update: 50

Source: Plumas County Environmental Health  
Telephone: 530-283-6355  
Last EDR Contact: 04/18/2018  
Next Scheduled EDR Contact: 08/06/2018  
Data Release Frequency: Varies

## RIVERSIDE COUNTY:

### Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/05/2018  
Date Data Arrived at EDR: 04/10/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 24

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 06/18/2018  
Next Scheduled EDR Contact: 10/01/2018  
Data Release Frequency: Quarterly

### Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 04/05/2018  
Date Data Arrived at EDR: 04/10/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 24

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 06/18/2018  
Next Scheduled EDR Contact: 10/01/2018  
Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:

### Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/02/2018  
Date Data Arrived at EDR: 04/04/2018  
Date Made Active in Reports: 06/14/2018  
Number of Days to Update: 71

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 07/03/2018  
Next Scheduled EDR Contact: 10/15/2018  
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: 02/02/2018  
Date Data Arrived at EDR: 04/04/2018  
Date Made Active in Reports: 06/19/2018  
Number of Days to Update: 76

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 07/03/2018  
Next Scheduled EDR Contact: 10/15/2018  
Data Release Frequency: Quarterly

## SAN BENITO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

Cupa facility list

Date of Government Version: 11/01/2017  
Date Data Arrived at EDR: 11/03/2017  
Date Made Active in Reports: 11/17/2017  
Number of Days to Update: 14

Source: San Benito County Environmental Health  
Telephone: N/A  
Last EDR Contact: 05/16/2018  
Next Scheduled EDR Contact: 08/20/2018  
Data Release Frequency: Varies

## 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: 04/09/2018  
Date Data Arrived at EDR: 04/11/2018  
Date Made Active in Reports: 06/19/2018  
Number of Days to Update: 69

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 04/06/2018  
Next Scheduled EDR Contact: 08/20/2018  
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: 03/05/2018  
Date Data Arrived at EDR: 03/07/2018  
Date Made Active in Reports: 04/16/2018  
Number of Days to Update: 40

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 06/06/2018  
Next Scheduled EDR Contact: 09/17/2018  
Data Release Frequency: Quarterly

### Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018  
Date Data Arrived at EDR: 04/24/2018  
Date Made Active in Reports: 06/19/2018  
Number of Days to Update: 56

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 04/18/2018  
Next Scheduled EDR Contact: 08/06/2018  
Data Release Frequency: Varies

### Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 04/18/2018  
Date Data Arrived at EDR: 04/23/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 11

Source: Department of Environmental Health  
Telephone: 858-505-6874  
Last EDR Contact: 04/18/2018  
Next Scheduled EDR Contact: 08/06/2018  
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	Source: San Diego County Department of Environmental Health
Date Data Arrived at EDR: 06/15/2010	Telephone: 619-338-2371
Date Made Active in Reports: 07/09/2010	Last EDR Contact: 05/31/2018
Number of Days to Update: 24	Next Scheduled EDR Contact: 09/17/2018
	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	Source: Department Of Public Health San Francisco County
Date Data Arrived at EDR: 09/19/2008	Telephone: 415-252-3920
Date Made Active in Reports: 09/29/2008	Last EDR Contact: 05/02/2018
Number of Days to Update: 10	Next Scheduled EDR Contact: 08/20/2018
	Data Release Frequency: Quarterly

### Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/02/2017	Source: Department of Public Health
Date Data Arrived at EDR: 11/07/2017	Telephone: 415-252-3920
Date Made Active in Reports: 12/19/2017	Last EDR Contact: 05/02/2018
Number of Days to Update: 42	Next Scheduled EDR Contact: 08/20/2018
	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: 03/20/2018	Source: Environmental Health Department
Date Data Arrived at EDR: 03/22/2018	Telephone: N/A
Date Made Active in Reports: 05/04/2018	Last EDR Contact: 06/14/2018
Number of Days to Update: 43	Next Scheduled EDR Contact: 10/01/2018
	Data Release Frequency: Semi-Annually

## SAN LUIS OBISPO COUNTY:

### CUPA Facility List

Cupa Facility List.

Date of Government Version: 11/16/2017	Source: San Luis Obispo County Public Health Department
Date Data Arrived at EDR: 11/17/2017	Telephone: 805-781-5596
Date Made Active in Reports: 12/18/2017	Last EDR Contact: 05/16/2018
Number of Days to Update: 31	Next Scheduled EDR Contact: 09/03/2018
	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: 03/14/2018  
Date Data Arrived at EDR: 03/20/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 45

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 06/06/2018  
Next Scheduled EDR Contact: 09/24/2018  
Data Release Frequency: Annually

## Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/15/2018  
Date Data Arrived at EDR: 03/20/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 45

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 06/06/2018  
Next Scheduled EDR Contact: 09/24/2018  
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: 05/16/2018  
Next Scheduled EDR Contact: 09/03/2018  
Data Release Frequency: Varies

## SANTA CLARA COUNTY:

### Cupa Facility List

Cupa facility list

Date of Government Version: 02/20/2018  
Date Data Arrived at EDR: 02/20/2018  
Date Made Active in Reports: 03/19/2018  
Number of Days to Update: 27

Source: Department of Environmental Health  
Telephone: 408-918-1973  
Last EDR Contact: 05/16/2018  
Next Scheduled EDR Contact: 09/03/2018  
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: 03/03/2014  
Date Data Arrived at EDR: 03/05/2014  
Date Made Active in Reports: 03/18/2014  
Number of Days to Update: 13

Source: Department of Environmental Health  
Telephone: 408-918-3417  
Last EDR Contact: 05/22/2018  
Next Scheduled EDR Contact: 09/10/2018  
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: 02/04/2018  
Date Data Arrived at EDR: 02/06/2018  
Date Made Active in Reports: 03/20/2018  
Number of Days to Update: 42

Source: City of San Jose Fire Department  
Telephone: 408-535-7694  
Last EDR Contact: 05/16/2018  
Next Scheduled EDR Contact: 08/20/2018  
Data Release Frequency: Annually

## SANTA CRUZ COUNTY:

CUPA Facility List  
CUPA facility listing.

Date of Government Version: 01/21/2017  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 05/23/2017  
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health  
Telephone: 831-464-2761  
Last EDR Contact: 05/16/2018  
Next Scheduled EDR Contact: 09/03/2018  
Data Release Frequency: Varies

## SHASTA COUNTY:

CUPA Facility List  
Cupa Facility List.

Date of Government Version: 06/15/2017  
Date Data Arrived at EDR: 06/19/2017  
Date Made Active in Reports: 08/09/2017  
Number of Days to Update: 51

Source: Shasta County Department of Resource Management  
Telephone: 530-225-5789  
Last EDR Contact: 05/16/2018  
Next Scheduled EDR Contact: 09/03/2018  
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: 03/08/2018  
Date Data Arrived at EDR: 03/13/2018  
Date Made Active in Reports: 05/04/2018  
Number of Days to Update: 52

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 05/31/2018  
Next Scheduled EDR Contact: 09/17/2018  
Data Release Frequency: Quarterly

Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 03/08/2018  
Date Data Arrived at EDR: 03/13/2018  
Date Made Active in Reports: 03/29/2018  
Number of Days to Update: 16

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 05/31/2018  
Next Scheduled EDR Contact: 09/17/2018  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

Cupa Facility List  
Cupa Facility list

Date of Government Version: 03/01/2018  
Date Data Arrived at EDR: 03/27/2018  
Date Made Active in Reports: 04/16/2018  
Number of Days to Update: 20

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-565-1174  
Last EDR Contact: 06/21/2018  
Next Scheduled EDR Contact: 10/08/2018  
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: 04/03/2018  
Date Data Arrived at EDR: 04/06/2018  
Date Made Active in Reports: 05/09/2018  
Number of Days to Update: 33

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 06/21/2018  
Next Scheduled EDR Contact: 10/08/2018  
Data Release Frequency: Quarterly

## STANISLAUS COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 05/08/2018  
Date Data Arrived at EDR: 05/11/2018  
Date Made Active in Reports: 06/15/2018  
Number of Days to Update: 35

Source: Stanislaus County Department of Environmental Protection  
Telephone: 209-525-6751  
Last EDR Contact: 04/16/2018  
Next Scheduled EDR Contact: 07/30/2018  
Data Release Frequency: Varies

## SUTTER COUNTY:

### Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 01/08/2018  
Date Data Arrived at EDR: 03/01/2018  
Date Made Active in Reports: 03/30/2018  
Number of Days to Update: 29

Source: Sutter County Department of Agriculture  
Telephone: 530-822-7500  
Last EDR Contact: 05/31/2018  
Next Scheduled EDR Contact: 09/17/2018  
Data Release Frequency: Semi-Annually

## TEHAMA COUNTY:

### CUPA Facility List

Cupa facilities

Date of Government Version: 01/26/2018  
Date Data Arrived at EDR: 02/02/2018  
Date Made Active in Reports: 03/21/2018  
Number of Days to Update: 47

Source: Tehama County Department of Environmental Health  
Telephone: 530-527-8020  
Last EDR Contact: 05/03/2018  
Next Scheduled EDR Contact: 08/20/2018  
Data Release Frequency: Varies

## TRINITY COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 04/23/2018  
Date Data Arrived at EDR: 04/25/2018  
Date Made Active in Reports: 06/15/2018  
Number of Days to Update: 51

Source: Department of Toxic Substances Control  
Telephone: 760-352-0381  
Last EDR Contact: 04/18/2018  
Next Scheduled EDR Contact: 08/06/2018  
Data Release Frequency: Varies

## TULARE COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

Cupa program facilities

Date of Government Version: 03/19/2018  
Date Data Arrived at EDR: 03/22/2018  
Date Made Active in Reports: 04/17/2018  
Number of Days to Update: 26

Source: Tulare County Environmental Health Services Division  
Telephone: 559-624-7400  
Last EDR Contact: 07/02/2018  
Next Scheduled EDR Contact: 08/20/2018  
Data Release Frequency: Varies

## TUOLUMNE COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 04/23/2018  
Date Data Arrived at EDR: 04/25/2018  
Date Made Active in Reports: 06/25/2018  
Number of Days to Update: 61

Source: Divison of Environmental Health  
Telephone: 209-533-5633  
Last EDR Contact: 04/18/2018  
Next Scheduled EDR Contact: 08/06/2018  
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: 03/26/2018  
Date Data Arrived at EDR: 04/25/2018  
Date Made Active in Reports: 06/22/2018  
Number of Days to Update: 58

Source: Ventura County Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 04/23/2018  
Next Scheduled EDR Contact: 08/06/2018  
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  
Date Data Arrived at EDR: 12/01/2011  
Date Made Active in Reports: 01/19/2012  
Number of Days to Update: 49

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 06/27/2018  
Next Scheduled EDR Contact: 10/15/2018  
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  
Date Data Arrived at EDR: 06/24/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 37

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 05/09/2018  
Next Scheduled EDR Contact: 08/27/2018  
Data Release Frequency: Quarterly

### 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: 03/26/2018  
Date Data Arrived at EDR: 04/25/2018  
Date Made Active in Reports: 06/25/2018  
Number of Days to Update: 61

Source: Ventura County Resource Management Agency  
Telephone: 805-654-2813  
Last EDR Contact: 04/23/2018  
Next Scheduled EDR Contact: 08/06/2018  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/28/2018	Source: Environmental Health Division
Date Data Arrived at EDR: 03/14/2018	Telephone: 805-654-2813
Date Made Active in Reports: 03/30/2018	Last EDR Contact: 06/13/2018
Number of Days to Update: 16	Next Scheduled EDR Contact: 09/24/2018
	Data Release Frequency: Quarterly

## YOLO COUNTY:

### Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 03/27/2018	Source: Yolo County Department of Health
Date Data Arrived at EDR: 04/03/2018	Telephone: 530-666-8646
Date Made Active in Reports: 05/04/2018	Last EDR Contact: 06/27/2018
Number of Days to Update: 31	Next Scheduled EDR Contact: 10/15/2018
	Data Release Frequency: Annually

## YUBA COUNTY:

### CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 05/10/2018	Source: Yuba County Environmental Health Department
Date Data Arrived at EDR: 05/15/2018	Telephone: 530-749-7523
Date Made Active in Reports: 06/15/2018	Last EDR Contact: 04/25/2018
Number of Days to Update: 31	Next Scheduled EDR Contact: 08/13/2018
	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: 01/03/2018	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 02/14/2018	Telephone: 860-424-3375
Date Made Active in Reports: 03/22/2018	Last EDR Contact: 05/18/2018
Number of Days to Update: 36	Next Scheduled EDR Contact: 08/27/2018
	Data Release Frequency: No Update Planned

### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/11/2017	Telephone: N/A
Date Made Active in Reports: 07/27/2017	Last EDR Contact: 04/23/2018
Number of Days to Update: 107	Next Scheduled EDR Contact: 07/23/2018
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 04/30/2018  
Date Data Arrived at EDR: 05/03/2018  
Date Made Active in Reports: 06/07/2018  
Number of Days to Update: 35

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 05/03/2018  
Next Scheduled EDR Contact: 08/13/2018  
Data Release Frequency: Quarterly

## PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016  
Date Data Arrived at EDR: 07/25/2017  
Date Made Active in Reports: 09/25/2017  
Number of Days to Update: 62

Source: Department of Environmental Protection  
Telephone: 717-783-8990  
Last EDR Contact: 04/12/2018  
Next Scheduled EDR Contact: 07/30/2018  
Data Release Frequency: Annually

## RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 02/23/2018  
Date Made Active in Reports: 04/09/2018  
Number of Days to Update: 45

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 05/21/2018  
Next Scheduled EDR Contact: 09/03/2018  
Data Release Frequency: Annually

## WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016  
Date Data Arrived at EDR: 04/13/2017  
Date Made Active in Reports: 07/14/2017  
Number of Days to Update: 92

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 06/11/2018  
Next Scheduled EDR Contact: 09/24/2018  
Data Release Frequency: Annually

## Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

## Electric Power Transmission Line Data

Source: PennWell Corporation

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

**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.

## 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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 was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

## State Wetlands Data: Wetland Inventory

Source: Department of Fish & Game

Telephone: 916-445-0411

## Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## **STREET AND ADDRESS INFORMATION**

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

SERRANO ANAHEIM  
6501-6513 SERRANO AVENUE  
ANAHEIM, CA 92807

### TARGET PROPERTY COORDINATES

Latitude (North):	33.831677 - 33° 49' 54.04"
Longitude (West):	117.760087 - 117° 45' 36.31"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	429667.1
UTM Y (Meters):	3743558.8
Elevation:	796 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map:	5641308 ORANGE, CA
Version Date:	2012
East Map:	5636465 BLACK STAR CANYON, CA
Version Date:	2012

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<sup>®</sup> - 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).

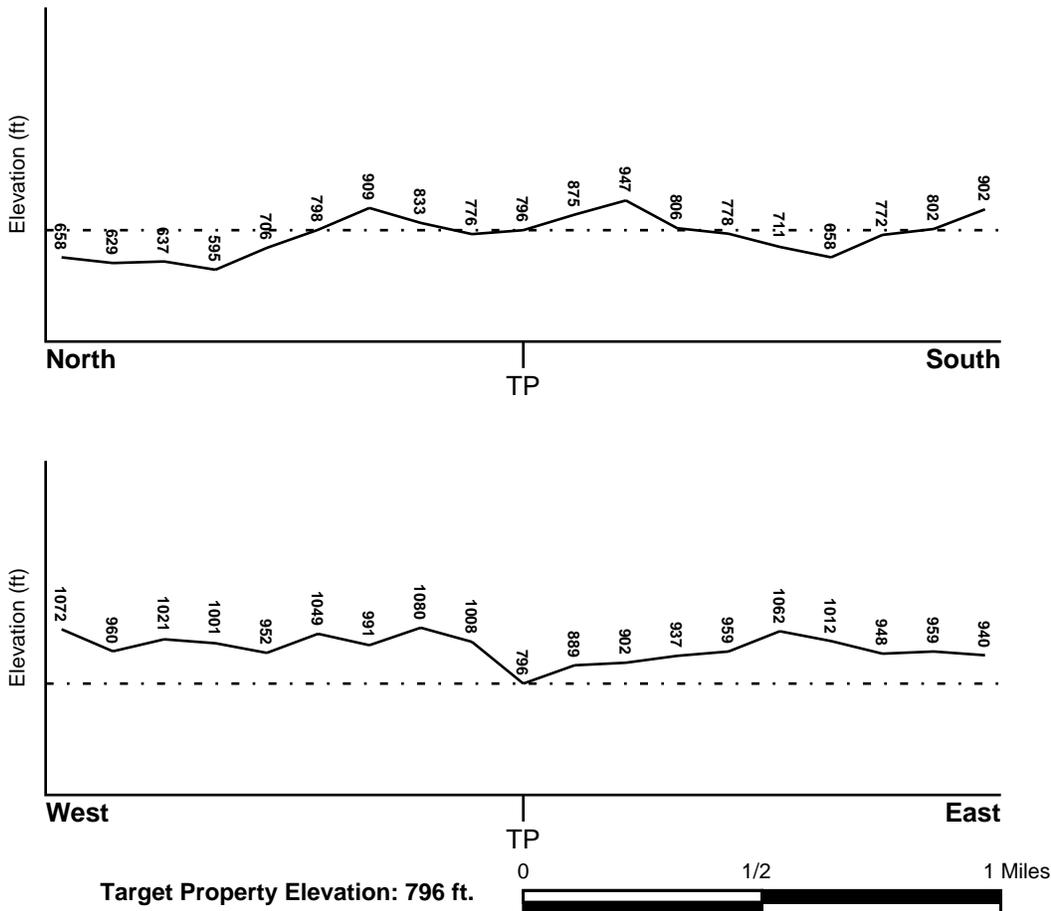
## TOPOGRAPHIC INFORMATION

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

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06059C0159J	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06059C0157J	FEMA FIRM Flood data
06059C0180J	FEMA FIRM Flood data

## NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
ORANGE	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>
Not Reported		

## 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**

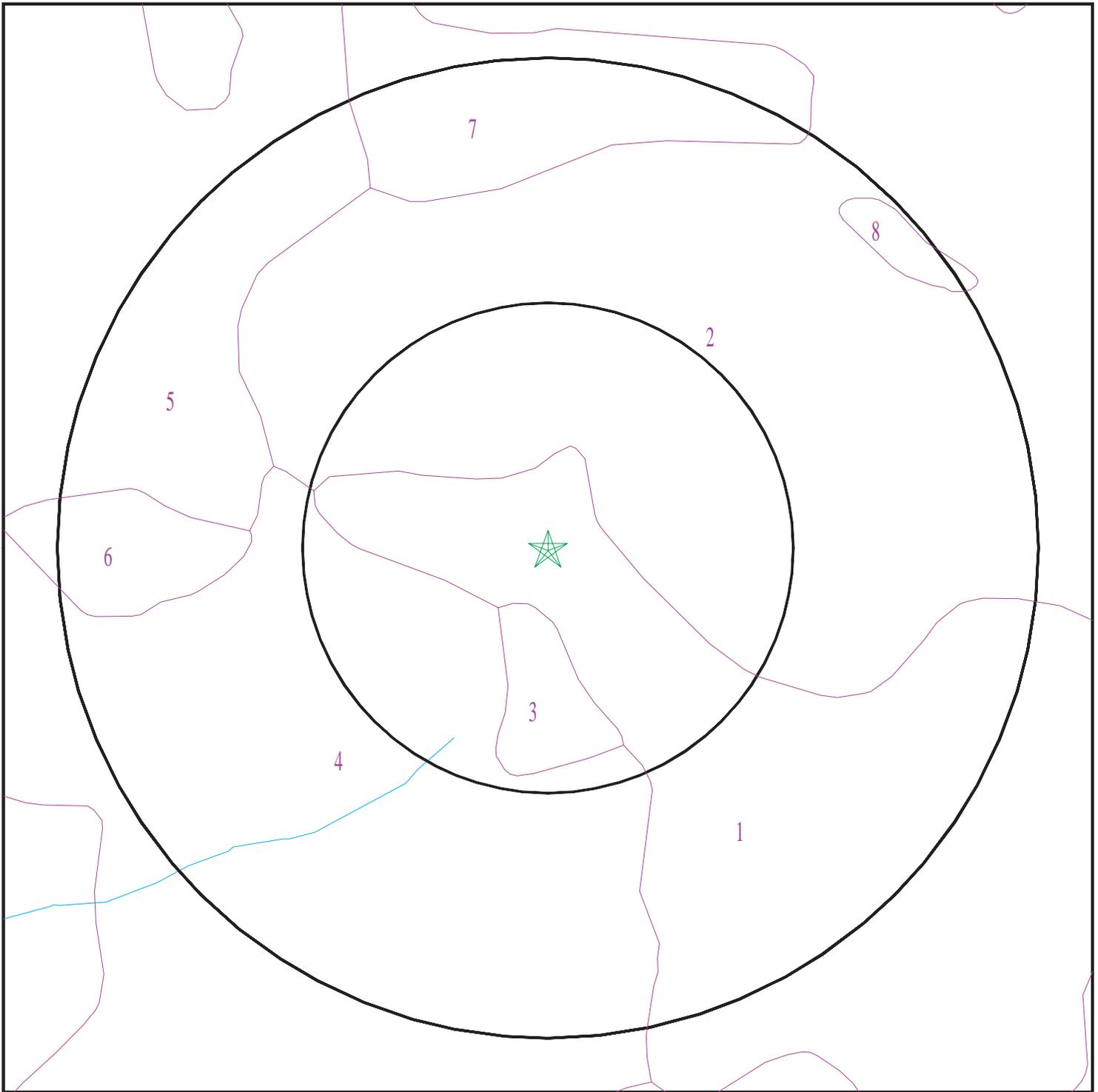
Era:	Cenozoic
System:	Tertiary
Series:	Eocene
Code:	Te (decoded above as Era, System & Series)

#### **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).

# SSURGO SOIL MAP - 5355743.2s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: Serrano Anaheim  
ADDRESS: 6501-6513 Serrano Avenue  
Anaheim CA 92807  
LAT/LONG: 33.831677 / 117.760087

CLIENT: Leighton and Associates, Inc.  
CONTACT: Brynn Mcculloch  
INQUIRY #: 5355743.2s  
DATE: July 09, 2018 4:52 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## 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. The following information is based on Soil Conservation Service SSURGO data.

### Soil Map ID: 1

Soil Component Name: ALO

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: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	14 inches	22 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.1
2	22 inches	25 inches	weathered bedrock	Not reported	Not reported	Max: 1.4 Min: 0	Max: Min:
3	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), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.1

### Soil Map ID: 2

Soil Component Name: CIENEBA

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat excessively drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 42 Min: 14	Max: 7.3 Min: 5.6
2	7 inches	11 inches	weathered bedrock	Not reported	Not reported	Max: 0.42 Min: 0	Max: Min:

### Soil Map ID: 3

Soil Component Name: BALCOM

Soil Surface Texture: clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	33 inches	clay loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 8.4 Min: 7.9

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	33 inches	38 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

### Soil Map ID: 4

Soil Component Name: CALLEGUAS

Soil Surface Texture: clay loam

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: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 8.4 Min: 7.9
2	14 inches	18 inches	weathered bedrock	Not reported	Not reported	Max: 1.4 Min: 0	Max: Min:

### Soil Map ID: 5

Soil Component Name: BOSANKO

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: Well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	20 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), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.1
2	20 inches	31 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), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.1
3	31 inches	35 inches	weathered bedrock	Not reported	Not reported	Max: 0.42 Min: 0	Max: Min:

### Soil Map ID: 6

Soil Component Name: ALO

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: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	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), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.1
2	14 inches	22 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), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.1
3	22 inches	25 inches	weathered bedrock	Not reported	Not reported	Max: 1.4 Min: 0	Max: Min:

### Soil Map ID: 7

Soil Component Name: SOPER

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	9 inches	29 inches	gravelly clay loam	Not reported	Not reported	Max: 4 Min: 1.4	Max: 7.8 Min: 6.1
3	29 inches	33 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

### Soil Map ID: 8

Soil Component Name: CIENEBA

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 42 Min: 14	Max: 7.3 Min: 5.1
2	7 inches	11 inches	weathered bedrock	Not reported	Not reported	Max: 0.42 Min: 0	Max: Min:

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## 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.

## WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

## **FEDERAL USGS WELL INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

## **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**

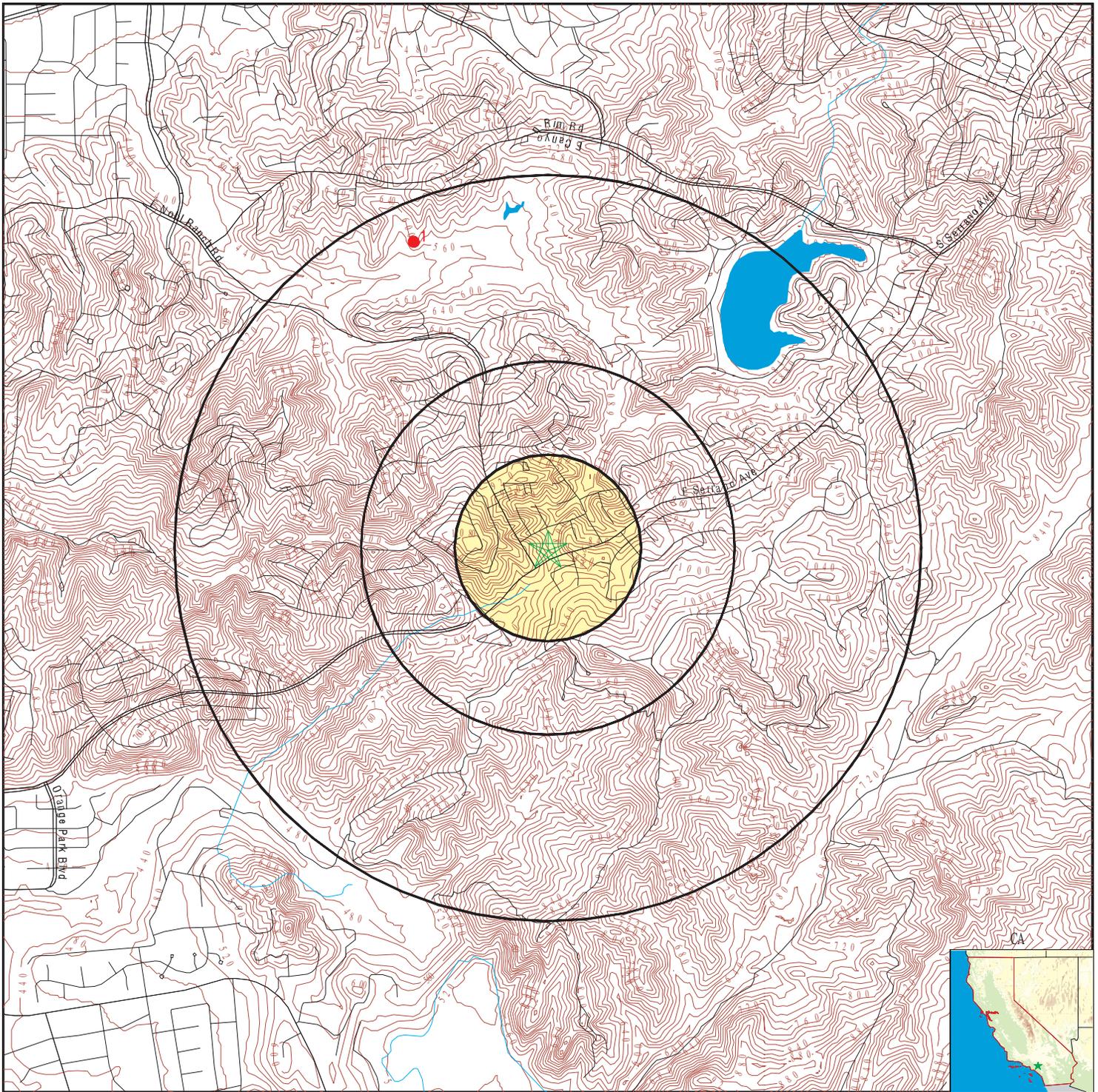
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

## OTHER STATE DATABASE INFORMATION

## **STATE OIL/GAS WELL INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	CAOG11000217665	1/2 - 1 Mile NNW

# PHYSICAL SETTING SOURCE MAP - 5355743.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- 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: Serrano Anaheim  
 ADDRESS: 6501-6513 Serrano Avenue  
 Anaheim CA 92807  
 LAT/LONG: 33.831677 / 117.760087

CLIENT: Leighton and Associates, Inc.  
 CONTACT: Brynn Mcculloch  
 INQUIRY #: 5355743.2s  
 DATE: July 09, 2018 4:52 pm

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance

Database EDR ID Number

**1**  
**NNW**  
**1/2 - 1 Mile**

OIL\_GAS CAOG11000217665

District nun:	1	Api number:	05900853
Blm well:	N	Redrill can:	Not Reported
Dryhole:	Y	Well status:	P
Operator name:	Aeco Corporation		
County name:	Orange	Fieldname:	Any Field
Area name:	Any Area	Section:	12
Township:	04S	Range:	09W
Base meridian:	SB	Elevation:	Not Reported
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Nohl-Bixby	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	Not Reported
Welldeptha:	0		
Redrillfoo:	0		
Abandonedd:	Not Reported	Completion:	Not Reported
Directiona:	Unknown	Gissymbol:	PDH
Site id:	CAOG11000217665		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92807	56	5

Federal EPA Radon Zone for ORANGE County: 3

- 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 ORANGE COUNTY, CA

Number of sites tested: 30

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.763 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.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish & Game

Telephone: 916-445-0411

## 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. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

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 Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, 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 Public Health

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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**Serrano Anaheim**

6501-6513 Serrano Avenue  
Anaheim, CA 92807

Inquiry Number: 5355743.2s  
September 21, 2018

# EDR Vapor Encroachment Screen

Prepared using EDR's Vapor Encroachment Worksheet

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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 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).

<b>STANDARD ENVIRONMENTAL RECORDS</b>	<b>Default Area of Concern (Miles)*</b>	<b>property</b>	<b>1/10</b>	<b>&gt; 1/10</b>
Federal NPL site list	1.0	0	0	0
Federal Delisted NPL site list	1.0	0	0	0
Federal CERCLIS list	0.5	0	0	0
Federal CERCLIS NFRAP site list	0.5	0	0	0
Federal RCRA CORRACTS facilities list	1.0	0	0	0
Federal RCRA non-CORRACTS TSD facilities list	0.5	0	0	0
Federal RCRA generators list	0.25	0	0	0
Federal institutional controls / engineering controls registries	0.5	0	0	0
Federal ERNS list	0.001	0	0	-
State- and tribal - equivalent NPL	1.0	0	0	0
State- and tribal - equivalent CERCLIS	1.0	0	0	0
State and tribal landfill and/or solid waste disposal site lists	0.5	0	0	0
State and tribal leaking storage tank lists	0.5	0	0	0
State and tribal registered storage tank lists	0.25	0	0	0
State and tribal institutional control / engineering control registries	not searched	-	-	-
State and tribal voluntary cleanup sites	0.5	0	0	0
State and tribal Brownfields sites	0.5	0	0	0

### ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists	0.5	0	0	0
Local Lists of Landfill / Solid Waste Disposal Sites	0.5	0	0	0
Local Lists of Hazardous waste / Contaminated Sites	1.0	0	0	0
Local Lists of Registered Storage Tanks	0.25	0	0	0
Local Land Records	0.5	0	0	0
Records of Emergency Release Reports	0.5	0	0	0
Other Ascertainable Records	1.0	0	0	0

### EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records	1.0	0	0	0
Exclusive Recovered Govt. Archives	0.001	0	0	-

## EXECUTIVE SUMMARY

### EDR RECOVERED GOVERNMENT ARCHIVES

EDR Exclusive Records	1.0	0	0	0
Exclusive Recovered Govt. Archives	0.001	0	0	-

\*The Default Area of Concern may be adjusted by the environmental professional using experience and professional judgement. Each category may include several databases, and each database may have a different distance. A list of individual databases is provided at the back of this report.

# EXECUTIVE SUMMARY

## TARGET PROPERTY INFORMATION

### ADDRESS

SERRANO ANAHEIM  
6501-6513 SERRANO AVENUE  
ANAHEIM, CA 92807

### COORDINATES

Latitude (North):	33.831677 - 33° 49' 54.03534"
Longitude (West):	117.760087 - 117° 45' 36.309814"
Elevation:	796 ft. above sea level

# 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>
Not Reported				

## ADDITIONAL ENVIRONMENTAL RECORDS

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
Not Reported				

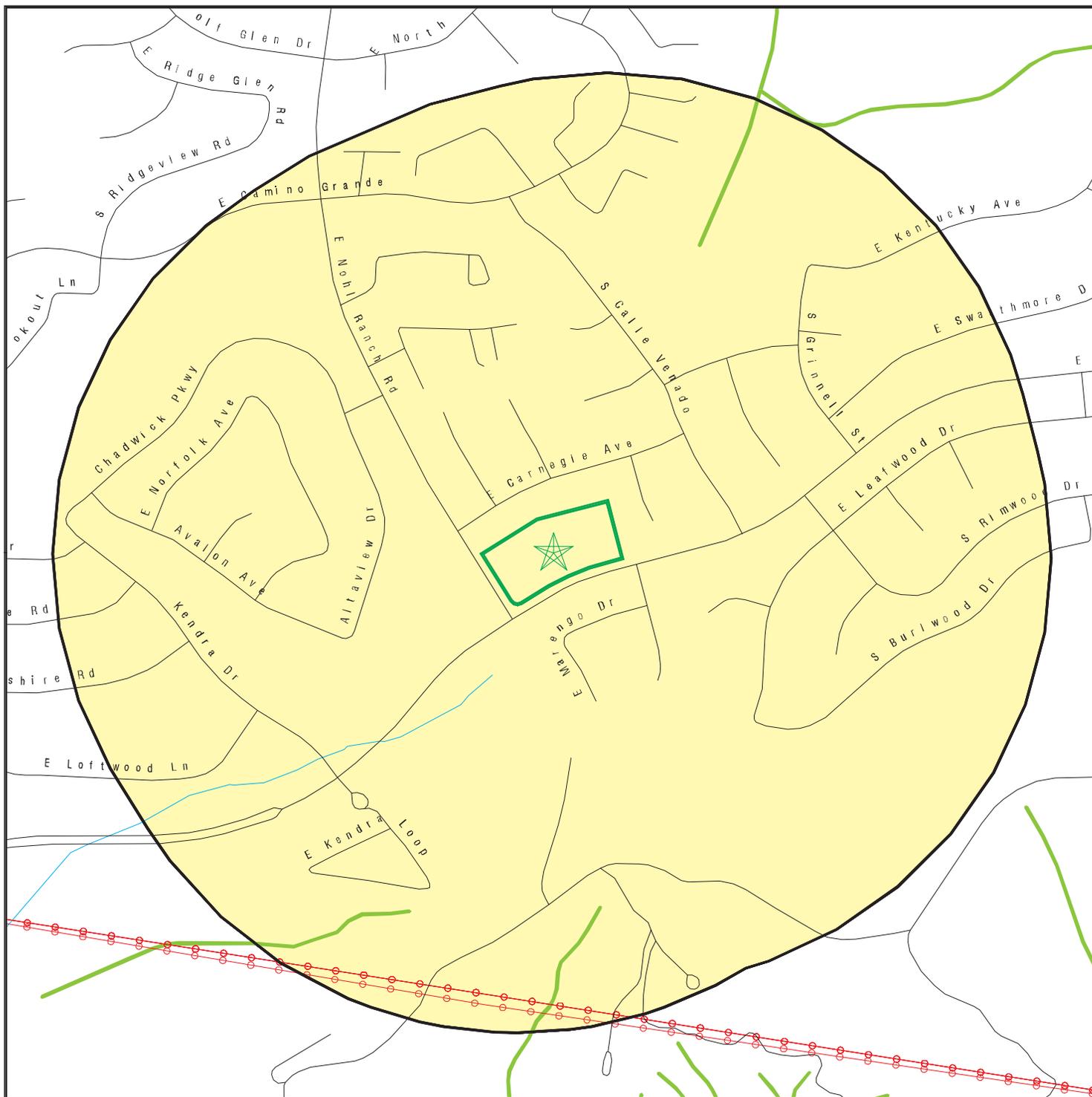
## EDR HIGH RISK HISTORICAL RECORDS

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
Not Reported				

## EDR RECOVERED GOVERNMENT ARCHIVES

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
Not Reported				

# PRIMARY MAP - 5355743.2S



-  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

-  0 300 1/3 Miles
-  Indian Reservations BIA
-  Power transmission lines
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
-  State Wetlands
-  Areas of Concern

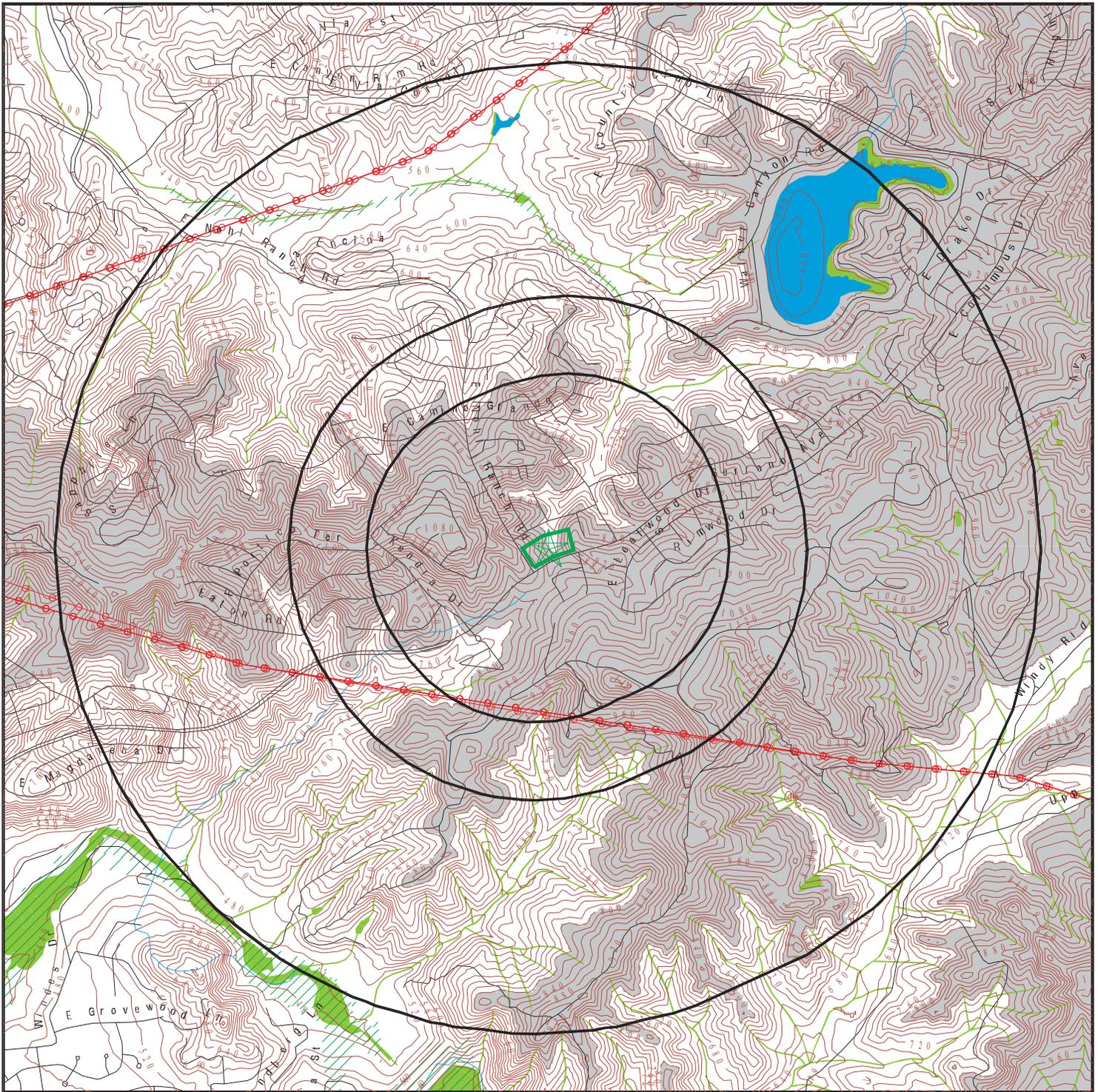


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Serrano Anaheim  
 ADDRESS: 6501-6513 Serrano Avenue  
 Anaheim CA 92807  
 LAT/LONG: 33.831677 / 117.760087

CLIENT: Leighton and Associates, Inc.  
 CONTACT: Brynn Mcculloch  
 INQUIRY #: 5355743.2s  
 DATE: July 09, 2018 4:51 pm

# SECONDARY MAP - 5355743.2S



 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

 Power transmission lines

 100-year flood zone

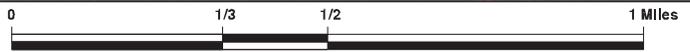
 500-year flood zone

 National Wetland Inventory

 State Wetlands

 Upgradient Area

 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.

SITE NAME: Serrano Anaheim  
 ADDRESS: 6501-6513 Serrano Avenue  
 Anaheim CA 92807  
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CLIENT: Leighton and Associates, Inc.  
 CONTACT: Brynn Mcculloch  
 INQUIRY #: 5355743.2S  
 DATE: July 09, 2018 4:50 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)	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.
	Relative Elevation	Feet Above Sea Level		
<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).

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
<b>ENVIRONMENTAL RECORDS</b>						
<b>Federal NPL site list</b>						
US	NPL	National Priority List	EPA	05/13/2018	05/30/2018	06/22/2018
US	Proposed NPL	Proposed National Priority List Sites	EPA	05/13/2018	05/30/2018	06/22/2018
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
<b>Federal CERCLIS list</b>						
US	SEMS	Superfund Enterprise Management System	EPA	05/18/2018	05/30/2018	06/22/2018
<b>Federal RCRA CORRACTS facilities list</b>						
US	CORRACTS	Corrective Action Report	EPA	03/01/2018	03/28/2018	06/22/2018
<b>Federal RCRA TSD facilities list</b>						
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
<b>Federal RCRA generators list</b>						
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
<b>Federal institutional controls / engineering controls registries</b>						
US	LUCIS	Land Use Control Information System	Department of the Navy	02/16/2018	02/22/2018	05/11/2018
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	02/13/2018	02/27/2018	05/11/2018
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	02/13/2018	02/27/2018	05/11/2018
<b>Federal ERNS list</b>						
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	03/19/2018	03/27/2018	06/08/2018
<b>State and tribal - equivalent NPL</b>						
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	04/30/2018	05/02/2018	06/22/2018
<b>State and tribal - equivalent CERCLIS</b>						
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	04/30/2018	05/02/2018	06/22/2018
<b>State and tribal landfill / solid waste disposal</b>						
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	05/14/2018	05/16/2018	06/22/2018
<b>State and tribal leaking storage tank lists</b>						
CA	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001
CA	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
CA	LUST	Leaking Underground Fuel Tank Report (GEOTRACKER)	State Water Resources Control Board	03/12/2018	03/14/2018	03/21/2018
CA	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
CA	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
CA	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
CA	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
CA	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003
CA	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	10/24/2017	01/23/2018	04/13/2018
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	09/30/2017	01/23/2018	04/13/2018
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	10/12/2017	01/23/2018	04/13/2018
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	10/12/2017	01/23/2018	04/13/2018
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	01/06/2018	01/23/2018	04/13/2018
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	10/14/2017	01/23/2018	04/13/2018
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	10/14/2017	01/23/2018	04/13/2018
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	10/16/2017	01/23/2018	04/13/2018
CA	CPS-SLIC	Statewide SLIC Cases (GEOTRACKER)	State Water Resources Control Board	03/12/2018	03/14/2018	03/21/2018
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victorv	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
<b>State and tribal registered storage tank lists</b>						
CA	UST	Active UST Facilities	SWRCB	03/12/2018	03/14/2018	03/29/2018
CA	UST CLOSURE	Proposed Closure of Underground Storage Tank (UST) Cases	State Water Resources Control Board	03/08/2018	03/14/2018	05/04/2018
CA	MILITARY UST SITES	Military UST Sites (GEOTRACKER)	State Water Resources Control Board	03/12/2018	03/14/2018	05/04/2018
CA	UST MENDOCINO	Mendocino County UST Database	Department of Public Health	02/28/2018	03/01/2018	03/28/2018
CA	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	07/06/2016	07/12/2016	09/19/2016
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	10/12/2017	01/23/2018	04/13/2018
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	10/14/2017	01/23/2018	04/13/2018
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/24/2017	07/27/2017	12/08/2017
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	01/13/2018	01/23/2018	04/13/2018
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	10/16/2017	01/23/2018	04/13/2018
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	10/24/2017	01/23/2018	04/13/2018
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	10/14/2017	01/23/2018	04/13/2018
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	09/30/2017	01/23/2018	04/13/2018
US	FEMA UST	Underground Storage Tank Listing	FEMA	05/15/2017	05/30/2017	10/13/2017

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
<b>State and tribal voluntary cleanup sites</b>						
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	04/30/2018	05/02/2018	06/22/2018
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
<b>State and tribal Brownfields sites</b>						
CA	BROWNFIELDS	Considered Brownfields Sites Listing	State Water Resources Control Board	03/26/2018	03/27/2018	05/04/2018
<b>Other Records</b>						
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	03/31/2018	04/16/2018	06/29/2018
US	ROD	Records Of Decision	EPA	05/13/2018	05/30/2018	06/29/2018
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	05/13/2018	05/30/2018	06/29/2018
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
CA	SWRCY	Recycler Database	Department of Conservation	03/12/2018	03/14/2018	05/04/2018
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	SAN FRANCISCO AST	Aboveground Storage Tank Site Listing	San Francisco County Department of Public Hea	04/19/2018	04/24/2018	05/04/2018
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	05/13/2018	05/30/2018	06/29/2018
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	04/22/2013	03/03/2015	03/09/2015
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	05/24/2017	11/30/2017	12/15/2017
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	12/23/2016	12/27/2016	02/17/2017
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	03/01/2018	03/27/2018	06/22/2018
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	02/22/2018	03/01/2018	05/11/2018
US	Delisted NPL	National Priority List Deletions	EPA	05/13/2018	05/30/2018	06/22/2018
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	05/18/2018	05/30/2018	06/22/2018
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	03/26/2018	03/27/2018	06/08/2018
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	02/22/2018	03/01/2018	05/11/2018
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	03/19/2018	03/21/2018	06/08/2018
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	01/31/2015	07/08/2015	10/13/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	06/23/2017	10/11/2017	11/03/2017
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	05/03/2018	05/31/2018	06/29/2018
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	12/05/2005	02/29/2008	04/18/2008

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	PRP	Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2016	01/10/2018	01/12/2018
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/21/2017	01/05/2018
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	PADS	PCB Activity Database System	EPA	06/01/2017	06/09/2017	10/13/2017
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	08/30/2016	09/08/2016	10/21/2016
US	RADINFO	Radiation Information Database	Environmental Protection Agency	04/03/2018	04/05/2018	06/29/2018
US	FINDS	Facility Index System/Facility Registry System	EPA	02/21/2018	02/23/2018	03/23/2018
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RMP	Risk Management Plans	Environmental Protection Agency	11/02/2017	11/17/2017	12/08/2017
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2015	02/22/2017	09/28/2017
US	PWS	Public Water System Data	EPA	12/17/2013	01/09/2014	10/15/2014
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	06/30/2017	08/18/2017	09/21/2017
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	04/06/2018	04/24/2018	06/14/2018
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	03/26/2018	03/27/2018	05/04/2018
CA	CUPA SAN FRANCISCO CO	CUPA SAN FRANCISCO CO	San Francisco County Department of Environmen	04/20/2018	04/24/2018	05/04/2018
CA	CUPA LIVERMORE-PLEASANTON	CUPA Facility Listing	Livermore-Pleasanton Fire Department	04/03/2018	05/07/2018	06/15/2018
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	02/08/2018	02/08/2018	02/08/2018
CA	DRYCLEAN SOUTH COAST	DRYCLEAN SOUTH COAST	South Coast Air Quality Management District	03/16/2018	03/20/2018	05/04/2018
CA	DRYCLEAN AVAQMD	DRYCLEAN AVAQMD	Antelope Valley Air Quality Management Distri	03/08/2018	03/13/2018	05/04/2018
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	03/27/2018	03/29/2018	05/04/2018
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2015	03/21/2017	08/15/2017
CA	ENF	Enforcement Action Listing	State Water Resoruces Control Board	04/18/2018	04/24/2018	07/06/2018
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	04/18/2018	04/20/2018	06/19/2018
CA	Financial Assurance 2	Financial Assurance Information Listing	California Integrated Waste Management Board	05/14/2018	05/15/2018	06/22/2018
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	02/08/2018	02/09/2018	03/20/2018
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2016	07/12/2017	10/17/2017
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	02/20/2018	02/21/2018	04/03/2018
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	04/09/2018	04/11/2018	06/19/2018
CA	ICE	ICE	Department of Toxic Substances Control	02/20/2018	02/21/2018	04/03/2018
CA	LDS	Land Disposal Sites Listing (GEOTRACKER)	State Water Quality Control Board	03/12/2018	03/14/2018	05/04/2018
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	01/28/2018	03/01/2018	04/16/2018
CA	MCS	Military Cleanup Sites Listing (GEOTRACKER)	State Water Resources Control Board	03/12/2018	03/14/2018	03/21/2018
CA	MINES	Mines Site Location Listing	Department of Conservation	03/12/2018	03/14/2018	05/04/2018
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	02/27/2018	03/05/2018	04/16/2018
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	05/14/2018	05/16/2018	07/05/2018
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	03/05/2018	03/05/2018	04/19/2018

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	PROC	Certified Processors Database	Department of Conservation	03/12/2018	03/14/2018	05/04/2018
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	03/23/2018	03/27/2018	05/04/2018
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	04/30/2018	05/02/2018	06/22/2018
CA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Department of Conservation	03/12/2018	03/14/2018	05/04/2018
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	04/10/2018	04/13/2018	06/19/2018
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
CA	SAMPLING POINT	SAMPLING POINT (GEOTRACKER)	State Water Resources Control Board	03/12/2018	03/14/2018	05/04/2018
CA	UIC GEO	UIC GEO (GEOTRACKER)	State Water Resource Control Board	03/12/2018	03/14/2018	05/04/2018
CA	NON-CASE INFO	NON-CASE INFO (GEOTRACKER)	State Water Resources Control Board	03/12/2018	03/14/2018	05/04/2018
CA	CERS TANKS	California Environmental Reporting System (CERS) Tanks	California Environmental Protection Agency	04/23/2018	04/24/2018	06/07/2018
CA	PROJECT	PROJECT (GEOTRACKER)	State Water Resources Control Board	03/12/2018	03/14/2018	05/04/2018
CA	PROD WATER PONDS	PROD WATER PONDS (GEOTRACKER)	State Water Resources Control Board	03/12/2018	03/14/2018	05/04/2018
CA	OTHER OIL GAS	OTHER OIL & GAS (GEOTRACKER)	State Water Resources Control Board	03/12/2018	03/14/2018	05/04/2018
CA	CERS	CalEPA Regulated Site Portal Data	California Environmental Protection Agency	04/23/2018	04/24/2018	06/07/2018
US	UXO	Unexploded Ordnance Sites	Department of Defense	09/30/2016	10/31/2017	01/12/2018
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	01/04/2018	01/19/2018	04/13/2018
CA	MILITARY PRIV SITES	Military Privatized Sites (GEOTRACKER)	State Water Resources Control Board	03/12/2018	03/14/2018	05/04/2018
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	02/20/2018	02/21/2018	03/23/2018
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	02/25/2018	03/17/2018	06/08/2018
US	ABANDONED MINES	Abandoned Mines	Department of Interior	03/08/2018	03/13/2018	06/08/2018
CA	CERS HAZ WASTE	CERS HAZ WASTE	CalEPA	04/23/2018	04/24/2018	06/07/2018
CA	CIWQS	The California Integrated Water Quality System	State Water Resources Control Board	03/05/2018	03/05/2018	05/04/2018
CA	WELL STIM PROJ	WELL SAMP PROJ (GEOTRACKER)	State Water Resources Control Board	03/12/2018	03/14/2018	05/04/2018
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Services, Indian	04/01/2014	08/06/2014	01/29/2015
<b>HISTORICAL USE RECORDS</b>						
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
<b>COUNTY RECORDS</b>						
CA	CS ALAMEDA	Contaminated Sites	Alameda County Environmental Health Services	04/05/2018	04/10/2018	06/14/2018
CA	UST ALAMEDA	Underground Tanks	Alameda County Environmental Health Services	04/05/2018	04/10/2018	05/04/2018
CA	CUPA AMADOR	CUPA Facility List	Amador County Environmental Health	03/31/2018	04/05/2018	06/14/2018
CA	CUPA BUTTE	CUPA Facility Listing	Public Health Department	04/21/2017	04/25/2017	08/09/2017
CA	CUPA CALVERAS	CUPA Facility Listing	Calveras County Environmental Health	05/07/2018	05/09/2018	06/14/2018
CA	CUPA COLUSA	CUPA Facility List	Health & Human Services	02/26/2018	03/01/2018	03/15/2018
CA	SL CONTRA COSTA	Site List	Contra Costa Health Services Department	02/22/2018	02/27/2018	04/16/2018
CA	CUPA DEL NORTE	CUPA Facility List	Del Norte County Environmental Health Divisio	04/27/2018	05/02/2018	06/15/2018
CA	CUPA EL DORADO	CUPA Facility List	El Dorado County Environmental Management Dep	03/05/2018	03/08/2018	04/16/2018
CA	CUPA FRESNO	CUPA Resources List	Dept. of Community Health	03/01/2018	03/05/2018	03/14/2018
CA	CUPA GLENN	CUPA Facility List	Glenn County Air Pollution Control District	01/22/2018	01/24/2018	03/14/2018
CA	CUPA HUMBOLDT	CUPA Facility List	Humboldt County Environmental Health	03/05/2018	03/08/2018	04/30/2018
CA	CUPA IMPERIAL	CUPA Facility List	San Diego Border Field Office	04/23/2018	04/25/2018	06/14/2018
CA	CUPA INYO	CUPA Facility List	Inyo County Environmental Health Services	04/02/2018	04/03/2018	06/14/2018
CA	UST KERN	Underground Storage Tank Sites & Tank Listing	Kern County Environment Health Services Depar	02/02/2018	02/02/2018	03/28/2018
CA	CUPA KINGS	CUPA Facility List	Kings County Department of Public Health	11/14/2017	11/17/2017	12/15/2017
CA	CUPA LAKE	CUPA Facility List	Lake County Environmental Health	05/09/2018	05/11/2018	06/14/2018
CA	CUPA LASSEN	CUPA Facility List	Lassen County Environmental Health	01/22/2018	01/24/2018	03/14/2018
CA	AOCONCERN	San Gabriel Valley Areas of Concern	EPA Region 9	03/30/2009	03/31/2009	10/23/2009
CA	HMS LOS ANGELES	HMS: Street Number List	Department of Public Works	04/12/2018	04/16/2018	06/15/2018
CA	LF LOS ANGELES	List of Solid Waste Facilities	La County Department of Public Works	04/16/2018	04/17/2018	06/19/2018
CA	LF LOS ANGELES CITY	City of Los Angeles Landfills	Engineering & Construction Division	01/01/2018	05/01/2018	05/14/2018
CA	SITE MIT LOS ANGELES	Site Mitigation List	Community Health Services	04/01/2018	04/17/2018	06/19/2018
CA	UST EL SEGUNDO	City of El Segundo Underground Storage Tank	City of El Segundo Fire Department	01/21/2017	04/19/2017	05/10/2017
CA	UST LONG BEACH	City of Long Beach Underground Storage Tank	City of Long Beach Fire Department	03/09/2017	03/10/2017	05/03/2017
CA	UST TORRANCE	City of Torrance Underground Storage Tank	City of Torrance Fire Department	01/04/2018	01/05/2018	01/18/2018
CA	CUPA MADERA	CUPA Facility List	Madera County Environmental Health	02/21/2018	02/22/2018	04/03/2018
CA	UST MARIN	Underground Storage Tank Sites	Public Works Department Waste Management	03/30/2018	04/06/2018	05/04/2018
CA	CUPA MERCED	CUPA Facility List	Merced County Environmental Health	01/11/2018	01/12/2018	02/08/2018
CA	CUPA MONO	CUPA Facility List	Mono County Health Department	02/22/2018	02/27/2018	03/14/2018
CA	CUPA MONTEREY	CUPA Facility Listing	Monterey County Health Department	03/27/2018	03/29/2018	04/16/2018
CA	LUST NAPA	Sites With Reported Contamination	Napa County Department of Environmental Manag	01/09/2017	01/11/2017	03/02/2017
CA	UST NAPA	Closed and Operating Underground Storage Tank Sites	Napa County Department of Environmental Manag	02/22/2018	02/27/2018	03/29/2018
CA	CUPA NEVADA	CUPA Facility List	Community Development Agency	04/24/2018	05/01/2018	06/15/2018
CA	IND_SITE ORANGE	List of Industrial Site Cleanups	Health Care Agency	04/02/2018	05/11/2018	06/22/2018
CA	LUST ORANGE	List of Underground Storage Tank Cleanups	Health Care Agency	04/02/2018	05/11/2018	06/25/2018
CA	UST ORANGE	List of Underground Storage Tank Facilities	Health Care Agency	01/02/2018	02/07/2018	03/28/2018
CA	MS PLACER	Master List of Facilities	Placer County Health and Human Services	03/15/2018	03/19/2018	05/04/2018
CA	CUPA PLUMAS	CUPA Facility List	Plumas County Environmental Health	01/22/2018	01/24/2018	03/15/2018
CA	LUST RIVERSIDE	Listing of Underground Tank Cleanup Sites	Department of Environmental Health	04/05/2018	04/10/2018	05/04/2018
CA	UST RIVERSIDE	Underground Storage Tank Tank List	Department of Environmental Health	04/05/2018	04/10/2018	05/04/2018
CA	CS SACRAMENTO	Toxic Site Clean-Up List	Sacramento County Environmental Management	02/02/2018	04/04/2018	06/14/2018
CA	ML SACRAMENTO	Master Hazardous Materials Facility List	Sacramento County Environmental Management	02/02/2018	04/04/2018	06/19/2018
CA	CUPA SAN BENITO	CUPA Facility List	San Benito County Environmental Health	11/01/2017	11/03/2017	11/17/2017
CA	PERMITS SAN BERNARDINO	Hazardous Material Permits	San Bernardino County Fire Department Hazardo	04/09/2018	04/11/2018	06/19/2018

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	HMMD SAN DIEGO	Hazardous Materials Management Division Database	Hazardous Materials Management Division	03/05/2018	03/07/2018	04/16/2018
CA	LF SAN DIEGO	Solid Waste Facilities	Department of Health Services	04/18/2018	04/24/2018	06/19/2018
CA	SAN DIEGO CO LOP	Local Oversight Program Listing	Department of Environmental Health	04/18/2018	04/23/2018	05/04/2018
CA	SAN DIEGO CO. SAM	Environmental Case Listing	San Diego County Department of Environmental	03/23/2010	06/15/2010	07/09/2010
CA	LUST SAN FRANCISCO	Local Oversight Facilities	Department Of Public Health San Francisco Cou	09/19/2008	09/19/2008	09/29/2008
CA	UST SAN FRANCISCO	Underground Storage Tank Information	Department of Public Health	11/02/2017	11/07/2017	12/19/2017
CA	UST SAN JOAQUIN	San Joaquin Co. UST	Environmental Health Department	03/20/2018	03/22/2018	05/04/2018
CA	CUPA SAN LUIS OBISPO	CUPA Facility List	San Luis Obispo County Public Health Departme	11/16/2017	11/17/2017	12/18/2017
CA	BI SAN MATEO	Business Inventory	San Mateo County Environmental Health Service	03/14/2018	03/20/2018	05/04/2018
CA	LUST SAN MATEO	Fuel Leak List	San Mateo County Environmental Health Service	03/15/2018	03/20/2018	05/04/2018
CA	CUPA SANTA BARBARA	CUPA Facility Listing	Santa Barbara County Public Health Department	09/08/2011	09/09/2011	10/07/2011
CA	CUPA SANTA CLARA	Cupa Facility List	Department of Environmental Health	02/20/2018	02/20/2018	03/19/2018
CA	HIST LUST SANTA CLARA	HIST LUST - Fuel Leak Site Activity Report	Santa Clara Valley Water District	03/29/2005	03/30/2005	04/21/2005
CA	LUST SANTA CLARA	LOP Listing	Department of Environmental Health	03/03/2014	03/05/2014	03/18/2014
CA	SAN JOSE HAZMAT	Hazardous Material Facilities	City of San Jose Fire Department	02/04/2018	02/06/2018	03/20/2018
CA	CUPA SANTA CRUZ	CUPA Facility List	Santa Cruz County Environmental Health	01/21/2017	02/22/2017	05/23/2017
CA	CUPA SHASTA	CUPA Facility List	Shasta County Department of Resource Managem	06/15/2017	06/19/2017	08/09/2017
CA	LUST SOLANO	Leaking Underground Storage Tanks	Solano County Department of Environmental Man	03/08/2018	03/13/2018	05/04/2018
CA	UST SOLANO	Underground Storage Tanks	Solano County Department of Environmental Man	03/08/2018	03/13/2018	03/29/2018
CA	CUPA SONOMA	Cupa Facility List	County of Sonoma Fire & Emergency Services De	03/01/2018	03/27/2018	04/16/2018
CA	LUST SONOMA	Leaking Underground Storage Tank Sites	Department of Health Services	04/03/2018	04/06/2018	05/09/2018
CA	CUPA STANISLAUS	CUPA Facility List	Stanislaus County Department of Ennvironmenta	05/08/2018	05/11/2018	06/15/2018
CA	UST SUTTER	Underground Storage Tanks	Sutter County Department of Agriculture	01/08/2018	03/01/2018	03/30/2018
CA	CUPA TEHAMA	CUPA Facility List	Tehama County Department of Environmental Hea	01/26/2018	02/02/2018	03/21/2018
CA	CUPA TRINITY	CUPA Facility List	Department of Toxic Substances Control	04/23/2018	04/25/2018	06/15/2018
CA	CUPA TULARE	CUPA Facility List	Tulare County Environmental Health Services D	03/19/2018	03/22/2018	04/17/2018
CA	CUPA TUOLUMNE	CUPA Facility List	Divison of Environmental Health	04/23/2018	04/25/2018	06/25/2018
CA	BWT VENTURA	Business Plan, Hazardous Waste Producers, and Operating Unde	Ventura County Environmental Health Division	03/26/2018	04/25/2018	06/22/2018
CA	LF VENTURA	Inventory of Illegal Abandoned and Inactive Sites	Environmental Health Division	12/01/2011	12/01/2011	01/19/2012
CA	LUST VENTURA	Listing of Underground Tank Cleanup Sites	Environmental Health Division	05/29/2008	06/24/2008	07/31/2008
CA	MED WASTE VENTURA	Medical Waste Program List	Ventura County Resource Management Agency	03/26/2018	04/25/2018	06/25/2018
CA	UST VENTURA	Underground Tank Closed Sites List	Environmental Health Division	02/28/2018	03/14/2018	03/30/2018
CA	UST YOLO	Underground Storage Tank Comprehensive Facility Report	Yolo County Department of Health	03/27/2018	04/03/2018	05/04/2018
CA	CUPA YUBA	CUPA Facility List	Yuba County Environmental Health Department	05/10/2018	05/15/2018	06/15/2018

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# APPENDIX F



**Serrano Anaheim**

6501-6513 Serrano Avenue

Anaheim, CA 92807

Inquiry Number: 5355743.11

July 10, 2018

## The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Aerial Photo Decade Package

07/10/18

**Site Name:**

Serrano Anaheim  
6501-6513 Serrano Avenue  
Anaheim, CA 92807  
EDR Inquiry # 5355743.11

**Client Name:**

Leighton and Associates, Inc.  
17781 Cowan  
Irvine, CA 92614  
Contact: Brynn McCulloch



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.

**Search Results:**

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1994	1"=500'	Acquisition Date: June 01, 1994	USGS/DOQQ
1989	1"=500'	Flight Date: August 03, 1989	USDA
1985	1"=500'	Flight Date: September 13, 1985	USDA
1972	1"=500'	Flight Date: October 30, 1972	USGS
1966	1"=500'	Flight Date: April 16, 1966	USGS
1963	1"=500'	Flight Date: February 28, 1963	USGS
1952	1"=500'	Flight Date: December 26, 1952	USDA
1946	1"=500'	Flight Date: December 29, 1946	USGS
1938	1"=500'	Flight Date: June 21, 1938	USDA

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INQUIRY # 5355743.11

YEAR: 2016

— = 500'



A-346  
B-160



INQUIRY #: 5355743.11

YEAR: 2012

— = 500'



A-347  
B-161



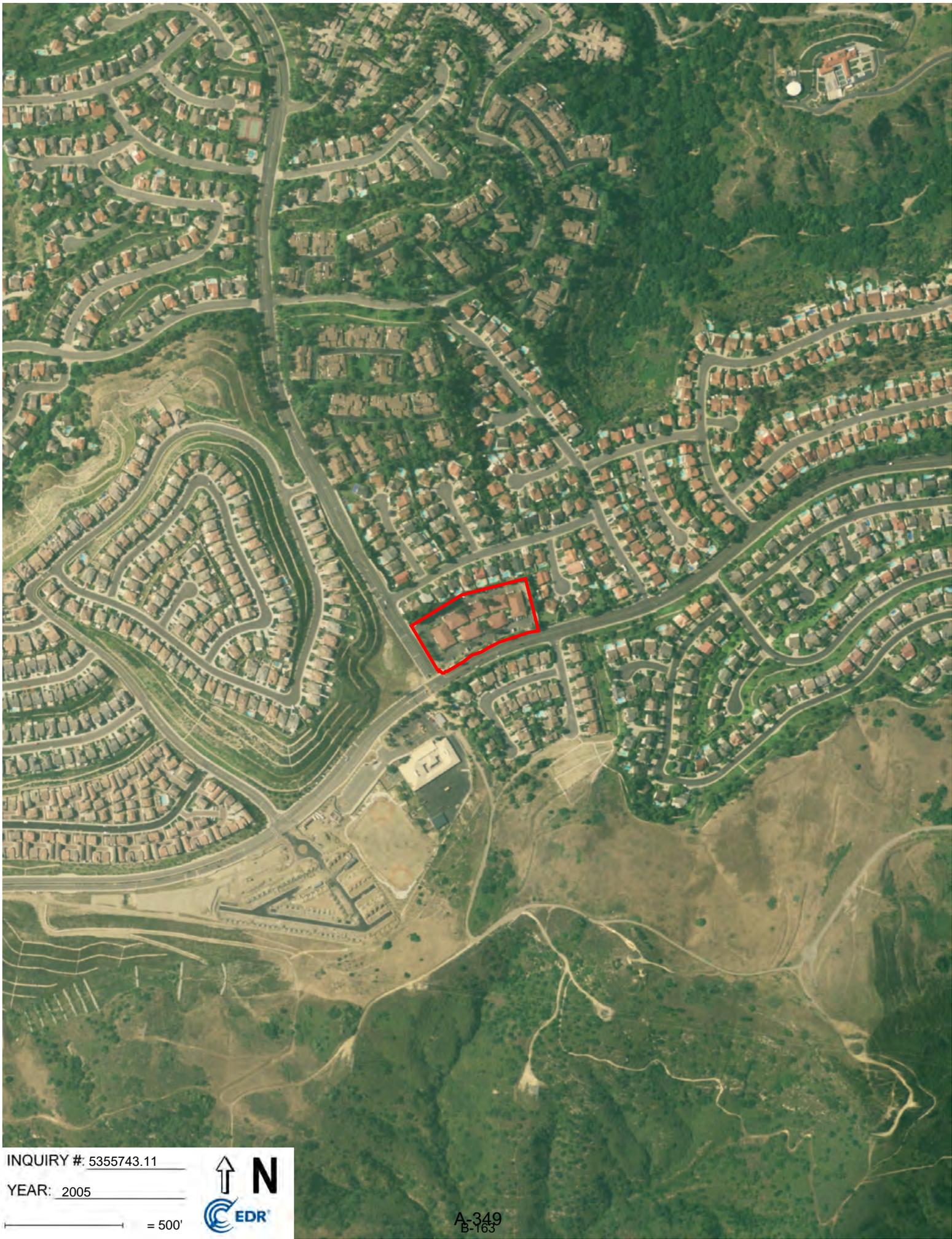
INQUIRY #: 5355743.11

YEAR: 2009

— = 500'



A-348  
B-162



INQUIRY #: 5355743.11

YEAR: 2005

— = 500'



A-349  
B-163



INQUIRY #: 5355743.11

YEAR: 1994

— = 500'



A-350  
B-164



INQUIRY #: 5355743.11

YEAR: 1989

— = 500'



A-351  
B-165



INQUIRY #: 5355743.11

YEAR: 1985

— = 500'



A-352  
B-166



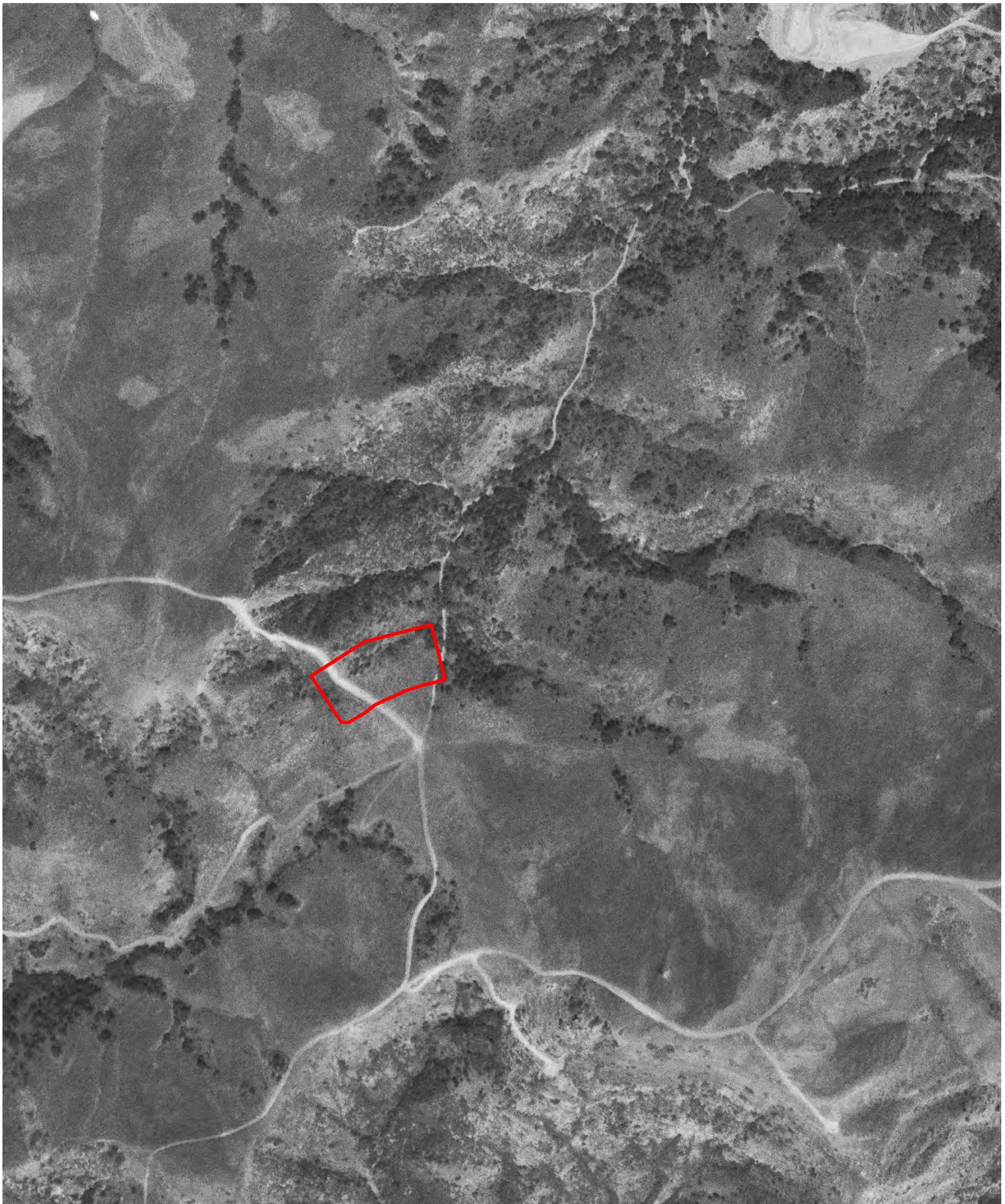
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YEAR: 1972

— = 500'



A-353  
B-167



INQUIRY # 5355743.11

YEAR: 1966

— = 500'



A-354  
B-168



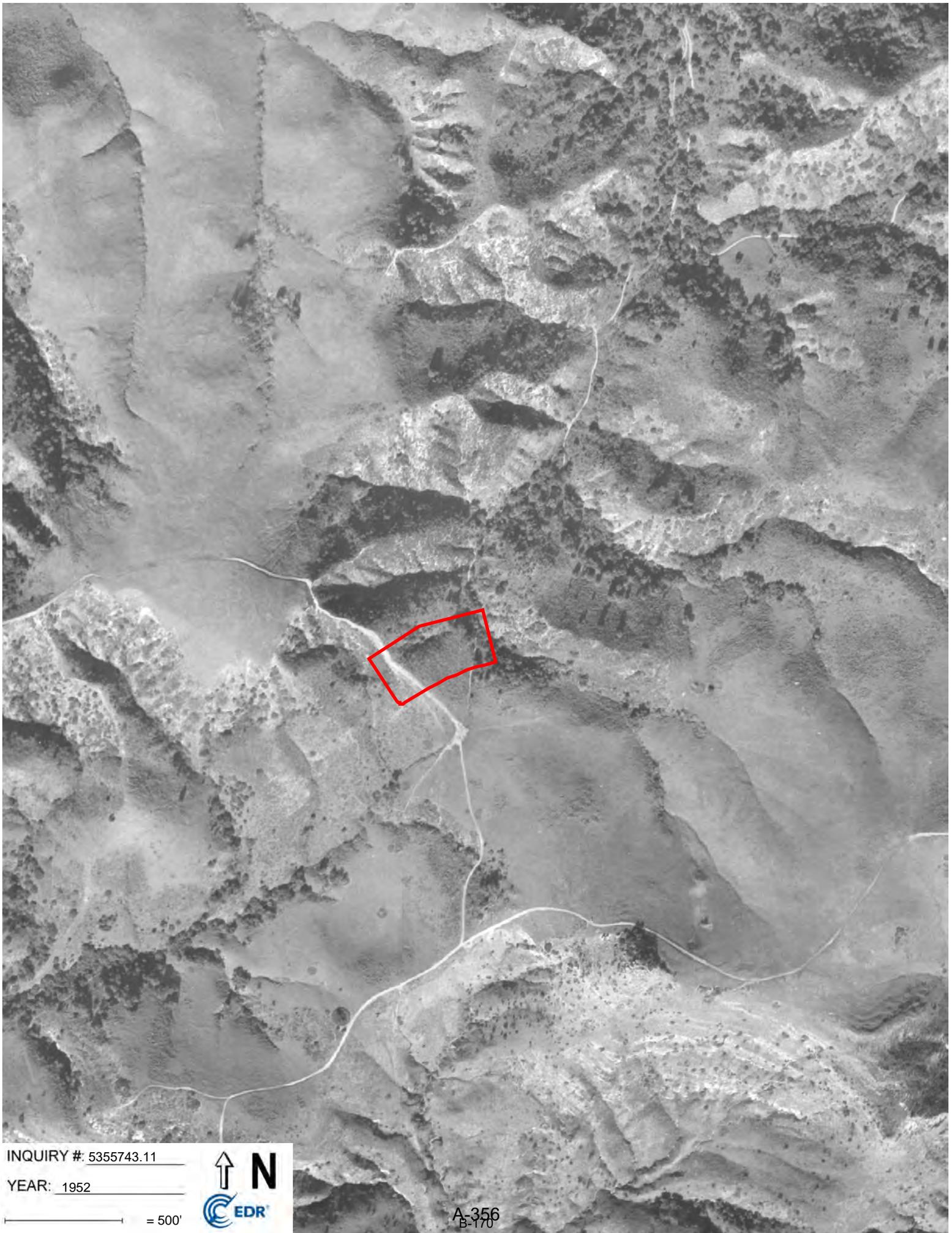
INQUIRY #: 5355743.11

YEAR: 1963

— = 500'



A-355  
B-169



INQUIRY #: 5355743.11

YEAR: 1952

— = 500'



A-356  
B-170

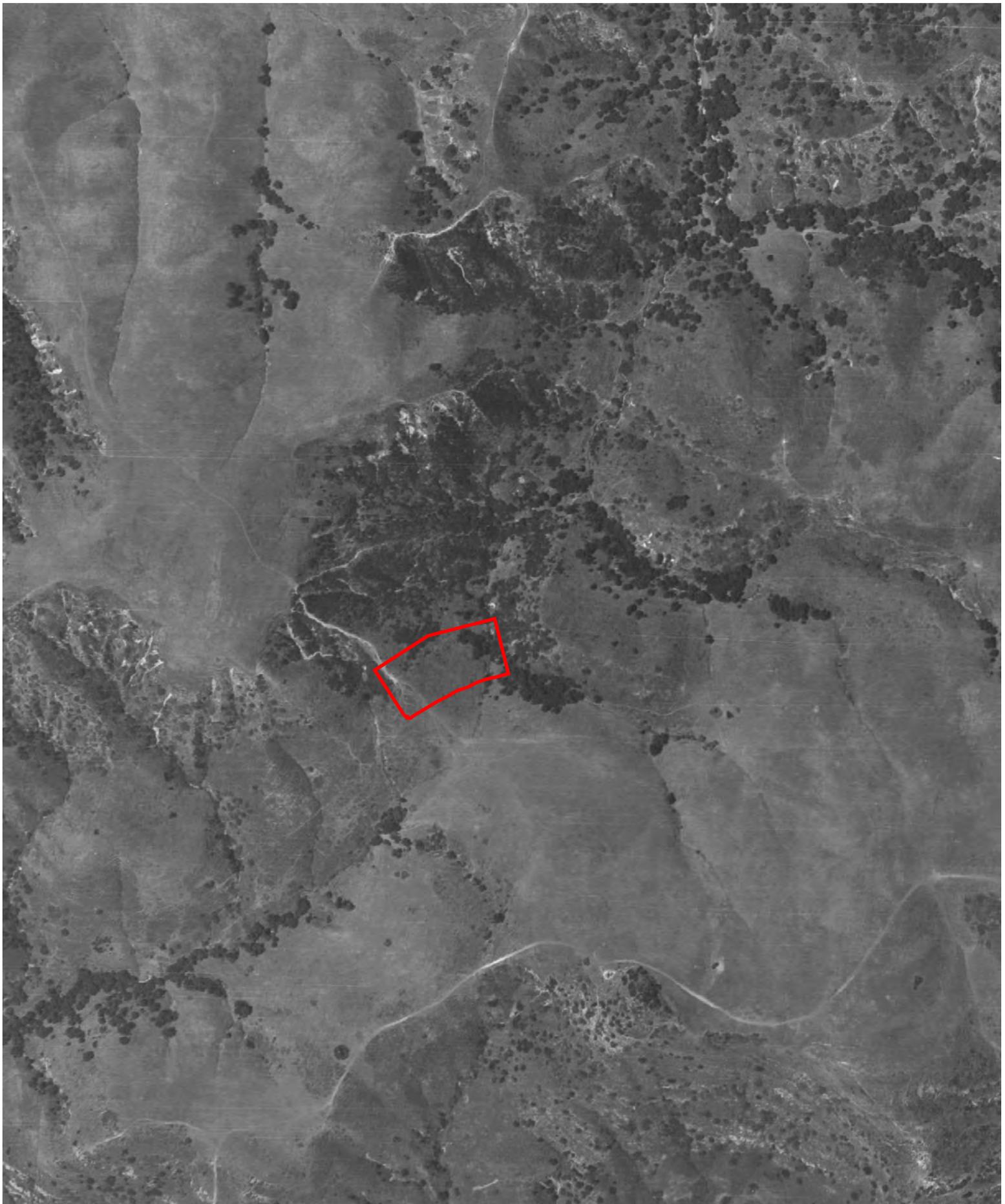


INQUIRY # 5355743.11  
YEAR: 1946



— = 500'

A-357  
B-171



INQUIRY #: 5355743.11

YEAR: 1938

— = 500'



A-358  
B-172



Serrano Anaheim  
6501-6513 Serrano Avenue  
Anaheim, CA 92807

Inquiry Number: 5355743.4  
July 09, 2018

# EDR Historical Topo Map Report

## with QuadMatch™



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Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Historical Topo Map Report

07/09/18

**Site Name:**

Serrano Anaheim  
6501-6513 Serrano Avenue  
Anaheim, CA 92807  
EDR Inquiry # 5355743.4

**Client Name:**

Leighton and Associates, Inc.  
17781 Cowan  
Irvine, CA 92614  
Contact: Brynn Mcculloch



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Leighton and Associates, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

**Search Results:**

**Coordinates:**

<b>P.O.#</b>	11737.003	<b>Latitude:</b>	33.831677 33° 49' 54" North
<b>Project:</b>	Serrano Anaheim	<b>Longitude:</b>	-117.760087 -117° 45' 36" West
		<b>UTM Zone:</b>	Zone 11 North
		<b>UTM X Meters:</b>	429668.68
		<b>UTM Y Meters:</b>	3743752.65
		<b>Elevation:</b>	800.53' above sea level

**Maps Provided:**

2012	1902
1981	1901
1964, 1967	1898
1950	1896
1949	
1942, 1947	
1935	
1932	

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## Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 2012 Source Sheets

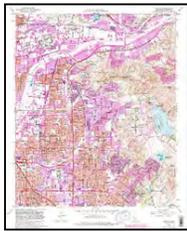


Orange  
2012  
7.5-minute, 24000



Black Star Canyon  
2012  
7.5-minute, 24000

### 1981 Source Sheets

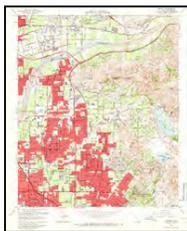


Orange  
1981  
7.5-minute, 24000  
Aerial Photo Revised 1978



Black Star Canyon  
1981  
7.5-minute, 24000  
Aerial Photo Revised 1978

### 1964, 1967 Source Sheets



Orange  
1964  
7.5-minute, 24000  
Aerial Photo Revised 1963

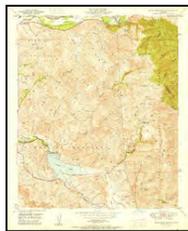


Black Star Canyon  
1967  
7.5-minute, 24000  
Aerial Photo Revised 1966

### 1950 Source Sheets



Orange  
1950  
7.5-minute, 24000  
Aerial Photo Revised 1946

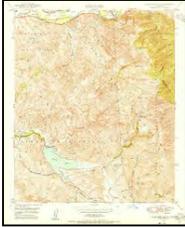


Black Star Canyon  
1950  
7.5-minute, 24000  
Aerial Photo Revised 1946

## Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1949 Source Sheets



Black Star Canyon  
1949  
7.5-minute, 24000  
Aerial Photo Revised 1946

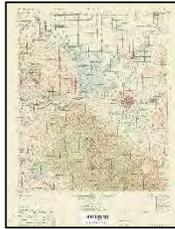


Orange  
1949  
7.5-minute, 24000  
Aerial Photo Revised 1946

### 1942, 1947 Source Sheets



ANAHEIM  
1942  
15-minute, 50000



CORONA  
1947  
15-minute, 50000

### 1935 Source Sheets



Orange  
1935  
7.5-minute, 31680

### 1932 Source Sheets



Orange  
1932  
7.5-minute, 31680

## **Topo Sheet Key**

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### **1902 Source Sheets**



Corona  
1902  
30-minute, 125000

### **1901 Source Sheets**



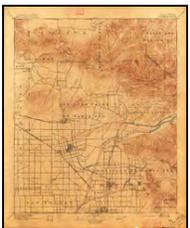
Anaheim  
1901  
15-minute, 62500

### **1898 Source Sheets**

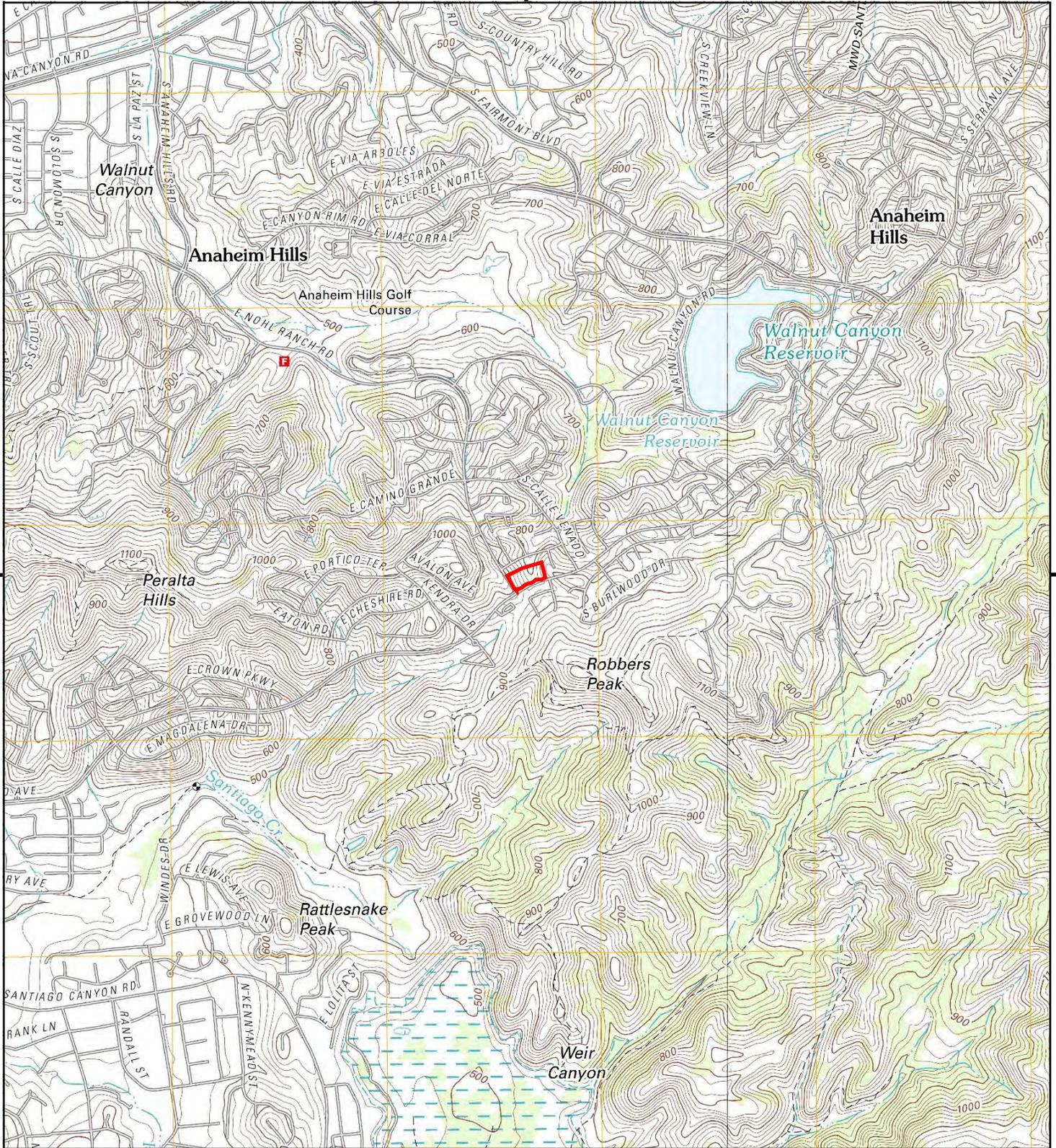


Anaheim  
1898  
15-minute, 62500

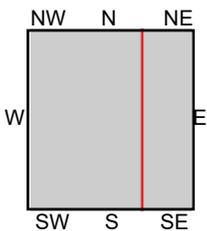
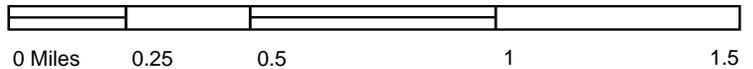
### **1896 Source Sheets**



Anaheim  
1896  
15-minute, 62500



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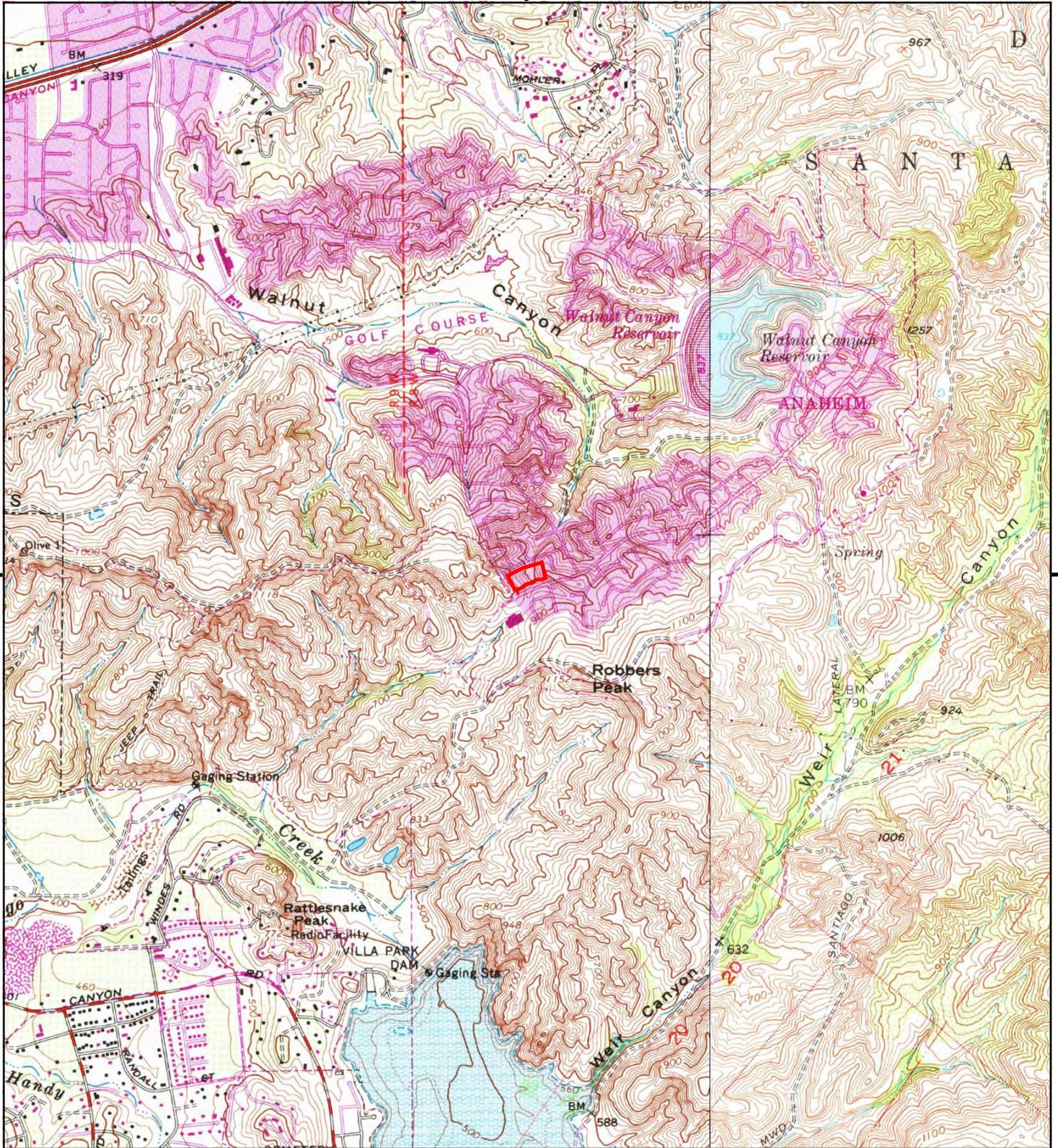


TP, Orange, 2012, 7.5-minute  
E, Black Star Canyon, 2012, 7.5-minute

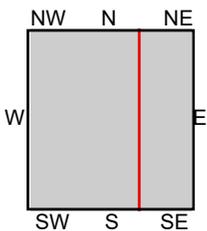
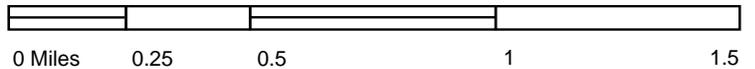
SITE NAME: Serrano Anaheim  
ADDRESS: 6501-6513 Serrano Avenue  
Anaheim, CA 92807  
CLIENT: Leighton and Associates, Inc.

A-364  
B-178





This report includes information from the following map sheet(s).

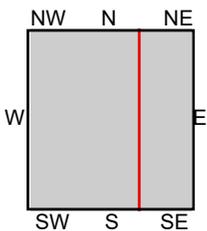
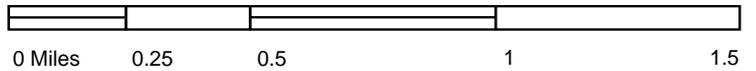


TP, Orange, 1981, 7.5-minute  
E, Black Star Canyon, 1981, 7.5-minute

**SITE NAME:** Serrano Anaheim  
**ADDRESS:** 6501-6513 Serrano Avenue  
Anaheim, CA 92807  
**CLIENT:** Leighton and Associates, Inc.



This report includes information from the following map sheet(s).

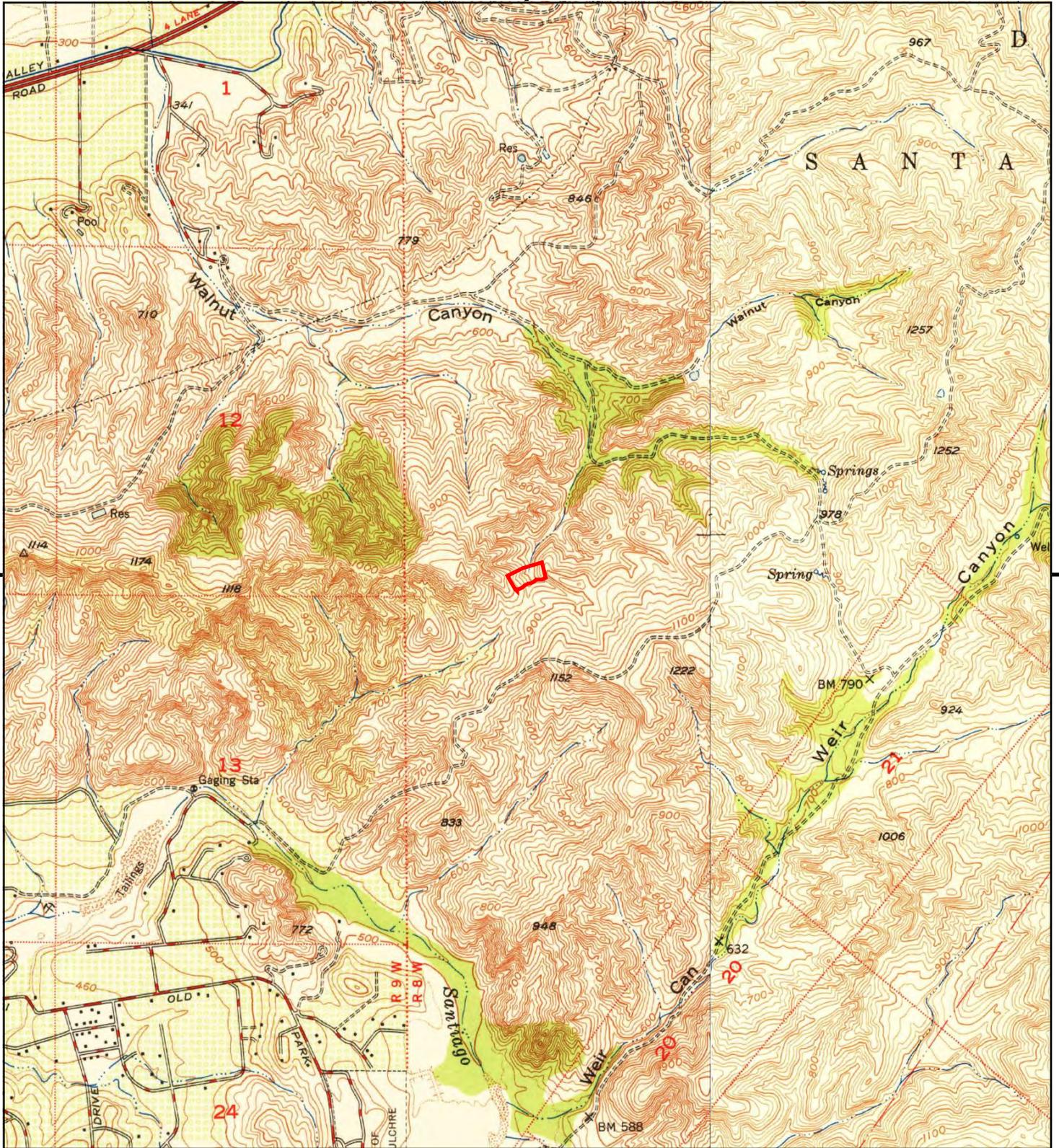


TP, Orange, 1964, 7.5-minute  
E, Black Star Canyon, 1967, 7.5-minute

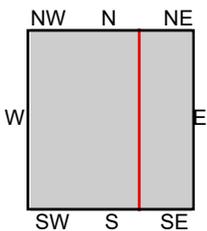
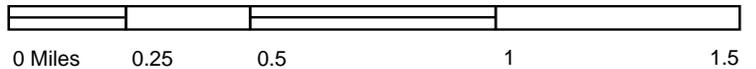
SITE NAME: Serrano Anaheim  
ADDRESS: 6501-6513 Serrano Avenue  
Anaheim, CA 92807  
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A-366  
B-180





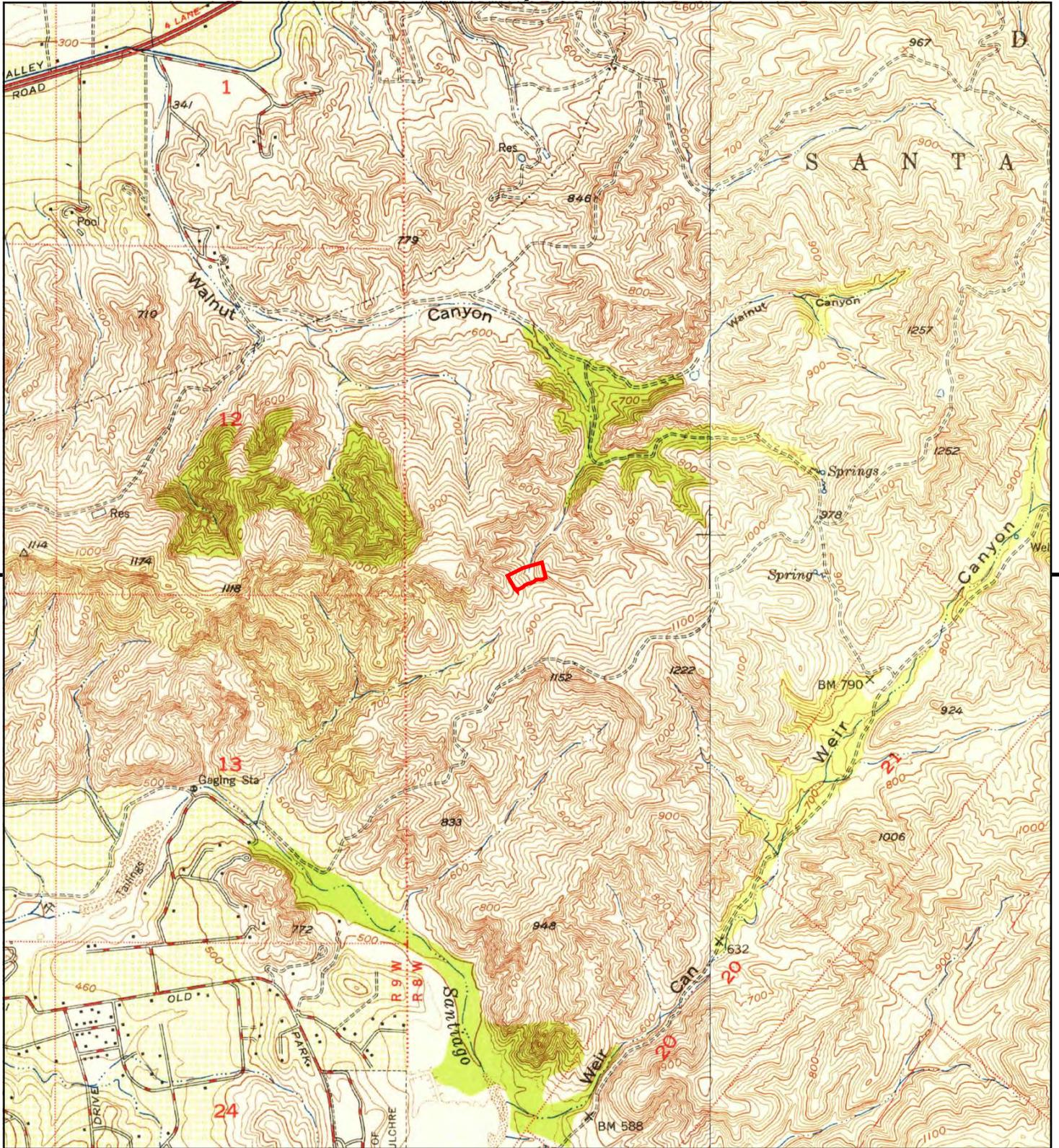
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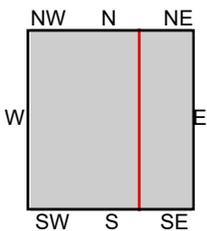
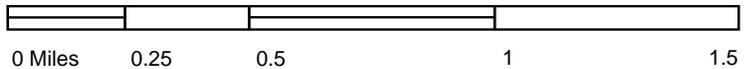
TP, Orange, 1950, 7.5-minute  
E, Black Star Canyon, 1950, 7.5-minute

**SITE NAME:** Serrano Anaheim  
**ADDRESS:** 6501-6513 Serrano Avenue  
Anaheim, CA 92807  
**CLIENT:** Leighton and Associates, Inc.





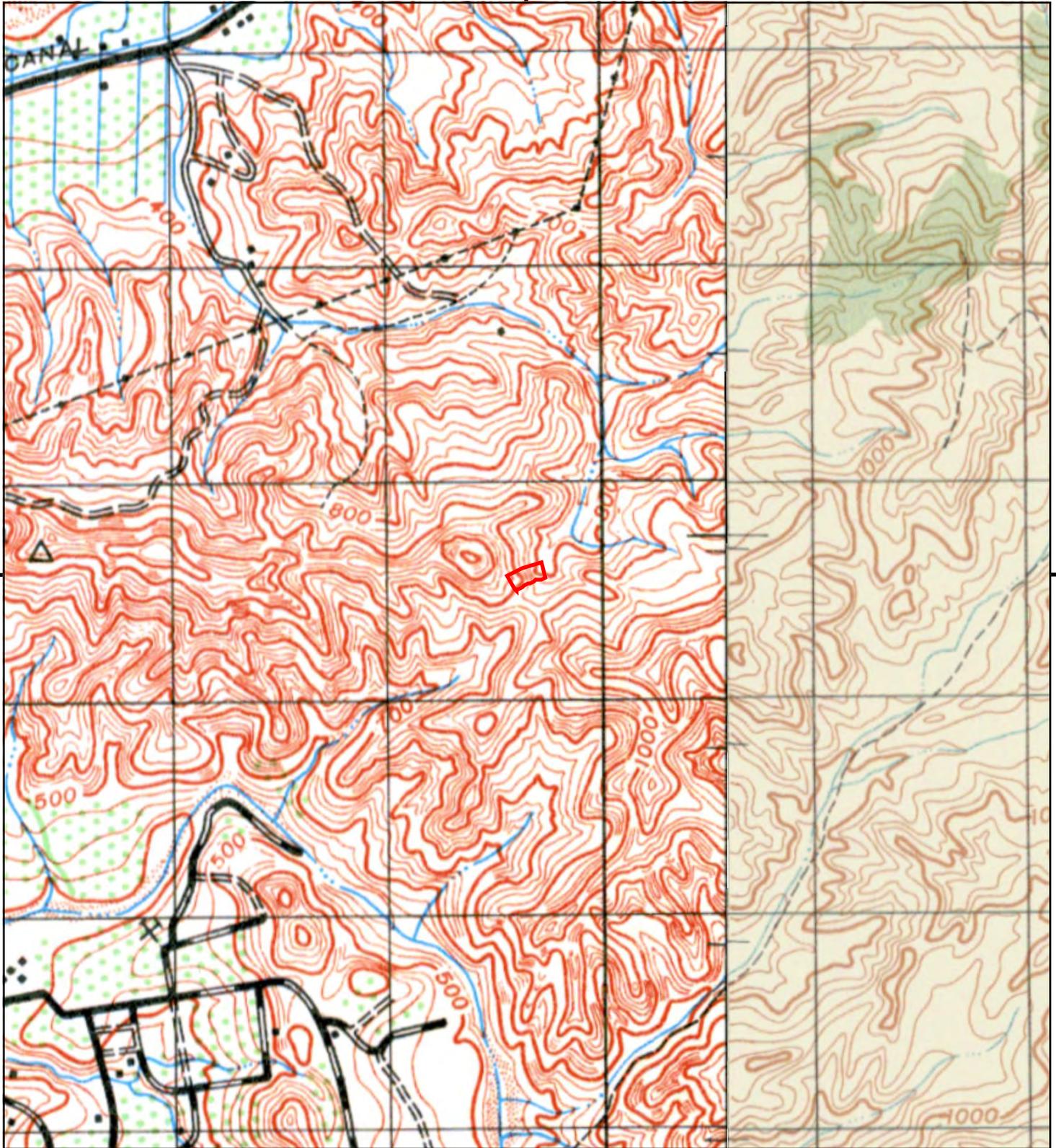
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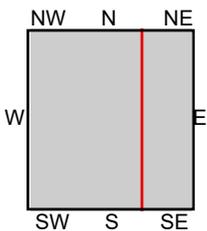
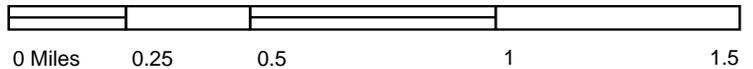
TP, Orange, 1949, 7.5-minute  
E, Black Star Canyon, 1949, 7.5-minute

**SITE NAME:** Serrano Anaheim  
**ADDRESS:** 6501-6513 Serrano Avenue  
Anaheim, CA 92807  
**CLIENT:** Leighton and Associates, Inc.





This report includes information from the following map sheet(s).

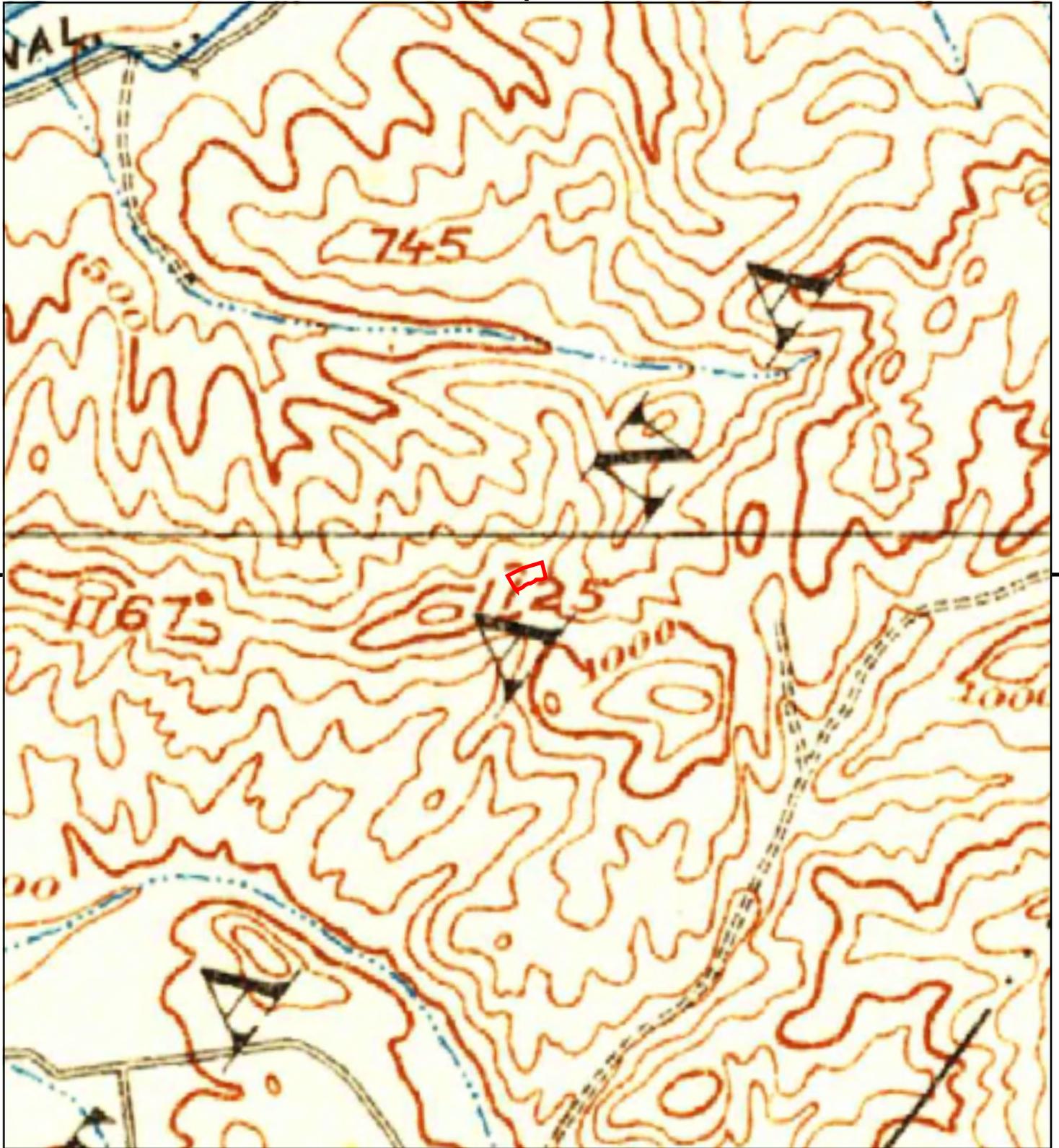


TP, ANAHEIM, 1942, 15-minute  
E, CORONA, 1947, 15-minute

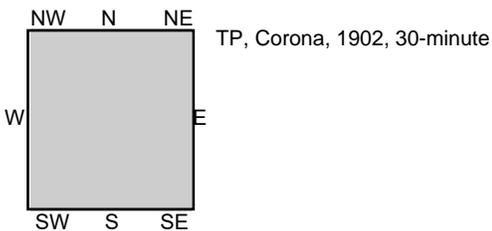
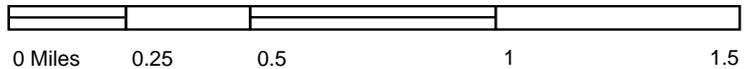
SITE NAME: Serrano Anaheim  
ADDRESS: 6501-6513 Serrano Avenue  
Anaheim, CA 92807  
CLIENT: Leighton and Associates, Inc.

A-369  
B-183





This report includes information from the following map sheet(s).



SITE NAME: Serrano Anaheim  
 ADDRESS: 6501-6513 Serrano Avenue  
 Anaheim, CA 92807  
 CLIENT: Leighton and Associates, Inc.

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 B-184











Serrano Anaheim  
6501-6513 Serrano Avenue  
Anaheim, CA 92807

Inquiry Number: 5355743.3  
July 09, 2018

## Certified Sanborn® Map Report



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Toll Free: 800.352.0050  
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A-374  
B-188

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07/09/18

**Site Name:**

Serrano Anaheim  
6501-6513 Serrano Avenue  
Anaheim, CA 92807  
EDR Inquiry # 5355743.3

**Client Name:**

Leighton and Associates, Inc.  
17781 Cowan  
Irvine, CA 92614  
Contact: Brynn Mcculloch



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**PO #** 11737.003  
**Project** Serrano Anaheim



Sanborn® Library search results

Certification #: 671B-4BA7-9A17

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- University Publications of America
- EDR Private Collection

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**Serrano Anaheim**

6501-6513 Serrano Avenue  
Anaheim, CA 92807

Inquiry Number: 5355743.5  
July 10, 2018

# The EDR-City Directory Abstract

## TABLE OF CONTENTS

### SECTION

Executive Summary

Findings

City Directory Images

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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 1920 through 2014. 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.

### RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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### 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>
2014	EDR Digital Archive	-	X	X	-
2010	EDR Digital Archive	-	X	X	-
2005	EDR Digital Archive	-	X	X	-
2002	Haines Company	-	X	X	-
2001	Pacific Telephone	-	-	-	-
1997	Pacific Bell	-	-	-	-
1995	Pacific Bell	-	X	X	-
	Pacific Bell	X	X	X	-
1992	Pacific Bell	-	-	-	-
1991	Pacific Bell	-	X	X	-
	Pacific Bell	X	X	X	-
1986	Pacific Bell	-	X	X	-

## EXECUTIVE SUMMARY

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
1986	Pacific Bell	X	X	X	-
1980	Pacific Telephone	-	X	X	-
	Pacific Telephone	X	X	X	-
1975	Luskeys Brothers & Co.	-	-	-	-
1971	Luskey Brothers Co., Inc.	-	-	-	-
1970	General Telephone Co., of California	-	-	-	-
1966	Pacific Telephone	-	-	-	-
1965	Ross Publications, Inc.,	-	-	-	-
1961	Luskey Brothers & Co.,	-	-	-	-
1960	Unknown	-	-	-	-
1956	The Pacific Telephone and Telegraph Co.	-	-	-	-
1955	The Pacific Telephone and Telegraph Co.	-	-	-	-
1952	Luskeys Directory Service Co.	-	-	-	-
1950	West Directory Co.	-	-	-	-
1946	Southern California Telephone Co.	-	-	-	-
1945	Western Directory Co.	-	-	-	-
1941	Southern California Telephone Co.	-	-	-	-
1936	Western Directory Co.	-	-	-	-
1930	Western Directory Co.	-	-	-	-
1926	Pacific Telephone	-	-	-	-
1925	Western Directory Co.	-	-	-	-
1922	Kaasen Directory Co.	-	-	-	-
1921	Western Directory Co.	-	-	-	-
1920	Santa Ana Directory Co.	-	-	-	-

## EXECUTIVE SUMMARY

### SELECTED ADDRESSES

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

<u>Address</u>	<u>Type</u>	<u>Findings</u>
6503 Serrano Avenue	Client Entered	X
6505 Serrano Avenue	Client Entered	X
6507 Serrano Avenue	Client Entered	X
6509 Serrano Avenue	Client Entered	X
6511 Serrano Avenue	Client Entered	X
6513 Serrano Avenue	Client Entered	
6501 Serrano Avenue	Client Entered	X

# FINDINGS

## TARGET PROPERTY INFORMATION

### ADDRESS

6501-6513 Serrano Avenue  
Anaheim, CA 92807

### FINDINGS DETAIL

Target Property research detail.

### SERRANO

#### **6509 SERRANO**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Ohio Security Insurance See Ohio Casualty Group	Pacific Bell

#### **Serrano Avenue**

#### **6501 Serrano Avenue**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Anaheim Hills Liqueur	Pacific Bell

#### **6503 Serrano Avenue**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	J & H Enterprises	Pacific Bell
	Technical Concepts Inc	Pacific Bell
	Zeman Marshall Associates	Pacific Bell
1991	Zeman Marshall Associates	Pacific Bell
1986	CE LS Corp	Pacific Bell
	COMMUNITY ASSOCIATION CONSULTANTS	Pacific Bell
	Executive Security Systems Inc	Pacific Bell

#### **6505 Serrano Avenue**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Marlind Inc	Pacific Bell
	Raltron Electronics Inc	Pacific Bell
	Western Plering	Pacific Bell
1991	Martid Inc	Pacific Bell
	Perma Jack Of Los Angeles & Orange Counties	Pacific Bell
1986	Brentwood International	Pacific Bell

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Sigma Sales	Pacific Telephone
	Sigma Three	Pacific Telephone
	Terrys Claws & Paws	Pacific Telephone

### 6507 Serrano Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Anaheim Hills Martial Arts Academy	Pacific Bell
	Changes	Pacific Bell
	Martial Arts Academy	Pacific Bell
1991	Changes	Pacific Bell
	Gunston Hall Company Inc The	Pacific Bell
1986	Changes	Pacific Bell
	Comprehensive Business Services	Pacific Bell
	Gunston Hall Company Inc The	Pacific Bell
	Gwartney Robert A	Pacific Bell

### 6509 Serrano Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	OHIO National Life Insurance	Pacific Bell
	Ohio Security Insurance See Ohio Casualty Groun	Pacific Bell
1991	Benton L Crowell Bond & Insurance Agency	Pacific Bell
	Crowell Benton L Bond & Insurance Agency	Pacific Bell
1986		Pacific Bell
	Benton L Crowell Bond & Insurance Agency	Pacific Bell
	Budy Nestor M vetnnan	Pacific Bell
	Crowell Benton L Bond & Insurance Agency	Pacific Bell

### 6511 Serrano Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Aqua Ducks Sports Center	Pacific Bell
	Aqua Duks Swim School	Pacific Bell
1991	Anaheim	Pacific Bell
	Anaheim Hills Towne & Country Early Education Center	Pacific Bell
	Aqua Duks Sports Center	Pacific Bell
1986	AN AHE IM HILLS COMMUN ITY CHURCH	Pacific Bell
	Aqua Duks Swim School	Pacific Bell
1980	Mitchell Mary Jane Acorn Realty	Pacific Telephone

## FINDINGS

6513 Serrano Avenue

Year

Uses

Source

# FINDINGS

## ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

### AVALON AVE

#### 2400 AVALON AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	MONTEMAYORP	Haines Company

#### 2401 AVALON AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	BEAN Dale	Haines Company

#### 2404 AVALON AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	PEREZGuillermo	Haines Company

#### 2405 AVALON AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	CLARKE Gregory 00 B	Haines Company

### E CARNEGIE AVE

#### 6500 E CARNEGIE AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Ones Joe M	Pacific Bell
	Canyon Hills Limousine	Pacific Bell
	Ines Hair Design	Pacific Bell
1991	Alarcon Richard	Pacific Bell
1986	Alarcon Richard	Pacific Bell
1980	Alarcon Richard	Pacific Telephone

### E Carnegie Ave

#### 6508 E Carnegie Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	LIL JO CREATIONS	EDR Digital Archive
	LIL JO CREATIONS	EDR Digital Archive

## FINDINGS

### E CARNEGIE AVE

#### 6508 E CARNEGIE AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Ines Joe M	Pacific Bell
1980	I nes Joe M	Pacific Telephone

### E Carnegie Ave

#### 6516 E Carnegie Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	ADAGORAM	EDR Digital Archive
	ADAGORAM	EDR Digital Archive

#### 6524 E Carnegie Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	ARCTIC AIR TREASURE COAST I	EDR Digital Archive
	ARCTIC AIR TREASURE COAST I	EDR Digital Archive
2010	ARCTIC AIR TREASURE COAST I	EDR Digital Archive
	ARCTIC AIR TREASURE COAST I	EDR Digital Archive

#### 6540 E Carnegie Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	SS DEWAN ENTERPRISES INC	EDR Digital Archive
	SS DEWAN ENTERPRISES INC	EDR Digital Archive

### E CARNEGIE AVE

#### 6540 E CARNEGIE AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Senate Impex Inc	Pacific Bell
1986	Dewan Shanti S	Pacific Bell

#### 6548 E CARNEGIE AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Austin Fran	Pacific Telephone

### E Carnegie Ave

#### 6556 E Carnegie Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	DCACHE RESTAURANT LLC	EDR Digital Archive

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	DCACHE RESTAURANT LLC	EDR Digital Archive

### E CARNEGIE AVE

#### 6556 E CARNEGIE AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Sanchez Emlio	Pacific Bell
1986	Sanchez Emilio	Pacific Bell

#### 6561 E CARNEGIE AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Four Seasons Lighting	Pacific Bell

#### 6564 E CARNEGIE AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Goodwin Gordon G	Pacific Bell

### E Carnegie Ave

#### 6570 E Carnegie Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	ACCEL ADVISORS INC	EDR Digital Archive
	ACCEL ADVISORS INC	EDR Digital Archive
2010	JENICA LLC	EDR Digital Archive
	JENICA LLC	EDR Digital Archive
2005	JENICA LLC	EDR Digital Archive
	BLUEWHALE TECHNOLOGIES	EDR Digital Archive
	JENICA LLC	EDR Digital Archive
	BLUEWHALE TECHNOLOGIES	EDR Digital Archive

### E CARNEGIE AVE

#### 6570 E CARNEGIE AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Lang Philip	Pacific Bell

#### 6575 E CARNEGIE AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Harrigan Sean	Pacific Bell

## FINDINGS

### E Carnegie Ave

#### 6587 E Carnegie Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	DARK SUN ENTERPRISES	EDR Digital Archive
	DARK SUN ENTERPRISES	EDR Digital Archive
2005	MOBILE COMPUTER REPAIR	EDR Digital Archive
	MOBILE COMPUTER REPAIR	EDR Digital Archive

### E CARNGIE AVE

#### 6548 E CARNGIE AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Austin Fred J	Pacific Telephone

### E MARENGO DR

#### 6500 E MARENGO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Hatcher Robt C	Pacific Bell
	Hatcher Robt C	Pacific Bell

### E Marengo Dr

#### 6503 E Marengo Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	RENE CASTRO	EDR Digital Archive
	RENE CASTRO	EDR Digital Archive
2010	CCI COMPLEX CLEARANCE AND IMPO	EDR Digital Archive
	CCI COMPLEX CLEARANCE AND IMPO	EDR Digital Archive

#### 6504 E Marengo Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	V G P S CO	EDR Digital Archive
	V G P S CO	EDR Digital Archive
2010	V G P S CO	EDR Digital Archive
	V G P S CO	EDR Digital Archive
2005	V G P S CO	EDR Digital Archive
	V G P S CO	EDR Digital Archive

## FINDINGS

### E MARENGO DR

#### 6504 E MARENGO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Wingo John W	Pacific Telephone
	W ingo K A	Pacific Telephone

### E Marengo Dr

#### 6507 E Marengo Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	KULUBYA SANDRA CAMBONGA	EDR Digital Archive
	KULUBYA SANDRA CAMBONGA	EDR Digital Archive

### E MARENGO DR

#### 6507 E MARENGO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Kulubya Edwin S	Pacific Bell
1991	Kulubya Edwin S	Pacific Bell
1980	Whitehouse Richard A	Pacific Telephone

#### 6508 E MARENGO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Cheng Steve	Pacific Telephone

### E Marengo Dr

#### 6511 E Marengo Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	ALPINE LEMO	EDR Digital Archive
	ALPINE LEMO	EDR Digital Archive

### E MARENGO DR

#### 6511 E MARENGO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Cunningham Michael W	Pacific Bell

## FINDINGS

### E Marengo Dr

#### 6519 E Marengo Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	JR CLEANING & RESTO	EDR Digital Archive
	TANNOUS ABINAJM	EDR Digital Archive
	TANNOUS ABINAJM	EDR Digital Archive
	JR CLEANING & RESTO	EDR Digital Archive
2005	JR CLEANING & RESTO	EDR Digital Archive
	JR CLEANING & RESTO	EDR Digital Archive

#### 6523 E Marengo Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	MARTINEZ AND SON CONSTRUCTION	EDR Digital Archive
	PRO ACTIVE CONSULTING	EDR Digital Archive
	PRO ACTIVE CONSULTING	EDR Digital Archive
	MARTINEZ AND SON CONSTRUCTION	EDR Digital Archive
2010	PRO ACTIVE CONSULTING	EDR Digital Archive
	MARTINEZ AND SON CONSTRUCTION	EDR Digital Archive
	PRO ACTIVE CONSULTING	EDR Digital Archive
	MARTINEZ AND SON CONSTRUCTION	EDR Digital Archive
2005	MARTINEZ AND SON CONSTRUCTION	EDR Digital Archive
	MARTINEZ AND SON CONSTRUCTION	EDR Digital Archive
	MARTINEZ AND SON CONSTRUCTION	EDR Digital Archive

### E MARENGO DR

#### 6523 E MARENGO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Modern Nuclear	Pacific Bell

### E Marengo Dr

#### 6527 E Marengo Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	AMBIENCE ENGINEERING SERVICES	EDR Digital Archive
	AMBIENCE ENGINEERING SERVICES	EDR Digital Archive

## FINDINGS

### **E MARENGO DR**

#### **6527 E MARENGO DR**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1986	Harabedian Albert	Pacific Bell
1980	I Harabedian Albert	Pacific Telephone

### **E Marengo Dr**

#### **6531 E Marengo Dr**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
2014	BUEHLER CONSULTING INC	EDR Digital Archive
	BUEHLER CONSULTING INC	EDR Digital Archive
2010	BUEHLER CONSULTING INC	EDR Digital Archive
	BUEHLER CONSULTING INC	EDR Digital Archive

### **E MARENGO DR**

#### **6531 E MARENGO DR**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1980	Lundstrom Robt C	Pacific Telephone

#### **6532 E MARENGO DR**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1986	Chrismon Robt W	Pacific Bell
1980	Furniss Chas	Pacific Telephone

#### **6535 E MARENGO DR**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1995	Adams Kirk & Mary Ann	Pacific Bell
1991	Adams Kirk & Mary Ann	Pacific Bell
1980	Hauser K J	Pacific Telephone
	Hauser L	Pacific Telephone

#### **6536 E MARENGO DR**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1991	Rapid Acton Marketing	Pacific Bell

#### **6539 E MARENGO DR**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1986	Pierson J Nicholas	Pacific Bell
1980	Pierson J Nicholas	Pacific Telephone

## FINDINGS

### 6542 E MARENGO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Budde S	Pacific Bell
1980	Morel M	Pacific Telephone
	Budde S	Pacific Telephone

### 6543 E MARENGO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Hlrani Parin A & Hazy	Pacific Bell
1991	Hirani Parin A & Nazy	Pacific Bell

### E Marengo Dr

### 6546 E Marengo Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	BISCUITS & BUTTER BEANS	EDR Digital Archive
	BISCUITS & BUTTER BEANS	EDR Digital Archive

### E MARENGO DR

### 6546 E MARENGO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Lindsey Mary E @Westminster@	Pacific Bell
	Lidsey Melane	Pacific Bell
	Lmdsey Marvyn & Joy	Pacific Bell

### 6547 E MARENGO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Evans Laurence C	Pacific Bell
1980	Williams Robt W	Pacific Telephone

### 6550 E MARENGO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Eordekian Steve	Pacific Telephone

### 6551 E MARENGO DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Shafe J B	Pacific Telephone

## FINDINGS

### **E SARRANO A AVE**

#### **6511 E SARRANO A AVE**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1995	Brenda J Fitness Programs	Pacific Bell

### **E SERRANO AVE**

#### **6450 E SERRANO AVE**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1995	Anaheim Hills Elementary School	Pacific Bell
	Anaheim Hills Elementary School	Pacific Bell
	Orange Unified School District Contd Business Division	Pacific Bell
1991	Child Care	Pacific Bell
	Anaheim Hills Elementary School	Pacific Bell
1986	Orange Unified Child Care	Pacific Bell
	Anaheim Hills Elementary School	Pacific Bell
1980	Anaheim Hills Elementary School	Pacific Telephone

### **E Serrano Ave**

#### **6501 E Serrano Ave**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
2014	ORANGE COUNTY PER ARTS	EDR Digital Archive
	ORANGE COUNTY PER ARTS	EDR Digital Archive
2010	ORANGE COUNTY PER ARTS	EDR Digital Archive
	CORNERSTONE BIBLE CHURCH	EDR Digital Archive
	OC BOUTIQUE	EDR Digital Archive
	ORANGE COUNTY PER ARTS	EDR Digital Archive
	CORNERSTONE BIBLE CHURCH	EDR Digital Archive
	OC BOUTIQUE	EDR Digital Archive
2005	SUNCAL SERRANO	EDR Digital Archive
	CORNERSTONE BIBLE CHURCH	EDR Digital Archive
	SUNCAL SERRANO	EDR Digital Archive
	CORNERSTONE BIBLE CHURCH	EDR Digital Archive

## FINDINGS

### **E SERRANO AVE**

#### **6501 E SERRANO AVE**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1991	Anaheim Hills Liqueur	Pacific Bell

### **E Serrano Ave**

#### **6503 E Serrano Ave**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
2014	ROBERT KARNES & ASSOCIATES	EDR Digital Archive
	ROBERT KARNES & ASSOCIATES	EDR Digital Archive
2010	ROBERT KARNES & ASSOCIATES	EDR Digital Archive
	ROBERT KARNES & ASSOCIATES	EDR Digital Archive
2005	ROBERT KARNES & ASSOCIATES	EDR Digital Archive
	YI RAYMOND ATA BLACKBELT ACADE	EDR Digital Archive
	YERKES CATHERINE INSUR AGCY	EDR Digital Archive
	WESTRN PAC MORTGAGE	EDR Digital Archive
	INTERNATIONAL ART CENTER	EDR Digital Archive
	ROBERT KARNES & ASSOCIATES	EDR Digital Archive
	YI RAYMOND ATA BLACKBELT ACADE	EDR Digital Archive
	YERKES CATHERINE INSUR AGCY	EDR Digital Archive
	WESTRN PAC MORTGAGE	EDR Digital Archive
	INTERNATIONAL ART CENTER	EDR Digital Archive

### **E SERRANO AVE**

#### **6503 E SERRANO AVE**

<b><u>Year</u></b>	<b><u>Uses</u></b>	<b><u>Source</u></b>
1995	J & H Enterprises	Pacific Bell
	Zeman Marshall Associates	Pacific Bell
	Technical Concepts Inc	Pacific Bell
1991	Zeman Marshall Associates	Pacific Bell
1986	Executive Security Systems Inc	Pacific Bell
	CE LS Corp	Pacific Bell
	COMMUNITY ASSOCIATION CONSULTANTS	Pacific Bell

## FINDINGS

### E Serrano Ave

#### 6505 E Serrano Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	DON WEBER AUTOMOTIVE CONS	EDR Digital Archive
	SWEET ESTELLES BAKING SUPPLY	EDR Digital Archive
	GLADYS BRYANT FOUNDATION	EDR Digital Archive
	MEN LE DMD INC	EDR Digital Archive
	CONTEMPORARY DENTISTRY	EDR Digital Archive
	APICTURELIFE PHOTOGRAPHY	EDR Digital Archive
	B SANITARY CUSTODIAL SERVICES	EDR Digital Archive
	NEXT GENERATION GENERAL CONTRS	EDR Digital Archive
	GMB PROPERTY MANAGEMENT INC	EDR Digital Archive
	B M W BUILDERS	EDR Digital Archive
	DON WEBER AUTOMOTIVE CONS	EDR Digital Archive
	SWEET ESTELLES BAKING SUPPLY	EDR Digital Archive
	GLADYS BRYANT FOUNDATION	EDR Digital Archive
	MEN LE DMD INC	EDR Digital Archive
	CONTEMPORARY DENTISTRY	EDR Digital Archive
	B M W BUILDERS	EDR Digital Archive
	APICTURELIFE PHOTOGRAPHY	EDR Digital Archive
	B SANITARY CUSTODIAL SERVICES	EDR Digital Archive
	NEXT GENERATION GENERAL CONTRS	EDR Digital Archive
	GMB PROPERTY MANAGEMENT INC	EDR Digital Archive
2010	GMB PROPERTY MANAGEMENT INC	EDR Digital Archive
	APICTURELIFE PHOTOGRAPHY	EDR Digital Archive
	B SANITARY CUSTODIAL SERVICES	EDR Digital Archive
	NEXT GENERATION GENERAL CONTRS	EDR Digital Archive
	B M W BUILDERS	EDR Digital Archive
	FOUNDATION STABILIZATION	EDR Digital Archive
	MEN LE DMD INC	EDR Digital Archive
	CONTEMPORARY DENTISTRY	EDR Digital Archive
	B M W BUILDERS	EDR Digital Archive
	NEXT GENERATION GENERAL CONTRS	EDR Digital Archive
	APICTURELIFE PHOTOGRAPHY	EDR Digital Archive
	GMB PROPERTY MANAGEMENT INC	EDR Digital Archive
	B SANITARY CUSTODIAL SERVICES	EDR Digital Archive

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	MEN LE DMD INC	EDR Digital Archive
	CONTEMPORARY DENTISTRY	EDR Digital Archive
	FOUNDATION STABILIZATION	EDR Digital Archive
2005	ALL THAT JAZZ	EDR Digital Archive
	CONTEMPORARY DENTISTRY	EDR Digital Archive
	WOMANS PLACE A	EDR Digital Archive
	B SANITARY CUSTODIAL SERVICES	EDR Digital Archive
	GMB PROPERTY MANAGEMENT INC	EDR Digital Archive
	B M W BUILDERS	EDR Digital Archive
	ALL THAT JAZZ	EDR Digital Archive
	CONTEMPORARY DENTISTRY	EDR Digital Archive
	B M W BUILDERS	EDR Digital Archive
	B SANITARY CUSTODIAL SERVICES	EDR Digital Archive
GMB PROPERTY MANAGEMENT INC	EDR Digital Archive	
WOMANS PLACE A	EDR Digital Archive	

### E SERRANO AVE

#### 6505 E SERRANO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Raltron Electronics Inc	Pacific Bell
	Western Plering	Pacific Bell
	Marlind Inc	Pacific Bell
1991	Martid Inc	Pacific Bell
	Perma Jack Of Los Angeles & Orange Counties	Pacific Bell
1986	Brentwood International	Pacific Bell
1980	Sigma Sales	Pacific Telephone
	Sigma Three	Pacific Telephone
	Terrys Claws & Paws	Pacific Telephone

### E Serrano Ave

#### 6507 E Serrano Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	DARLING NAILS	EDR Digital Archive
	CEC INC	EDR Digital Archive
	CEC INC	EDR Digital Archive
	DARLING NAILS	EDR Digital Archive
2010	DARLING NAILS	EDR Digital Archive

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	DARLING NAILS	EDR Digital Archive
2005	ADONIS BEAUTY SUPPLY AND SALON	EDR Digital Archive
	DARLING NAILS	EDR Digital Archive
	DEE TRACY ACADEMY OF DANCE	EDR Digital Archive
	CURVES INTERNATIONAL INC	EDR Digital Archive
	HILDA ME SKIN CARE	EDR Digital Archive
	LYON SKIN CARE CLINIC	EDR Digital Archive
	ADONIS BEAUTY SUPPLY AND SALON	EDR Digital Archive
	DARLING NAILS	EDR Digital Archive
	DEE TRACY ACADEMY OF DANCE	EDR Digital Archive
	CURVES INTERNATIONAL INC	EDR Digital Archive
	HILDA ME SKIN CARE	EDR Digital Archive
	LYON SKIN CARE CLINIC	EDR Digital Archive

### **E SERRANO AVE**

#### **6507 E SERRANO AVE**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Changes	Pacific Bell
	Martial Arts Academy	Pacific Bell
	Anaheim Hills Martial Arts Academy	Pacific Bell
1991	Changes	Pacific Bell
	Gunston Hall Company Inc The	Pacific Bell
1986	Changes	Pacific Bell
	Comprehensive Business Services	Pacific Bell
	Gunston Hall Company Inc The	Pacific Bell
	Gwartney Robert A	Pacific Bell

### **E Serrano Ave**

#### **6509 E Serrano Ave**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	INNOVATE LEARNING CENTER	EDR Digital Archive
	CALIFORNIA CLEANERS	EDR Digital Archive
	REYTEC INDUSTRIES INC	EDR Digital Archive
	EXTRA FINANCIAL SERVICES INC	EDR Digital Archive
	NEAL MUSIC INSTRUCTION	EDR Digital Archive
	DEBURR MASTER INC	EDR Digital Archive
	WORDDIALCOM USA INC	EDR Digital Archive

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	NEAL MUSIC INSTRUCTION	EDR Digital Archive
	INNOVATE LEARNING CENTER	EDR Digital Archive
	DEBURR MASTER INC	EDR Digital Archive
	WORDDIALCOM USA INC	EDR Digital Archive
	CALIFORNIA CLEANERS	EDR Digital Archive
	REYTEC INDUSTRIES INC	EDR Digital Archive
	EXTRA FINANCIAL SERVICES INC	EDR Digital Archive
2010	REYTEC INDUSTRIES INC	EDR Digital Archive
	CALIFORNIA CLEANERS	EDR Digital Archive
	DEBURR MASTER INC	EDR Digital Archive
	WORDDIALCOM USA INC	EDR Digital Archive
	WORDDIALCOM USA INC	EDR Digital Archive
	INNOVATE LEARNING CENTER	EDR Digital Archive
	CROWELL BENTON L BOND & INSR	EDR Digital Archive
	NEAL MUSIC INSTRUCTION	EDR Digital Archive
	DON WEBER AUTOMOTIVE CONS	EDR Digital Archive
	DEBURR MASTER INC	EDR Digital Archive
	WORDDIALCOM USA INC	EDR Digital Archive
	WORDDIALCOM USA INC	EDR Digital Archive
	NEAL MUSIC INSTRUCTION	EDR Digital Archive
	REYTEC INDUSTRIES INC	EDR Digital Archive
	CALIFORNIA CLEANERS	EDR Digital Archive
DON WEBER AUTOMOTIVE CONS	EDR Digital Archive	
INNOVATE LEARNING CENTER	EDR Digital Archive	
CROWELL BENTON L BOND & INSR	EDR Digital Archive	
2005	CALIFORNIA CLEANERS	EDR Digital Archive
	CANYON RIM COMMUNITY CHURCH	EDR Digital Archive
	NEAL MUSIC INSTRUCTION	EDR Digital Archive
	CANYON RIM COMMUNITY CHURCH	EDR Digital Archive
	NEAL MUSIC INSTRUCTION	EDR Digital Archive
CALIFORNIA CLEANERS	EDR Digital Archive	

### E SERRANO AVE

#### 6509 E SERRANO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	OHIO National Life Insurance	Pacific Bell
1991	Benton L Crowell Bond & Insurance Agency	Pacific Bell

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Benton L Crowell Bond & Insurance Agency	Pacific Bell
	Crowell Benton L Bond & Insurance Agency	Pacific Bell
1986	Crowell Benton L Bond & Insurance Agency	Pacific Bell
	Budy Nestor M vetnnan	Pacific Bell
	Benton L Crowell Bond & Insurance Agency	Pacific Bell

### E Serrano Ave

#### 6511 E Serrano Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	SITARE INC	EDR Digital Archive
	BODIES BY US	EDR Digital Archive
	AQUA DUCKS INC	EDR Digital Archive
	BODIES BY US	EDR Digital Archive
	AQUA DUCKS INC	EDR Digital Archive
	SITARE INC	EDR Digital Archive
2010	SERRANO HEIGHTS MONTESSORI	EDR Digital Archive
	CANYON MONTESSORI CENTER	EDR Digital Archive
	HILLSBOROUGH SCHOOL	EDR Digital Archive
	AQUA DUCKS INC	EDR Digital Archive
	BODIES BY US	EDR Digital Archive
	AQUA DUCKS INC	EDR Digital Archive
	BODIES BY US	EDR Digital Archive
	SERRANO HEIGHTS MONTESSORI	EDR Digital Archive
	CANYON MONTESSORI CENTER	EDR Digital Archive
	HILLSBOROUGH SCHOOL	EDR Digital Archive
2005	HILLSBOROUGH SCHOOL	EDR Digital Archive
	AQUA DUCKS SPORTS CENTER	EDR Digital Archive
	AQUA DUCKS SPORTS CENTER	EDR Digital Archive
	HILLSBOROUGH SCHOOL	EDR Digital Archive

### E SERRANO AVE

#### 6511 E SERRANO AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Aqua Ducks Sports Center	Pacific Bell
	Aqua Duks Swim School	Pacific Bell

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Anaheim Hills Towne & Country Early Education Center	Pacific Bell
	Aqua Duks Sports Center	Pacific Bell
	Anaheim	Pacific Bell
1986	AN AHE IM HILLS COMMUN ITY CHURCH	Pacific Bell
	Aqua Duks Swim School	Pacific Bell
1980	Mitchell Mary Jane Acorn Realty	Pacific Telephone

### QUINCY CIR

#### 960 QUINCY CIR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Mehta Deepak & Meena	Pacific Telephone

### S Amherst Cir

#### 921 S Amherst Cir

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	JEFF LUM	EDR Digital Archive
	JEFF LUM	EDR Digital Archive
2010	JEFF LUM	EDR Digital Archive
	JEFF LUM	EDR Digital Archive

#### 941 S Amherst Cir

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	MASOOD MIAN	EDR Digital Archive
	MASOOD MIAN	EDR Digital Archive

#### 950 S Amherst Cir

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	ITGURUS INC	EDR Digital Archive
	ITGURUS INC	EDR Digital Archive

### S Bucknell Cir

#### 900 S Bucknell Cir

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	SCOTT MICHAEL CONCRETE CNSTR	EDR Digital Archive
	SCOTT MICHAEL CONCRETE CNSTR	EDR Digital Archive
2010	SCOTT MICHAEL CONCRETE CNSTR	EDR Digital Archive

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	SCOTT MICHAEL CONCRETE CNSTR	EDR Digital Archive
2005	SCOTT MICHAEL CONCRETE CNSTR	EDR Digital Archive
	SCOTT MICHAEL CONCRETE CNSTR	EDR Digital Archive

### 910 S Bucknell Cir

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	BETSCHER DENNIS	EDR Digital Archive
	BETSCHER DENNIS	EDR Digital Archive
2005	BETSCHER DENNIS	EDR Digital Archive
	BETSCHER DENNIS	EDR Digital Archive

### 941 S Bucknell Cir

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	WOMANS WAY HEALTH CENTER	EDR Digital Archive
	WOMANS WAY HEALTH CENTER	EDR Digital Archive

### 950 S Bucknell Cir

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	FREDO DWYER	EDR Digital Archive
	ISLAND BROTHER REALTY LLC	EDR Digital Archive
	FREDO DWYER	EDR Digital Archive
	ISLAND BROTHER REALTY LLC	EDR Digital Archive

## S PEGASUS

### 1000 S PEGASUS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Burnham Leon V	Pacific Bell
1986	Bumham Leon V	Pacific Bell

### 1020 S PEGASUS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Nullmeyer Sharon & Jeff	Pacific Bell
	Nullmeyer Calvin D	Pacific Bell
1986	Nullmeyer Sharon & Jeff	Pacific Bell
	Nullmeyer Calvin D	Pacific Bell
1980	Nullmeyer Calvin D	Pacific Telephone

### 1030 S PEGASUS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Hong Ingi	Pacific Bell

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Product Design Associates	Pacific Telephone

### 1047 S PEGASUS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Meyer Richard E	Pacific Bell
1980	Meyer Richard E	Pacific Telephone

### 1050 S PEGASUS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Hilaski Gordon	Pacific Bell
1980	Mazon Jess	Pacific Telephone
	Mazon L	Pacific Telephone

### 1060 S PEGASUS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Welsh Eric A	Pacific Bell
1980	Wesh Eric A	Pacific Telephone

### 1070 S PEGASUS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Kepner L Joe	Pacific Bell
1986	Kepner L Joe	Pacific Bell
1980	Kepnr I Joe	Pacific Telephone

### 01000 S PEGASUS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Burnham Craig H DDS loo	Pacific Telephone

### S Pegasus St

#### 1010 S Pegasus St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	HVC CLEANING SERVICE INC	EDR Digital Archive
	HVC CLEANING SERVICE INC	EDR Digital Archive

#### 1020 S Pegasus St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	NULL MEYER & ASSOCIATES	EDR Digital Archive
	NULL MEYER & ASSOCIATES	EDR Digital Archive
2010	NULL MEYER & ASSOCIATES	EDR Digital Archive
	NULL MEYER & ASSOCIATES	EDR Digital Archive

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	NULL MEYER & ASSOCIATES	EDR Digital Archive
	NULL MEYER & ASSOCIATES	EDR Digital Archive

### S PEGASUS ST

#### 1020 S PEGASUS ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Nullmeyer Calvin D	Pacific Bell
	Nullmeyer B	Pacific Bell

### S Pegasus St

#### 1047 S Pegasus St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	SUMMIT MANAGEMENT GROUP	EDR Digital Archive
	BUDGET JANITORIAL & SUPPLIES	EDR Digital Archive
	BUDGET JANITORIAL & SUPPLIES	EDR Digital Archive
	SUMMIT MANAGEMENT GROUP	EDR Digital Archive

#### 1050 S Pegasus St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	GOURMET PIG	EDR Digital Archive
	GOURMET PIG	EDR Digital Archive

#### 1070 S Pegasus St

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	L J KEPNER & ASSOCIATES	EDR Digital Archive
	L J KEPNER & ASSOCIATES	EDR Digital Archive

### S QUIANC CIR

#### 999 S QUIANC CIR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Reyn`lds W	Pacific Telephone

### S Quincy Cir

#### 960 S Quincy Cir

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	MILIANA ENTERPRISES INC	EDR Digital Archive
	MILIANA ENTERPRISES INC	EDR Digital Archive

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	DAVID LEIBSOHN CONSULTING	EDR Digital Archive
	MILIANA ENTERPRISES INC	EDR Digital Archive
	DAVID LEIBSOHN CONSULTING	EDR Digital Archive
	MILIANA ENTERPRISES INC	EDR Digital Archive

### S QUINCY CIR

#### 960 S QUINCY CIR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1986	Mehta Deepak & Meena	Pacific Bell

#### 970 S QUINCY CIR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Bedrossian Viken B	Pacific Telephone

### S Quincy Cir

#### 971 S Quincy Cir

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	JOSEFINA SANCHEZ	EDR Digital Archive
	JOSEFINA SANCHEZ	EDR Digital Archive
2005	JOSEFINA SANCHEZ	EDR Digital Archive
	JOSEFINA SANCHEZ	EDR Digital Archive

### S QUINCY CIR

#### 971 S QUINCY CIR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Sanchez Natividad	Pacific Bell
	Sanchez Natividad	Pacific Bell

#### 981 S QUINCY CIR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Moser Verne	Pacific Bell
1986	Blancas Hector J	Pacific Bell
1980	Blancas Hector J	Pacific Telephone

#### 990 S QUINCY CIR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Gerkey Edw C	Pacific Bell
1991	Gerkey Edw C	Pacific Bell

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1980	Gerkey Edw C	Pacific Telephone

### 991 S QUINCY CIR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Peck Frank C	Pacific Bell
1991	Peck Frank C	Pacific Bell
1986	Peck Frank C	Pacific Bell

### S Quincy Cir

#### 998 S Quincy Cir

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	TRANSPORTATION ENRGY SOLUTIONS	EDR Digital Archive
	TRANSPORTATION ENRGY SOLUTIONS	EDR Digital Archive

### S QUINCY CIR

#### 998 S QUINCY CIR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Johnston Raymond J	Pacific Bell
1986	Olley Bert Realty	Pacific Bell
1980	Oley Bert Realty	Pacific Telephone

### SERRANO

#### 6450 SERRANO

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Orange Unified School District Contd Business Division	Pacific Bell
	Anaheim Hills Elementary School	Pacific Bell

## 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

6501-6513 Serrano Avenue

#### Address Not Identified in Research Source

2014, 2010, 2005, 2002, 2001, 1997, 1992, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

### 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

01000 S PEGASUS

#### Address Not Identified in Research Source

2014, 2010, 2005, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

1000 S PEGASUS

2014, 2010, 2005, 2002, 2001, 1997, 1995, 1992, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

1010 S Pegasus St

2014, 2005, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

1010 S Pegasus St

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1020 S PEGASUS

2014, 2010, 2005, 2002, 2001, 1997, 1995, 1992, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

1020 S PEGASUS ST

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1020 S Pegasus St

2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

1020 S Pegasus St

2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

1030 S PEGASUS

2014, 2010, 2005, 2002, 2001, 1997, 1995, 1992, 1986, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

1047 S PEGASUS

2014, 2010, 2005, 2002, 2001, 1997, 1995, 1992, 1991, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

1047 S Pegasus St

2014, 2005, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

## FINDINGS

### Address Researched

### Address Not Identified in Research Source

1047 S Pegasus St	2014, 2005, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
1050 S PEGASUS	2014, 2010, 2005, 2002, 2001, 1997, 1995, 1992, 1991, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
1050 S Pegasus St	2014, 2010, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
1050 S Pegasus St	2014, 2010, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
1060 S PEGASUS	2014, 2010, 2005, 2002, 2001, 1997, 1995, 1992, 1986, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
1070 S PEGASUS	2014, 2010, 2005, 2002, 2001, 1997, 1995, 1992, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
1070 S Pegasus St	2014, 2005, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
1070 S Pegasus St	2014, 2005, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
2400 AVALON AVE	2014, 2010, 2005, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
2401 AVALON AVE	2014, 2010, 2005, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
2404 AVALON AVE	2014, 2010, 2005, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
2405 AVALON AVE	2014, 2010, 2005, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
6450 E SERRANO AVE	2014, 2010, 2005, 2002, 2001, 1997, 1992, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
6450 SERRANO	2014, 2010, 2005, 2002, 2001, 1997, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
6500 E CARNEGIE AVE	2014, 2010, 2005, 2002, 2001, 1997, 1992, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
6500 E MARENGO DR	2014, 2010, 2005, 2002, 2001, 1997, 1995, 1992, 1991, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920
6501 E SERRANO AVE	2014, 2010, 2005, 2002, 2001, 1997, 1995, 1992, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920













## FINDINGS

### Address Researched

998 S Quincy Cir

998 S Quincy Cir

999 S QUIANC CIR

### Address Not Identified in Research Source

2014, 2010, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

2014, 2010, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1980, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

2014, 2010, 2005, 2002, 2001, 1997, 1995, 1992, 1991, 1986, 1975, 1971, 1970, 1966, 1965, 1961, 1960, 1956, 1955, 1952, 1950, 1946, 1945, 1941, 1936, 1930, 1926, 1925, 1922, 1921, 1920

**Serrano Anaheim**

6501-6513 Serrano Avenue  
Anaheim, CA 92807

Inquiry Number: 5355743.8  
July 10, 2018

# EDR Building Permit Report

Target Property and Adjoining Properties

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***Thank you for your business.***

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with any questions or comments.

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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 1527-13), 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 1527-13 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.



## EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of Leighton and Associates, Inc. on Jul 10, 2018.

### **TARGET PROPERTY**

6501-6513 Serrano Avenue  
Anaheim, CA 92807

### **SEARCH METHODS**

EDR searches available lists for both the Target Property and Surrounding Properties.

### **RESEARCH SUMMARY**

Building permits identified: **YES**

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.

#### **Anaheim**

<b><u>Year</u></b>	<b><u>Source</u></b>	<b><u>TP</u></b>	<b><u>Adjoining</u></b>
2018	City of Anaheim, Planning & Building Department		X
2017	City of Anaheim, Planning & Building Department		X
2016	City of Anaheim, Planning & Building Department		X
	City of Anaheim, Planning & Building Department	X	
2015	City of Anaheim, Planning & Building Department		X
2014	City of Anaheim, Planning & Building Department		X
2013	City of Anaheim, Planning & Building Department		X
2012	City of Anaheim, Planning & Building Department		X
	City of Anaheim, Planning & Building Department	X	
2011	City of Anaheim, Planning & Building Department		X
2010	City of Anaheim, Planning & Building Department		X
2009	City of Anaheim, Planning & Building Department		X
2008	City of Anaheim, Planning & Building Department		X
2007	City of Anaheim, Planning & Building Department		X
2006	City of Anaheim, Planning & Building Department		X
2005	City of Anaheim, Planning & Building Department		X
	City of Anaheim, Planning & Building Department	X	
2004	City of Anaheim, Planning & Building Department		X
2003	City of Anaheim, Planning & Building Department		X
	City of Anaheim, Planning & Building Department	X	
2002	City of Anaheim, Planning & Building Department		X
	City of Anaheim, Planning & Building Department	X	
2001	City of Anaheim, Planning & Building Department		X
2000	City of Anaheim, Planning & Building Department		X

#### **Orange**

<b><u>Year</u></b>	<b><u>Source</u></b>	<b><u>TP</u></b>	<b><u>Adjoining</u></b>
2018	City of Orange, Community Development		

## EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>
2017	City of Orange, Community Development		
2016	City of Orange, Community Development		
2015	City of Orange, Community Development		
2014	City of Orange, Community Development		
2013	City of Orange, Community Development		
2012	City of Orange, Community Development		
2011	City of Orange, Community Development		
2010	City of Orange, Community Development		
2009	City of Orange, Community Development		
2008	City of Orange, Community Development		
2007	City of Orange, Community Development		
2006	City of Orange, Community Development		
2005	City of Orange, Community Development		
2004	City of Orange, Community Development		X
2003	City of Orange, Community Development		X
2002	City of Orange, Community Development		
2001	City of Orange, Community Development		
2000	City of Orange, Community Development		
1999	City of Orange, Community Development		
1998	City of Orange, Community Development		
1997	City of Orange, Community Development		
1996	City of Orange, Community Development		
1995	City of Orange, Community Development		
1994	City of Orange, Community Development		
1993	City of Orange, Community Development		
1992	City of Orange, Community Development		
1991	City of Orange, Community Development		
1990	City of Orange, Community Development		
1989	City of Orange, Community Development		
1988	City of Orange, Community Development		

### **BUILDING DEPARTMENT RECORDS SEARCHED**

Name: Anaheim  
 Years: 2000-2018  
 Source: City of Anaheim, Planning & Building Department, Anaheim, CA  
 Phone: (714) 765-5153

Name: Orange  
 Years: 1988-2018  
 Source: City of Orange, Community Development, ORANGE, CA  
 Phone: (714) 744-7200

Name: Burbank  
Years: 1970-2017  
Source: City of Burbank, Building Division, BURBANK, CA  
Phone: (818) 238-5220

Name: Garden Grove  
Years: 1960-2018  
Source: City of Garden Grove, Community Development, Garden Grove, CA  
Phone: (714) 741-5000

Name: Orange County  
Years: 1990-2018  
Source: Orange County, Planning and Development Services, LAGUNA HILLS, CA  
Phone: (714) 834-5238

Name: Huntington Beach  
Years: 1996-2018  
Source: Huntington Beach, Dept. of Building and Safety, HUNTINGTON BEACH, CA  
Phone: (714) 536-5241

## TARGET PROPERTY FINDINGS

### TARGET PROPERTY DETAIL

**6501-6513 Serrano Avenue  
Anaheim, CA 92807**

#### **6501 E SERRANO AVE**

Date: **8/22/2003**  
Permit Type:  
Description: **Tenant Improvement. Convert existing B occupancy to A-3 (Church)**  
Permit Description:  
Work Class:  
Proposed Use:  
Permit Number: **BLD2001-04166**  
Status:  
Valuation: **\$0.00**  
Contractor Company:  
Contractor Name:

Date: **4/18/2003**  
Permit Type:  
Description: **Tenant Improvement. Convert existing B occupancy to A-3 (Church) REF BLD2001-00672**  
Permit Description:  
Work Class: **Residential Remodel**  
Proposed Use:  
Permit Number: **PLM2003-00672**  
Status:  
Valuation: **\$0.00**  
Contractor Company:  
Contractor Name: **JANLOU CONSTRUCTION COMPANY**

## TARGET PROPERTY FINDINGS

Date: **1/14/2003**  
Permit Type:  
Description: **Mechanical for Tenant Improvement. Convert existing B occupancy to A-3 (Church)  
Ref: BLD2003-00029**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: MEC2003-00029  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: PROGRESSIVE MARINE & MAINTENANCE

Date: **10/2/2002**  
Permit Type:  
Description: **Tenant Improvement. Convert existing B occupancy to A-3 (Church)REF BLD2001-  
04166**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2002-01609  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: PROGRESSIVE MARINE & MAINTENANCE

Date: **9/23/2002**  
Permit Type:  
Description: **Meter pedestal for Traffic Signal**

Permit Description:  
Work Class: Miscellaneous  
Proposed Use:  
Permit Number: ELE2002-01547  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: SIERRA PACIFIC ELECTRICAL CONT

## TARGET PROPERTY FINDINGS

Date: **1/16/2002**  
Permit Type:  
Description: **Install 8 w x 2 h non electrical sign " Cornerstone Bible Church "**  
Permit Description:  
Work Class: New Attached to Structure Sign  
Proposed Use:  
Permit Number: SGN2002-00009  
Status:  
Valuation: \$400.00  
Contractor Company:  
Contractor Name: JANLOU CONSTRUCTION

### 6501-6513 SERRANO AVENUE

Date: **8/22/2003**  
Permit Type:  
Description: **Tenant Improvement. Convert existing B occupancy to A-3 (Church)**  
Permit Description:  
Work Class:  
Proposed Use:  
Permit Number: BLD2001-04166  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

Date: **4/18/2003**  
Permit Type:  
Description: **Tenant Improvement. Convert existing B occupancy to A-3 (Church) REF BLD2001-00672**  
Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2003-00672  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JANLOU CONSTRUCTION COMPANY

## TARGET PROPERTY FINDINGS

Date: **1/14/2003**  
Permit Type:  
Description: **Mechanical for Tenant Improvement. Convert existing B occupancy to A-3 (Church)  
Ref: BLD2003-00029**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: MEC2003-00029  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: PROGRESSIVE MARINE & MAINTENANCE

Date: **10/2/2002**  
Permit Type:  
Description: **Tenant Improvement. Convert existing B occupancy to A-3 (Church)REF BLD2001-  
04166**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2002-01609  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: PROGRESSIVE MARINE & MAINTENANCE

Date: **9/23/2002**  
Permit Type:  
Description: **Meter pedestal for Traffic Signal**

Permit Description:  
Work Class: Miscellaneous  
Proposed Use:  
Permit Number: ELE2002-01547  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: SIERRA PACIFIC ELECTRICAL CONT

## TARGET PROPERTY FINDINGS

Date: **1/16/2002**  
Permit Type:  
Description: **Install 8 w x 2 h non electrical sign " Cornerstone Bible Church "**  
Permit Description:  
Work Class: New Attached to Structure Sign  
Proposed Use:  
Permit Number: SGN2002-00009  
Status:  
Valuation: \$400.00  
Contractor Company:  
Contractor Name: JANLOU CONSTRUCTION

### 6503 E SERRANO AVE

Date: **4/7/2003**  
Permit Type:  
Description: **Install (1) 4x8 illuminated wall sign "Karate for Kids"**  
Permit Description:  
Work Class: New Attached to Structure Sign  
Proposed Use:  
Permit Number: SGN2003-00054  
Status:  
Valuation: \$1,800.00  
Contractor Company:  
Contractor Name: SANG SOP CHU

### 6505 E SERRANO AVE STE B

Date: **5/10/2012**  
Permit Type: **SGN**  
Description: **Install (1) illuminated sign for "Kumon"**  
Permit Description: **Sign Permit**  
Work Class: New Attached to Structure Sign  
Proposed Use:  
Permit Number: SGN2012-00065  
Status: Issued  
Valuation: \$750.00  
Contractor Company:  
Contractor Name: LASZLO GYORGYEI

## TARGET PROPERTY FINDINGS

Date: **11/19/2003**  
Permit Type:  
Description: **Mechanical for Tenant Improvement. 1053sf dental TI. BLD2003-03608**  
Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: MEC2003-01181  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: BOICE ENGINEERING AND DEVELOPMENT

Date: **10/1/2003**  
Permit Type:  
Description: **Tenant Improvement. 1053sf dental TI.**  
Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2003-01671  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: BOICE ENGINEERING AND DEVELOPMENT

Date: **10/1/2003**  
Permit Type:  
Description: **Tenant Improvement. 1053sf dental TI. REF BLD2003-03608**  
Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2003-01608  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: BOICE ENGINEERING AND DEVELOPMENT

## TARGET PROPERTY FINDINGS

### 6505 E SERRANO AVE STE C

Date: **5/10/2012**  
Permit Type: **SGN**  
Description: **Install (1) illuminated sign for "Kumon"**

Permit Description: **Sign Permit**  
Work Class: **New Attached to Structure Sign**  
Proposed Use:  
Permit Number: **SGN2012-00065**  
Status: **Issued**  
Valuation: **\$750.00**  
Contractor Company:  
Contractor Name: **LASZLO GYORGYEI**

Date: **11/19/2003**  
Permit Type:  
Description: **Mechanical for Tenant Improvement. 1053sf dental TI. BLD2003-03608**

Permit Description:  
Work Class: **Residential Remodel**  
Proposed Use:  
Permit Number: **MEC2003-01181**  
Status:  
Valuation: **\$0.00**  
Contractor Company:  
Contractor Name: **BOICE ENGINEERING AND DEVELOPMENT**

Date: **10/1/2003**  
Permit Type:  
Description: **Tenant Improvement. 1053sf dental TI.**

Permit Description:  
Work Class: **Residential Remodel**  
Proposed Use:  
Permit Number: **ELE2003-01671**  
Status:  
Valuation: **\$0.00**  
Contractor Company:  
Contractor Name: **BOICE ENGINEERING AND DEVELOPMENT**

## TARGET PROPERTY FINDINGS

Date: **10/1/2003**  
Permit Type:  
Description: **Tenant Improvement. 1053sf dental TI. REF BLD2003-03608**  
Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2003-01608  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: BOICE ENGINEERING AND DEVELOPMENT

### 6507 E SERRANO AVE STE C

Date: **11/15/2016**  
Permit Type: **BLD**  
Description: **Mechanical to replace commercial ground-mounted air conditioning unit within existing screening.**  
Permit Description: **Building Permit**  
Work Class: Tenant Improvement  
Proposed Use:  
Permit Number: BLD2016-05498  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: J D P AIR CONDITIONING AND HEATING

Date: **8/9/2005**  
Permit Type:  
Description: **Tenant improvement pedicure shop.**  
Permit Description:  
Work Class:  
Proposed Use:  
Permit Number: BLD2005-01846  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

## TARGET PROPERTY FINDINGS

Date: **8/2/2005**  
Permit Type:  
Description: **Electrical for tenant improvement pedicure shop; REFBLD2005-01846**  
Permit Description:  
Work Class:  
Proposed Use:  
Permit Number: ELE2005-01096  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

Date: **8/1/2005**  
Permit Type:  
Description: **Plumbing for tenant improvement pedicure spas.; REFBLD2005-01846**  
Permit Description:  
Work Class:  
Proposed Use:  
Permit Number: PLM2005-00950  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

### 6509 E SERRANO AVE

Date: **2/11/2016**  
Permit Type: **BLD**  
Description: **Tenant Improvement: Extend metal framed wall to full height (9 ft to 10ft).**  
Permit Description: **Building Permit**  
Work Class: Tenant Improvement  
Proposed Use: Additions Alteratiopns and Conversion nonresidential and nonhousekeeping  
Permit Number: BLD2015-06637  
Status: Issued  
Valuation: \$15,000.00  
Contractor Company:  
Contractor Name:

## TARGET PROPERTY FINDINGS

Date: **5/16/2012**  
Permit Type: **SGN**  
Description: **Install (1) Illuminated cabinet sign for "Innovate learning center"**  
Permit Description: **Sign Permit**  
Work Class: New Attached to Structure Sign  
Proposed Use:  
Permit Number: SGN2012-00070  
Status: Issued  
Valuation: \$4,000.00  
Contractor Company:  
Contractor Name:

### 6511 E SERRANO AVE

Date: **4/4/2002**  
Permit Type:  
Description: **Install (1) internally illuminated wall sign " ANAHEIM HILLS PRESCHOOL.**  
Permit Description:  
Work Class: New Attached to Structure Sign  
Proposed Use:  
Permit Number: SGN2002-00053  
Status:  
Valuation: \$1,500.00  
Contractor Company:  
Contractor Name: CENSOURCE INC.

## ADJOINING PROPERTY FINDINGS

### ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

#### E ALTAVIEW

##### **8464 E ALTAVIEW**

Date: **12/23/2003**  
Permit Type: **BUILDING**  
Description:

Permit Description:  
Work Class: **BLOCK WAL**  
Proposed Use:  
Permit Number: **0312-282**  
Status: **FINALED**  
Valuation: **\$0.00**  
Contractor Company:  
Contractor Name: **EMENAKER RESIDENCE**

Date: **12/15/2003**  
Permit Type: **POOL**  
Description:

Permit Description:  
Work Class: **POOL/SPA**  
Proposed Use:  
Permit Number: **0312-175**  
Status: **FINALED**  
Valuation: **\$0.00**  
Contractor Company:  
Contractor Name: **EMENAKER, JEFFREY**

## ADJOINING PROPERTY FINDINGS

Date: **12/3/2003**  
Permit Type: **MECHANICAL**  
Description:

Permit Description:  
Work Class:  
Proposed Use:  
Permit Number: 0312-050  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JEFF & CHRIS EMANAKAI

Date: **1/16/2003**  
Permit Type: **BUILDING**  
Description:

Permit Description:  
Work Class: NEW SFR  
Proposed Use:  
Permit Number: 0301-052  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: HEZMALHALCH

### 8490 E ALTAVIEW

Date: **7/10/2003**  
Permit Type: **BUILDING**  
Description:

Permit Description:  
Work Class: RET. WALL  
Proposed Use:  
Permit Number: 0307-143  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: MICHAEL BATTAGLIA

## ADJOINING PROPERTY FINDINGS

Date: **1/16/2003**  
Permit Type: **BUILDING**  
Description:

Permit Description:  
Work Class: NEW SFR  
Proposed Use:  
Permit Number: 0301-062  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: HEZMALHALCH

### 8518 E ALTAVIEW

Date: **2/4/2004**  
Permit Type: **BUILDING**  
Description:

Permit Description:  
Work Class: RET. WALL  
Proposed Use:  
Permit Number: 0402-055  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: TAVASSOLI, ARANAK

Date: **3/5/2003**  
Permit Type: **ELECTRICAL**  
Description:

Permit Description:  
Work Class:  
Proposed Use:  
Permit Number: 0303-046  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: TEMP POWER SYSTEMS

## ADJOINING PROPERTY FINDINGS

Date: **1/16/2003**  
Permit Type: **BUILDING**  
Description: **NEW SFR**

Permit Description:  
Work Class: NEW SFR  
Proposed Use:  
Permit Number: 0301-063  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: HEZMALHALCH

### 8526 E ALTAVIEW

Date: **9/22/2003**  
Permit Type: **ELECTRICAL**  
Description:

Permit Description:  
Work Class:  
Proposed Use:  
Permit Number: 0309-268  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: DOLORES WEIDER

Date: **8/25/2003**  
Permit Type: **BUILDING**  
Description:

Permit Description:  
Work Class: RET. WALL  
Proposed Use:  
Permit Number: 0308-264  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: DOLORES WILDER

## ADJOINING PROPERTY FINDINGS

Date: **1/16/2003**  
Permit Type: **BUILDING**  
Description: **NEW SFR**

Permit Description:  
Work Class: NEW SFR  
Proposed Use:  
Permit Number: 0301-064  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: HEZMALHALCH

### **E ALTAVIEW DRIVE**

#### **8470 E ALTAVIEW DRIVE**

Date: **1/16/2003**  
Permit Type: **BUILDING**  
Description:

Permit Description:  
Work Class: NEW SFR  
Proposed Use:  
Permit Number: 0301-061  
Status: FINALED  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: HEZMALHALCH

## ADJOINING PROPERTY FINDINGS

### 8482 E ALTAVIEW DRIVE

Date: **1/16/2003**  
Permit Type: **BUILDING**  
Description:

Permit Description:  
Work Class: **NEW SFR**  
Proposed Use:  
Permit Number: **0301-066**  
Status: **SUBMITTED**  
Valuation: **\$0.00**  
Contractor Company:  
Contractor Name: **HEZMALHALCH**

### 8506 E ALTAVIEW DRIVE

Date: **1/16/2003**  
Permit Type: **BUILDING**  
Description: **NEW SFR**

Permit Description:  
Work Class: **NEW SFR**  
Proposed Use:  
Permit Number: **0301-055**  
Status: **FINALED**  
Valuation: **\$0.00**  
Contractor Company:  
Contractor Name: **HEZMALHALCH**

## ADJOINING PROPERTY FINDINGS

### E CARNEGIE AVE

#### 6500 E CARNEGIE AVE

Date: **2/10/2011**  
Permit Type:  
Description: **Plumbing for water heater replacement.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2011-00548  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: CALIFORNIA DELTA MECHANICAL INC

Date: **3/28/2002**  
Permit Type:  
Description: **Tear off existing wood shake and install 26 squares of Eagle Lite tiles 5.7 lbs ICBO # 4660**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2002-00919  
Status:  
Valuation: \$8,500.00  
Contractor Company:  
Contractor Name: HOYT ROOFS

## ADJOINING PROPERTY FINDINGS

Date: **3/11/2002**  
Permit Type:  
Description: **Tear off and reroof 28 sq. with eaglelite ICBO4660 (5.7 lb.)**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2002-00684  
Status:  
Valuation: \$9,800.00  
Contractor Company:  
Contractor Name: HOYT ROOFS

### 6508 E CARNEGIE AVE

Date: **4/2/2003**  
Permit Type:  
Description: **Tear off existing comp. and install 26 squares of 20 year comp. shingles.**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2003-01226  
Status:  
Valuation: \$3,000.00  
Contractor Company:  
Contractor Name:

## ADJOINING PROPERTY FINDINGS

### 6516 E CARNEGIE AVE

Date: **12/14/2017**  
Permit Type: **BLD**  
Description: **Residential Photovoltaic System**

Permit Description: **Building Permit**  
Work Class: Photovoltaic System  
Proposed Use: Additons, Alterations, and Conversions to Residential Buildings  
Permit Number: BLD2017-05612  
Status: Issued  
Valuation: \$28,960.00  
Contractor Company:  
Contractor Name: SOLCIUS LLC

Date: **8/19/2002**  
Permit Type:  
Description: **Replace existing shake install new sheathing and reroof w/ 50 year composition shingles: 22 Squares.**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2002-02619  
Status:  
Valuation: \$7,100.00  
Contractor Company:  
Contractor Name: WEATHERLINE ROOFING INC.

## ADJOINING PROPERTY FINDINGS

Date: **8/24/2000**  
Permit Type:  
Description: **Add supplemental fees to mec1999-00137**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: MEC2000-00898  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: DIAL ONE SONSHINE PLMBIG HTG

Date: **4/13/2000**  
Permit Type:  
Description: **replace furance for single family dwelling**

Permit Description:  
Work Class:  
Proposed Use:  
Permit Number: MEC1999-00137  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

### 6524 E CARNEGIE AVE

Date: **4/15/2003**  
Permit Type:  
Description: **Install 460 sf gunite pool/spa**

Permit Description:  
Work Class: New Pool and / or Spa  
Proposed Use:  
Permit Number: SWI2003-00046  
Status:  
Valuation: \$20,000.00  
Contractor Company:  
Contractor Name: TITAN POOLS INC

## ADJOINING PROPERTY FINDINGS

Date: **4/8/2003**  
Permit Type:  
Description: **Upgrade electrical meter to 200A**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2003-00595  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: CHORAK BROTHERS ENTERPRISES INCORPO

Date: **10/11/2002**  
Permit Type:  
Description: **Repair sewer line.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2002-01530  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: DYMEKS FREEDOM PLUMBING & DRAIN CL

### 6540 E CARNEGIE AVE

Date: **1/12/2018**  
Permit Type: **BLD**  
Description: **Electrical for 200 amp main service panel upgrade.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2018-00154  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: CITY FIRST ELECTRIC

## ADJOINING PROPERTY FINDINGS

Date: **1/13/2005**  
Permit Type:  
Description: **Tear of existing and install 21 squares of 5.8 lbs. (ICBO # 2656) tile.**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2005-00097  
Status:  
Valuation: \$8,000.00  
Contractor Company:  
Contractor Name: SUNSHINE ROOFING

### 6548 E CARNEGIE AVE

Date: **3/31/2011**  
Permit Type:  
Description: **Swimming pool Remodel: Re-plaster replace bond beam and replace pool equipment.**

Permit Description:  
Work Class: Repair or Alteration of Existing  
Proposed Use:  
Permit Number: SWI2011-00021  
Status:  
Valuation: \$10,000.00  
Contractor Company:  
Contractor Name: CROSS LANDSCAPE POOL & SPA INC

## ADJOINING PROPERTY FINDINGS

Date: **3/31/2011**  
Permit Type:  
Description: **Residential Remodel: Construct New 120sf. Patio cover per engineered design and 6 linear ft. by 6 high block (6" blocks) wall per city specifications. Remove and replace 2 high retaining wall Mechanical for new condensing unit in same location.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2011-01262  
Status:  
Valuation: \$3,500.00  
Contractor Company:  
Contractor Name: CROSS LANDSCAPE POOL & SPA INC

Date: **12/8/2009**  
Permit Type:  
Description: **Plumbing for water heater change out.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2009-04035  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: CALIFORNIA DELTA MECHANICAL INC

Date: **12/11/2001**  
Permit Type:  
Description: **Install water heater.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2001-01887  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: COAST PLMBG HEATING & AIR INC

## ADJOINING PROPERTY FINDINGS

Date: **5/31/2000**  
Permit Type:  
Description: **Replace Roof W/40 Yr Presidential Shingle**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2000-01624  
Status:  
Valuation: \$4,120.00  
Contractor Company:  
Contractor Name: COAST ROOFING

Date: **5/31/2000**  
Permit Type:  
Description: **Replace existing a/c unit w/new.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: MEC2000-00586  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: MAGNOLIA HEATING & COOLING INC

Date: **5/31/2000**  
Permit Type:  
Description: **Relocating electrical for a/c unit**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2000-00980  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: MAGNOLIA HEATING & COOLING INC

## ADJOINING PROPERTY FINDINGS

### 6564 E CARNEGIE AVE

Date: **3/20/2014**  
Permit Type: **BLD**  
Description: **Photovoltaic System: Install residential roof mounted solar system with 23 panels**

Permit Description: **Building Permit**  
Work Class: Photovoltaic System  
Proposed Use: Additions, Alterations, and Conversions to Residential Buildings (additions of garages and  
Permit Number: BLD2014-00659  
Status: Issued  
Valuation: \$23,000.00  
Contractor Company:  
Contractor Name: SOLARCITY CORPORATION

### 6567 E CARNEGIE AVE

Date: **9/12/2000**  
Permit Type:  
Description: **Replace shake with 40 year comp.**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2000-02876  
Status:  
Valuation: \$5,000.00  
Contractor Company:  
Contractor Name: MCCORMACK ROOFING CO

## ADJOINING PROPERTY FINDINGS

### 6570 E CARNEGIE AVE

Date: **2/7/2006**  
Permit Type:  
Description: **Change out dishwasher.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2006-00146  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: APPLIANCE INSTALLERS INC.

Date: **10/2/2003**  
Permit Type:  
Description: **Water heater changeout**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2003-01614  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

## ADJOINING PROPERTY FINDINGS

### 6575 E CARNEGIE AVE

Date: **7/2/2002**  
Permit Type:  
Description: **Change-out furnace and A/C.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: MEC2002-00556  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ALASKA AIR CONDITIONING & HEA

Date: **6/28/2002**  
Permit Type:  
Description: **Electrical for HVAC change-out. Ref # MEC2002-00538.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2002-01028  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ALASKA AIR CONDITIONING & HEA

Date: **6/28/2002**  
Permit Type:  
Description: **Relocate A/C unit and replace furnace.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: MEC2002-00538  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ALASKA AIR CONDITIONING & HEA

## ADJOINING PROPERTY FINDINGS

### 6581 E CARNEGIE AVE

Date: **4/14/2004**  
Permit Type:   
Description: **Replace existing shake with 30 year comp shingle. 21 squares.**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2004-01192  
Status:  
Valuation: \$6,400.00  
Contractor Company:  
Contractor Name: THE ROOF STORE

### E EDINBORO CIR

### 6545 E EDINBORO CIR

Date: **6/17/2014**  
Permit Type: **BLD**  
Description: **Mechanical for air conditioning unit change out.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2014-02581  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: AIRWEST AIR CONDITIONING AND HEATIN

## ADJOINING PROPERTY FINDINGS

### 6550 E EDINBORO CIR

Date: **10/7/2004**  
Permit Type:  
Description: **Electrical for sink gas and sewer line for outdoor BBQ. (reference PLM2004-01627)**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2004-02130  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: G R CONSTRUCTION

Date: **10/7/2004**  
Permit Type:  
Description: **Install sink gas and sewer line for outdoor BBQ.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2004-01627  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: G R CONSTRUCTION

## ADJOINING PROPERTY FINDINGS

### 6570 E EDINBORO CIR

Date: **6/20/2008**  
Permit Type:  
Description: **Plumbing for copper repipe.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2008-02075  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ALL AMERICAN REPIPE

Date: **9/26/2006**  
Permit Type:  
Description: **Change out water heater.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2006-01362  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: AFFORDABLE WATER HEATERS & PLU

## ADJOINING PROPERTY FINDINGS

### 6580 E EDINBORO CIR

Date: **10/5/2010**  
Permit Type:  
Description: **Mechanical for heating and air conditioning system replacement. (15.5 seer)**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2010-03736  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: YAEGER SERVICES INC

Date: **5/27/2009**  
Permit Type:  
Description: **Plumbing for residential remodel: Change out water heater.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2009-01669  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: CALIFORNIA DELTA MECHANICAL INC

Date: **3/6/2008**  
Permit Type:  
Description: **Patio Cover (650 sq. ft.) per engineered plans and gas line for Bar-B-Q area.**

Permit Description:  
Work Class: Patio Cover  
Proposed Use:  
Permit Number: BLD2008-00656  
Status:  
Valuation: \$2,000.00  
Contractor Company:  
Contractor Name: HOME ENHANCEMENT SPECIALISTS INC

## ADJOINING PROPERTY FINDINGS

Date: **1/16/2001**  
Permit Type:  
Description: **Replace main waterline.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2001-00066  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ALLIED PLUMBING HEATING & A/C

### 6590 E EDINBORO CIR

Date: **10/8/2007**  
Permit Type:  
Description: **Reroof: tear off existing install OSB and reroof 22 squares with Monier Tile ICBO #1647 @ 5.9 lb/sq**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2007-02246  
Status:  
Valuation: \$5,500.00  
Contractor Company:  
Contractor Name: SCURRAHS ROOFING

## ADJOINING PROPERTY FINDINGS

### E MARENGO DR

#### 6500 E MARENGO DR

Date: **2/3/2011**  
Permit Type:  
Description: **Re-roof: Remove existing material install 22 squares of Metro Shingles for house and attached garage. ER# 5626.**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2011-00480  
Status:  
Valuation: \$5,000.00  
Contractor Company:  
Contractor Name: WESTERN ROOFING SYSTEMS

Date: **11/27/2001**  
Permit Type:  
Description: **Change out water heater**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2001-01806  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: COAST PLMBG HEATING & AIR INC

## ADJOINING PROPERTY FINDINGS

### 6507 E MARENGO DR

Date: **9/1/2000**  
Permit Type:  
Description: **Replace water heater**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2000-01507  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: RANCHO PLUMBING HEATING & AIR

### 6511 E MARENGO DR

Date: **9/26/2012**  
Permit Type: **BLD**  
Description: **Re-roof: Tear off existing roof replace plywood as necessary and install 28 squares of light weight tile (monaire bolar CRRC#0942-0009 5.7 lbs.) over house and attached garage.**

Permit Description: **Building Permit**  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2012-03313  
Status: Issued  
Valuation: \$9,000.00  
Contractor Company:  
Contractor Name:

## ADJOINING PROPERTY FINDINGS

### 6515 E MARENGO DR

Date: **11/15/2013**  
Permit Type: **SWI**  
Description: **New Pool and Spa (452 sq. ft.) with gas for firepit.**

Permit Description: **SwimmingPool/Spa Permit**  
Work Class: **New Pool and / or Spa**  
Proposed Use:  
Permit Number: **SWI2013-00091**  
Status: **Issued**  
Valuation: **\$33,000.00**  
Contractor Company:  
Contractor Name: **SWAN POOLS OF SOUTHERN CALIFORNIA**

Date: **9/9/2008**  
Permit Type:  
Description: **Reroof: Tear off existing and reroof 30 squares with Eagle Light Weight Tile 7.2 lbs. ICC# 1900.**

Permit Description:  
Work Class: **Reroof**  
Proposed Use:  
Permit Number: **BLD2008-03126**  
Status:  
Valuation: **\$12,000.00**  
Contractor Company:  
Contractor Name: **TERRAZAS ROOFING**

## ADJOINING PROPERTY FINDINGS

### 6519 E MARENGO DR

Date: **8/8/2016**  
Permit Type: **SWI**  
Description: **Demolition of 533 sq. ft. swimming pool. Shell to remain**

Permit Description: **SwimmingPool/Spa Permit**  
Work Class: Demolition  
Proposed Use:  
Permit Number: SWI2016-00091  
Status: Issued  
Valuation: \$6,890.00  
Contractor Company:  
Contractor Name: KENNAH CONSTRUCTION INC

Date: **3/23/2012**  
Permit Type: **BLD**  
Description: **Electrical to change out 200 amp service.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2012-00966  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: INTERIOR ELECTRIC INC

## ADJOINING PROPERTY FINDINGS

Date: **3/21/2012**  
Permit Type: **BLD**  
Description: **Re-roof: Remove existing material install 29 squares of Eaglelite tile to house and attached garage. 5.8 psf.**

Permit Description: **Building Permit**  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2012-00920  
Status: Issued  
Valuation: \$16,100.00  
Contractor Company:  
Contractor Name: ROYAL ROOFING CORP

### 6523 E MARENGO DR

Date: **1/17/2007**  
Permit Type:  
Description: **Blockwall: Infill 3x5 cut out in existing 6 high blockwall**

Permit Description:  
Work Class: Blockwall / Columns  
Proposed Use:  
Permit Number: BLD2007-00120  
Status:  
Valuation: \$1,500.00  
Contractor Company:  
Contractor Name:

## ADJOINING PROPERTY FINDINGS

### 6531 E MARENGO DR

Date: **4/30/2018**  
Permit Type: **BLD**  
Description: **Electrical for 200 amp main service panel upgrade.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2018-01830  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: SUN SOLAR ENERGY SOLUTIONS

Date: **4/26/2018**  
Permit Type: **BLD**  
Description: **Residential Photovoltaic with 21 Micro-inverters**

Permit Description: **Building Permit**  
Work Class: Photovoltaic with Micro-Inverters  
Proposed Use: Additions, Alterations, and Conversions to Residential Buildings  
Permit Number: BLD2018-01792  
Status: Issued  
Valuation: \$32,886.00  
Contractor Company:  
Contractor Name: SUN SOLAR ENERGY SOLUTIONS

## ADJOINING PROPERTY FINDINGS

Date: **8/28/2006**  
Permit Type:  
Description: **Tear off existing install 7/16" OSB and reroof 26 squares with Monier Life Tile ICBO# 2656 @ 5.96 lb/sf**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2006-02312  
Status:  
Valuation: \$14,500.00  
Contractor Company:  
Contractor Name: HOSKINS RENOVATION COMPANY

### 6535 E MARENGO DR

Date: **3/27/2014**  
Permit Type: **BLD**  
Description: **Reroof: Remove existing material and install 22 squares of Eaglelite (Ponderosa-light weight) 7.0 lb tile over house and attached garage.**

Permit Description: **Building Permit**  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2014-01255  
Status: Issued  
Valuation: \$11,900.00  
Contractor Company:  
Contractor Name: HOYT ROOFS INC

## ADJOINING PROPERTY FINDINGS

Date: **6/8/2012**  
Permit Type: **SWI**  
Description: **New Pool/Spa: New 294 sq.ft. gunite pool with new 45 sq. ft. spa per plan.**

Permit Description: **SwimmingPool/Spa Permit**  
Work Class: New Pool and / or Spa  
Proposed Use:  
Permit Number: SWI2012-00043  
Status: Issued  
Valuation: \$35,000.00  
Contractor Company:  
Contractor Name: EXOTIC WATERWORLDS

Date: **10/10/2000**  
Permit Type:  
Description: **Remove precast fireplace construct new wood framed fireplace on existing footing.**

Permit Description:  
Work Class: Repair  
Proposed Use:  
Permit Number: BLD2000-03238  
Status:  
Valuation: \$1,020.00  
Contractor Company:  
Contractor Name:

Date: **10/10/2000**  
Permit Type:  
Description: **Install new superior prefab fireplace KR-38-3**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: MEC2000-01150  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

## ADJOINING PROPERTY FINDINGS

### 6536 E MARENGO DR

Date: **5/16/2016**  
Permit Type: **SWI**  
Description: **Alteration fo Existing: Relocate swimming pool equipment only.**

Permit Description: **SwimmingPool/Spa Permit**  
Work Class: Repair or Alteration of Existing  
Proposed Use:  
Permit Number: SWI2016-00060  
Status: Issued  
Valuation: \$500.00  
Contractor Company:  
Contractor Name:

Date: **5/21/2002**  
Permit Type:  
Description: **Replace A/C and heater. REF Mec2002-00427**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2002-00804  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

Date: **5/21/2002**  
Permit Type:  
Description: **Replace A/C and heater.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: MEC2002-00427  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

## ADJOINING PROPERTY FINDINGS

### 6542 E MARENGO DR

Date: **1/18/2018**  
Permit Type: **BLD**  
Description: **Mechanical: Air conditioner furnace and (7) duct change out.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2018-00239  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: SERVICE CHAMPIONS HEATING AND AIR C

Date: **3/11/2002**  
Permit Type:  
Description: **Install 360 sq ft combo solid/ lattice patio cover.**

Permit Description:  
Work Class: Patio Cover  
Proposed Use:  
Permit Number: BLD2002-00683  
Status:  
Valuation: \$5,000.00  
Contractor Company:  
Contractor Name: PATIO 2000 INC

Date: **5/22/2001**  
Permit Type:  
Description: **Diningroom extension change out windows & exterior doors.**

Permit Description:  
Work Class: Residential Addition  
Proposed Use:  
Permit Number: BLD2001-01822  
Status:  
Valuation: \$7,500.00  
Contractor Company:  
Contractor Name: BG CONSTRUCTION CO

## ADJOINING PROPERTY FINDINGS

Date: **5/22/2001**  
Permit Type:  
Description: **Electrical for Diningroom extension. Ref # BLD2001-00937**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2001-00937  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: BG CONSTRUCTION CO

Date: **5/22/2001**  
Permit Type:  
Description: **Replace kitchen & bathroom fixtures. Ref # BLD2001-01822**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2001-00801  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: BG CONSTRUCTION CO

### 6543 E MARENGO DR

Date: **6/11/2004**  
Permit Type:  
Description: **Replace dishwasher and relocate water line main.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2004-01048  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

## ADJOINING PROPERTY FINDINGS

### 6546 E MARENGO DR

Date: **8/11/2004**  
Permit Type:  
Description: **Change out dishwasher.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2004-01315  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: APPLIANCE INSTALLERS INC.

### 6547 E MARENGO DR

Date: **11/17/2009**  
Permit Type:  
Description: **Plumbing for water heater replacement.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2009-03801  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ALL STAR WATER HEATERS INC

## ADJOINING PROPERTY FINDINGS

### 6550 E MARENGO DR

Date: **9/8/2016**  
Permit Type: **BLD**  
Description: **Patio Cover: 174 sq.ft. attached lattice cover built per engineered plans.**

Permit Description: **Building Permit**  
Work Class: **Patio Cover**  
Proposed Use: **Additions, Alterations, and Conversions to Residential Buildings**  
Permit Number: **BLD2016-04340**  
Status: **Issued**  
Valuation: **\$2,000.00**  
Contractor Company:  
Contractor Name: **ALL PRO REMODELING**

Date: **9/6/2007**  
Permit Type:  
Description: **Reroof: Tear off and replace 23 squares of metal tile over house and attached garage.**

Permit Description:  
Work Class: **Reroof**  
Proposed Use:  
Permit Number: **BLD2007-01982**  
Status:  
Valuation: **\$6,800.00**  
Contractor Company:  
Contractor Name: **MC CORMACK ROOFING & WINDOW CO**

## ADJOINING PROPERTY FINDINGS

### S AMHERST CIR

#### 910 S AMHERST CIR

Date: **7/9/2013**  
Permit Type: **BLD**  
Description: **Electrical to upgrade service panel to 200 amps.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2013-02688  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

#### 931 S AMHERST CIR

Date: **10/1/2012**  
Permit Type: **BLD**  
Description: **Mechanical to replace air conditioning unit.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2012-03361  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ECONO AIR

## ADJOINING PROPERTY FINDINGS

Date: **2/10/2011**  
Permit Type:  
Description: **Plumbing for water heater replacement.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2011-00555  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: CALIFORNIA DELTA MECHANICAL INC

Date: **2/20/2003**  
Permit Type:  
Description: **Kitchen remodel raise ceiling new electrical cabinets with granite counters**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2003-00679  
Status:  
Valuation: \$40,000.00  
Contractor Company:  
Contractor Name: ANTOINES INTERNATIONAL TILE & MARB

Date: **2/20/2003**  
Permit Type:  
Description: **Kitchen remodel**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2003-00248  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ANTOINES INTERNATIONAL TILE & MARB

## ADJOINING PROPERTY FINDINGS

Date: **2/20/2003**  
Permit Type:  
Description: **kitchen remodel**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: MEC2003-00155  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ANTOINES INTERNATIONAL TILE & MARB

Date: **2/20/2003**  
Permit Type:  
Description: **Kitchen remodel**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2003-00316  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ANTOINES INTERNATIONAL TILE & MARB

### 941 S AMHERST CIR

Date: **5/24/2000**  
Permit Type:  
Description: **Replace dishwasher**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2000-00941  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: NOCK PLUMBING INC

## ADJOINING PROPERTY FINDINGS

Date: **3/28/2000**  
Permit Type:  
Description: **Replace Roof W/30 Yr GAF**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2000-00845  
Status:  
Valuation: \$5,800.00  
Contractor Company:  
Contractor Name: ECONO ROOF MAINTENANCE

### 950 S AMHERST CIR

Date: **7/10/2015**  
Permit Type: **BLD**  
Description: **Plumbing for water heater change out**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2015-03518  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: AFFORDABLE WATER HEATERS & PLU

Date: **3/11/2014**  
Permit Type: **BLD**  
Description: **Electrical for one level 2 EV charger in garage.**

Permit Description: **Building Permit**  
Work Class: EV Charger Level 2  
Proposed Use:  
Permit Number: BLD2014-00784  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: EXCELLENCE ELECTRIC INC

## ADJOINING PROPERTY FINDINGS

Date: **4/13/2009**  
Permit Type:  
Description: **Photovoltaic System: Install Residential System.**

Permit Description:  
Work Class: Photovoltaic System  
Proposed Use:  
Permit Number: BLD2009-00639  
Status:  
Valuation: \$20,000.00  
Contractor Company:  
Contractor Name: SOLARCITY CORPORATION

Date: **1/29/2003**  
Permit Type:  
Description: **Tear off existing wood shake and install 30 squares of 30 year comp. shingles**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2003-00399  
Status:  
Valuation: \$5,950.00  
Contractor Company:  
Contractor Name: THE ROOFING SPECIALISTS

## ADJOINING PROPERTY FINDINGS

### 951 S AMHERST CIR

Date: **2/4/2003**  
Permit Type:  
Description: **Tear off existing shake resheath replace fascia boards & reroof 34 sq with Eagle Tile ICBO # 4660. 9 lbs**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2003-00484  
Status:  
Valuation: \$12,600.00  
Contractor Company:  
Contractor Name: RONALD D ADAMS

### 971 S AMHERST CIR

Date: **8/13/2003**  
Permit Type:  
Description: **ELectrical for BLD2003-02858**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2003-01439  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: CAPISTRANO SUNROOMS

## ADJOINING PROPERTY FINDINGS

Date: **7/21/2003**  
Permit Type:  
Description: **Build 240 sq ft patio cover per ICBO # 2228P**

Permit Description:  
Work Class: Patio Cover  
Proposed Use:  
Permit Number: BLD2003-02858  
Status:  
Valuation: \$3,400.00  
Contractor Company:  
Contractor Name: CAPISTRANO SUNROOMS

### **S ASPENWOOD CIR**

#### **1000 S ASPENWOOD CIR**

Date: **2/13/2018**  
Permit Type: **BLD**  
Description: **Mechanical Electrical and Plumbing for bathroom remodel. Tile in shower area.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2018-00594  
Status: Issued  
Valuation: \$11,000.00  
Contractor Company:  
Contractor Name: MAROUNI INDUSTRIES INC

## ADJOINING PROPERTY FINDINGS

Date: **7/30/2008**  
Permit Type:  
Description: **Residential Remodel: Roof mounted Photovoltaic System**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2008-02618  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: REC SOLAR INC

### 1001 S ASPENWOOD CIR

Date: **8/24/2017**  
Permit Type: **BLD**  
Description: **Residential Photovoltaic System**

Permit Description: **Building Permit**  
Work Class: Photovoltaic System  
Proposed Use: Additions, Alterations, and Conversions to Residential Buildings  
Permit Number: BLD2017-03667  
Status: Issued  
Valuation: \$23.00  
Contractor Company:  
Contractor Name: BRIGHT LIFE SOLAR

## ADJOINING PROPERTY FINDINGS

Date: **11/9/2010**  
Permit Type:  
Description: **Mechanical and electrical for air conditioning unit furnace registers heating/cooling coil change out.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2010-04195  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ALISO AIR INC

Date: **10/9/2003**  
Permit Type:  
Description: **Replace existing shake with Ponderosa tile ICBO # 4660. 7.2 lbs. ( Added 1 skylight 30" x 46 ".)**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2003-04014  
Status:  
Valuation: \$6,100.00  
Contractor Company:  
Contractor Name: MCCORMACK ROOFING CO

Date: **1/16/2001**  
Permit Type:  
Description: **Supplement To ELE2000-01880**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2001-00073  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: J M B CONSTRUCTION A PARTNERSH

## ADJOINING PROPERTY FINDINGS

Date: **12/5/2000**  
Permit Type:  
Description: **Kitchen remodel**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2000-02054  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: J M B CONSTRUCTION A PARTNERSH

Date: **10/3/2000**  
Permit Type:  
Description: **100 sq ft Room addition.**

Permit Description:  
Work Class: Residential Addition  
Proposed Use:  
Permit Number: BLD2000-03167  
Status:  
Valuation: \$6,290.00  
Contractor Company:  
Contractor Name: J M B CONSTRUCTION A PARTNERSH

Date: **10/3/2000**  
Permit Type:  
Description: **Electrical for 100 sq ft Room Addition. Ref # BLD2000-03167**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2000-01880  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: J M B CONSTRUCTION A PARTNERSH

## ADJOINING PROPERTY FINDINGS

### 1006 S ASPENWOOD CIR

Date: **3/19/2015**  
Permit Type: **BLD**  
Description: **Photovoltaic System: Installation of residential roof mounted solar system.**

Permit Description: **Building Permit**  
Work Class: Photovoltaic System  
Proposed Use:  
Permit Number: BLD2015-01071  
Status: Issued  
Valuation: \$35,000.00  
Contractor Company:  
Contractor Name: SUNPRO SOLAR INC

Date: **8/5/2002**  
Permit Type:  
Description: **Change-out Dishwasher.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2002-01205  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: NOCK PLUMBING INC

Date: **1/5/2000**  
Permit Type:  
Description: **Tear Off Roof & REplace W/Eaglelite Tile ICBO 4660 7#**

Permit Description:  
Work Class:  
Proposed Use:  
Permit Number: BLD1999-00204  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

## ADJOINING PROPERTY FINDINGS

### S BUCKNELL CIR

#### 901 S BUCKNELL CIR

Date: **2/27/2008**  
Permit Type:  
Description: **Block wall: Build 6 high by 56 linear ft. block wall per city specifications.**

Permit Description:  
Work Class: Blockwall / Columns  
Proposed Use:  
Permit Number: BLD2008-00578  
Status:  
Valuation: \$2,000.00  
Contractor Company:  
Contractor Name: BEN CASTRO MASONRY INC

#### 920 S BUCKNELL CIR

Date: **2/9/2012**  
Permit Type: **BLD**  
Description: **Plumbing for water heater replacement.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2012-00477  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: PAYLESS WATER HEATERS & PLUMBING IN

## ADJOINING PROPERTY FINDINGS

Date: **3/8/2004**  
Permit Type:  
Description: **Tear off shakes and install 18 squares of Metro Metal shakes ICBO # 5626**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2004-00609  
Status:  
Valuation: \$3,000.00  
Contractor Company:  
Contractor Name: WESTERN ROOFING SYSTEMS

### 921 S BUCKNELL CIR

Date: **12/20/2016**  
Permit Type: **BLD**  
Description: **Mechanical for air conditioning and FAU change out (existing location).**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2016-06049  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: METROPOLITAN HEATING AND AIR COND

Date: **3/27/2003**  
Permit Type:  
Description: **Installation of water softening equipment.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2003-00483  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: CULLIGAN WATER CONDITIONING OF

## ADJOINING PROPERTY FINDINGS

Date: **3/21/2001**  
Permit Type:  
Description: **Add pool and spa.**

Permit Description:  
Work Class: New Pool and / or Spa  
Proposed Use:  
Permit Number: SWI2001-00041  
Status:  
Valuation: \$22,000.00  
Contractor Company:  
Contractor Name: J. AYALA DECKING CO

Date: **2/18/2000**  
Permit Type:  
Description: **Install reroof - t/o shake & repl w/ metal Decra Tile - ICBO # 3409**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2000-00466  
Status:  
Valuation: \$10,400.00  
Contractor Company:  
Contractor Name: CAL PAC ROOFING

### 930 S BUCKNELL CIR

Date: **2/7/2012**  
Permit Type: **BLD**  
Description: **Mechanical for heating appliance replacement.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2012-00438  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: SERVICE CHAMPIONS HEATING AND AIR C

## ADJOINING PROPERTY FINDINGS

### 931 S BUCKNELL CIR

Date: **2/15/2002**  
Permit Type:  
Description: **Water heater install.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2002-00253  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: COAST PLMBG HEATING & AIR INC

### 950 S BUCKNELL CIR

Date: **7/24/2015**  
Permit Type: **BLD**  
Description: **Photovoltaic System: Install residential roof mounted solar system with 38 modules. REF: BLD2015-03238**

Permit Description: **Building Permit**  
Work Class: Photovoltaic System  
Proposed Use:  
Permit Number: BLD2015-03236  
Status: Issued  
Valuation: \$37,500.00  
Contractor Company:  
Contractor Name: SCOTTS ELECTRIC

## ADJOINING PROPERTY FINDINGS

Date: **6/25/2015**  
Permit Type: **BLD**  
Description: **Electrical for 200 amp service panel upgrade (same location). REF: BLD2015-03236**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2015-03238  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: SCOTTS ELECTRIC

Date: **4/29/2014**  
Permit Type: **BLD**  
Description: **Mechanical to remove and replace air conditioning unit and F.A.U (same location).**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2014-01759  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: PRECISION COMFORT SYSTEMS

Date: **4/22/2014**  
Permit Type: **BLD**  
Description: **Re-roof: Tear off existing roof and install 7/16 OSB with 20 squares of composition shingles over house and attached garage.**

Permit Description: **Building Permit**  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2014-01675  
Status: Issued  
Valuation: \$9,000.00  
Contractor Company:  
Contractor Name: HOYT ROOFS INC

## ADJOINING PROPERTY FINDINGS

Date: **10/21/2008**  
Permit Type:  
Description: **Residential Remodel: enlarge wall openings in kitchen.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2008-01184  
Status:  
Valuation: \$4,000.00  
Contractor Company:  
Contractor Name: J M A CONSTRUCTION

### 960 S BUCKNELL CIR

Date: **10/16/2015**  
Permit Type: **BLD**  
Description: **Mechanical for air conditioning unit and FAU change out with ductwork**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2015-05450  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: AIR CONCEPTS

Date: **10/13/2014**  
Permit Type: **BLD**  
Description: **Electrical for 225 amp service panel upgrade (same location). REF: BLD2014-04027**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2014-04660  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: A1 SOLAR POWER INC

## ADJOINING PROPERTY FINDINGS

Date: **10/8/2014**  
Permit Type: **BLD**  
Description: **Photovoltaic System: Install residential roof mounted solar system with 36 panels.  
REF: BLD2014-04660**

Permit Description: **Building Permit**  
Work Class: Photovoltaic System  
Proposed Use:  
Permit Number: BLD2014-04027  
Status: Issued  
Valuation: \$70,000.00  
Contractor Company:  
Contractor Name: A1 SOLAR POWER INC

Date: **3/22/2007**  
Permit Type:  
Description: **Electrical for kitchen remodel; REF BLD2006-01822**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2007-00397  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: NOFAR

Date: **3/22/2007**  
Permit Type:  
Description: **Mechanical for wall removal at kitchen and replace with beam for kitchen remodel  
(Ref. BLD2006-01822)**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: MEC2007-00245  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: NOFAR

## ADJOINING PROPERTY FINDINGS

Date: **3/22/2007**  
Permit Type:  
Description: **Plumbing for wall removal at kitchen and replace with beam for kitchen remodel (Ref. BLD2006-01822)**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2007-00326  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: NOFAR

Date: **7/7/2006**  
Permit Type:  
Description: **Remove wall at kitchen and replace with beam for kitchen remodel**

Permit Description:  
Work Class: Residential Addition  
Proposed Use:  
Permit Number: BLD2006-01822  
Status:  
Valuation: \$3,000.00  
Contractor Company:  
Contractor Name: NOFAR

Date: **11/16/2005**  
Permit Type:  
Description: **Remove wrought iron guard rail and replace with stucco wall. Plan submitted 11/15/05 and approved.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2005-02839  
Status:  
Valuation: \$1,000.00  
Contractor Company:  
Contractor Name: NOFAR

## ADJOINING PROPERTY FINDINGS

Date: **3/3/2005**  
Permit Type:  
Description: **Install partition wall to create a workshop.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2005-00552  
Status:  
Valuation: \$5,000.00  
Contractor Company:  
Contractor Name: CUMMINS CONSTRUCTION

Date: **3/3/2005**  
Permit Type:  
Description: **Electrical for Installation partition wall to create a workshop. (BlD2005-00552)**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2005-00281  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

## ADJOINING PROPERTY FINDINGS

### S CALLE VENADO

#### 955 S CALLE VENADO

Date: **5/13/2016**  
Permit Type: **BLD**  
Description: **Plumbing for repipe using copper.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2016-02362  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: AMERI CAL REPIPE AND PLUMBING

Date: **3/22/2013**  
Permit Type: **BLD**  
Description: **Residential Remodel: Re-tile shower area with electrical mechanical and plumbing for bathroom remodel.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2013-01126  
Status: Issued  
Valuation: \$1,000.00  
Contractor Company:  
Contractor Name: A T M CONSTRUCTION & COATING INC DBA JUST DO IT BUILDERS

## ADJOINING PROPERTY FINDINGS

Date: **3/26/2012**  
Permit Type: **BLD**  
Description: **Residential Remodel: Retile shower mechanical electrical and plumbing for bathroom remodel.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2012-00984  
Status: Issued  
Valuation: \$200.00  
Contractor Company:  
Contractor Name: MASTER BUILDER GROUP

Date: **10/12/2010**  
Permit Type:  
Description: **Remodel: Replace electrical for two pool lights switches and outlets.**

Permit Description:  
Work Class: Repair or Alteration of Existing  
Proposed Use:  
Permit Number: SWI2010-00094  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

Date: **10/11/2010**  
Permit Type:  
Description: **Block Wall: Construct 15 linear ft. of retaining wall up to 4 high per city specifications.**

Permit Description:  
Work Class: Blockwall / Columns  
Proposed Use:  
Permit Number: BLD2010-03829  
Status:  
Valuation: \$2,000.00  
Contractor Company:  
Contractor Name: JILL L PRICE

## ADJOINING PROPERTY FINDINGS

Date: **9/29/2010**  
Permit Type:  
Description: **Plumbing for gas line repair for fire pit.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2010-03663  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: JILL L PRICE

Date: **2/19/2010**  
Permit Type:  
Description: **Mechanical to replace heating and air conditioning system. (16 seers energy efficient)**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2010-00558  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: BRRR AIR CONDITIONING-HEATING

## ADJOINING PROPERTY FINDINGS

### 965 S CALLE VENADO

Date: **9/7/2012**  
Permit Type: **BLD**  
Description: **Photovoltaic System: Install residential system.**

Permit Description: **Building Permit**  
Work Class: Photovoltaic System  
Proposed Use:  
Permit Number: BLD2012-02436  
Status: Issued  
Valuation: \$17,489.00  
Contractor Company:  
Contractor Name: SUNGATE ENERGY SOLUTIONS INC

Date: **8/10/2004**  
Permit Type:  
Description: **Remove existing shake roof and replace with 30 year composition.**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2004-03090  
Status:  
Valuation: \$6,757.00  
Contractor Company:  
Contractor Name: SISCO ROOFING-FENCING

## ADJOINING PROPERTY FINDINGS

### 975 S CALLE VENADO

Date: **6/17/2002**  
Permit Type:  
Description: **Tear off existing wood shake install 7/16" OSB 2 layers 30# felt & reroof 27 sq with Eaglelite Tile. ICBO # 4660 (7.2 lbs)**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2002-01839  
Status:  
Valuation: \$7,500.00  
Contractor Company:  
Contractor Name: FRAME ROOFING

### S PEGASUS ST

#### 1010 S PEGASUS ST

Date: **1/24/2018**  
Permit Type: **BLD**  
Description: **Patio Cover: 375 sq ft open alumawood patio cover to be half solid and half lattice with electrical. IAPMO 195**

Permit Description: **Building Permit**  
Work Class: Patio Cover  
Proposed Use: Additons, Alterations, and Conversions to Residential Buildings  
Permit Number: BLD2018-00181  
Status: Issued  
Valuation: \$3,500.00  
Contractor Company:  
Contractor Name: DIAMOND CONSTRUCTION & DESIGN

## ADJOINING PROPERTY FINDINGS

Date: **7/14/2014**  
Permit Type: **BLD**  
Description: **Residential Remodel: Installation of stainless steel liner in chimney.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2014-03019  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: CHIMNEY SAFETY EXPERTS

Date: **11/1/2007**  
Permit Type:  
Description: **Re-roof: Remove existing material install 30 sq. ft. of Monier tile for house and attached garage. ICC #1647 5.9 psf.**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2007-02424  
Status:  
Valuation: \$10,500.00  
Contractor Company:  
Contractor Name: CHARLES STEC CO

## ADJOINING PROPERTY FINDINGS

### 1040 S PEGASUS ST

Date: **6/4/2012**  
Permit Type: **BLD**  
Description: **Mechanical to replace heating unit.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2012-01850  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: BILL PASLAY HEATING AIR CONDITIONIN

Date: **3/26/2007**  
Permit Type:  
Description: **Replace existing water service from meter to house.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2007-00336  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: GEORGE BRAZIL PLUMBING HEATING

## ADJOINING PROPERTY FINDINGS

### 1057 S PEGASUS ST

Date: **10/3/2017**  
Permit Type: **BLD**  
Description: **Mechanical: relocate furnace to attic change out air conditioner change out (7) registers. Add gas and electrical to attic area. Change out disconnect**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use: Additions, Alterations, and Conversions to Residential Buildings  
Permit Number: BLD2017-04321  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

Date: **9/22/2017**  
Permit Type: **BLD**  
Description: **Residential Remodel: Remove dividing wall between kitchen and dining room. Remodel kitchen and master bathroom**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use: Additions, Alterations, and Conversions to Residential Buildings  
Permit Number: BLD2017-04098  
Status: Issued  
Valuation: \$40,000.00  
Contractor Company:  
Contractor Name:

## ADJOINING PROPERTY FINDINGS

Date: **8/12/2011**  
Permit Type: **BLD**  
Description: **Reroof: Tear off existing material and install 26 squares of metal shake.**

Permit Description: **Building Permit**  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2011-03127  
Status: Issued  
Valuation: \$8,600.00  
Contractor Company:  
Contractor Name: MC CORMACK ROOFING & WINDOW CO

### 1070 S PEGASUS ST

Date: **8/20/2009**  
Permit Type:  
Description: **Patio Cover: Build 378 sq. ft. custom patio cover per engineered drawings (originally built prior to obtaining permit)**

Permit Description:  
Work Class: Patio Cover  
Proposed Use:  
Permit Number: BLD2009-01336  
Status:  
Valuation: \$2,000.00  
Contractor Company:  
Contractor Name:

## ADJOINING PROPERTY FINDINGS

Date: **1/18/2006**  
Permit Type:  
Description: **Build 80 lineal feet of 6 feet high block wall and (6) pilasters 6 high per city specifications**

Permit Description:  
Work Class: Blockwall / Columns  
Proposed Use:  
Permit Number: BLD2006-00162  
Status:  
Valuation: \$6,000.00  
Contractor Company:  
Contractor Name:

Date: **2/22/2000**  
Permit Type:  
Description: **EMPED "1070 T-PWR" 200 Amp For Pumps (Alter address to "1077 T-PWR" request of utilities)**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2000-00323  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: KING COMPANY CHARLES

## ADJOINING PROPERTY FINDINGS

### S QUINCY CIR

#### 970 S QUINCY CIR

Date: **5/26/2011**  
Permit Type:  
Description: **Plumbing for water heater replacement.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2011-02016  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: CALIFORNIA DELTA MECHANICAL INC

Date: **11/30/2005**  
Permit Type:  
Description: **New water softner.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2005-01609  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: EVINGER PLUMBING

## ADJOINING PROPERTY FINDINGS

### 981 S QUINCY CIR

Date: **10/30/2017**  
Permit Type: **BLD**  
Description: **Plumbing for PEX repipe and (3) hose bibb change out.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2017-04891  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: AMERI CAL REPIPE AND PLUMBING INC

Date: **6/13/2006**  
Permit Type:  
Description: **Install electrical for portable BBQ; REFPLM2006-00816**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: ELE2006-00885  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: GOLDEN LEAF DESIGN & CONSTRUCTION

Date: **6/13/2006**  
Permit Type:  
Description: **Install gas line for portable BBQ**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2006-00816  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: GOLDEN LEAF DESIGN & CONSTRUCTION

## ADJOINING PROPERTY FINDINGS

Date: **5/5/2003**  
Permit Type:  
Description: **Tear off existing tile and install 20 squares of Tile 5.9 lbs ICBO # ER3523**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2003-01688  
Status:  
Valuation: \$8,780.00  
Contractor Company:  
Contractor Name: COAST ROOFING

Date: **2/26/2002**  
Permit Type:  
Description: **Replace water main.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2002-00310  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: GEORGE BRAZIL PLUMBING HEATING

Date: **11/27/2001**  
Permit Type:  
Description: **Change out water heater**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2001-01807  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: COAST PLMBG HEATING & AIR INC

## ADJOINING PROPERTY FINDINGS

Date: **6/30/2000**  
Permit Type:  
Description: **Gunite Pool & Spa**

Permit Description:  
Work Class: New Pool and / or Spa  
Proposed Use:  
Permit Number: SWI2000-00107  
Status:  
Valuation: \$19,000.00  
Contractor Company:  
Contractor Name: SWAN POOLS OF SOUTHERN CALIFOR

### 990 S QUINCY CIR

Date: **4/23/2002**  
Permit Type:  
Description: **Water Heater change out.**

Permit Description:  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: PLM2002-00597  
Status:  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: A L A P ASSOCIATES G P

## ADJOINING PROPERTY FINDINGS

### 998 S QUINCY CIR

Date: **3/21/2017**  
Permit Type: **BLD**  
Description: **Electrical for island/bbq. REF: SWI2016-00115**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2017-01179  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name:

Date: **10/11/2016**  
Permit Type: **SWI**  
Description: **Swimming pool / Spa: Construct 392 sq. ft. gunite pool and 49 sq. gunite spa.**

Permit Description: **SwimmingPool/Spa Permit**  
Work Class: New Pool and / or Spa  
Proposed Use:  
Permit Number: SWI2016-00115  
Status: Issued  
Valuation: \$20,000.00  
Contractor Company:  
Contractor Name: ALCAZAR CUSTOM POOLS INC

## ADJOINING PROPERTY FINDINGS

### 999 S QUINCY CIR

Date: **5/14/2014**  
Permit Type: **BLD**  
Description: **Plumbing for (40-gal.) water heater change out.**

Permit Description: **Building Permit**  
Work Class: Residential Remodel  
Proposed Use:  
Permit Number: BLD2014-02039  
Status: Issued  
Valuation: \$0.00  
Contractor Company:  
Contractor Name: ALL STAR WATER HEATERS INC

Date: **9/22/2006**  
Permit Type:  
Description: **Remove existing material resheath and install 29 squares of eagle lite tile for house with attached garage. ICBO 4660 at 5.5 lbs per sq. ft.**

Permit Description:  
Work Class: Reroof  
Proposed Use:  
Permit Number: BLD2006-02559  
Status:  
Valuation: \$8,900.00  
Contractor Company:  
Contractor Name: HOYT ROOFS INC

## GLOSSARY

### General Building Department concepts

- **ICC:** The International Code Council. The governing body for the building/development codes used by all jurisdictions who've adopted the ICC guidelines. MOST of the US has done this. Canada, Mexico, and other countries use ICC codes books and guides as well. There are a few states who have added guidelines to the ICC codes to better fit their needs. For example, California has added seismic retrofit requirements for most commercial structures.
- **Building Department (Permitting Authority, Building Codes, Inspections Department, Building and Inspections):** This is the department in a jurisdiction where an owner or contractor goes to obtain permits and inspections for building, tearing down, remodeling, adding to, re-roofing, moving or otherwise making changes to any structure, Residential or Commercial.
- **Jurisdiction:** This is the geographic area representing the properties over which a Permitting Authority has responsibility.
- **GC:** General Contractor. Usually the primary contractor hired for any Residential or Commercial construction work.
- **Sub:** Subordinate contracting companies or subcontractors. Usually a "trades" contractor working for the GC. These contractors generally have an area of expertise in which they are licensed like Plumbing, Electrical, Heating and Air systems, Gas Systems, Pools etc. (called "trades").
- **Journeyman:** Sub contractors who have their own personal licenses in one or more trades and work for different contracting companies, wherever they are needed or there is work.
- **HVAC (Mechanical, Heating & Air companies):** HVAC = Heating, Ventilation, and Air Conditioning.
- **ELEC (Electrical, TempPole, TPole, TPower, Temporary Power, Panel, AMP Change, Power Release):** Electrical permits can be pulled for many reasons. The most common reason is to increase the AMPs of power in an electrical power panel. This requires a permit in almost every jurisdiction. Other commons reason for Electrical permits is to insert a temporary power pole at a new construction site. Construction requires electricity, and in a new development, power has yet to be run to the lot. The temporary power pole is usually the very first permit pulled for new development. The power is released to the home owner when construction is complete and this sometimes takes the form of a Power Release permit or inspection.
- **"Pull" a permit:** To obtain and pay for a building permit.
- **CBO:** Chief Building Official
- **Planning Department:** The department in the development process where the building /structural plans are reviewed for their completeness and compliance with building codes
- **Zoning Department:** The department in the development process where the site plans are reviewed for their compliance with the regulations associated with the zoning district in which they are situated.
- **Zoning District:** A pre-determined geographic boundary within a jurisdiction where certain types of structures are permitted / prohibited. Examples are Residential structure, Commercial/Retail structures, Industrial/Manufacturing structures etc. Each zoning district has regulations associated with it like the sizes of the lots, the density of the structures on the lots, the number of parking spaces required for certain types of structures on the lots etc.
- **PIN (TMS, GIS ID, Parcel#):** Property Identification Number and Tax Map System number.
- **State Card (Business license):** A license card issued to a contractor to conduct business.
- **Building Inspector (Inspector):** The inspector is a building department employee that inspects building construction for compliance to codes.
- **C.O.:** Certificate of Occupancy. This is the end of the construction process and designates that the owners now have permission to occupy a structure after its building is complete. Sometimes also referred to as a Certificate of Compliance.

## GLOSSARY

### Permit Content Definitions

- Permit Number: The alphanumerical designation assigned to a permit for tracking within the building department system. Sometimes the permit number gives clues to its role, e.g. a "PL" prefix may designate a plumbing permit.
- Description: A field on the permit form that allows the building department to give a brief description of the work being done. More often than not, this is the most important field for EP's to find clues to the prior use(s) of the property.
- Permit Type: Generally a brief designation of the type of job being done. For example BLDG-RES, BLDG-COM, ELEC, MECH etc.

### Sample Building Permit Data

Date: Nov 09, 2000  
Permit Type: Bldg -  
New Permit Number: 101000000405  
Status: Valuation: \$1,000,000.00  
Contractor Company: OWNER-BUILDER  
Contractor Name:

Description: New one store retail (SAV-ON) with drive-thru pharmacy. Certificate of Occupancy.

# APPENDIX G

# Important Information about This

# Geoenvironmental Report

Geoenvironmental studies are commissioned to gain information about environmental conditions on and beneath the surface of a site. The more comprehensive the study, the more reliable the assessment is likely to be. But remember: Any such assessment is to a greater or lesser extent based on professional opinions about conditions that cannot be seen or tested. Accordingly, no matter how many data are developed, risks created by unanticipated conditions will always remain. *Have realistic expectations.* Work with your geoenvironmental consultant to manage known and unknown risks. Part of that process should already have been accomplished, through the risk allocation provisions you and your geoenvironmental professional discussed and included in your contract's general terms and conditions. This document is intended to explain some of the concepts that may be included in your agreement, and to pass along information and suggestions to help you manage your risk.

## **Beware of Change; Keep Your Geoenvironmental Professional Advised**

The design of a geoenvironmental study considers a variety of factors that are subject to change. Changes can undermine the applicability of a report's findings, conclusions, and recommendations. *Advise your geoenvironmental professional about any changes you become aware of.* Geoenvironmental professionals cannot accept responsibility or liability for problems that occur because a report fails to consider conditions that did not exist when the study was designed. Ask your geoenvironmental professional about the types of changes you should be particularly alert to. Some of the most common include:

- modification of the proposed development or ownership group,
- sale or other property transfer,
- replacement of or additions to the financing entity,

- amendment of existing regulations or introduction of new ones, or
- changes in the use or condition of adjacent property.

Should you become aware of any change, *do not rely on a geoenvironmental report.* Advise your geoenvironmental professional immediately; follow the professional's advice.

## **Recognize the Impact of Time**

A geoenvironmental professional's findings, recommendations, and conclusions cannot remain valid indefinitely. The more time that passes, the more likely it is that important latent changes will occur. *Do not rely on a geoenvironmental report if too much time has elapsed since it was completed.* Ask your environmental professional to define "too much time." In the case of Phase I Environmental Site Assessments (ESAs), for example, more than 180 days after submission is generally considered "too much."

## **Prepare To Deal with Unanticipated Conditions**

The findings, recommendations, and conclusions of a Phase I ESA report typically are based on a review of historical information, interviews, a site "walkover," and other forms of noninvasive research. When site subsurface conditions are not sampled in any way, the risk of unanticipated conditions is higher than it would otherwise be.

While borings, installation of monitoring wells, and similar invasive test methods can help reduce the risk of unanticipated conditions, *do not overvalue the effectiveness of testing.* Testing provides information about actual conditions only at the precise locations where samples are taken, and only when they are taken. Your geoenvironmental

professional has applied that specific information to develop a general opinion about environmental conditions. *Actual conditions in areas not sampled may differ (sometimes sharply) from those predicted in a report.* For example, a site may contain an unregistered underground storage tank that shows no surface trace of its existence. *Even conditions in areas that were tested can change, sometimes suddenly, due to any number of events, not the least of which include occurrences at adjacent sites.* Recognize, too, that *even some conditions in tested areas may go undiscovered,* because the tests or analytical methods used were designed to detect only those conditions assumed to exist.

Manage your risks by retaining your geoenvironmental professional to work with you as the project proceeds. Establish a contingency fund or other means to enable your geoenvironmental professional to respond rapidly, in order to limit the impact of unforeseen conditions. And to help prevent any misunderstanding, identify those empowered to authorize changes and the administrative procedures that should be followed.

### **Do Not Permit Any Other Party To Rely on the Report**

Geoenvironmental professionals design their studies and prepare their reports to meet the specific needs of the clients who retain them, in light of the risk management methods that the client and geoenvironmental professional agree to, and the statutory, regulatory, or other requirements that apply. The study designed for a developer may differ sharply from one designed for a lender, insurer, public agency...or even another developer. *Unless the report specifically states otherwise, it was developed for you and only you.* Do not unilaterally permit any other party to rely on it. The report and the study underlying it may not be adequate for another party's needs, and you could be held liable for shortcomings your geoenvironmental professional was powerless to prevent or anticipate. Inform your geoenvironmental professional when you know or expect that someone else—a third-party—will want to use or rely on the report. *Do not permit third-party use or reliance until you first confer with the geoenvironmental professional who prepared the report.* Additional testing, analysis, or study may be required and, in any event, appropriate terms and conditions should be agreed to so both you and your geoenvironmental professional are protected from third-party risks. *Any party who relies on a geoenvironmental report without the express written permission of the professional who prepared it and the client for whom it was prepared may be solely liable for any problems that arise.*

### **Avoid Misinterpretation of the Report**

Design professionals and other parties may want to rely on the report in developing plans and specifications. They need to be advised, in writing, that their needs may not have been considered when the study's scope was developed, and, even if their needs were considered, they might misinterpret geoenvironmental findings, conclusions, and recommendations. *Commission your geoenvironmental professional to explain pertinent elements of the report to others who are permitted to rely on it, and to review any plans, specifications or other instruments of professional service that incorporate any of the report's findings, conclusions, or recommendations.* Your geoenvironmental professional has the best understanding of the issues involved, including the fundamental assumptions that underpinned the study's scope.

### **Give Contractors Access to the Report**

Reduce the risk of delays, claims, and disputes by giving contractors access to the full report, *providing that it is accompanied by a letter of transmittal that can protect you* by making it unquestionably clear that: 1) the study was not conducted and the report was not prepared for purposes of bid development, and 2) the findings, conclusions, and recommendations included in the report are based on a variety of opinions, inferences, and assumptions and are subject to interpretation. Use the letter to also advise contractors to consult with your geoenvironmental professional to obtain clarifications, interpretations, and guidance (a fee may be required for this service), and that—in any event—they should conduct additional studies to obtain the specific type and extent of information each prefers for preparing a bid or cost estimate. Providing access to the full report, with the appropriate caveats, helps prevent formation of adversarial attitudes and claims of concealed or differing conditions. If a contractor elects to ignore the warnings and advice in the letter of transmittal, it would do so at its own risk. Your geoenvironmental professional should be able to help you prepare an effective letter.

### **Do Not Separate Documentation from the Report**

Geoenvironmental reports often include supplemental documentation, such as maps and copies of regulatory files, permits, registrations, citations, and correspondence with regulatory agencies. If subsurface explorations were performed, the report may contain final boring logs and copies of laboratory data. If remediation activities occurred on site, the report may include: copies of daily field reports; waste manifests; and information about the disturbance of subsurface materials, the type and thickness of any fill placed on site, and fill placement practices, among other types of documentation. *Do not separate supplemental documentation from the report. Do not, and do not permit any other party to redraw or modify any of the supplemental documentation for incorporation into other professionals' instruments of service.*

### **Understand the Role of Standards**

Unless they are incorporated into statutes or regulations, standard practices and standard guides developed by the American Society for Testing and Materials (ASTM) and other recognized standards-developing organizations (SDOs) are little more than aspirational methods agreed to by a consensus of a committee. The committees that develop standards may not comprise those best-qualified to establish methods and, no matter what, no standard method can possibly consider the infinite client- and project-specific variables that fly in the face of the theoretical "standard conditions" to which standard practices and standard guides apply. In fact, these variables can be so pronounced that geoenvironmental professionals who comply with every directive of an ASTM or other standard procedure could run afoul of local custom and practice, thus violating the standard of care. Accordingly, when geoenvironmental professionals indicate in their reports that they have performed a service "in general compliance" with one standard or another, it means they have applied professional judgement in creating and implementing a scope of service designed for the specific client and project involved, and which follows some of the general precepts laid out in the referenced standard. To the extent that a report indicates "general compliance" with a standard, you may wish to speak with your geoenvironmental professional to learn more about what was and was not done. *Do not assume a given standard was followed to the letter.* Research indicates that that seldom is the case.

### **Realize That Recommendations May Not Be Final**

The technical recommendations included in a geoenvironmental report are based on assumptions about actual conditions, and so are preliminary or tentative. Final recommendations can be prepared only by observing actual conditions as they are exposed. For that reason, you should retain the geoenvironmental professional of record to observe construction and/or remediation activities on site, to permit rapid response to unanticipated conditions. *The geoenvironmental professional who prepared the report cannot assume responsibility or liability for the report's recommendations if that professional is not retained to observe relevant site operations.*

### **Understand That Geotechnical Issues Have Not Been Addressed**

Unless geotechnical engineering was specifically included in the scope of professional service, a report is not likely to relate any findings, conclusions, or recommendations about the suitability of subsurface materials for construction purposes, especially when site remediation has been accomplished through the removal, replacement, encapsulation, or chemical treatment of on-site soils. The equipment, techniques, and testing used by geotechnical engineers differ markedly from those used by geoenvironmental professionals; their education, training, and experience are also significantly different. If you plan to build on the subject site, but have not yet had a geotechnical engineering study conducted, your geoenvironmental professional should be able to provide guidance about the next steps you should take. The same firm may provide the services you need.

### Read Responsibility Provisions Closely

Geoenvironmental studies cannot be exact; they are based on professional judgement and opinion. Nonetheless, some clients, contractors, and others assume geoenvironmental reports are or certainly should be unerringly precise. Such assumptions have created unrealistic expectations that have led to wholly unwarranted claims and disputes. To help prevent such problems, geoenvironmental professionals have developed a number of report provisions and contract terms that explain who is responsible for what, and how risks are to be allocated. Some people mistake these for “exculpatory clauses,” that is, provisions whose purpose is to transfer one party’s rightful responsibilities and liabilities to someone else. Read the responsibility provisions included in a report and in the contract you and your geoenvironmental professional agreed to. *Responsibility provisions are not “boilerplate.”* They are important.

### Rely on Your Geoenvironmental Professional for Additional Assistance

Membership in the Geoprofessional Business Association exposes geoenvironmental professionals to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a geoenvironmental project. Confer with your GBA-member geoenvironmental professional for more information.



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## Appendix C Sewer Study

## Appendices

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TECHNICAL MEMORANDUM

To: Keith Linker  
From: Mike Swan  
Date: October 3, 2017, Revised December 3, 2018  
Subject: Sewer Study – 6509 E. Serrano Avenue  
City Project Tracking No.: OTH2017-00983

---



**Introduction**

The purpose of this memorandum is to revise the subject sewer study prepared for a proposed project that originally included the demolition of the existing buildings at the project site and the development of a 60-unit condominium project. The current project calls for a minor reduction in the number of units to 58.

**Project Revision and Sewer Flow**

The original 60-unit project generated a net additional average sewage flow of 3,690 gallons per day (gpd) on the site when the existing flow from the commercial development on the site was subtracted from the proposed flow. The two dwelling unit reduction decreases the net additional average flow by 480 gpd to 3,210 gpd and now results in a net additional peak flow from the site of only 1,494 gpd compared to a previous increase in peak flow of 2,358 gpd.

**Analysis**

The original sewer study for the project indicated that the maximum increase in d/D ratio from the increased project flow at Buildout condition was only 2% and all of the increased ratios were safely below the threshold for pipe capacity limits (0.67 for pipes less than 12 inches in diameter, and 0.75 for pipes greater than or equal to 12 inches in diameter). The lower peak flow increase due to the two-unit reduction in the project would reduce this d/D increase to approximately 1%.

**Conclusion**

The conclusions due to this reduction in dwelling units and corresponding reduction in flow increase on the site are unchanged from the original October 2017 sewer study as follows:

1. No additional sewer system improvements are required for the proposed 6509 East Serrano Avenue project including 58 condominium units.
2. If the East Anaheim Master Plan of Sanitary Sewer revision has not been completed, the consultant preparing that update should be made aware of this minor change in land use. If that revision has been completed, this minor change will not be significant enough to warrant an amendment.

**TECHNICAL MEMORANDUM**

To: Keith Linker  
 From: Mike Swan  
 Date: October 3, 2017  
 Subject: Sewer Study – 6509 E. Serrano Avenue  
 City Project Tracking No.: OTH2017-00983



**Introduction**

The purpose of this memorandum is to document a sewer study prepared for a proposed project that would include the demolition of the existing buildings at the project site and the development of a 60-unit condominium project. The project is proposed to be constructed on Assessor Parcel No. (APN) 365-062-09, totaling 3.06 acres. The site is bounded on the south by Serrano Avenue, on the west by Nohl Ranch Road, and on the north and east by existing residential land uses as shown on Figure 1.

**Existing and Proposed Land Use and Sewer Flow**

Currently, APN 365-062-090 consists of commercial land uses including a Performing Arts Academy, a bridal outlet, a marketplace, a math and reading center, and a swim school, among other various commercial uses. In researching the Combined East Anaheim Area Master Plan of Sanitary Sewers (CEAAMPSS) dated December 2005, it was determined that the downstream tributary basin for this site spanned over three different models: Model 58, Model 56, and Model 46. In the CEAAMPSS, each model area in the East Anaheim area was modeled separately for both Buildout and Existing conditions using Hydra computer models.

The proposed 60 condominium units are proposed to be loaded to manhole SW286216 on the existing 8-inch Serrano Avenue sewer. For this study, it was assumed that the existing land use was also loaded to the same manhole, SW0286216. The existing and proposed manhole loading with flow generation is summarized in Table 1. Flow factors are in gallons per day (gpd)/acre and gpd/dwelling unit (DU). The downstream tributary area for the project crosses from Model 58 to Model 56 and finally to Model 46 before discharging into the Orange County Sanitation District (OCSD) Trunk Sewer.

Based on the CEAAMPSS, the Existing System Scenario included the flows shown in Table 2, with this table also showing the average flow increases due to the proposed project. The existing flow factor for commercial land uses from the CEAAMPSS was 3,500 gpd/acre, based on OCSD unit flow factors. Since the CEAAMPSS is currently being revised, the proposed flow factor for condominiums of 240 gpd/DU from the more recent calibrated land use flows from the First Revision to the Combined Central Anaheim Area Master Plan of Sanitary Sewers (CCAAMPSS) is used in this detailed sewer study. As shown in Table 2, the total average daily flow increase to the sewer collection system is 3,690 gpd with the proposed land use (14,400 gpd – 10,710 gpd).

Commercial flows peak at a slightly higher factor than residential land uses (2.2 vs. 1.8) and the flow increase due to the project in terms of peak flows is shown on Table 2 as only 2,358 gpd

**Table 1 – Existing and Proposed Manhole Flow Loading**

Manhole Number	Existing/ Proposed	Units		Flow Factor (gpd/unit)	Existing Average Flow (gpd)	Proposed Average Flow (gpd)
		Acres	DUs			
<b>SW286216</b>						
Commercial	Existing	3.06		3,500	10,710	-
<b>Total Flow to SW286216</b>					<b>10,710</b>	-
<b>SW286216</b>						
Condominiums	Proposed		60	240	-	14,400
<b>Total Flow to SW286216</b>					-	<b>14,400</b>

**Table 2 – Existing and Proposed Flow Increases Due to Proposed Project**

Project Parcels	Units		Flow Factor (gpd/unit)	Average Flow (gpd)	Peaking Factor	Peak Flow (gpd)
	Acres	DUs				
<b>Existing Flow</b>						
Commercial	3.06		3,500	10,710		
<b>Total Existing Flow</b>				<b>10,710</b>	2.2	<b>23,562</b>
<b>Proposed Project Flow</b>						
Condominiums		60	240	14,400		
<b>Total Proposed Flow</b>				<b>14,400</b>	1.8	<b>25,920</b>
<b>Flow Increase</b>				<b>3,690</b>		<b>2,358</b>

**Existing Condition Sewer Analysis**

Atlas maps from the CEAAMPSS were researched to obtain pipeline diameters, slopes and lengths for this new study area model. The Existing condition scenario models were not initially examined for this study, and instead the Buildout condition models were examined first in order to save time. This is because Buildout flows are higher than Existing flows and the additional flow is fairly low, so if there were no deficiencies determined in the Buildout conditions, there would be no deficiencies in the Existing condition as well.

**Buildout Condition Sewer Analysis**

The Buildout condition scenario without additional project flows and depth-to-Diameter (d/D) ratios for the sewer collection system from the hydraulic Hydra models are shown in Table 3. The d/D deficiency criteria is a ratio greater than 0.67 for pipes less than 12 inches in diameter, and is greater than 0.75 for pipes greater than or equal to 12 inches in diameter. As shown on Table 3, the greatest d/D ratio in any downstream sewer reach in the buildout condition without

the additional project flows is 0.60. Therefore, the buildout system does not have any capacity deficiencies in the downstream collection system from the project site before the minor flow increase from the proposed project is added.

As shown in Table 2, above, the peak flow increase from the proposed project is only 2,358 gpd or 1.64 gallons per minute (gpm). The five greatest d/D ratios in any downstream sewer reaches in the Buildout condition without the additional project flows are as follows: 0.51 in an 8-inch reach, 0.52 in a 10-inch reach, 0.53 and 0.58 in two 15-inch reaches, and 0.60 in an 18-inch reach. If we add the proposed additional 2,358 gpm of flow to each of these five reaches, the maximum increase in d/D is only 2%. For this reason, we can safely conclude that the additional proposed flow does not trigger any capacity deficiencies in the downstream sewer collection system in the Buildout Scenario. Because there are no capacity deficiencies in the Buildout condition with the added project flow, it can also be concluded that there are no capacity deficiencies in the downstream sewer collection system in the Existing condition with the added project flow.

### **Conclusion**

As described above, no additional sewer system improvements are required for the proposed 6509 East Serrano Avenue project including 60 condominium units.

Also, it is recommended that a copy of this sewer study be provided to the City's project manager and the consultant currently responsible for updating the CEAAMPSS for incorporation into that master plan.

Attachments: Figure 1, Table 3, Hunsaker & Associates Site Plan Map



**FIGURE 1  
LOCATION MAP**

**Table 3 - Buildout Land Use Scenario Without Project**

Street	Cross Street	Model	Upstrm MH-Dwnstrm MH	Size (in)	Length (ft)	Slope (ft/ft)	Peak Flow (cfs)	Peak Flow (gpm)	d/D
Serrano	Project	58	SW286216-SW286214	8	361	0.003	0.010	4	0.12
		58	SW286214-SW286215	8	169	0.007	0.035	16	0.18
		Calle Venado	58	SW286215-SW287213	8	266	0.016	0.041	18
Calle Venado	Serrano	58	SW287213-SW287109	8	206	0.009	0.181	81	0.30
	Carnegie	58	SW287109-SW286209	8	282	0.038	0.186	83	0.24
		58	SW286209-SW286204	8	212	0.029	0.221	99	0.27
	Princeton	58	SW286204-SW286203	8	73	0.003	0.246	110	0.45
	Edinboro	58	SW286203-SW205439	8	54	0.002	0.256	115	0.51
Hills	Calle Venado	58	SW205439-SW205440	8	126	0.004	0.275	123	0.42
		58	SW205440-SW211309	8	482	0.274	0.275	123	0.18
		58	SW211309-SW211308	8	197	0.014	0.275	123	0.33
		58	SW211308-SW211306	8	172	0.039	0.274	123	0.27
		58	SW211306-SW0211302	8	107	0.075	0.274	123	0.24
		58	SW0211302-SW211303	8	49	0.112	0.274	123	0.21
		58	SW211303-SW211301	10	322	0.061	0.837	375	0.29
		58/56	SW211301-SW211106	10	250	0.012	0.837	375	0.44
		56	SW211106-SW211103	12	249	0.010	0.842	378	0.34
		56	SW211103-SW211101	10	383	0.017	0.974	437	0.41
		56	SW211101-SW205204	10	460	0.058	0.972	436	0.31
		56	SW205204-SW205201	12	213	0.004	0.969	435	0.46
		56	SW205201-SW204406	12	306	0.010	0.967	434	0.36
		56	SW204406-SW204405	12	236	0.004	1.357	609	0.32
		56	SW204405-SW204403	12	204	0.039	1.353	607	0.32
		56	SW204403-SW204402	12	189	0.010	1.353	607	0.44
		56	SW204402-SW204401	12	344	0.010	1.353	607	0.44
		56	SW204401-SW204305	12	335	0.009	1.352	607	0.44
		56	SW204305-SW204304	12	324	0.010	1.351	606	0.44
		56	SW204304-SW204303	12	95	0.123	1.765	792	0.28
		56	SW204303-SW204302	12	148	0.080	1.765	792	0.30
		56	SW204302-SW204301	12	140	0.010	1.765	792	0.50
		56	SW204301-SW204306	12	419	0.010	1.765	792	0.50
		56	SW204306-SW198407	12	390	0.026	1.764	791	0.40
		56	SW198407-SW198406	12	239	0.021	1.762	790	0.42
		56	SW198406-SW198402	12	357	0.026	1.761	790	0.40
		56	SW198402-SW198403	12	188	0.039	1.765	792	0.36
		56/46	SW198403-SW198401	12	250	0.126	1.765	792	0.27
		46	SW198401-SW198316	12	272	0.017	1.765	792	0.50
		46	SW198316-SW198315	12	133	0.014	1.762	790	0.52
		46	SW198315-SW198314	12	347	0.017	1.760	790	0.50
		46	SW198314-SW198312	15	315	0.040	1.885	846	0.30
46	SW198312-SW198311	15	276	0.026	1.893	849	0.34		
Nohl Ranch	Canyon Rim	46	SW198311-SW198412	15	339	0.029	1.895	850	0.32
		46	SW192412-SW192408	15	217	0.019	2.468	1,107	0.42
	Anaheim Hills	46	SW192408-SW192402	15	347	0.020	2.470	1,108	0.42
Anaheim Hills	Nohl Ranch	46	SW192402-SW192221	15	193	0.017	2.535	1,137	0.43
		46	SW192221-SW192220	15	343	0.019	2.533	1,136	0.42
		46	SW192220-SW192214	15	364	0.019	2.536	1,138	0.42
		46	SW192214-SW192206	15	355	0.019	2.533	1,136	0.42
	San Vincente	46	SW192206-SW192202	15	151	0.026	2.530	1,135	0.38
		46	SW192202-SW191429	15	185	0.026	2.534	1,137	0.38
		46	SW191429-SW191420	15	317	0.025	2.534	1,137	0.38
		46	SW191420-SW191418	15	140	0.032	2.539	1,139	0.37
	Via Montanera	46	SW191418-SW191410	15	199	0.028	2.543	1,141	0.38
		46	SW191410-SW191403	15	340	0.025	2.543	1,141	0.38
		46	SW191403-SW191226	15	270	0.024	2.542	1,140	0.40
		46	SW191226-SW191223	15	272	0.021	2.541	1,140	0.42
	Santa Ana Canyon	46	SW191223-SW191212	15	339	0.030	2.540	1,139	0.37
		46	SW191212-SW191210	15	253	0.009	2.538	1,139	0.53
		46	SW191210-SW190426	15	732	0.015	2.536	1,138	0.45
		46	SW190426-SW190418	15	341	0.006	2.531	1,135	0.58
OCSD Outlet	46	SW190418-SW190404	18	347	0.002	2.526	1,133	0.60	

Source: CEAAMPSS Hydra Computer Model Files for Models 58, 56 and 46, Psomas, December 2005.

