

### **MITIGATED NEGATIVE DECLARATION**

The City of Sacramento, California, a municipal corporation, does hereby prepare, declare, and publish this Mitigated Negative Declaration for the following described project:

**Sutter Greens 2.0 Project (P21-013):** The 9.06-acre project site is located southeast of the intersection of West El Camino Avenue and Natomas Park Drive in the South Natomas Community Plan area in the City of Sacramento, California (Assessor's Parcel Number 274-0410-016). The project site is located within the South Natomas Community Plan and the Creekside Oaks Planned Unit Development (PUD), and is currently occupied by the Natomas Sports Club. The entire project site is developed with a parking lot, tennis courts, swimming pool, outdoor covered areas, and a building/fitness center. The General Plan designates the project site Suburban Neighborhood High Density, and the project site is zoned R-2B-PUD.

The proposed project would include the demolition of the existing Natomas Sports Club and redevelopment of the project site with a multi-family development consisting of 190 units distributed throughout 10 three-story buildings. In addition to the multi-family development, the proposed project would include amenities such as a playground, pool, clubhouse, and two dog parks. Up to 353 parking spaces would be provided on-site, consisting of approximately 253 surface parking spaces and 96 covered spaces. The proposed project would require Site Design Review approval and an amendment to the Creekside Oaks PUD Guidelines.

The Lead Agency is the City of Sacramento. The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that there is no substantial evidence that the project, with mitigation measures as identified in the attached Initial Study, will have a significant effect on the environment. This Mitigated Negative Declaration reflects the lead agency's independent judgment and analysis. An Environmental Impact Report is not required. This Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (Public Resources Code [PRC] Sections 21000 et seq.), CEQA Guidelines (Title 14, Sections 15000 et seq. of the California Code of Regulations), the Sacramento Local Environmental Regulations (Resolution 91-892), and the Sacramento City Code.

Due to concerns over COVID-19, the City of Sacramento, Community Development Department's Public Counter, at 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811 is closed until further notice. A copy of this document and all supportive documentation may be reviewed through the City's website at <https://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports>.

Environmental Services Manager, City of  
Sacramento, California, a municipal corporation

By: Scott Johnson

Date: August 16, 2021



**SUTTER GREENS 2.0 PROJECT**  
**(P21-013)**

**INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION FOR ANTICIPATED SUBSEQUENT  
PROJECTS UNDER THE 2035 GENERAL PLAN MASTER EIR**

This Initial Study has been prepared by the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Act (PRC Sections 21000 *et seq.*), CEQA Guidelines (Title 14, Section 15000 *et seq.* of the California Code of Regulations) and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento.

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**ORGANIZATION OF THE INITIAL STUDY**

This Initial Study is organized into the following sections:

**SECTION I - BACKGROUND:** Provides summary background information about the project name, location, sponsor, and the date this Initial Study was completed.

**SECTION II - PROJECT DESCRIPTION:** Includes a detailed description of the proposed project.

**SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION:** Reviews proposed project and states whether the project would have additional significant environmental effects (project-specific effects) that were not evaluated in the Master EIR for the 2035 General Plan.

**SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:** Identifies which environmental factors were determined to have additional significant environmental effects.

**SECTION V - DETERMINATION:** States whether environmental effects associated with development of the proposed project are significant, and what, if any, added environmental documentation may be required.

**REFERENCES CITED:** Identifies source materials that have been consulted in the preparation of the Initial Study.

**APPENDICES:** Appends technical information that was referenced as attached in the preparation of the IS/MND.

## **SECTION I - BACKGROUND**

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Project Name and File Number: Sutter Greens 2.0 Project (P21-013)

Project Location: 2450 Natomas Park Drive  
Sacramento, CA 95833  
Assessor's Parcel Number (APN) 274-0410-016

Project Applicant: Demmon Partners  
601 University Avenue, Suite 110  
Sacramento, CA 95825

Project Planner: Jose Quintanilla, Associate Planner  
(916) 808-5879  
[jquintanilla@cityofsacramento.org](mailto:jquintanilla@cityofsacramento.org)

Environmental Planner: Ron Bess , Associate Planner  
(916) 808-8272  
[Rbess@cityofsacramento.org](mailto:Rbess@cityofsacramento.org)

Date Initial Study Completed: August 2021

This Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA) (PRC Sections 1500 *et seq.*). The Lead Agency is the City of Sacramento.

The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that the proposed project is an anticipated subsequent project identified and described in the 2035 General Plan Master EIR and is consistent with the land use designation and the permissible densities and intensities of use for the project site as set forth in the 2035 General Plan. See CEQA Guidelines Section 15176 (b) and (d).

The City has prepared the attached Initial Study to review the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the 2035 General Plan Master EIR to determine their adequacy for the project (see CEQA Guidelines Section 15178(b),(c)) and identify any potential new or additional project-specific significant environmental effects that were not analyzed in the Master EIR and any mitigation measures or alternatives that may avoid or mitigate the identified effects to a level of insignificance, if any.

As part of the Master EIR process, the City is required to incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the Master EIR (CEQA Guidelines Section 15177(d)) Policies included in the 2035 General Plan that reduce significant impacts identified in the Master EIR are identified and discussed. See also the Master EIR for the 2035 General Plan. The mitigation monitoring plan for the 2035 General Plan, which provides references to applicable general plan policies that reduce the environmental effects of development that may occur consistent with the general plan, is included in the adopting resolution for the Master EIR. See City Council Resolution No. 2015-0060, beginning on page 60. The resolution is available at:

<http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx>.

This analysis incorporates by reference the general discussion portions of the 2035 General Plan Master EIR. (CEQA Guidelines Section 15150(a)). The Master EIR is available for public review at the City of Sacramento's web site at:

<http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx>

The City is soliciting views of interested persons and agencies on the content of the environmental information presented in this document. Written comments should be sent at the earliest possible date, but no later than the 20-day review period ending September 7, 2021.

Please send written responses to:

Ron Bess, Associate Planner  
Community Development Department  
City of Sacramento  
300 Richards Boulevard, 3rd Floor  
Sacramento, CA 95811  
Direct Line: (916) 808-8272  
[Rbess@cityofsacramento.org](mailto:Rbess@cityofsacramento.org)

## **SECTION II - PROJECT DESCRIPTION**

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### **INTRODUCTION**

The Project Description section of the Initial Study provides a description of the Sutter Greens 2.0 Project (proposed project) location, existing conditions, surrounding land uses, and project components.

### **PROJECT LOCATION, EXISTING CONDITIONS, AND SURROUNDING LAND USES**

The 9.06-acre project site is located southeast of the intersection of West El Camino Avenue and Natomas Park Drive in the South Natomas Community Plan area in the City of Sacramento, California (APN 274-0410-016) (see Figure 1). The site is bounded by West El Camino to the north and Natomas Park Drive to the south. Regional access is provided by Interstate 5 (I-5) to the east, and Interstate 80 (I-80) to the south. In addition, the project site is approximately 0.7-mile north of the American River.

The project site is located within the South Natomas Community Plan area and the Creekside Oaks Planned Unit Development (PUD) and is currently occupied by the Natomas Sports Club. The entire project site is developed with a parking lot, tennis courts, swimming pool, outdoor covered areas, and a building/fitness center. The General Plan designates the project site Suburban Neighborhood High Density, and the project site is zoned R-2B-PUD.

Surrounding land uses include single-family residences to the north, multi-family housing to the east, a business park and daycare to the west, and multi-family housing to the south. The Bannon Creek Preserve Trail traverses the western portion of the project site, West El Camino Avenue extends along the northern site boundary, and Natomas Park Drive extends along the southern site boundary (see Figure 2).

### **PROJECT DESCRIPTION**

The proposed project would include the demolition of the existing Natomas Sports Club and redevelopment of the project site with a multi-family development consisting of 190 units distributed throughout 10 three-story buildings. Demolition would include removal of the on-site buildings and associated outdoor facilities (i.e., tennis courts, parking lots, swimming pool). The proposed project would require Site Plan and Design Review approval and an amendment to the Creekside Oaks PUD Guidelines and Schematic Plan to allow multi-family residential uses within the Health Building Zone.

A discussion of the project's components, including the residential units, construction phasing, site access and circulation, landscaping, utility infrastructure, and project entitlements, is included below.

#### Residential Units

The proposed multi-family development would consist of 164,712 net square feet (sf) in total. Of the 190 units, 82 would be one bed/one bath, 102 would be two bed/two bath, and 6 would be three bed/two bath. The proposed density of the project would be 21.0 dwelling units per acre. In addition to the multi-family development, the proposed project would include amenities such as a playground, pool, clubhouse, and two dog parks (see Figure 3). The clubhouse would include a fitness center, bicycle storage room, lounge, dining area, and leasing office. Additionally, the project would include a 16-foot trail easement traversing the western portion of the project site to retain and improve the existing Bannon Creek Preserve Trail.

#### Construction Phasing

Construction of the proposed project is anticipated to begin in May 2022 and continue over a span of approximately two years. Construction of the site would require demolition of 34,000 sf of building material over a three-month period. In addition, eight acres of the project site would be graded over an approximately two-month time period.

Figure 1  
Regional Project Location

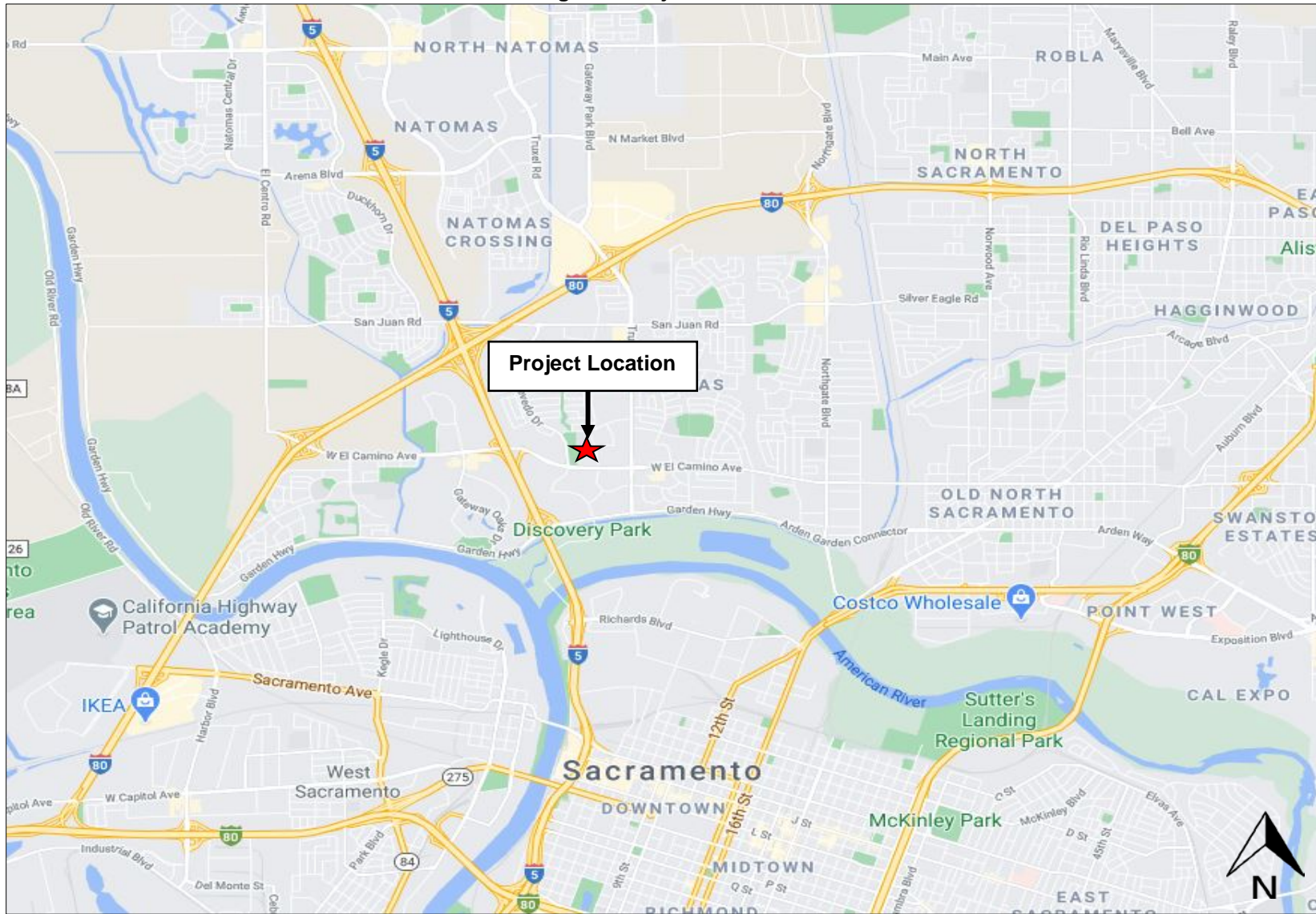
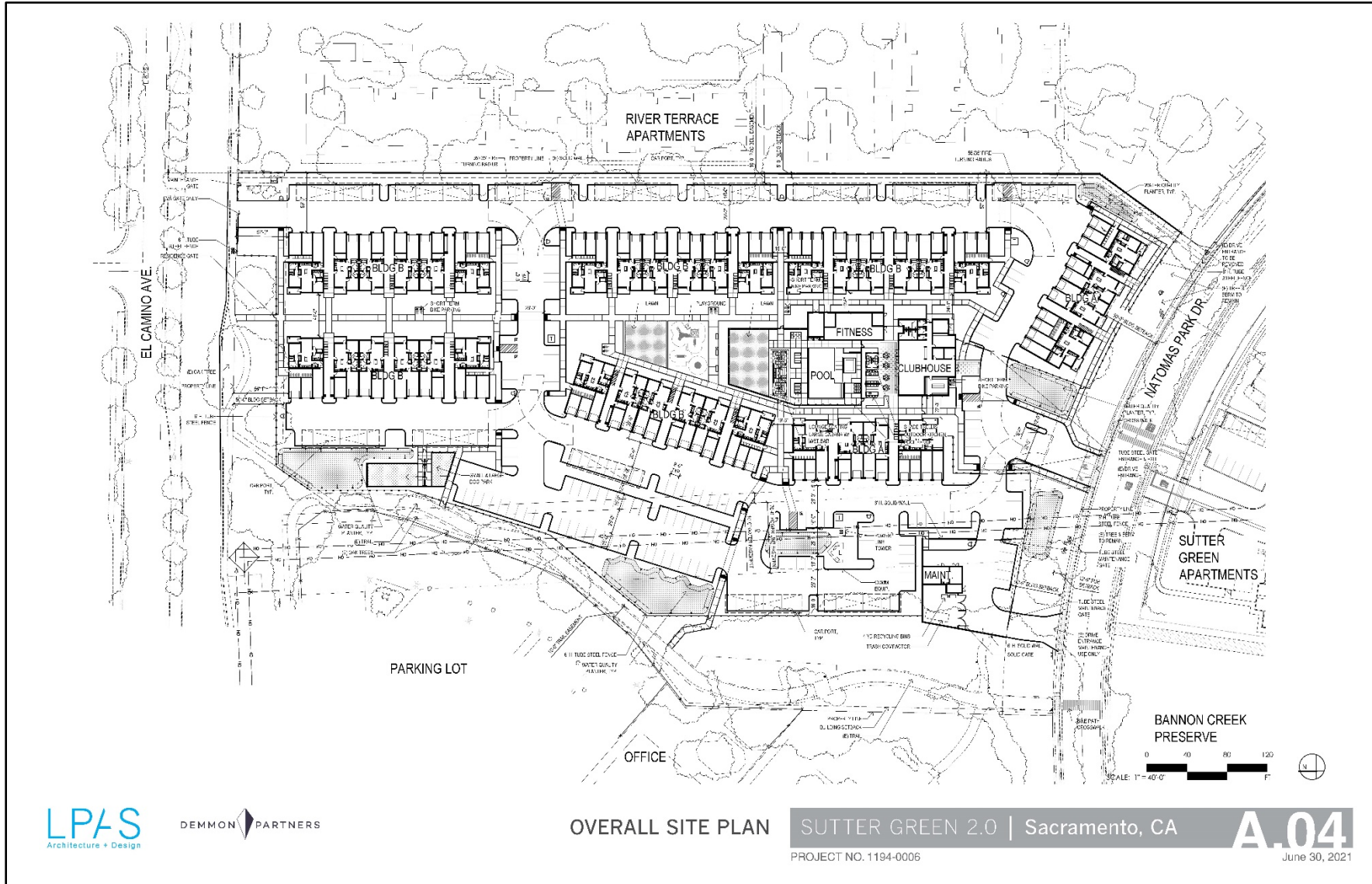


Figure 2  
Project Vicinity Map



**Figure 3**  
**Site Plan**



**LPAS**  
Architecture + Design

**DEMMON PARTNERS**

**OVERALL SITE PLAN**

**SUTTER GREEN 2.0 | Sacramento, CA**

**A.04**

PROJECT NO. 1194-0006

June 30, 2021



### Site Access, Parking, and Circulation

Currently, access to the site is provided by two driveways from Natomas Park Drive. Both existing driveways would be removed as part of the project, and access to the project site would be provided by way of a new gated entrance/exit to/from Natomas Park Drive (see Figure 4). Additionally, a new Emergency Vehicle Access (EVA) driveway would be provided onto West El Camino Avenue. Internal circulation would be provided by a 26-foot-wide roadway. In addition, the project would retain and would provide pedestrian and bicycle access to the Bannon Creek Preserve Trail, which extends through the western portion of the project site. The proposed development would have access to the trail from two proposed access points: one access point would be located within the dog park north of the trail towards West El Camino, and the second access point would be located south of trail towards Natomas Park Drive.

Up to 353 parking spaces would be provided on-site, consisting of approximately 253 surface parking spaces and 96 covered spaces. In addition, 98 long-term and 20 short-term bicycle spaces would be provided.

### Landscaping

As part of the proposed project, 54 on-site trees would be removed to facilitate the redevelopment of the project site. However, the proposed landscaping plan, included as Figure 5, would provide various replacement trees and other vegetation throughout the site.

### Utility Infrastructure

The following discussion relates to the water, wastewater, and stormwater drainage infrastructure components of the proposed project (see Figure 6).

#### *Water*

Municipal water for the existing use on-site is currently supplied by the City of Sacramento Department of Utilities. The City uses surface water from the American and Sacramento rivers as well as groundwater north of the American River to meet the City's demands. The City would continue to supply water to the proposed project. The proposed project includes an existing 10-foot water transmission easement along the southwestern property line of the project site. The project would connect to the existing water main located in Natomas Park Drive through a network of 12–48-inch water lines. The project will prepare a project-specific water study to show that the existing flows in the area can supply the project's domestic and fire flows demand for review and approval by the Department of Utilities.

#### *Wastewater*

Wastewater treatment for the existing use on-site is currently provided by the Sacramento Area Sewer District (SASD) and the Sacramento Regional County Sanitation District (SRCSD). Wastewater generated in the project area is collected in the SASD system through a series of sewer pipes and pump stations. Once collected in the SASD system, wastewater flows into the SRCSD interceptor system, where the wastewater is conveyed to the Sacramento Regional Wastewater Treatment Plant (SRWWTP). The SRWWTP is owned and operated by the SRCSD and provides sewage treatment for the entire City. SASD requires each building with a wastewater source on each lot to have a separate connection to SASD's sewer system. The project would connect to the existing sanitary sewer main located in Natomas Park Drive through a network of eight-inch sewer lines.

#### *Stormwater Drainage*

The City's Department of Utilities provides storm drainage service throughout the City by using drain inlets, pumps, and canals. The City provides stormwater drainage with either the City's Combined Sewer System (CSS) or into individual drainage sumps located throughout the City. Stormwater collected by the CCS is transported to the SRCSD's SRWWTP, where runoff is then treated prior to discharge into the Sacramento River. Existing stormwater drainage infrastructure would continue to serve the proposed project. The project

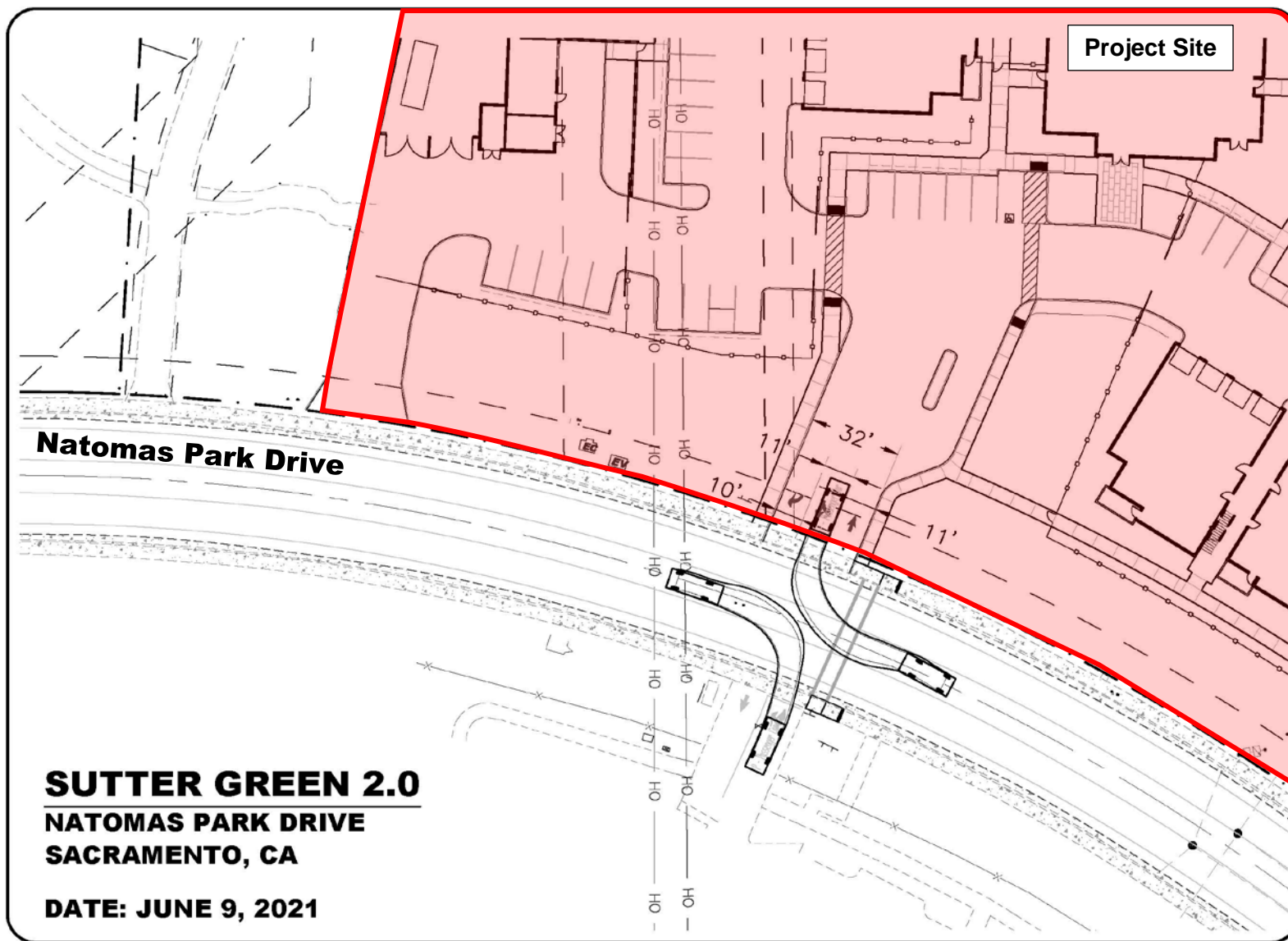
would connect to the existing storm drain located in Natomas Park Drive and West El Camino through a new network of stormwater lines. The project will prepare a project specified drainage study meeting the criteria in the current Department of Utilities Onsite Design Manual for review and approval by the DOU.

Project Entitlements

The proposed project would require approval of the following entitlements:

- Approval of the IS/MND and Mitigation and Monitoring Plan;
- Amendment to the Creekside Oaks PUD Guidelines and Schematic Plan; and
- Site Plan and Design Review.

**Figure 4**  
**Driveway Improvement**



**Figure 5**  
**Landscape Plan**





## **SECTION III – ENVIRONMENTAL CHECKLIST AND DISCUSSION**

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### **LAND USE, POPULATION AND HOUSING, AGRICULTURAL RESOURCES**

#### **Introduction**

The California Environmental Quality Act (CEQA) requires the Lead Agency to examine the effects of a project on the physical conditions that exist within the area that would be affected by the project. CEQA also requires a discussion of any inconsistency between the proposed project and applicable general plans and regional plans.

An inconsistency between the proposed project and an adopted plan for land use development in a community would not constitute a physical change in the environment. When a project diverges from an adopted plan, however, it may affect planning in the community regarding infrastructure and services, and the new demands generated by the project may result in later physical changes in response to the project.

In the same manner, the fact that a project brings new people or demand for housing to a community does not, by itself, change the physical conditions. An increase in population may, however, generate changes in retail demand or demand for governmental services, and the demand for housing may generate new activity in residential development. Physical environmental impacts that could result from implementing the proposed project are discussed in the appropriate technical sections.

This section of the initial study identifies the applicable land use designations, plans and policies, and permissible densities and intensities of use, and discusses any inconsistencies between these plans and the proposed project. This section also discusses agricultural resources and wildfire, and the effect of the project on these resources.

#### **Discussion**

##### Land Use

The project site is designated Suburban Neighborhood High Density in the 2035 General Plan, and the project site is zoned R-2B-PUD. Suburban Neighborhood designations provides for single-use multi-family housing and predominantly residential mixed-use development in areas served by major transportation routes and facilities, and near major shopping facilities.

The project site is located in an urbanized portion of the community. Surrounding land uses include single-family residences to the north, multi-family housing to the east, a business park and daycare to the west, and multi-family housing to the south. The current land use development standards allow for a density range of 15 to 30.0 units per net acre, and the R-2B zone allows a density up to 21.0 units per acre. The proposed project includes a density of 20.97 units per acre, which is within the allowable range defined by the land use designation within the General Plan and the R-2B zoning district. As a result, the proposed project would be considered consistent with the General Plan land use and zoning designations. Therefore, the proposed project would be subject to goals and policies pursuant to land use designation within the General Plan.

The project would include an amendment to the Creekside Oaks PUD Guidelines and Schematic Plan to allow multi-family residential uses within the Health Building Zone. However, the proposed project would remain consistent with the overall PUD Schematic Plan, and would not conflict with any existing surrounding land uses.

Development of the site would alter the existing on-site landscape from a sports club to multi-family residences. However, the redevelopment would be consistent with surrounding land uses and land use designated for urban development in the 2035 General Plan and the Planning and Development Code.

Given that portions of the site are currently developed, and the site does not contain any existing residential development, implementation of the project would not physically divide an established community.

Based on the above, the proposed project would not result in impacts related to land use.

#### Population and Housing

The proposed project would include the construction of a 190-unit multi-family residential development distributed throughout 10 buildings in the South Natomas Community Plan. Consequently, development would add to the population in the City. However, as previously mentioned, the proposed project is consistent with the General Plan land use and zoning designations. As such, impacts related to population and housing associated with buildout of the project site would have been analyzed as part of the Master EIR analysis. As a result, the project would not be considered to induce population beyond what was previously analyzed in the Master EIR. Implementation of the proposed project would not displace any existing housing units or people. Construction or replacement of housing elsewhere would not be required for the project.

#### Agricultural Resources

The Master EIR discussed the potential impact of development under the 2035 General Plan on agricultural resources (see Master EIR, Chapter 4.1). In addition to evaluating the effect of the General Plan on sites within the City, the Master EIR noted that to the extent the Sacramento General Plan accommodates future growth within the City limits, the conversion of farmland outside the City limits is minimized (Master EIR, page 4.1-3). The Master EIR concluded that the impact of the General Plan on agricultural resources within the City was less than significant.

The project site has already been developed and the project site is located in an urbanized area surrounding by residential and commercial development. According to the California Department of Conservation Important Farmland Map, the project site is 100 percent Urban and Built-Up Land.<sup>1</sup> As such, the project site does not contain soils designated as Important Farmland (i.e., Prime Farmland, Unique Farmland or Farmland of Sitewide Importance). The site is not zoned for agricultural uses and is not under a Williamson Act contract. In addition, the project site is not utilized for agricultural or timber-harvest operations.

#### Wildfire

The Master EIR does not identify any significant impacts related to wildfire risk. Per the CAL FIRE Fire and Resources Assessment Program (FRAP), the City of Sacramento is located within a Local Responsibility Area (LRA). The City is not located within or adjacent to a State Responsibility Area (SRA) or a designated Very High Fire Hazard Severity Zone (VHFHSZ). Furthermore, the project site is located within a developed area where a substantial wildland-urban interface does not exist. Thus, the risk of wildfire at the project site is minimal. Based on the above, the proposed project would not create a substantial fire risk for existing development in the project vicinity.

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<sup>1</sup> California Department of Conservation. *California Important Farmland Finder*. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed March 2021.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<b>1. AESTHETICS</b> Would the proposal:			X
A) Create a new source of glare that would cause a public hazard or annoyance?			X
B) Create a new source of light that would be cast onto oncoming traffic or residential uses?			X
C) Substantially degrade the existing visual character of the site or its surroundings?			X

**ENVIRONMENTAL SETTING**

The project site is located on a 9.06-acre site that is currently occupied by the Natomas Sports Club building/fitness center. The project site is located south of West El Camino and northeast of Natomas Park Drive, generally within an area of the City featuring single and multi-family residential developments as well as commercial development. Surrounding land uses include single-family residences to the north, multi-family housing to the east, a business park and daycare to the west, and multi-family housing to the south. The site is bound by the Bannon Creek Preserve Trail to the west, West El Camino Avenue to the north, and Natomas Park Drive to the south.

Public views of the project site include views from motorists, bicyclists, and pedestrians travelling on West El Camino Avenue and Natomas Park Drive, as well as from bicycles and pedestrians travelling along the Bannon Creek Preserve Trail. Public views of the project site from West El Camino Avenue and Natomas Park Drive are partially obscured due to various landscaping trees that line the roadway along the perimeter of the project site.

Existing scenic resources in the City include major natural open space features such as the American River and Sacramento River, including associated parkways. In addition, the State Capitol is a scenic resource within the City defined by the Capitol View Protection Ordinance. The project site does not contain scenic resources or within an area designated as a scenic resource or vista. The California Department of Transportation (Caltrans) manages the State Scenic Highway System which provides guidance and assists local government agencies with the process to officially designate scenic highways. According to Caltrans, designated scenic highways are not located in proximity to the project site and the project site is not visible from any State-designated scenic highways.<sup>2</sup>

**STANDARDS OF SIGNIFICANCE**

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to aesthetics would occur if the project would:

- Substantially interfere with an important scenic resource or substantially degrade the view of an existing scenic resource; or
- Create a new source of substantial light or glare that is substantially greater than typical urban sources and could cause sustained annoyance or hazard for nearby sensitive receptors.

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<sup>2</sup> California Department of Transportation. *California Scenic Highway Mapping System, Sacramento County*. Available at: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983>. Accessed March 2021.



## **SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

The Master EIR described the existing visual conditions in the City of Sacramento, and the potential changes to those conditions that could result from development consistent with the 2035 General Plan. See Master EIR, Chapter 4.13, Visual Resources.

The Master EIR identified potential impacts for light and glare (Impact 4.13-1) and concluded that impacts would be less than significant.

### **ANSWERS TO CHECKLIST QUESTIONS**

#### Questions A and B

According to the Master EIR, the City of Sacramento is mostly built out, and a large amount of ambient light from urban uses already exists. New development under the Sacramento General Plan could add sources of light that are similar to the existing urban light sources from one of the following: exterior building lighting, new street lighting, parking lot lights, and headlights of vehicular traffic. Sensitive land uses would generally be residential uses, especially single- and multi-family residences. The nearest sensitive residential use to the project site is directly east and south of the project site. Potential new sources of light associated with development and operation of the proposed project would be similar to adjacent residential uses to the east and south of the project site.

Because the City of Sacramento is mostly built-out with a level of ambient light that is typical of and consistent with the urban character of a large city and new development allowed under the 2035 General Plan would be subject to the General Plan policies, building codes, and (for larger projects) design review, the introduction of substantially greater intensity or dispersal of light would not occur. For example, Policy ER 7.1.3. Lighting requires that misdirected, excessive, or unnecessary outdoor lighting be minimized. In addition, Policy ER 7.1.4: Reflective Glass prohibits new development from resulting in any of the following:

- (1) using reflective glass that exceeds 50 percent of any building surface and on the bottom three floors;
- (2) using mirrored glass;
- (3) using black glass that exceeds 25 percent of any surface of a building;
- (4) using metal building materials that exceed 50 percent of any street-facing surface of a primarily residential building; and
- (5) using exposed concrete that exceeds 50 percent of any building.

The proposed project would be required to comply with the aforementioned General Plan policies, which would be ensured through the Site Plan and Design Review process. Additionally, it is noted that the project site currently includes several sources of light and glare associated with the Natomas Sports Club. Redevelopment of the site with the proposed project would not result in substantially more light and/glare than what already exists.

Based on the above, while the proposed project would introduce sources of light and glare to the project site that are different from what currently exists, the type and intensity of light and glare would be similar to that of the surrounding developments and would be consistent with the existing land use. The proposed project would comply with all applicable General Plan policies related to minimizing light and glare, and compliance with such policies would be ensured during the design review for the project. Therefore, the proposed project would have **no additional significant environmental effect** beyond what was previously evaluated in the Master EIR.

#### Question C

New development associated with the 2035 General Plan could result in changes to important scenic resources as seen from visually sensitive locations. As described above under "Thresholds of Significance"

important existing scenic resources include major natural open space features such as the American River and Sacramento River, including associated parkways. Another important scenic resource is the State Capitol (as defined by the Capitol View Protection Ordinance). Other potential important scenic resources include important historic structures listed on the Sacramento Register of Historic and Cultural Resources, California and/or National Registers.

Visually-sensitive public locations include viewpoints where a change to the visibility of an important scenic resource, or a visual change to the resource itself, would affect the general public. Visually-sensitive public locations include public plazas, trails, parks, parkways, or designated, publicly available and important scenic corridors (e.g., Capitol View Protection Corridor).

The proposed project is not located near significant visual resources such as the Sacramento River, American River, or the State Capitol. While the project site is approximately 57 feet east of the Bannon Creek Preserve Trail, the proposed project would not create substantial adverse effects on the trail. In fact, the proposed project would improve the existing trail through the addition of access points from the proposed project to the trail.

The 2035 General Plan designates the site Suburban Neighborhood High, which permits the use of multi-family housing. The construction of the proposed project would be consistent with the permitted land use designation for the site and compatible with the existing multi-family homes east and south of the site. Because the proposed project is consistent with the General Plan, impacts related to aesthetics have been analyzed and anticipated within the General Plan EIR. According to the General Plan EIR, with adherence to polices pursuant to aesthetics, buildout of the General Plan would not substantially alter the existing visual character.

Furthermore, City staff would conduct Site Plan and Design Review prior to implementation of the proposed project. As noted in Chapter 17.808 of the Sacramento City Code, the purpose of Site Plan and Design Review is to ensure that the physical aspects of development projects are consistent with the General Plan and any other applicable specific plans or design guidelines, that projects are high quality and compatible with surrounding development, among other considerations. Accordingly, Site Plan and Design Review for the proposed project would ensure that the proposed development would not result in a substantial degradation in the existing visual character of the project site. Finally, the proposed project would be visually consistent with the surrounding developments including, specifically, the multi-family residential development located south of the project site.

Therefore, potential impacts to the visual character of the project site and its surroundings associated with development of the site with light industrial uses have been previously analyzed in the Master EIR, and the proposed project would have **no additional significant environmental effect** beyond what was previously evaluated in the Master EIR.

#### **MITIGATION MEASURES**

None required.

#### **FINDINGS**

The project would have no additional project-specific environmental effects relating to Aesthetics.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<b>2. AIR QUALITY</b> Would the project:			X
A) Result in construction emissions of NO <sub>x</sub> above 85 pounds per day?			X
B) Result in operational emissions of NO <sub>x</sub> or ROG above 65 pounds per day?			X
C) Violate any air quality standard or have a cumulatively considerable contribution to an existing or projected air quality violation?			X
D) Result in PM <sub>10</sub> and PM <sub>2.5</sub> concentrations that exceed SAMQMD requirements?			X
E) Result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm)?			X
F) Result in exposure of sensitive receptors to substantial pollutant concentrations?		X	
G) Result in TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources?		X	
H) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X

### ENVIRONMENTAL SETTING

The City of Sacramento is located within the Sacramento Valley Air Basin (SVAB), which is a valley bounded by the North Coast Mountain Ranges to the west and the Northern Sierra Nevada Mountains to the east. The terrain in the valley is flat and approximately 25 feet above sea level. The City, including the project site, is located within the jurisdiction of the Sacramento Air Quality Management District (SMAQMD).

Hot, dry summers and mild, rainy winters characterize the Mediterranean climate of the Sacramento Valley. Throughout the year, daily temperatures may range by 20 degrees Fahrenheit with summer highs often exceeding 100 degrees and winter lows occasionally below freezing. Average annual rainfall is about 20 inches and snowfall is very rare. Summertime temperatures are normally moderated by the presence of the "Delta breeze" that arrives through the Carquinez Strait in the evening hours.

The mountains surrounding the SVAB create a barrier to airflow, which can trap air pollutants in the valley. The highest frequency of air stagnation occurs in the autumn and early winter when large high-pressure cells lie over the valley. The lack of surface wind during these periods and the reduced vertical flow caused by less surface heating reduces the influx of outside air and allows air pollutants to become concentrated in a stable volume of air. The surface concentrations of pollutants are highest when these conditions are combined with temperature inversions that trap cooler air and pollutants near the ground.

The warmer months in the SVAB (May through October) are characterized by stagnant morning air or light winds, and the Delta breeze that arrives in the evening out of the southwest. Usually, the evening breeze

transports a portion of airborne pollutants to the north and out of the Sacramento Valley. During about half of the day from July to September, however, a phenomenon called the “Schultz Eddy” prevents this from occurring. Instead of allowing the prevailing wind patterns to move north carrying the pollutants out of the valley, the Schultz Eddy causes the wind pattern to circle back south. This phenomenon exacerbates the pollution levels in the area and increases the likelihood of violating Federal or State standards. The Schultz Eddy normally dissipates around noon when the Delta breeze begins.

### **Criteria Air Pollutants**

Concentrations of emissions from criteria air pollutants (the most prevalent air pollutants known to be harmful to human health) are used to indicate the quality of the ambient air. Criteria air pollutants include ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), respirable and fine particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and lead. The sources of criteria air pollutants and their respective acute and chronic health impacts are described in Table 1.

### **Existing Air Quality**

The U.S. Environmental Protection Agency (EPA) has been charged with implementing national air quality programs. EPA’s air quality mandates are drawn primarily from the federal Clean Air Act (CAA), which was enacted in 1970 and most recently amended by Congress in 1990. The CAA required EPA to establish the National Ambient Air Quality Standards (NAAQS) for the following criteria air pollutants: ozone, CO, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead. CAA also requires each State to prepare a State implementation plan (SIP) for attaining and maintaining the NAAQS. The federal Clean Air Act Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. Individual SIPs are modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies.

The California Air Resources Board (CARB) is the agency responsible for coordination and oversight of State and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA). The CCAA, which was adopted in 1988, required CARB to establish its own California Ambient Air Quality Standards (CAAQS). CARB has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned criteria air pollutants. In most cases the CAAQS are more stringent than the NAAQS.

The SVAB is currently designated as nonattainment for the NAAQS 8-hour ozone standard and the CAAQS for both 1-hour and 8-hour O<sub>3</sub> standard. The SVAB is also currently designated as nonattainment for both NAAQS and CAAQS 24-hour PM<sub>10</sub> standards. In addition, the SVAB is currently designated as nonattainment for the NAAQS 24-hour PM<sub>2.5</sub> standard. The air basin is designated as unclassified or in attainment for the remaining criteria air pollutants (SMAQMD 2019).

### **Toxic Air Contaminants**

According to the California Almanac of Emissions and Air Quality (CARB 2013), the majority of the estimated health risks from toxic air contaminants (TACs) can be attributed to relatively few compounds, the most important being diesel particulate matter (diesel PM). Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emissions control system is being used. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

<b>Table 1</b>			
<b>Sources and Health Effects of Criteria Air Pollutants</b>			
<b>Pollutant</b>	<b>Sources</b>	<b>Acute<sup>1</sup> Health Effects</b>	<b>Chronic<sup>2</sup> Health Effects</b>
Ozone	Secondary pollutant resulting from reaction of ROG and NO <sub>x</sub> in presence of sunlight. ROG emissions result from incomplete combustion and evaporation of chemical solvents and fuels; NO <sub>x</sub> results from the combustion of fuels	Increased respiration and pulmonary resistance; cough, pain, shortness of breath, lung inflammation	Permeability of respiratory epithelia, possibility of permanent lung impairment
Carbon monoxide (CO)	Incomplete combustion of fuels; motor vehicle exhaust	Headache, dizziness, fatigue, nausea, vomiting, death	Permanent heart and brain damage
Nitrogen dioxide (NO <sub>2</sub> )	Combustion devices; e.g., boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines	Coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis or pulmonary edema; breathing abnormalities, cough, cyanosis, chest pain, rapid heartbeat, death	Chronic bronchitis, decreased lung function
Sulfur dioxide (SO <sub>2</sub> )	Coal and oil combustion, steel mills, refineries, and pulp and paper mills	Irritation of upper respiratory tract, increased asthma symptoms	Insufficient evidence linking SO <sub>2</sub> exposure to chronic health impacts
Respirable particulate matter (PM <sub>10</sub> ), Fine particulate matter (PM <sub>2.5</sub> )	Fugitive dust, soot, smoke, mobile and stationary sources, construction, fires and natural windblown dust, and formation in the Atmosphere by condensation and/or transformation of SO <sub>2</sub> and ROG	Breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, Premature death	Alterations to the immune system, carcinogenesis
Lead	Metal processing	Reproductive/developmental effects (fetuses and children)	Numerous effects including neurological, endocrine, and cardiovascular effects
<p>Notes: NO<sub>x</sub> = oxides of nitrogen; ROG = reactive organic gases.</p> <p>1. "Acute" refers to effects of short-term exposures to criteria air pollutants, usually at fairly high concentrations.</p> <p>2. "Chronic" refers to effects of long-term exposures to criteria air pollutants, usually at lower, ambient concentrations.</p> <p>Source: EPA 2018.</p>			

### Sensitive Receptors

Sensitive receptors are generally considered to include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children or the elderly. Residential dwellings, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants and/or the potential for increased and prolonged exposure of individuals to pollutants. The closest sensitive receptors to the project site include the multi-family residential complex located approximately 30 feet east of the project site, and the day care facility located approximately 90 feet west of the project site.

## **Greenhouse Gases**

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. GHGs are responsible for "trapping" solar radiation in the earth's atmosphere, a phenomenon known as the greenhouse effect. Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO<sub>2</sub>), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. Emissions of GHGs contributing to global climate change are attributable, in large part, to human activities associated with on-road and off-road transportation, industrial/manufacturing, electricity generation by utilities and consumption by end users, residential and commercial on-site fuel usage, and agriculture and forestry. Emissions of CO<sub>2</sub> are, largely, byproducts of fossil fuel combustion.

The quantity of GHGs in the atmosphere responsible for climate change is not precisely known, but it is enormous. No single project alone would measurably contribute to an incremental change in the global average temperature or to global or local climates or microclimates. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

Several regulations currently exist related to GHG emissions, predominantly Assembly Bill (AB) 32, Executive Order S-3-05, and Senate Bill (SB) 32. AB 32 requires that Statewide GHG emissions be reduced to 1990 levels by 2020. Executive Order S-3-05 established the GHG emission reduction target for the State to reduce to the 2000 level by 2010, the 1990 level by 2020 (AB 32), 40 percent below the 1990 level by 2030, and to 80 percent below the 1990 level by 2050 (SB 32).

To meet the statewide GHG emission targets, the City adopted the City of Sacramento Climate Action Plan (CAP) on February 14, 2012 to comply with AB 32. The CAP identified how the City and the broader community could reduce Sacramento's GHG emissions and included reduction targets, strategies, and specific actions. In 2015, the City of Sacramento adopted the 2035 General Plan Update. The update incorporated measures and actions from the CAP into Appendix B, General Plan CAP Policies and Programs, which includes citywide policies and programs that are supportive of reducing GHG emissions.

## **STANDARDS OF SIGNIFICANCE**

For purposes of this Initial Study, air quality impacts may be considered significant if construction and/or implementation of the proposed project would result in the following impacts that remain significant after implementation of 2035 General Plan policies:

- Construction emissions of NO<sub>x</sub> above 85 pounds per day;
- Operational emissions of NO<sub>x</sub> or ROG above 65 pounds per day;
- Violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- Any increase in PM<sub>10</sub> concentrations, unless all feasible Best Available Control Technology (BACT) and Best Management Practices (BMPs) have been applied, then increases above 80 pounds per day or 14.6 tons per year;
- CO concentrations that exceed the 1-hour State ambient air quality standard (i.e., 20.0 ppm) or the 8-hour State ambient standard (i.e., 9.0 ppm); or
- Exposure of sensitive receptors to substantial pollutant concentrations.

Ambient air quality standards have not been established for toxic air contaminants (TAC). TAC exposure is deemed to be significant if:

- TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources.

A project is considered to have a significant effect relating to greenhouse gas emissions if the project fails to satisfy the requirements of the City's CAP.

**SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

The Master EIR addressed the potential effects of the 2035 General Plan on ambient air quality and the potential for exposure of people, especially sensitive receptors such as children or the elderly, to unhealthy pollutant concentrations. See Master EIR, Chapter 4.2.

Policies in the 2035 General Plan Environmental Resources Element were identified as mitigating potential effects of development that could occur under the 2035 General Plan. For example, Policy ER 6.1.1 calls for the City to work with the CARB and the SMAQMD to meet State and federal air quality standards; Policy ER 6.1.2 requires the City to review proposed development projects to ensure that the projects incorporate feasible measures that reduce construction and operational emissions; Policy ER 6.1.4 and ER 6.1.11 calls for coordination of City efforts with SMAQMD; and Policy ER 6.1.15 requires the City to give preference to contractors using reduced-emission equipment.

The Master EIR identified exposure to sources of toxic air contaminants (TAC) as a potential effect. Policies in the 2035 General Plan would reduce the effect to a less-than-significant level. The policies include ER 6.1.4, requiring coordination with SMAQMD in evaluating exposure of sensitive receptors to TACs, and impose appropriate conditions on projects to protect public health and safety, as well as Policy LU 2.7.5 requiring extensive landscaping and trees along freeways and design elements that provide proper filtering, ventilation, and exhaust of vehicle air emissions from buildings.

The Master EIR found that greenhouse gas emissions that would be generated by development consistent with the 2035 General Plan would contribute to climate change on a cumulative basis. Policies of the 2035 General Plan identified in the Master EIR that would reduce construction related GHG emissions include: ER 6.1.2, ER 6.1.11 requiring coordination with SMAQMD to ensure feasible mitigation measures are incorporated to reduce GHG emissions, and ER 6.1.15. The 2035 General Plan incorporates the GHG reduction strategy of the 2012 CAP, which demonstrates compliance mechanism for achieving the City's adopted GHG reduction target of 15 percent below 2005 emissions by 2020. Policy ER 6.1.8 commits the City to assess and monitor performance of GHG emission reduction efforts beyond 2020, and progress toward meeting long-term GHG emission reduction goals, ER 6.1.9 also commits the City to evaluate the feasibility and effectiveness of new GHG emissions reduction measures in view of the City's longer-term GHG emission reductions goal. The discussion of greenhouse gas emissions and climate change in the 2035 General Plan Master EIR are incorporated by reference in this Initial Study (CEQA Guidelines Section 15150).

The Master EIR identified numerous policies included in the 2035 General Plan that addressed greenhouse gas emissions and climate change. See Draft Master EIR, Chapter 4.14, and pages 4.14-1 et seq.

**ANSWERS TO CHECKLIST QUESTIONS**

Questions A through D

Implementation of the proposed project would contribute local emissions in the area during both construction and operations of the proposed project. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants that the area is designated nonattainment, the SMAQMD has established recommended thresholds of significance, including mass emission thresholds for construction-related and operational ozone precursors, as the area is under nonattainment for ozone. The SMAQMD's recommended thresholds of significance for the ozone precursors reactive organic gases (ROG) and nitrous oxides (NO<sub>x</sub>), particulate matter 10 microns in diameter or less (PM<sub>10</sub>), and particulate matter 2.5 microns in diameter or less (PM<sub>2.5</sub>), which are expressed in pounds per day (lbs/day), are presented in Table 2. It should be noted that SMAQMD has recently adopted mass emissions thresholds of significance for PM<sub>10</sub> and PM<sub>2.5</sub> which have been included in the proposed project's analysis as shown below.

Pollutant	Construction Thresholds	Operational Thresholds
NO <sub>x</sub>	85	65
ROG	-	65
PM <sub>10</sub>	80	80
PM <sub>2.5</sub>	82	82

*Source: Sacramento Metropolitan Air Quality Management District. SMAQMD Thresholds of Significance Table. Available at: <http://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable4-2020.pdf>. Accessed May 2021.*

Because construction equipment emits relatively low levels of ROG, and ROG emissions from other construction processes (e.g., asphalt paving, architectural coatings) are typically regulated by SMAQMD, SMAQMD has not adopted a construction emissions threshold for ROG. SMAQMD has, however, adopted a construction emissions threshold for NO<sub>x</sub>, as shown in Table 2, above.

In order to determine whether the proposed project would result in criteria pollutant emissions in excess of the applicable thresholds of significance presented above, the proposed project's emissions have been estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 software – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the Institute of Transportation Engineers (ITE) Manual, vehicle mix, trip length, average speed, etc. However, where project-specific data is available, such data should be input into the model. Accordingly, based on information provided by the City of Sacramento Public Works Department for the proposed project, trip generation rates were updated to reflect project details.

The results of the proposed project's emissions estimates were compared to the thresholds of significance above in order to determine the associated level of impact. All CalEEMod modeling results are included as Appendix A to this IS/MND.

#### *Construction Emissions*

During construction of the proposed project, which includes demolition of the existing on-site facilities, various types of equipment and vehicles would operate on the project site. Construction exhaust emissions would be generated from construction equipment, any earth-moving activities, construction workers' commute, and material hauling for the entire construction period. These activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants.

According to the CalEEMod results, the proposed project is estimated to result in maximum daily construction emissions as shown in Table 3.

Pollutant	Project Emissions (lbs/day)	SMAQMD Threshold of Significance (lbs/day)
NO <sub>x</sub>	33.12	85
PM <sub>10</sub>	19.82	80
PM <sub>2.5</sub>	11.45	82

*Source: CalEEMod, May 2021 (see Appendix A).*

As shown in the table, the proposed project's maximum unmitigated construction-related emissions would be below the applicable thresholds of significance. In addition, all projects under the jurisdiction of SMAQMD are required to comply with all applicable SMAQMD rules and regulations (a complete list of current rules is available at [www.airquality.org/rules](http://www.airquality.org/rules)). Rules and regulations related to construction include, but not limited to, Rule 201 (General Permit Requirements), Rule 402 (Nuisance), Rule 403 (Fugitive Dust),



Rule 404 (Particulate Matter), Rule 414 (Water Heaters, Boilers and Process Heaters Rated Less Than 1,000,000 British Thermal Units per Hour), Rule 417 (Wood Burning Appliances), Rule 442 (Architectural Coatings), Rule 453 (Cutback and Emulsified Asphalt Paving Materials), Rule 460 (Adhesives and Sealants), Rule 902 (Asbestos) and California Code of Regulations (CCR) requirements related to the registration of portable equipment and anti-idling. Furthermore, all projects are required to implement the SMAQMD's Basic Construction Emission Control Practices (BCECP). Compliance with SMAQMD rules and regulations and BCECP would ensure that construction emissions are minimized to the extent practicable, and would reduce emissions below the level presented in Table 3. Therefore, impacts related to the proposed project's construction emissions would be less than significant.

*Operational Emissions*

SMAQMD has developed screening criteria to aid in determining if emissions from development projects would exceed the SMAQMD thresholds of significance presented in Table 2. The screening criteria provides a conservative indication of whether a development project could result in potentially significant air quality impacts. According to SMAQMD, if a project is below the screening level identified for the applicable land use type, emissions from the operation of the project would have a less-than-significant impact on air quality. The screening criterion for operational emissions associated with a mid-rise apartment is 740 units for ozone precursors and 1,385 units for particulate matter.<sup>3</sup> The proposed project involves the development of up to 190 units, which would be below the operational screening criteria for both categories of criteria pollutants. Therefore, based on the SMAQMD's screening criteria, the proposed project's operational emissions would not be expected to exceed SMAQMD thresholds of significance.

Nonetheless, to confirm this conclusion, operational air quality emissions were estimated using CalEEMod, and are presented in Table 4.

<b>Table 4</b>		
<b>Maximum Unmitigated Project Operational Emissions</b>		
<b>Pollutant</b>	<b>Project Emissions (lbs/day)</b>	<b>SMAQMD Threshold of Significance (lbs/day)</b>
NO <sub>x</sub>	6.95	65
ROG	6.04	65
PM <sub>10</sub>	4.84	80
PM <sub>2.5</sub>	1.41	82

*Source: CalEEMod, May 2021 (see Appendix A).*

As shown in the table, the proposed project's maximum unmitigated operational emissions or criteria pollutants would be below the applicable thresholds of significance and, as a result, impacts related to operational emissions would be considered less than significant.

*Cumulative Emissions*

SMAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. As future attainment of AAQS is a function of successful implementation of SMAQMD's planning efforts, according to the SMAQMD Guide, by exceeding the SMAQMD's project-level thresholds for construction or operational emissions, a project could contribute to the region's nonattainment status for ozone and PM emissions and could be considered to conflict with or obstruct implementation of the SMAQMD's air quality planning efforts.

As discussed above and below, the proposed project would result in construction and operational emissions below all applicable SMAQMD thresholds of significance. Therefore, the proposed project would not be considered to contribute to the region's nonattainment status for ozone or PM emissions and would not conflict with or obstruct implementation of the SMAQMD's air quality planning efforts. Accordingly, the

<sup>3</sup> Sacramento Metropolitan Air Quality Management District. *SMAQMD Operational Screening Levels*. April 2018.

proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation, and a less-than-significant impact would occur.

### *Conclusion*

As discussed above, construction of the proposed project would result in emissions below the thresholds of significance. In addition, due to the project size, the project would be below the operational screening criteria developed by SMAQMD. Thus, the proposed project would not result in construction or operational emissions in excess of the applicable thresholds of significance. Because the proposed project would result in emissions below the applicable thresholds of significance during both construction and operations, the proposed project would not violate an AAQS, contribute substantially to an existing or projected air quality violation, or result in PM concentrations greater than the applicable thresholds. Therefore, the proposed project would have **no additional significant environmental effect** beyond what was previously evaluated in the Master EIR.

### Question E

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Per the SMAQMD Guide, emissions of CO are generally of less concern than other criteria pollutants, as operational activities are not likely to generate substantial quantities of CO, and the SVAB has been in attainment for CO for multiple years.<sup>4</sup> The proposed project would not involve operational changes that could result in long-term generation of CO. The use of construction equipment at each site would result in limited generation of CO; however, the total amount of CO emitted by construction equipment would be minimal and would not have the potential to result in health risks to any nearby receptors. Consequently, the proposed project would have **no additional significant environmental effects** related to localized CO emissions beyond what was previously evaluated in the Master EIR.

### Question F and G

The area surrounding the project site has already been developed. The existing multi-family residences would be considered sensitive receptors, with the closest located approximately 30 feet east of the project site boundary. In addition, a day care facility is located approximately 90 feet west of the project site.

### *TAC Emissions*

The CARB Handbook provides recommendations for siting new sensitive land uses near sources typically associated with significant levels of TAC emissions, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified DPM from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure.

Operational-related emissions of TACs are typically associated with stationary diesel engines or land uses that involve heavy diesel truck traffic or idling. The proposed project does not involve long-term operation of any stationary diesel engine or other major on-site stationary source of TACs. The CARB's Handbook includes facilities (distribution centers) with associated diesel truck trips of more than 100 trucks per day as a source of substantial TAC emissions. The project is not a distribution center, would not involve heavy diesel truck traffic, and is not located near any existing distribution centers. Therefore, the proposed project would not expose any existing sensitive receptors to any new permanent or substantial TAC emissions.

However, short-term, construction-related activities could result in the generation of TACs, primarily DPM, from on-road haul trucks and off-road equipment exhaust emissions. Although DPM emissions from on-road haul trucks would be widely dispersed throughout the project area, as haul trucks move goods and

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<sup>4</sup> Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment, Chapter 4: Operational Criteria Air Pollutant and Precursor Emissions*. June 2020.

material to and from the site, exhaust from off-road equipment would primarily occur within the project site. Consequently, the operation of off-road equipment within the project site during demolition and project construction could result in exposure of nearby residents to DPM.

To analyze potential health risks to nearby residents that could result from DPM emissions from off-road equipment at the project site, total DPM emissions from demolition and project construction were estimated. DPM is considered a subset of PM<sub>2.5</sub>, thus, the CalEEMod estimated PM<sub>2.5</sub> emissions from exhaust during construction was conservatively assumed to represent all DPM emitted on-site. The CalEEMod estimated PM<sub>2.5</sub> exhaust emissions were then used to calculate the concentration of DPM at the maximally exposed sensitive receptor near the project site. DPM concentrations resulting from project implementation were estimated using the American Meteorological Society/Environmental Protection Agency (AMS/EPA) Regulatory Model (AERMOD). The results of AERMOD are presented Figure 4. As presented therein, the maximally exposed receptor, depicted by a white X, is located east of the project site.

The associated cancer risk and non-cancer hazard index were calculated using the CARB's Hotspot Analysis Reporting Program Version 2 (HARP 2) Risk Assessment Standalone Tool (RAST), which calculates the cancer and non-cancer health impacts using the risk assessment guidelines of the 2015 Office of Environmental Health Hazard Assessment (OEHHA) Guidance Manual for Preparation of Health Risk Assessments.<sup>5</sup> The modeling was performed in accordance with the USEPA's User's Guide for the AERMOD<sup>6</sup> and the 2015 OEHHA Guidance Manual.

Based on the foregoing methodology, and the methodology presented above regarding the estimation of construction emissions, the cancer risk and non-cancer hazard indices were estimated and are presented in Table 5.

<b>Table 5</b>			
<b>Maximum Unmitigated Cancer Risk and Hazard Index Associated with Project Construction</b>			
<b>DPM</b>			
	<b>Cancer Risk (per million persons)</b>	<b>Acute Hazard Index</b>	<b>Chronic Hazard Index</b>
Construction DPM Health Risks	41.79	0.00	0.02
Thresholds of Significance	10	1.0	1.0
Exceed Thresholds?	<b>YES</b>	<b>NO</b>	<b>NO</b>
<i>Source: AERMOD and HARP 2 RAST, July 2021 (see Appendix A).</i>			

As shown in Table 5, construction of the proposed project would not result in acute or chronic hazards in excess of SMAQMD's standards. However, project construction would conservatively have the potential to result in cancer risks in excess of SMAQMD's 10 cases per million threshold. Thus, construction of the proposed project could result in exposure of nearby receptors to substantial pollutant concentrations.

*Conclusion*

Based on the above, the proposed project would not cause or be exposed to substantial concentrations of localized CO. However, construction activities associated with implementation of the proposed project would generate DPM concentrations that could result in health risks that exceed the SMAQMD's thresholds of significance. Therefore, exposure of sensitive receptors to substantial pollutant concentrations could occur as a result of the proposed project, and impacts would be potentially significant. With implementation of Mitigation Measure 2-1, the **effect can be mitigated to less than significant**.

<sup>5</sup> Office of Environmental Health Hazard Assessment. *Air Toxics Hot Spots Program Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments* [pg. 8-18]. February 2015.

<sup>6</sup> U.S. Environmental Protection Agency. *User's Guide for the AMS/EPA Regulatory Model (AERMOD)*. December 2016.

Figure 7  
AERMOD Results



Source: AERMOD, July 2021 (see Appendix A).

#### Question H

Emissions from operations of the proposed project were quantified and would equal approximately 980.46 metric tons of CO<sub>2</sub> equivalent units per year. It is noted that the SMAQMD considers operational GHG emissions of less than 1,100 metric tons of CO<sub>2</sub> equivalent units per year to be less than significant. However, the City of Sacramento does not assess potential impacts related to GHG emissions on the basis of total emissions of GHGs. Rather, the City of Sacramento has integrated a CAP into the City's General Plan, and, thus, potential impacts related to climate change from development within the City are assessed based on the project's compliance with the City's adopted General Plan CAP Policies and Programs set forth in Appendix B of the General Plan Update. The majority of the policies and programs set forth in Appendix B are citywide efforts in support of reducing overall citywide emissions of GHG. However, various policies related to new development within the City would directly apply to the proposed project. The project's general consistency with City policies that would reduce GHG emissions from buildout of the City's General Plan is discussed below.

Goal LU 1.1 and Policy LU 1.1.5 encourage infill development within existing urbanized areas. Given that the proposed project would be consistent with the site's current land use and zoning designations and the surrounding areas are currently built-out, the project would be consistent with Goal LU 1.1 and Policy LU 1.1.5. The proposed project would be constructed in compliance with the California Building Standards Code (CBSC), which includes the California Building Energy Efficiency Standards and the California Green Building Code. The CBSC, and the foregoing standards and codes, increase the sustainability of new development through requiring energy efficiency and sustainable design practices (Policy ER 6.1.7). Such sustainable design would support the City's Policy U 6.1.5, which states that energy consumption per capita should be reduced as compared to the year 2005.

Goal LU 2.5, Policy LU 2.5.1, and Policy LU 2.7.6 require that new urban developments should be well-connected, minimize barriers between uses, and create pedestrian-scaled, walkable areas. Considering the proposed project would include pedestrian and bicycle connections to the Bannon Creek Preserve Trail, the proposed project would comply with the aforementioned goals and policies.

The Master EIR concluded that buildout of the City's General Plan, including the project site, would not result in a conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. The proposed project would be consistent with the City's General Plan land use and zoning designations for the site as well as the policies discussed above that are intended to reduce GHG emissions from buildout of the City's General Plan. Thus, GHG emissions from operation of the proposed project were previously analyzed in the Master EIR, and would be consistent with the CAP. Considering the project's consistency with the City's General Plan, including the CAP, and the general consistency with the City's General Plan policies intended to reduce GHG emissions, the foregoing annual emissions related to operations of the proposed project have been previously analyzed. Consequently, the proposed project would have ***no additional significant environmental effect*** beyond what was previously evaluated in the Master EIR.

#### **MITIGATION MEASURES**

The most effective way to reduce construction-related DPM emissions is by improving the engine tier/engine efficiency of construction equipment. Off-road diesel engines that are used in construction equipment fall into efficiency tiers, with the most efficient being the Tier 4 emission standards. Engine Tiers 3 through 1 are regressively less efficient. Based on modeling conducted, as demonstrated in Table 6, use of higher tier construction equipment for all construction activities would ensure that DPM emissions from construction equipment do not result in increased health risks to nearby receptors in excess of SMAQMD's standards. Consequently, implementation of the following mitigation measure would reduce impacts related to Air Quality to a *less-than-significant* level.

<b>Table 6</b>			
<b>Maximum Mitigated Cancer Risk and Hazard Index Associated with Project Construction DPM</b>			
	<b>Cancer Risk (per million persons)</b>	<b>Acute Hazard Index</b>	<b>Chronic Hazard Index</b>
Construction DPM Health Risks	9.95	0.00	0.02
Thresholds of Significance	10	1.0	1.0
Exceed Thresholds?	<b>NO</b>	<b>NO</b>	<b>NO</b>
<i>Source: AERMOD and HARP 2 RAST, May 2021 (see Appendix A).</i>			

2-1

*Prior to the initiation of ground disturbance, the project applicant shall show on the plans via notation that the contractor shall ensure that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, shall not generate PM<sub>2.5</sub> emissions in excess of 0.00133 tons PM<sub>2.5</sub> per year. The PM<sub>2.5</sub> reduction shall be achieved by requiring a combination of engine Tier 3 or Tier 4 off-road construction equipment or the use of hybrid, electric, or alternatively fueled equipment.*

*In addition, all off-road equipment working at the construction site must be maintained in proper working condition according to manufacturer's specifications. Idling shall be limited to five minutes or less in accordance with the Off-Road Diesel Fueled Fleet Regulation as required by CARB. Portable equipment over 50 horsepower must have either a valid District Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.*

*The aforementioned requirements shall be noted on Grading Plans and submitted for review and approval by the City of Sacramento Community Development Department.*

**FINDINGS**

All additional significant environmental effects of the project relating to Air Quality can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<b>3. BIOLOGICAL RESOURCES</b>			
Would the project:			
A) Create a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected?			X
B) Result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal species?		X	
C) Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands)?			X

**ENVIRONMENTAL SETTING**

Prior to human development, the natural habitats within the region included perennial grasslands, riparian woodlands, oak woodlands, and a variety of wetlands including vernal pools, seasonal wetlands, freshwater marshes, ponds, streams, and rivers. Over the last 150 years, agriculture, irrigation, flood control, and urbanization have resulted in the loss or alteration of much of the natural habitat within the City limits. Non-native annual grasses have replaced the native perennial grasslands, many of the natural streams have been channelized, much of the riparian and oak woodlands have been cleared, and most of the marshes have been drained and converted to agricultural or urban uses.

Though the majority of the City is developed with residential, commercial, and other urban development, valuable plant and wildlife habitat still exists. The natural habitats are located primarily outside the City boundaries in the northern, southern and eastern portions of the City, but also occur along river and stream corridors and on a number of undeveloped parcels. Habitats that are present in the City include annual grasslands, riparian woodlands, oak woodlands, riverine, ponds, freshwater marshes, seasonal wetlands, and vernal pools.

**Vegetation**

The proposed project site is currently developed with features such as a parking lot, tennis courts, swimming pool, outdoor covered areas, and a building/fitness center. Trees and shrubs occur along the borders of the project site, specifically within the Bannon Creek Preserve and along the Bannon Creek Preserve Trail.

**Wildlife**

Due to the disturbed nature of the project site, the potential for a diversified amount of wildlife is anticipated to be very low; however, several trees on and in the immediate vicinity of the project site could potentially provide nesting habitat for bird species and other raptors.

## Trees

Chapter 12.56, Tree Planting, Maintenance, and Conservation, of the Sacramento City Code establishes guidelines for the conversation, protection, removal, and replacement of both City trees and private protected trees. Per Section 12.56.020, a private protected tree meets at least one of the following criteria:

- A. A tree that is designated by City Council resolution to have special historical value, special environmental value, or significant community benefit, and is located on private property;
- B. Any native Valley Oak (*Quercus lobata*), Blue Oak (*Quercus douglasii*), Interior Live Oak (*Quercus wislizenii*), Coast Live Oak (*Quercus agrifolia*), California Buckeye (*Aesculus californica*), or California Sycamore (*Platanus racemosa*), that has a diameter at standard height (DSH) of 12 inches or more, and is located on private property;
- C. A tree that has a DSH of 24 inches or more located on private property that:
  - a. Is an undeveloped lot; or
  - b. Does not include any single unit or duplex dwellings; or
- D. A tree that has a DSH of 32 inches or more located on private property that includes any single unit or duplex dwellings.

When circumstances do not allow for retention of trees, permits are required to remove City trees or private protected trees that are within the City's jurisdiction. In addition, City Code Section 12.56.050, Tree Permits, states that no person shall perform regulated work without a tree permit. The Tree Permit application requires a statement detailing the nature and necessity for the proposed regulated work and the location of the proposed work for evaluation and approval by the City Council.

An Arborist Report was prepared for the project site by California Tree and Landscape Consulting, Inc. (see Appendix B). California Tree and Landscape Consulting, Inc. conducted a site survey January 12, 2021 to evaluate the 156 trees on-site and within 25 feet of development. According to California Tree and Landscape Consulting, Inc. of the surveyed trees, 54 are proposed for removal to facilitate implementation of the proposed project, eight of which are considered private protected under City Code Chapter 12.56 (see Table 1 – Tree Inventory of the Arborist Report).

## Jurisdictional Waters

The U.S. Army Corps of Engineers (USACE) has regulatory authority of "waters of the United States," which include wetlands, pursuant to Section 404 of the Clean Water Act (CWA). Waters of the U.S. includes navigable waters, interstate waters, and all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Aquatic resources do not exist on the project site.

## Natomas Basin Habitat Conservation Plan

The Natomas Basin Habitat Conservation Plan (NBHCP), adopted in 1997 and revised in 2003, is a conservation plan designed to promote biological conservation along with economic development and continuation of agriculture in the Natomas Basin. The Natomas Basin includes portions of Sacramento and Sutter County, including the project site. The NBHCP is part of the requirements of the Endangered Species Act designed to support applications for federal permits under Section 10(a)(1)(B). The NBHCP is also intended to serve as an application for Incidental Take Permits (ITPs) under California state law pursuant to Section 2081(b) of the California Department of Fish and Game (CDFG) Code. The requirement for issuance of the federal and State permits is described in Section I.I of the NBHCP.

The NBHCP is designed to serve a number of purposes, including but not limited to the satisfaction of the federal and State Endangered Species Acts, Mitigation and Monitoring Plan requirements specified in the North Natomas Community Plan, and requirements of the Sacramento Area Flood Control Agency (SAFCA) Permit, relating to direct, indirect, and cumulative biological impacts associated with Urban Development in the Permit Area. As such, the NBHCP allows developers to pay mitigation fees to satisfy requirements



covered by the plan. NBHCP fees are adjusted based on the HCP Finance Model, which is periodically reviewed and considered by the Board of Directors of The Natomas Basin Conservancy (TNBC), and are intended to represent the true cost of a development's mitigation share within the Natomas Basin.

Development within the project site is required to be consistent with the NBHCP. The project site is identified as existing development under the NBHCP and, therefore, development of the project is exempt from the NBHCP fees.

#### **STANDARDS OF SIGNIFICANCE**

For purposes of this environmental document, an impact would be significant if any of the following conditions or potential thereof, would result with implementation of the proposed project:

- Creation of a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected;
- Substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal; or
- Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands).

For the purposes of this document, "special-status" has been defined to include those species, which are:

- Listed as endangered or threatened under the federal Endangered Species Act (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under the California Endangered Species Act (or proposed for listing);
- Designated as endangered or rare, pursuant to California Fish and Game Code (Section 1901);
- Designated as fully protected, pursuant to California Fish and Game Code (Section 3511, 4700, or 5050);
- Designated as species of concern by U.S. Fish and Wildlife Service (USFWS), or as species of special concern to California Department of Fish and Wildlife (CDFW);
- Plants or animals that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA).

#### **SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

Chapter 4.3 of the Master EIR evaluated the effects of the 2035 General Plan on biological resources within the City. The Master EIR identified potential impacts in terms of degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status birds, through the loss of both nesting and foraging habitat.

Policies in the 2035 General Plan were identified as mitigating the effects of development that could occur under the provisions of the 2035 General Plan. Policy ER 2.1.5 calls for the City to preserve the ecological integrity of creek corridors and other riparian resources; Policy ER 2.1.10 requires the City to consider the potential impact on sensitive plants for each project and to require pre-construction surveys when appropriate; and Policy ER 2.1.11 requires the City to coordinate its actions with those of the California Department Fish and Wildlife, U.S. Fish and Wildlife Service, and other agencies in the protection of resources.

The Master EIR discussed biological resources in Chapter 4.3. The Master EIR concluded that policies in the general plan, combined with compliance with the California Endangered Species Act, NBHCP (when applicable) and CEQA would minimize the impacts on special-status species to a less-than-significant level (see Impact 4.3-1), and that the general plan policies, along with similar compliance with local, state and federal regulation would reduce impacts to a less-than-significant level for habitat for special-status invertebrates, birds, amphibians and reptiles, mammals and fish (Impacts 4.3-3-6).

Given the prevalence of rivers and streams in the incorporated area, impacts to riparian habitat is a common concern. Riparian habitats are known to exist throughout the City, especially along the Sacramento and American rivers and their tributaries. The Master EIR discussed impacts of development adjacent to riparian habitat that could disturb wildlife species that rely on these areas for shelter and food, and could also result in the degradation of these areas through the introduction of feral animals and contaminants that are typical of urban uses. The CDFW regulates potential impacts on lakes, streams, and associated riparian (streamside or lakeside) vegetation through the issuance of Lake or Streambed Alteration Agreements (SAA) (per Fish and Game Code Section 1602), and provides guidance to the City as a resource agency. While there are no federal regulations that specifically mandate the protection of riparian vegetation, federal regulations set forth in Section 404 of the Clean Water Act address areas that potentially contain riparian-type vegetation, such as wetlands.

The General Plan calls for the City to preserve the ecological integrity of creek corridors, canals and drainage ditches that support riparian resources (Policy ER 2.1.5) and wetlands (Policy ER 2.1.6) and requires habitat assessments and impact compensation for projects (Policy ER 2.1.10). The City has adopted a standard that requires coordination with State and federal agencies if a project has the potential to affect other species of special concern or habitats (including regulatory waters and wetlands) protected by agencies or natural resource organizations (Policy ER 2.1.11).

Implementation of 2035 General Plan Policy ER 2.1.5 would reduce the magnitude of potential impacts by requiring a 1:1 replacement of riparian habitat lost to development. While this would help mitigate impacts on riparian habitat, large open areas of riparian habitat used by wildlife could be lost and/or degraded directly and indirectly through development under the 2035 General Plan. Given the extent of urban development designated in the general plan, the preservation and/or restoration of riparian habitat would likely occur outside of the City limits. The Master EIR concluded that the permanent loss of riparian habitat would be a less-than-significant impact. (Impact 4.3-7)

## **ANSWERS TO CHECKLIST QUESTIONS**

### Question A

The use, handling, and storage of hazardous materials is regulated by both the Federal Occupational Safety and Health Administration (Fed/OSHA) and the California Occupational Safety and Health Administration (Cal/OSHA). Cal/OSHA is responsible for developing and enforcing workplace safety regulations. At the local level, the Sacramento County Environmental Management Department regulates hazardous materials within Sacramento County, including chemical storage containers, businesses that use hazardous materials, and hazardous waste management.

The use and storage of hazardous materials is regulated by Section 8.64 of the Sacramento Municipal Code. Section 8.64.040 establishes regulation related to the designation of hazardous materials and requires that a hazardous material disclosure form be submitted within 15 days by any person using or handling a hazardous material. In addition, the routine transport, use, and disposal of hazardous materials are regulated by existing federal, State, and local regulations. For instance, the Sacramento County Environmental Management Department requires businesses handling sufficient quantities of hazardous materials to submit a Hazardous Materials Business Plan and obtain permitting.

Furthermore, residential uses are not typically associated with the routine transport, use, or disposal of hazardous materials, or present a reasonably foreseeable release of hazardous materials. Any hazardous materials associated with the residential uses would consist primarily of typical household cleaning products and fertilizers, which would be utilized in small quantities and in accordance with label instructions, which are based on federal and/or State health and safety regulations. Therefore, the proposed project would have **no additional significant environmental effect** related to creating a potential health significant hazard to plant or animal populations in the area beyond what was previously evaluated in the Master EIR.

### Question B

The proposed project would include the demolition of the existing Natomas Sports Club and the construction and operation of a multi-family development consisting of 190 units distributed throughout 10 buildings. According to the Arborist Report prepared for the project, 61 trees would be removed to accommodate the proposed development. A search of the California Natural Diversity Database (CNDDDB) was performed for the project site quadrangle (Sacramento West) as well as the eight surrounding quadrangles (i.e., Grays Bend, Taylor Monument, Rio Linda, Sacramento East, Florin, Clarksburg, Saxon, and Davis) to determine which special-status plant and wildlife species are known to occur within the region. The results of the CNDDDB query are discussed below.

#### *Special-Status Plant Species*

As noted previously, the project site is currently developed with buildings, outdoor recreation facilities, and parking areas. As a result, due to the lack of sufficient on-site habitat and the highly disturbed nature of the site, special-status plants are not likely to occur on-site.

#### *Special-Status Wildlife Species*

Of the special-status wildlife species identified as having the potential to exist in the project area, most were eliminated from further consideration due to habitat requirements (i.e., aquatic, wetland, grassland, and/or coastal habitats) which are not present at the project site. As noted above, portions of the project site are currently developed and the site is characterized by large a high level of disturbance. In addition, the project site is located within an urban area and is surrounded by existing development. Nonetheless, the project site contains on-site trees, and the Bannon Creek Preserve Trail includes trees, that provide suitable nesting habitat for migratory birds. California Fish and Game Code §3503 and the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711) each protect most birds and their nests, including most non-migratory birds in California.

Trees on the project site have the potential to provide nesting habitat for special-status bird species, including migratory birds and raptors protected under the MBTA and Section 3503 of the California Fish and Game Code. Special-status birds have the potential to nest in trees on or adjacent to the project site and could be disturbed by construction activities should construction occur during the bird nesting season. As such, construction of the project could affect suitable nesting habitat, and a potentially significant impact to nesting and migratory birds, including the Swainson's hawk, could occur.

#### *Tree Removal*

California Tree and Landscape Consulting, Inc. conducted a tree survey and prepared an Arborist Report for the project site. According to the Arborist Report, 54 total trees are proposed for removal to facilitate implementation of the proposed project, including both street trees and private protected trees. As noted above, eight private protected trees would require removal as part of the proposed project. Without the implementation of the recommendations included in the Arborist Report, a potentially significant impact could occur related to the removal and/or damage to protected trees.

#### *Conclusion*

Based on the above, development of the proposed project could result in a potentially significant impact to the Swainson's hawk and other nesting or migratory birds. In addition, a potentially significant impact could occur related to the removal of nine protected trees during grading and construction including street trees such as red oak and valley oak. However, with the implementation of Mitigation Measures 3-1, 3-2, and 3-3, the ***effect can be mitigated to less than significant.***

### Question C

Currently, the project site is developed with existing structures, parking areas, and associated improvements. Residential development surrounds the northern, eastern, and southern boundaries of the project site. Existing water bodies or features, such as rivers, creeks, or natural ditches do not exist on the project site. According to the National Wetlands Inventory, the area immediately west of the project site is identified as riverine habitat associated with the First Bannon Slough.<sup>7</sup> However, implementation of the project would not impinge upon the riparian habitat associated with the First Bannon Slough.

Because the project site does not contain existing water body features such as rivers, creeks, or natural ditches, the proposed project would not have a substantially adverse effect on any sensitive protected wetlands. Therefore, the proposed project would have **no additional significant environmental effect** beyond what was previously evaluated in the Master EIR.

### **MITIGATION MEASURES**

Implementation of Mitigation Measures 3-1 through 3-3 below would reduce the impacts identified above related to the Swainson's hawk, Migratory Birds and other raptors protected under the MBTA, and private protected trees per the City's Tree Ordinance to a *less-than-significant* level.

#### Swainson's Hawk, Migratory Birds, and Other Raptors Protected Under the MBTA

3-1 *If tree removal or construction activities on the project site are to begin during the nesting season for raptors or other protected bird species in the region (generally February 15-September 15), a qualified biologist shall be retained by the project applicant to conduct pre-construction surveys in areas of suitable nesting habitat for common raptors (including Swainson's hawk) and other bird species protected by the MBTA or California Fish and Game Code located within 500 feet of project activity. Surveys shall be conducted no more than 10 days before tree removal or ground disturbance is expected to occur. The pre-construction surveys shall be submitted to the City's Community Development Department. If active nests are not found, further mitigation is not required. If active nests are found, the construction contractor shall avoid impacts on such nests by establishing a no-disturbance buffer around the nest. The appropriate buffer size for all nesting birds shall be determined by a qualified biologist, but shall extend at least 50 feet from the nest. Buffer size will vary depending on site-specific conditions, the species of nesting bird, nature of the project activity, the extent of existing disturbance in the area, visibility of the disturbance from the nest site, and other relevant circumstances.*

*Construction activity shall not occur within the buffer area of an active nest until a qualified biologist confirms that the chicks have fledged and are no longer dependent on the nest, or the nesting cycle has otherwise completed. Monitoring of the nest by a qualified biologist during construction activities shall be required if the activity has the potential to adversely affect the nest. The qualified biologist shall determine the status of the nest at least weekly during the nesting season. If construction activities cause the nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the no-disturbance shall be increased until the agitated behavior ceases.*

#### Protected Trees

3-2 *Prior to issuance of grading permits, the plans shall note tree protection requirements stated within the Arborist Report prepared for the project. The measures shall be reflected on the grading plans, subject to review and approval by the City's Community Development Department.*

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<sup>7</sup> National Wetlands Inventory. *Wetlands Mapper*. Available at: <https://www.fws.gov/wetlands/data/mapper.html>. Accessed July 2021.

3-3 *Prior to issuance of a grading permit, the project applicant shall comply with tree permit requirements in effect at the time of project approval for removal, pruning, or soil disturbance within the canopy dripline of a private protected tree or City Street Tree. In addition, the following measures shall be implemented to reduce impacts from the removal of City Street Trees:*

- a) *Replacement trees for City Street Trees shall be replanted within the City right-of-way in coordination with the City's Urban Forester. If replacement trees for City Street Trees cannot be accommodated in the City's right-of-way, they shall be planted on site and incorporated into the project landscape plan or be planted at another off-site location at the City's direction.*
- b) *Replacement plantings shall consist of shade tree species recommended by the Urban Forestry Director.*
- c) *Tree planting shall comply with the City's landscaping requirements (City Code Sections 17.612.010 and 17.612.040).*
- d) *Canopy or root pruning of any retained City Street Trees to accommodate construction and/or fire lane access shall be conducted according the American National Standards Institute (ANSI) standards and the International Society of Arboriculture (ISA) best management practices (BMPs) All City Street Trees shall be protected from construction-related impacts pursuant to Sacramento City Code Chapter 12.56).*

*The aforementioned measures shall be reflected on the grading plans, subject to review and approval by the City's Community Development Department.*

#### **FINDINGS**

All additional significant environmental effects of the project relating to Biological Resources can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<b>4. CULTURAL RESOURCES</b>			
Would the project:			
A) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in § 15064.5?		X	
B) Directly or indirectly destroy a unique paleontological resource?		X	
C) Disturb any human remains?		X	

**ENVIRONMENTAL SETTING**

The City of Sacramento and the surrounding area are known to have been occupied by Native American groups for thousands of years prior to settlement by non-Native peoples. Archaeological materials, including human burials, have been found throughout the City. Human burials outside of formal cemeteries often occur in prehistoric contexts. Areas of high sensitivity for archaeological resources, as identified in the 2035 General Plan Background Report, are located within close proximity to the Sacramento and American rivers and other watercourses.

The 2035 General Plan land use diagram designates a wide swath of land along the American River as Parks, which limits development and impacts on sensitive prehistoric resources. High sensitivity areas may be found in other areas related to the ancient flows of the rivers, with differing meanders than found today. However, all such areas are outside of the immediate vicinity of the project site. Recent discoveries during infill construction in downtown Sacramento have shown that the downtown area is highly sensitive for both historic- and prehistoric-period archaeological resources. Native American burials and artifacts were found in 2005 during construction of the New City Hall and historic period archaeological resources are abundant downtown due to the evolving development of the area and, in part, to the raising of the surface street level in the 1860s and 1870s, which created basements out of the first floors of many buildings.

Currently, the majority of the project site is developed with existing structures, parking areas, and associated improvement's affiliated with the Natomas Sports Club. Additionally, the western portion of the project site consists of trees and shrubs associated with the Bannon Creek Preserve Trail. The entirety of the project site has been subject to extensive ground disturbances as a result of prior grading activities and existing development. Further, due to the age of the buildings, the existing on-site structures are not considered historic.

**STANDARDS OF SIGNIFICANCE**

For purposes of this Initial Study, cultural resource impacts may be considered significant if the proposed project would result in one or more of the following:

- Cause a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5; or
- Directly or indirectly destroy a unique paleontological resource; or
- A substantial adverse change in the significance of such resources.

## **SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

The Master EIR evaluated the potential effects of development under the 2035 General Plan on prehistoric and historic resources. See Chapter 4.4.

General Plan policies identified as reducing such effects call for identification of resources on project sites (Policy HCR 2.1.1), implementation of applicable laws and regulations (Policy HCR 2.1.2), early consultation with owners and land developers to minimize effects (Policy HCR 2.1.10) and encouragement of adaptive reuse of historic resources (Policy HCR 2.1.14). Demolition of historic resources is deemed a last resort. (Policy HCR 2.1.15)

The Master EIR concluded that implementation of the 2035 General Plan would have a significant and unavoidable effect on historic resources and archeological resources. (Impacts 4.4-1,2)

## **ANSWERS TO CHECKLIST QUESTIONS**

### Questions A through C

The approximately 9.06-acre project site includes existing development, parking areas, and associated improvements. The proposed project would include the construction and operation of a multi-family development consisting of 190 units distributed throughout 10 three-story buildings. The proposed project would also include the demolition of the existing building, tennis courts, swimming pools, and associated facilities, as well as modification to the site's access points, and new on-site improvements.

To identify any known cultural resources, a records search of the California Historic Resources System (CHRIS) was performed by the North Central Information Center (NCIC) for cultural resource site records and survey reports within the project area. According to the CHRIS search, the site has a low potential for the discovery of prehistoric-period cultural resources. Additionally, a search of the Sacred Lands File maintained by the Native American Heritage Commission (NAHC) was conducted and returned negative results for the presence of known Native American sacred sites in the immediate project vicinity.

Given the disturbed nature of the project site, surface cultural resources are not likely to be found on-site during grading and construction activities. However, due to the predominant historic theme of the region as a whole, which includes thousands of years of occupation by Native American groups prior to non-Native peoples settling in the region, the possibility exists that previously unknown resources could be encountered during ground-disturbing activities associated with development of the project. Therefore, the proposed project would have a potentially significant impact related to damaging or destroying prehistoric cultural resources. However, with implementation of Mitigation Measure 4-1, the ***effect can be mitigated to less than significant***.

## **MITIGATION MEASURES**

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

**4-1**                    ***In the Event that Cultural Resources are Discovered During Construction, Implement Procedures to Evaluate Cultural Resources and Implement Avoidance and Minimization Measures to Avoid Significant Impact.***

*If archaeological resources, or paleontological resources, are encountered in the project area during construction, the following performance standards shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of cultural resources:*

- *Each resource will be evaluated for California Register of Historical Resources (CRHR) eligibility through application of established eligibility criteria (California Code of Regulations 15064.636), in consultation with consulting Native American Tribes.*

*If a cultural resource is determined to be eligible for listing on the CRHR, the City will avoid damaging effects to the resource in accordance with California PRC Section 21084.3, if feasible. If the City determines that the project may cause a significant impact to a cultural resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts to a cultural resource or alternatives that would avoid significant impacts to the resource. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less-than significant may be reached:*

- *Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.*
- *Treat the resource with culturally appropriate dignity taking into account the cultural values and meaning of the resource, including, but not limited to, the following:*
  - *Protect the cultural character and integrity of the resource.*
  - *Protect the traditional use of the resource.*
  - *Protect the confidentiality of the resource.*
  - *Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.*
  - *Rebury the resource in place.*
  - *Protect the resource.*

*Avoidance and preservation in place is the preferred manner of mitigating impacts to archaeological resources and paleontological resources will be accomplished, if feasible, by several alternative means, including:*

- *Planning construction to avoid cultural resources, archaeological sites and/ or other resources; incorporating sites within parks, green-space or other open space; covering archaeological sites; deeding a site to a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity.*
- *The construction contractor(s) will install and maintain protective fencing throughout construction to avoid the site during all remaining phases of construction. The area will be demarcated as an “Environmentally Sensitive Area”.*

*To implement these avoidance and minimization standards, the following procedures shall be followed in the event of the discovery of an archaeological or paleontological resource:*

- *At the developer’s expense, the City shall coordinate the investigation of the find with a qualified (meeting the Secretary of the Interior’s Qualification Standards for Archaeology) archaeologist approved by the City. As part of the site investigation and resource assessment, the City and the archaeologist shall assess the significance of the find, make recommendations for further evaluation and treatment as necessary and provide proper management recommendations should potential impacts to the resources be determined by the City to be significant. A written report detailing the site assessment, coordination activities, and management recommendations shall be provided to the City representative*



*by the qualified archaeologist. These recommendations will be documented in the project record.*

- *The City shall consider management recommendations for tribal cultural resources, including Native American archaeological resources, that are deemed appropriate, including resource avoidance or, where avoidance is infeasible in light of project design or layout or is unnecessary to avoid significant effects, preservation in place or other measures. The contractor shall implement any measures deemed by the City to be necessary and feasible to avoid or minimize significant impacts to the cultural resources.*

**FINDINGS**

All additional significant environmental effects of the project relating to Cultural Resources can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<b>5. ENERGY</b> Would the project: <ul style="list-style-type: none"> <li>A) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?</li> </ul>			X
<ul style="list-style-type: none"> <li>B) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?</li> </ul>			X

**ENVIRONMENTAL SETTING**

Sacramento Municipal Utility District (SMUD) is a community-owned and not-for-profit utility that provides electric services to 900 square miles, including most of Sacramento County (SMUD 2020). Pacific Gas and Electric (PG&E) is an inventory-owned utility that provides electric and natural gas services to approximately 16 million people within a 70,000-square-mile service area in both northern and central California (PG&E 2020). SMUD is the primary electricity supplier, and PG&E is the primary natural gas supplier for the City of Sacramento and the project area.

Energy demand related to the proposed project would include energy directly consumed for space heating and cooling and proposed electric facilities and lighting. Indirect energy consumption would be associated with the generation of electricity at power plants. Transportation-related energy consumption includes the use of fuels and electricity to power cars, trucks, and public transportation. Energy would also be consumed by equipment and vehicles used during project construction and routine maintenance activities.

**Energy Policy and Conservation Act, and CAFE Standards**

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil. Under this act, the National Highway Traffic and Safety Administration, is responsible for revising existing fuel economy standards and establishing new vehicle economy standards. The Corporate Average Fuel Economy program was established to determine vehicle manufacturer compliance with the government’s fuel economy standards. Three Energy Policy Acts have been passed, in 1992, 2005, and 2007, to reduce dependence on foreign petroleum, provide tax incentives for alternative fuels, and support energy conservation.

**Energy Policy Act of 1992 and 2005**

The Energy Policy Act of 1992 (EPAAct) was passed to reduce the country’s dependence on foreign petroleum and improve air quality. EPAAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAAct requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in EPAAct. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs. The Energy Policy Act of 2005 provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

## **State of California Energy Efficiency Action Plan**

The 2019 California Energy Efficiency Action Plan has three primary goals for the state: double energy efficiency savings by 2030 relative to a 2015 base year (per SB 350), expand energy efficiency in low-income and disadvantaged communities, and reduce greenhouse gas emissions from buildings. This plan provides guiding principles and recommendations on how the state would achieve those goals. These recommendations include:

- identifying funding sources that support energy efficiency programs,
- identifying opportunities to improve energy efficiency through data analysis,
- using program designs as a way to encourage increased energy efficiency on the consumer end,
- improving energy efficiency through workforce education and training, and
- supporting rulemaking and programs that incorporate energy demand flexibility and building decarbonization. (CEC 2019)

## **California Green Building Standards**

The energy consumption of new residential and nonresidential buildings in California is regulated by the state's Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code). The California Energy Code was established by the California Energy Commission (CEC) in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and non-residential buildings. CEC updates the California Energy Code every 3 years with more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions.

The 2019 California Energy Code was adopted by CEC on May 9, 2018 and applies to projects constructed after January 1, 2020. The 2019 California Energy Code is designed to move the State closer to its zero-net energy goals for new residential development. It does so by requiring all new residences to install enough renewable energy to offset all the electricity needs of each residential unit (California Code of Regulations (CCR), Title 24, Part 6, Section 150.1(c)4). CEC estimates that the combination of mandatory on-site renewable energy and prescriptively required energy efficiency standards will result in a 53 percent reduction in new residential construction as compared to the 2016 California Energy Code. Non-residential buildings are anticipated to reduce energy consumption by 30 percent as compared to the 2016 California Energy Code primarily through prescriptive requirements for high-efficiency lighting (CEC 2018). The Energy Code is enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary due to local climatologic, geologic, or topographic conditions, provided that these standards exceed those provided in the California Energy Code.

## **Transportation-Related Regulations**

Various regulatory and planning efforts are aimed at reducing dependency on fossil fuels, increasing the use of alternative fuels, and improving California's vehicle fleet. SB 375 aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. CARB, in consultation with the metropolitan planning organizations, provides each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in their respective regions for 2020 and 2035.

Pursuant to AB 2076 (Chapter 936, Statutes of 2000), CEC and the CARB prepared and adopted a joint agency report in 2003, Reducing California's Petroleum Dependence. Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita vehicle miles traveled (VMT) (CEC and CARB 2003).

AB 1007 (Chapter 371, Statutes of 2005) required CEC to prepare the State Alternative Fuels Plan to increase the use of alternative fuels in California.

In January 2012, CARB approved the Advanced Clean Cars program which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025. The program's zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025.

On August 2, 2018, the National Highway Traffic Safety Administration (NHTSA) and EPA proposed the Safer Affordable Fuel-Efficient Vehicles Rule (SAFE Rule). Part One of the SAFE Rule revokes a waiver granted by EPA to the State of California under Section 209 of the CAA to enforce more stringent emission standards for motor vehicles than those required by EPA for the explicit purpose of GHG emission reduction, and indirectly, criteria air pollutant and ozone precursor emission reduction. On March 31, 2020, Part Two of the SAFE Rule was published and would amend existing CAFE and tailpipe CO<sub>2</sub> emissions standards for passenger cars and light trucks and establish new standards covering model years 2021 through 2026.

### **GHG Reduction Regulations**

Several regulatory measures such as AB 32 and the Climate Change Scoping Plan, EO B-30-15, SB 32, and AB 197 were enacted to reduce GHGs and have the co-benefit of reducing California's dependency on fossil fuels and making land use development and transportation systems more energy efficient.

### **Renewable Energy Regulations**

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California. SB X1-2 mandates that renewables from these sources make up at least 50 percent of the total renewable energy for the 2011-2013 compliance period, at least 65 percent for the 2014-2016 compliance period, and at least 75 percent for 2016 and beyond.

SB 100, signed in September 2018, requires that all California utilities, including independently-owned utilities, energy service providers, and community choice aggregators, supply 44 percent of retail sales from renewable resources by December 31, 2024, 50 percent of all electricity sold by December 31, 2026, 52 percent by December 31, 2027, and 60 percent by December 31, 2030. The law also requires that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045.

### **Energy Independence and Security Act of 2007**

The Energy Independence and Security Act of 2007 is designed to improve vehicle fuel economy and help reduce U.S. dependence on oil. It represents a major step forward in expanding the production of renewable fuels, reducing dependence on oil, and confronting global climate change. The Energy Independence and Security Act of 2007 increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022, which represents a nearly five-fold increase over current levels; and reduces U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020—an increase in fuel economy standards of 40 percent. By addressing renewable fuels and the CAFE standards, the Energy Independence and Security Act of 2007 builds upon progress made by the Energy Policy Act of 2005 in setting out a comprehensive national energy strategy for the 21st century.

### **SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

Structures built would be subject to Titles 20 and 24 of the California Code of Regulations, which reduce demand for electrical energy by implementing energy-efficient standards for residential and non-residential

buildings. The 2035 General Plan includes policies (see 2035 General Plan Energy Resources Goal U 6.1.1) and related policies to encourage energy-efficient technology by offering rebates and other incentives to commercial and residential developers, coordination with local utility providers and recruitment of businesses that research and promote energy conservation and efficiency.

The Master EIR discussed energy conservation and relevant General Plan policies in section 6.3 (page 6-3). The discussion concluded that with implementation of the General Plan policies and energy regulation (e.g., Title 24) development allowed in the General Plan would not result in the inefficient, wasteful or unnecessary consumption of energy.

The Master EIR concluded that implementation of state regulation, coordination with energy providers and implementation of General Plan policies would reduce the potential impacts from construction of new energy production or transmission facilities to a less-than-significant level.

### **Sacramento Climate Action Plan**

The Sacramento CAP was adopted on February 14, 2012 by the Sacramento City Council and was incorporated into the 2035 General Plan. The Sacramento CAP includes GHG emission reduction targets, strategies, and implementation measures developed to help the City reach these targets. Reduction strategies address GHG emissions associated with transportation and land use, energy, water, waste management and recycling, agriculture, and open space.

### **STANDARDS OF SIGNIFICANCE**

For the purposes of this Initial Study, an impact is considered significant if the proposed project would:

- Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation; and/or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

### **ANSWERS TO CHECKLIST QUESTIONS**

#### Questions A and B

Neither federal or State law nor the State CEQA Guidelines establish thresholds that define when energy consumption is considered wasteful, inefficient and unnecessary. Compliance with CCR Title 24 Energy Efficiency Standards would result in energy-efficient buildings. However, compliance with building codes does not adequately address all potential energy impacts during construction and operation. For example, energy would be required to transport people and goods to and from the project site. Energy use is discussed by anticipated use type below.

#### *Construction*

Construction of the proposed project would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the sites where energy supply cannot be met via a hookup to the existing electricity grid.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site and off-site improvement areas would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, all construction equipment and operation thereof would be regulated per the CARB In-Use Off-Road Diesel Vehicle Regulation. The

In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. The In-Use Off-Road Diesel Vehicle Regulation would subsequently help to improve fuel efficiency and reduce GHG emissions. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to reduce demand on oil and emissions associated with construction.

The CARB has recently prepared the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan), which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. Appendix B of the 2017 Scoping Plan includes examples of local actions (municipal code changes, zoning changes, policy directions, and mitigation measures) that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The CARB Diesel Vehicle Regulation described above, with which the Project must comply, would be consistent with the intention of the 2017 Scoping Plan and the recommended actions included in Appendix B of the 2017 Scoping Plan.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, construction activities would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

#### *Operational*

The proposed project would be subject to all relevant provisions of the most recent update of the CBSC, including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code, the Building Energy Efficiency Standards, and all applicable regulations included within the City's Climate Action Plan would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting. Required compliance with the CBSC would ensure that the building energy use associated with the project would not be wasteful, inefficient, or unnecessary. In addition, electricity supplied to the project by SMUD would comply with the State's Renewables Portfolio Standard, which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 60 percent by 2030. Pursuant to the 2019 CBSC, the proposed project would be required to incorporate rooftop solar panels to meet the electricity demands of future residents. As a result, a portion of the electricity consumed during project operations would be generated from renewable sources. It is noted that at least 50 percent of the proposed parking area would be shaded by landscaping trees (see Figure 5), which would reduce heat island effects on the project and discourage energy use associated with air conditioning and the use of HVAC systems.

With regard to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy. In addition, as discussed in Section 12, Transportation, of this Initial Study, the VMT associated with development of the proposed project is anticipated to be less than the average household VMT per capita for the region.

#### *Conclusion*

Based on the above, construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, implementation of the proposed project would have **no**

***additional significant environmental effect*** related to energy beyond what was previously evaluated in the Master EIR.

**MITIGATION MEASURES**

None required.

**FINDINGS**

The project would have no additional project-specific environmental effects relating to Energy.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p><b>6. <u>GEOLOGY AND SOILS</u></b> Would the project:</p> <p>A) Would the project allow a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards?</p>		X	

**ENVIRONMENTAL SETTING**

**Seismicity**

The City of Sacramento is not located within an Alquist-Priolo Earthquake Fault Zone, and known faults do not exist within the Policy Area. Therefore, fault rupture within the Policy Area is highly unlikely and, consequently, implementation of buildout of the General Plan, would not expose people or structures to the possibility of fault rupture.

Nonetheless, the City may be subject to seismic hazards caused by major seismic events outside the City. Per the Master EIR, the greatest earthquake threat to the City comes from earthquakes along Northern California’s major faults, including the San Andreas, Calaveras, and Hayward faults. Ground shaking on any of the aforementioned faults could cause shaking within the City to an intensity of 5 to 6 moment magnitude (Mw). However, as noted above, the City is not within an Alquist-Priolo Earthquake Fault Zone and does not include any known active faults. As such, the City’s seismic ground-shaking hazard is low, ranking among the lowest in the State. Additionally, the City is in Seismic Zone 3. Accordingly, any future development, rehabilitation, reuse, or possible change of use of a structure would be required to comply with all design standards applicable to Seismic Zone 3.

**Topography**

Terrain in the City of Sacramento features very little relief and the potential for slope instability within the City is minor due to the relatively flat topography of the area. The topography of the project site is relatively level, and is not a risk of seismically-induced landslides. Due to the relatively flat topography of the area, the potential for slope instability within the City and at the project site is minor.

**Regional Geology**

The City of Sacramento is located in the Great Valley Geomorphic Province. The Great Valley Geomorphic Province consists of a deep, northwest-trending sedimentary basin that borders the east of the Coast Ranges. The Great Valley Geomorphic Province is a flat alluvial plain approximately 50 miles wide and 400 miles long in the central portion of California. The northern portion of the Great Valley Geomorphic Province is the Sacramento Valley drained by the Sacramento River, and the southern part is the San Joaquin Valley drained by the San Joaquin River. The valley is surrounded by the Sierra Nevada to the east, the Tehachapi Mountains to the south, Coastal Range to the west, and Cascade Range to the north.

**STANDARDS OF SIGNIFICANCE**

For the purposes of this Initial Study, an impact is considered significant if it allows a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards.



**SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

Chapter 4.5 of the Master EIR evaluated the potential effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, existing mineral resources and paleontological resources in the City. Implementation of identified policies in the 2035 General Plan reduced all effects to a less-than-significant level. Policy EC 1.1.1 requires regular review of the City's seismic and geologic safety standards, and Policy EC 1.1.2 requires geotechnical investigations for project sites to identify and respond to geologic hazards, when present.

**ANSWERS TO CHECKLIST QUESTIONS**

Question A

The City of Sacramento's topography is relatively flat, the City is not located within an Alquist-Priolo Earthquake Fault Zone, and the City is not located in the immediate vicinity of an active fault. However, Sacramento is located in a moderate seismically-active region. The 2035 General Plan indicates that ground shaking would occur periodically in Sacramento as a result of distant earthquakes. The 2035 General Plan further states that the earthquake resistance of any building is dependent on an interaction of seismic frequency, intensity, and duration with the structure's height, condition, and construction materials. Although the project site is not located near any active or potentially active faults, strong ground shaking could occur at the project site during a major earthquake on any of the major regional faults.

The proposed project would include the development of a 190-unit apartment complex. Due to the seismic activity in the State, construction is required to comply with Title 24 of the Uniform Building Code (UBC). Chapter 15.20 of the Sacramento City Code adopts the UBC and mandates compliance; therefore, all new construction and modifications to existing structures within the City are subject to the requirements of the UBC. The UBC contains standards to ensure that all structures and infrastructure are constructed to minimize the impacts from seismic activity, to the extent feasible, including exposure of people or structures to substantial, adverse effects as a result of strong groundshaking, seismic-related ground failure, liquefaction, lateral spreading, landslides, or lurch cracking. As a result, seismic activity in the area of the proposed development would not expose people or structures to substantial, adverse effects as a result of strong groundshaking and seismic-related ground failure.

In addition, issues related to fault rupture, seismic groundshaking, and seismically induced ground failures are addressed in the City's adopted Standard Specifications for Public Works Construction (2007), which requires construction contractors to build to City standards related to structural integrity, thus, ensuring that erosion and unstable soil conditions do not occur as a result of construction. The construction specification document contains provisions that require contractors to be responsible for damage caused during construction and to be responsible for the repair of such damages (e.g., settling of adjacent land and structures). The proposed project would require heavy construction, and individual components used in the construction of the project would be constructed to industry-provided design specifications and requirements, including the American Society for Testing and Materials (ASTM) standards.

Soils typically found most susceptible to liquefaction are saturated and loose, fine to medium grained sand. Liquefaction occurs where surface soils become saturated with water and become mobile during groundshaking caused by a seismic event. When soils subject to liquefaction move, the foundations of structures move as well which can cause structural damage. Liquefaction generally occurs below the water table, but could move upward through soils after development. The Master EIR identified soils subject to liquefaction to be found within areas primarily within the Central City, Pocket, and North and South Natomas Community. However, the Master EIR recommends using site-specific geotechnical studies to determine if in fact, a specific location may be subject to liquefaction hazard.

In 2015, a Geotechnical Exploration Report was prepared for the multi-family development directly south of the project site by KC Engineering Consultants (see Appendix C).<sup>8</sup> According to the United States Geological Survey (USGS) Web Soil Survey, the soils found on the project site and the multi-family development south of the site are identical.<sup>9</sup> Therefore, the conclusion and recommendations included within the 2015 Geotechnical Exploration Report are applicable to the Sutter Greens 2.0 project site.

As part of the 2015 Geotechnical Exploration Report, KC Engineering Consultants performed a site reconnaissance and drilled five exploratory test borings of subsurface soils at the project site. Site soils were found to be subject to heave and shrink movements with changes in moisture content. The movement of site soils may affect foundations, concrete flatwork, and pavements. The varying layers of firm, stiff material creates the potential for total settlement to be as much as an inch and a potential differential settlement of about half an inch. The groundwater levels encountered in the borings ranged from 15.5 to 16 feet below the ground surface. Fluctuations in the groundwater level could occur with variations in seasonal rainfall, subsurface stratification, and irrigation on the site and vicinity. However, the 2015 Geotechnical Exploration Report determined that the site is feasible for construction given that recommendations presented in the report are incorporated in the project design. Furthermore, development of the project site would be built to City of Sacramento Building Code, UBC Standards, and California Building Code Standards.

Based on the above, the site directly south of the project site was found to have a presence of moderately expansive near surface soil conditions, creating the potential for consolidation settlement and the potential for liquefaction to occur. Because the same soil type exists on the project site and the site which was evaluated in the 2015 Geotechnical Report, the project site would also have the potential for expansive soils, consolidation, and liquefaction. As such, without further investigation and preparation of site-specific soil testing, the proposed project could potentially introduce geologic or seismic hazards by allowing the construction of the project site without protection against settlement and liquefaction hazards, and a potentially significant impact could occur. However, with implementation of Mitigation Measure 6-1, the ***effect can be mitigated to less than significant.*** .

#### **MITIGATION MEASURES**

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

- 6-1 *Prior to issuance of a grading permit, the applicant shall retain the services of a qualified geologist to prepare a design-level Geotechnical Report for the project site. The grading plans shall incorporate all geotechnical recommendations specified in the Geotechnical Report prepared for the proposed project. All grading and foundation plans for the development must be reviewed and approved by the City Engineer and Chief Building Official prior to issuance of grading and building permits in order to ensure that recommendations in the Geotechnical Report are properly incorporated and utilized in the project design.*

#### **FINDINGS**

All additional significant environmental effects of the project relating to Geology and Soils can be mitigated to a less-than-significant level.

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<sup>8</sup> KC Consultants. *Geotechnical Exploration Report on Proposed Natomas Park Drive Apartments*. June 2015.

<sup>9</sup> United States Department of Agriculture. *Natural Resources Conservation Science*. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed May 2021.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<b>7. HAZARDS</b> Would the project:			
A) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities?			X
B) Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials?			X
C) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities?			X

**ENVIRONMENTAL AND REGULATORY SETTING**

Federal regulations and regulations adopted by the SMAQMD apply to the identification and treatment of hazardous materials during demolition and construction activities. Failure to comply with these regulations respecting asbestos may result in a Notice of Violation being issued by the AQMD and civil penalties under state and/or federal law, in addition to possible action by U.S. EPA under federal law.

Federal law covers a number of different activities involving asbestos, including demolition and renovation of structures (40 CFR § 61.145).

**SMAQMD Rule 902 and Commercial Structures**

The work practices and administrative requirements of Rule 902 apply to all commercial renovations and demolitions where the amount of Regulated Asbestos-Containing Material (RACM) is greater than:

- 260 lineal feet of RACM on pipes, or
- 160 square feet of RACM on other facility components, or
- 35 cubic feet of RACM that could not be measured otherwise.

The administrative requirements of Rule 902 apply to any demolition of commercial structures, regardless of the amount of RACM. To determine the amount of RACM in a structure, Rule 902 requires that a survey be conducted prior to demolition or renovation unless:

- The structure is otherwise exempt from the rule, or
- Any material that has a propensity to contain asbestos (so-called "suspect material") is treated as if it is RACM.

Surveys must be done by a licensed asbestos consultant and require laboratory analysis. Asbestos consultants are listed in the phone book under "Asbestos Consultants." Large industrial facilities may use non-licensed employees if those employees are trained by the U.S. EPA. Questions regarding the use of non-licensed employees should be directed to the AQMD.

A Phase I Environmental Site Assessment (ESA) was prepared for the proposed project by Analytical Environmental Services in January 2021 (see Appendix D).<sup>10</sup> The Phase I ESA included a review of

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<sup>10</sup> Analytical Environmental Services. *Phase I Environmental Site Assessment for Demmon Partners 2450 Natomas Park Drive*. January 2021.

previous land uses and history of the subject property, databases for records of known storage tanks sites or hazardous materials, and available information from federal, State, or local agency lists of potentially hazardous wastes or materials on site. In addition, a site reconnaissance was conducted on December 22, 2020. The purpose of the site reconnaissance was to examine the subject property for obvious physical indications of improper hazardous substances or evidence of petrochemical disposal, such as stained soil, stressed vegetation, sumps, partially buried drums, bulk underground and above-ground fuel storage tanks, and other obvious signs of hazardous materials involvement.

A Geotechnical Exploration Report was prepared for the multi-family development south of the project site by KC Engineering Consultants in which subsurface conditions were explored and tested. Surficial soil borings were placed on site and groundwater levels encountered in the borings ranged from 15.5 to 16 feet below ground surface. In addition, an Asbestos Inspection and Report was prepared by Regas Group Environmental Consultants.<sup>11</sup>

### **STANDARDS OF SIGNIFICANCE**

For the purposes of this Initial Study, an impact is considered significant if the proposed project would:

- Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials; or
- Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities.

### **SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

The Master EIR evaluated effects of development on hazardous materials, emergency response and aircraft crash hazards. See Chapter 4.6. Implementation of the General Plan may result in the exposure of people to hazards and hazardous materials during construction activities, and exposure of people to hazards and hazardous materials during the life of the General Plan. Impacts identified related to construction activities and operations were found to be less than significant. Policies included in the 2035 General Plan, including PHS 3.1.1 (investigation of sites for contamination) and PHS 3.1.2 (preparation of hazardous materials actions plans when appropriate) were effective in reducing the identified impacts.

### **ANSWERS TO CHECKLIST QUESTIONS**

#### Question A

Per the Master EIR, grading, excavation, and dewatering of sites for new development may expose construction workers and the public to known or previously unreported hazardous substances present in the soil or groundwater. If new development is proposed at or near a documented or suspected hazardous materials site, investigation, remediation, and cleanup of the site would be required before construction could begin. The Phase I ESA prepared for the project site searched for Recognized Environmental Concerns (RECs) that may affect future users of the subject property. RECs refer to the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products in structures on the property or into the ground, groundwater, or surface water of the property. According to the Phase I ESA, RECs were not identified on or in the immediate vicinity of the subject property that would likely pose a significant impact. Furthermore, the project site is not located on a hazardous waste facility or site with known contamination within the EnviroStor Database.<sup>12</sup> The closest

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<sup>11</sup> Regas Group Environmental Consultants. *Asbestos Inspection and Report*. June 4, 2021.

<sup>12</sup> Department of Toxic Substances Control. *EnviroStor*. Available at: <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Natomas%2C+California>. Accessed March 2021.

listed hazardous site is the Jibboom Junkyard, approximately 1.2 miles south of the project site. According to the Phase I ESA, additional subsurface hazardous materials investigations of the property are not recommended at this time.

Because the proposed project does not contain contaminated soils, and the off-site hazardous sites would not likely impact the proposed project site, impacts related to exposing people to existing contaminated soils or groundwater during construction activities would be less-than-significant. Thus, implementation of the proposed project would have ***no additional significant environmental effect*** related to exposing people to existing contaminated soil during construction activities beyond what was previously evaluated in the Master EIR.

#### Question B

Asbestos is the name for a group of naturally occurring silicate minerals that are considered to be “fibrous” and, through processing, can be separated into smaller and smaller fibers. The fibers are strong, durable, chemical resistant, and resistant to heat and fire. They are also long, thin and flexible, so they can even be woven into cloth. Because of these qualities, asbestos was considered an ideal product and has been used in thousands of consumer, industrial, maritime, automotive, scientific and building products. However, later discoveries found that, when inhaled, the material caused serious illness.

For buildings constructed prior to 1980, the Code of Federal Regulations (29 CFR 1926.1101) states that all thermal system insulation (boiler insulation, pipe lagging, and related materials) and surface materials must be designated as “presumed asbestos-containing material” unless proven otherwise through sampling in accordance with the standards of the Asbestos Hazard Emergency Response Act. Asbestos-containing materials could include, but are not limited to, plaster, ceiling tiles, thermal systems insulation, floor tiles, vinyl sheet flooring, adhesives, and roofing materials.

Lead-based paint (LBP) is defined as any paint, varnish, stain, or other applied coating that has one milligram per cubic centimeter or greater (5,000 micrograms per gram or 5,000 parts per million) of lead by federal guidelines. Lead is a highly toxic material that may cause a range of serious illnesses and, in some cases, death. In buildings constructed after 1978, LBP is unlikely to be present. Structures built prior to 1978 and especially prior to the 1960s should be expected to contain LBP.

The proposed project includes the demolition of the existing on-site facility, the Natomas Sports Club. Existing facilities within the Natomas Sports Club include a parking lot, tennis courts, outdoor covered areas, a swimming pool, and a building/fitness area. However, as noted in the Phase I ESA prepared for the project, the existing buildings were built between 1993 and 1998. As a result, asbestos and LBP are unlikely to be present in the existing structures, and demolition would not result in exposure to such hazards.

In order to confirm the absence of asbestos-containing materials (ACMs) in the existing structures, an Asbestos Inspection and Report was prepared for the proposed project. The Asbestos Inspection and Report included testing of over 70 samples of building materials for the presence of asbestos. Currently, EPA regulations classify ACMs as materials containing greater than one percent of asbestos. Based on the results of the analysis, the Asbestos Inspection and Report concluded that ACMs are not present in the existing structures. Thus, demolition of the existing building would not pose a risk to receptors related to asbestos.

In addition, the project site is not located in eastern Sacramento County and is not in an area identified as likely to contain naturally-occurring asbestos (NOA). Thus, receptors would not be exposed to NOA as a result of ground-disturbing activities associated with implementation of the proposed project.

Based on the age of the existing on-site structures and the results of the Asbestos Inspection and Result, demolition activities associated with the proposed project would not result in the exposure of people to asbestos-containing materials or other hazardous materials. Therefore, implementation of the proposed project would have ***no additional significant environmental effect*** related to exposing people to asbestos-containing materials or other hazardous materials beyond what was previously evaluated in the Master EIR.

Question C

According to the Geotechnical Exploration Report, groundwater levels encountered at the site ranged from 15.5 to 16 feet below the ground surface. Fluctuations in the groundwater level could occur with variations in seasonal rainfall, subsurface stratification, and irrigation on the site and vicinity. Construction activities are not expected to involve excavation to groundwater depths. Additionally, groundwater dewatering is not anticipated to be required during development of the proposed project. Furthermore, according to the Phase I ESA, groundwater on the project site has not been contaminated. Therefore, impacts related to exposing people to existing contaminated groundwater during dewatering activities would be less than significant, and construction of the proposed project would have ***no additional significant environmental effect*** related to groundwater contamination beyond what was previously evaluated in the Master EIR.

**MITIGATION MEASURES**

None required.

**FINDINGS**

The project would have no additional project-specific environmental effects relating to Hazards.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<b>8. HYDROLOGY AND WATER QUALITY</b>			
Would the project:			
A) Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the project?			X
B) Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood?			X

**ENVIRONMENTAL SETTING**

The project site is located in a highly developed area of South Natomas. Currently, the majority of the project site is developed with impervious surfaces, including buildings, parking areas, and sidewalks. The site already contains storm drainage infrastructure, which diverts runoff from the impervious surfaces on the site and into the City’s storm drain main in Natomas Park Drive.

The City of Sacramento’s Grading Ordinance requires that development projects comply with the requirements of the City’s Stormwater Quality Improvement Plan (SQIP). The SQIP outlines the priorities, key elements, strategies, and evaluation methods of the City’s Stormwater Management Program. The City’s Stormwater Management Program is based on the National Pollutant Discharge Elimination System (NPDES) municipal stormwater discharge permit. The comprehensive Stormwater Management Program includes pollution reduction activities for construction sites, industrial sites, illegal discharges and illicit connections, new development, and municipal operations. In addition, before the onset of any construction activities, where the disturbed area is one acre or more in size, projects are required to obtain coverage under the NPDES General Construction Permit and include erosion and sediment control plans. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater and other non-point source runoff. Measures that reduce or eliminate post-construction-related water quality problems range from source controls, such as reduced surface disturbance, to treatment of polluted runoff, such as detention or retention basins. The City’s SQIP and the *Stormwater Quality Design Manual for the Sacramento Region* (Sacramento Stormwater Quality Partnership 2014) include BMPs to be implemented to mitigate impacts from new development and redevelopment projects, as well as requirements for low impact development (LID) standards.

The Federal Emergency Management Agency (FEMA) publishes Flood Insurance Rate Maps (FIRM) that delineate flood hazard zones for communities. The project site is located within an area designated as Zone A99, which is applied to areas that are subject to inundation by the one percent annual chance flood event, but will ultimately be protected upon completion of an under-construction federal flood protection system. According to FEMA, such areas are areas of special flood hazard where enough progress has been made on the construction of a protection system, such as a dike, dam, or levee, to consider the protection system complete for insurance rating purposes. Areas zoned A99 may only be rated as such when the flood protection system has reached specified statutory progress toward completion. Mandatory flood insurance requirements and floodplain management standards apply to areas rated A99.

Section 13.08.145 of the Sacramento City Municipal Code (Mitigation of drainage impacts; design and procedures manual for water, sanitary sewer, storm drainage, and water quality facilities) requires that when a property contributes drainage to the storm drain system or combined sewer system, all stormwater and surface runoff drainage impacts resulting from the improvement or development must be fully mitigated

to ensure that the improvement or development does not affect the function of the storm drain system or combined sewer system, and that an increase in flooding or in water surface elevation that adversely affects individuals, streets, structures, infrastructure, or property does not occur. The project is within the service area of the SASD fees, which are used to recover a share of SASD's cost for any new system facilities necessary to service new connections.<sup>13</sup> In addition to sewer service provided by SASD, the project would also be within the SRCSD. In order to connect with the SRCSD wastewater conveyance and treatment system, developers must pay impact fees.<sup>14</sup> In infill areas, multi-family residential customers must pay 2,701 dollars per dwelling unit.

#### **STANDARDS OF SIGNIFICANCE**

For purposes of this Initial Study, impacts to hydrology and water quality may be considered significant if construction and/or implementation of the proposed project would result in the following impacts that remain significant after implementation of general plan policies or mitigation from the 2035 General Plan Master EIR:

- Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board (SWRCB), due to increases in sediments and other contaminants generated by construction and/or development of the proposed project; or
- Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

#### **SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

Chapter 4.7 of the Master EIR evaluates the potential effects of the 2035 General Plan as they relate to surface water, groundwater, flooding, stormwater and water quality. Potential effects include water quality degradation due to construction activities (Impacts 4.7-1, 4.7-2), and exposure of people to flood risks (Impacts 4.7-3). Policies included in the 2035 General Plan, including a directive for regional cooperation (Policies ER 1.1.2, EC 2.1.1), comprehensive flood management (Policy EC 2.1.23), and construction of adequate drainage facilities with new development (Policy ER 1.1.1 to ER 1.1.10) were identified that the Master EIR concluded would reduce all impacts to a less-than-significant level.

#### **ANSWERS TO CHECKLIST QUESTIONS**

##### Question A

The proposed project has the potential to effect water quality during both construction and operation. Further details regarding the potential effects are provided below.

##### *Construction*

Construction activities associated with the proposed project would create the potential to degrade water quality from increased sedimentation and increased discharge (increased flow and volume of runoff) associated with storm water runoff. The SWRCB adopted a statewide general NPDES permit for stormwater discharges associated with construction activity. Dischargers whose projects disturb one or more acres of soil are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2012-0006-DWQ. Construction activity subject to the General Permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation. The proposed project would include disturbance of approximately 9.06 acres; thus, the project would be subject to the aforementioned regulations.

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<sup>13</sup> Sacramento Area Sewer District. *Sewer Ordinance SDI-0072*. Effective May 27, 2016.

<sup>14</sup> Regional San. *Impact Fees*. Available at: <https://www.regionalsan.com/impact-fees-businesses>. Accessed March 2021.



The City's SQIP contains a Construction Element that guides implementation of the NPDES Permit for Storm Water Discharges Associated with Construction Activity. This General Construction Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list BMPs the discharger would use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutant to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. Compliance with City requirements to protect storm water inlets would require the developer to implement BMPs such as the use of straw wattles, sandbags, gravel traps, and filters; erosion control measures such as vegetation and physical stabilization; and sediment control measure such as fences, dams, barriers, berms, traps, and basins. City staff inspects and enforces the erosion, sediment and pollution control requirements in accordance with City codes (Grading, Erosion and Sediment Control Ordinance).

Conformance with City regulations and permit requirements along with implementation of BMPs would ensure that construction activities of the proposed project would result in a less-than-significant impact related to water quality.

### *Operations*

Because the project would involve demolition of the existing tennis courts and implementation of new landscaped areas, development of the proposed project would decrease the amount of impervious surface area from approximately 268,7775 sf to 240,737 sf. As a result, following implementation of the project, more pervious surface area would be available on-site for stormwater to infiltrate on-site soils. Consistent with Chapter 13.16 of the Municipal Code, the post-development stormwater flows from the site would be equal to or less than predevelopment conditions.

As a standard Condition of Approval (COA) for development projects in the City, the City's Department of Utilities requires preparation and submittal of project-specific drainage studies. With submittal of the required drainage study, the Department of Utilities would review the Improvement Plans for the proposed project prior to approval to ensure that adequate water quality control facilities and certified full capture trash control devices are incorporated. It should be noted that the proposed project would comply with Section 13.08.145, Mitigation of drainage impacts; design and procedures manual for water, sanitary sewer, storm drainage, and water quality facilities, of the Municipal Code, which requires the following:

"When property that contributes drainage to the storm drain system or combined sewer system is improved or developed, all stormwater and surface runoff drainage impacts resulting from the improvement or development shall be fully mitigated to ensure that the improvement or development does not affect the function of the storm drain system or combined sewer system, and that there is no increase in flooding or in water surface elevation that adversely affects individuals, streets, structures, infrastructure, or property."

While the project-specific drainage study will be completed at a later date, per the Preliminary Grading Plan, the project would include the provision of several infiltration trenches, as well as stormwater treatment vaults equipped with Contech StormFilter cartridges, in order to treat on-site runoff. Considering the reduction in impervious surface area, the planned stormwater treatment facilities, and the required preparation of a site-specific drainage study, adverse impacts related to water quality during project operations would not occur.

### *Conclusion*

Design of the proposed project site and conformance with City and State regulations would ensure that a substantial degradation to water quality or violation of any water quality objectives due to increases in sediments and other contaminants generated by construction and/or development of the proposed project

would not occur. The design of the proposed project provides for containment of runoff water associated with the site through the use of infiltration trenches and on-site stormwater treatment vaults; therefore, discharge of runoff to surface waters or groundwater would not result from the proposed project. Therefore, the proposed project would not result in significant impacts related to substantial degradation of water quality or violation of any water quality objectives set by the SWRCB due to increases in sediments and other contaminants generated by construction and/or development of the proposed project. Implementation of proposed project would have ***no additional significant environmental effect*** related to drainage and runoff beyond what was previously evaluated in the Master EIR.

#### Question B

A floodplain is an area that is inundated during a flood event and is often physically discernable as a broad, flat area created by historic flood. According to FEMA's FIRM, the project is within Zone A99, a 100-year flood hazard zone. As such, the proposed project would place housing or structures within a 100-year flood hazard area. The A99 designation is used for areas where flood protection system has reached specified statutory progress toward completion. In addition to FEMA, the Sacramento Area Flood Control Agency (SAFCA) was formed to address the Sacramento area's vulnerability to catastrophic flooding.

Areas designated as A99 are required to comply with the following criteria, in regards to levee construction, established by FEMA:

- 100 percent of the project's total financial cost for the completed flood control system has been authorized;
- At least 60 percent of the total financial project cost of the completed flood control system has been appropriated;
- At least 50 percent of the total financial project cost of the completed flood control system has been expended;
- All critical features of the flood control system, as identified by FEMA, are under construction, and each critical feature is 50 percent complete as measured by the actual expenditure of the estimated construction budget funds; and
- The community has not been responsible for any delay in the competition of the system.

Mandatory flood insurance purchase requirements and floodplain management would be required of properties located in Zone A99. At a minimum, projects located within Zone A99 would need to include the floodplain management and building requirements set forth in Section 60.3 of the National Flood Insurance Program (NFIP) regulations, which include, but are not limited to, the following:

- Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall (i) be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, (ii) be constructed with materials resistant to flood damage, (iii) be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- Review subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, to determine whether such proposals will be reasonably safe from flooding. If a subdivision proposal or other proposed new development is in a flood-prone area, any such proposals shall be reviewed to assure that (i) all such proposals are consistent with the need to minimize flood damage within the flood-prone area, (ii) all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage, and (iii) adequate drainage is provided to reduce exposure to flood hazards;

Given that the proposed project would be required to comply with floodplain management and building requirements of Section 60.3 of the NFIP for flood Zone A99, impacts related to flooding would be considered less than significant, and implementation of proposed project would have ***no additional***

***significant environmental effect*** related to flooding beyond what was previously evaluated in the Master EIR.

**MITIGATION MEASURES**

None required.

**FINDINGS**

The project would have no additional project-specific environmental effects relating to Hydrology and Water Quality.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<b>9. NOISE</b> Would the project:			
A) Result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases?			X
B) Result in residential interior noise levels of 45 dBA L <sub>dn</sub> or greater caused by noise level increases due to the project?			X
C) Result in construction noise levels that exceed the standards in the City of Sacramento general plan or Noise Ordinance?			X
D) Permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction?			X
E) Permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations?			X
F) Permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic?			X

**ENVIRONMENTAL SETTING**

The discussions below are based on the Environmental Noise Assessment prepared for the proposed project by Saxelby Acoustics LLC, dated July 1, 2021 (see Appendix E). The following section presents basic information related to noise and vibration, as well as the existing noise environment at the project site.

**Noise**

Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz). Discussing sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel (dB) scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure), as a point of reference defined as 0 dB. Other sound pressures are compared to the reference pressure and the logarithm is taken to keep the numbers in practical range. The dB scale allows a million-fold increase in pressure to be expressed as 120 dB. To better relate overall sound levels and loudness to human perception, frequency-dependent weighting networks were developed. A strong correlation exists between the way humans perceive sound and A-weighted sound levels. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment for community exposures. All sound levels expressed as dB in this section are A-weighted sound levels, unless noted otherwise.

Community noise is commonly described in terms of the “ambient” noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level ( $L_{eq}$ ), over a given time period (usually one hour). The  $L_{eq}$  is the foundation of the composite noise descriptors, day-night average level ( $L_{dn}$ ) and the community noise equivalent level (CNEL), and shows very good correlation with community response to noise for the average person. The median noise level descriptor, denoted  $L_{50}$ , represents the noise level which is exceeded 50 percent of the hour. In other words, half of the hour ambient conditions are higher than the  $L_{50}$  and the other half are lower than the  $L_{50}$ .

The  $L_{dn}$  is based upon the average noise level over a 24-hour day, with a +10 dB weighting applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because  $L_{dn}$  represents a 24-hour average,  $L_{dn}$  tends to disguise short-term variation in the noise environment. Where short-term noise sources are an issue, noise impacts maybe assessed in terms of maximum noise levels, hourly averages, or other statistical descriptors.

Another common descriptor is the CNEL. The CNEL is similar to the  $L_{dn}$ , except CNEL has an additional weighting factor. Both average noise energy over a 24-hour period. The CNEL applies a +5 dB weighting to events that occur between 7:00 PM and 10:00 PM, in addition to the +10 dB weighting between 10:00 PM and 7:00 AM associated with  $L_{dn}$ . Typically, the CNEL and  $L_{dn}$  result in similar results for the same noise events, with the CNEL sometimes resulting in reporting a 1 dB increase compared to the  $L_{dn}$  to account for noise events between 7:00 PM and 10:00 PM that have the additional weighting factor.

### **Vibration**

Vibration is like noise in that vibration involves a source, a transmission path, and a receiver. While vibration is related to noise, vibration differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and a frequency. A person’s perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating. Vibration can be measured in terms of acceleration, velocity, or displacement. Vibration magnitude is measured in vibration decibels (VdB) relative to a reference level of 1 micro-inch per second peak particle velocity (ppv), the human threshold of perception. The background vibration level in residential areas is usually 50 VdB or lower. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible. The range of environmental interest is typically from 50 VdB to 90 VdB (or 0.12 inch per second ppv), the latter being the general threshold where structural damage can begin to occur in fragile buildings.

### **Existing Noise Environment**

To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurements at three locations on the project site. Noise measurement locations are shown on Figure 8. A summary of the noise level measurement survey results is provided in Table 7.

**Figure 8**  
**Noise Measurement Sites**



<b>Table 7</b>								
<b>Summary of Existing Background Noise Measurement Data</b>								
<b>Site</b>	<b>Date</b>	<b>Average Measured Hourly Noise Levels, dBA</b>						
		<b>CNEL/L<sub>dn</sub></b>	<b>Daytime (7:00 AM - 10:00 PM)</b>			<b>Nighttime (10:00 PM - 7:00 AM)</b>		
			<b>L<sub>eq</sub></b>	<b>L<sub>50</sub></b>	<b>L<sub>max</sub></b>	<b>L<sub>eq</sub></b>	<b>L<sub>50</sub></b>	<b>L<sub>max</sub></b>
LT-1	4/29/2021	62/61	58	53	71	54	53	65
LT-2	4/29/2021	60/60	54	52	67	54	53	63
LT-3	4/29/2021	64/63	60	57	78	57	55	69

*Source: Saxelby Acoustics, 2021.*

**STANDARDS OF SIGNIFICANCE**

For purposes of this Initial Study, impacts due to noise may be considered significant if construction and/or implementation of the proposed project would result in the following impacts that remain significant after implementation of General Plan policies:

- Result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;
- Result in residential interior noise levels of 45 dBA L<sub>dn</sub> or greater caused by noise level increases due to the project;
- Result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance;
- Permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction;
- Permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or
- Permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic.

**SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

The Master EIR evaluated the potential for development under the 2035 General Plan to increase noise levels in the community. New noise sources include vehicular traffic, aircraft, railways, light rail and stationary sources. The general plan policies establish exterior (Policy EC 3.1.1) and interior (EC 3.1.3) noise standards. A variety of policies provide standards for the types of development envisioned in the General Plan.

See Policy EC 3.1.8, which requires new mixed-use, commercial and industrial development to mitigate the effects of noise from operations on adjoining sensitive land use, and Policy 3.1.9, which calls for the City to limit hours of operations for parks and active recreation areas to minimize disturbance to nearby residences. Notwithstanding application of the general plan policies, noise impacts for exterior noise levels (Impact 4.8-1) and interior noise levels (Impact 4.8-2), and vibration impacts (Impact 4.8-4) were found to be significant and unavoidable.

**ANSWERS TO CHECKLIST QUESTIONS**

Questions A and B

During project operations, the primary source of noise would be generated from traffic on the adjacent roadways. Operational noise associated with the proposed project is discussed in further detail below.

*Operational Noise at Off-Site Receptors*

The proposed project would include typical residential noise which would be compatible with the adjacent existing residential uses. In addition, residential land uses typically do not generate substantial noise. Therefore, impacts resulting from project-generated noise would be considered less than significant.

*Traffic Noise at Off-Site Receptors*

Existing noise levels due to traffic are calculated using the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108). The model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. Table 8 summarizes the modeled traffic noise levels at the nearest sensitive receptors along each roadway segment in the proposed project area.

<b>Table 8</b>				
<b>Predicted Traffic Noise Level and Project-Related Traffic Noise Level Increases</b>				
<b>Roadway</b>	<b>Segment</b>	<b>Predicted Exterior Noise Level (dBA L<sub>dn</sub>) at Closest Sensitive Receptors</b>		
		<b>Existing No Project</b>	<b>Existing + Project</b>	<b>Change</b>
Natomas Park Dr.	W. El Camino Ave to Garden Hwy.	61.5	62.1	0.6
W. El Camino Ave.	I-5 to Truxel Rd.	64.8	65.0	0.2

*Source: Saxelby Acoustics, 2021.*

The FICON guidelines specify criteria to determine the significance of traffic noise impacts. Where existing traffic noise levels are greater than 65 dB L<sub>dn</sub>, at the outdoor activity areas of noise-sensitive uses, a +1.5 dB L<sub>dn</sub> increase in roadway noise levels will be considered significant. The maximum increase is traffic noise at the nearest sensitive receptor is predicted to be 0.6 dBA. Therefore, impacts resulting from increased traffic noise would be less than the 1.5 dB threshold of significance which is applicable to the project site.

*Exterior Transportation Noise*

CEQA does not require an analysis of the environment's impact on the proposed project; however, noise-related effects on future residents of the project are typically evaluated to determine consistency with the City of Sacramento's policies. While not required under CEQA, the following section regarding off-site transportation noise effects on future residents is provided for informational purposes.

Saxelby Acoustics used the SoundPLAN noise model to calculate traffic noise levels at the proposed residential uses due to traffic on West El Camino Avenue and Natomas Park Drive. The model was calibrated to existing conditions. The proposed buildings and surrounding structures were input into the SoundPLAN model to determine the traffic noise exposure on the project site. The results of this analysis are shown on Figure 9.

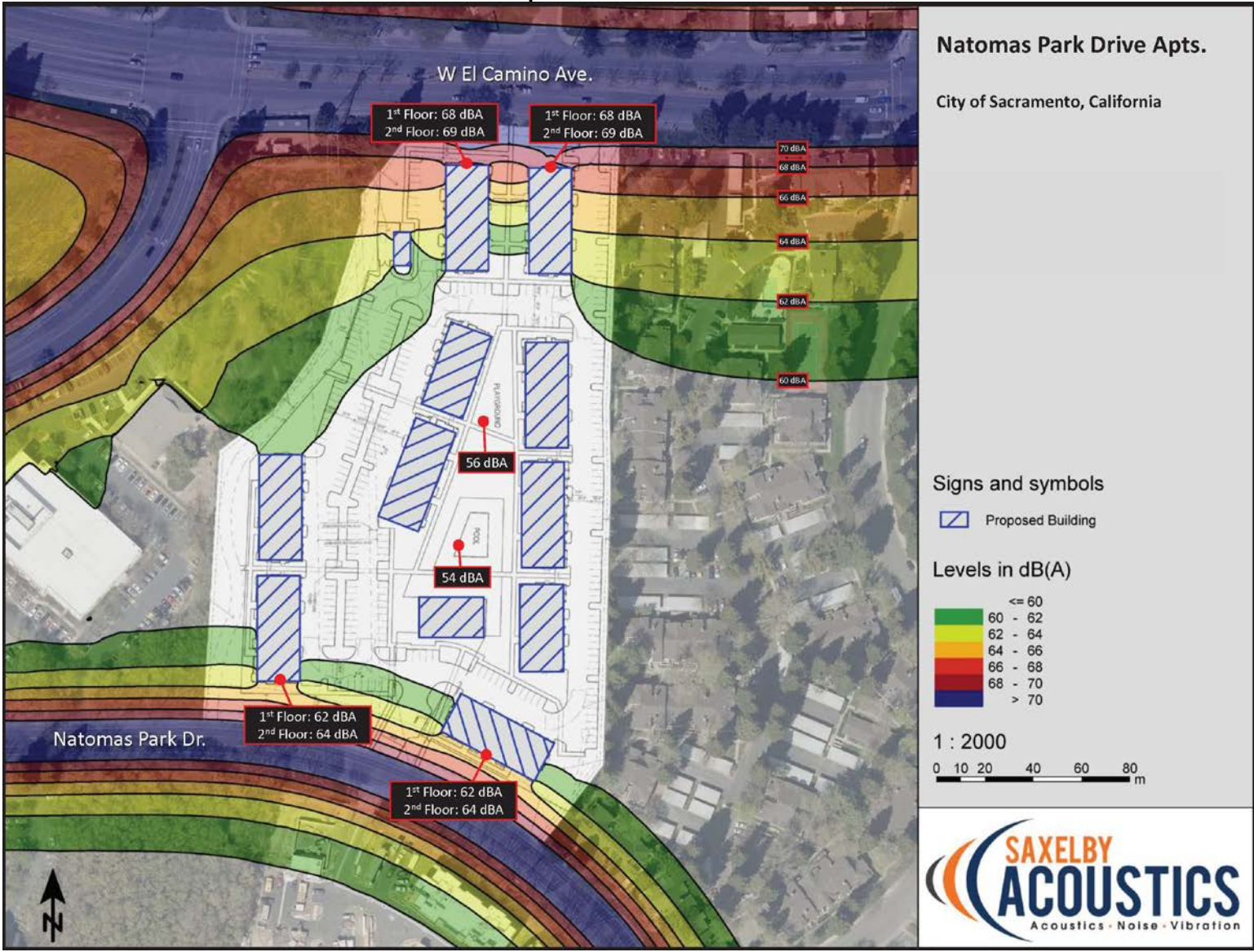
As shown on Figure 9, the pool area and playground are predicted to be exposed to exterior transportation noise levels up to approximately 56 dBA during daytime (7:00 AM to 10:00 PM) hours. This would comply with the 65 dBA limit for outdoor activity areas in multi-family residential uses established by the City of Sacramento General Plan.

*Interior Transportation Noise*

Based upon Figure 9, the proposed project would be exposed to exterior noise levels of up to 68 dBA L<sub>dn</sub> at the ground floor building facades closest to West El Camino Avenue. Second floor locations would be exposed to noise levels up to 69 dBA L<sub>dn</sub>.



**Figure 9**  
**Transportation Noise Contours**



Modern building construction methods typically yield an exterior-to-interior noise level reduction of 25 dBA. For the proposed project, exterior noise levels are predicted to be up to 69 dBA L<sub>dn</sub>, resulting in an interior noise level of 44 dBA L<sub>dn</sub> based on typical building construction. Such noise levels would comply with the City's 45 dBA L<sub>dn</sub> interior noise level standard.

*Conclusion*

Because the proposed project would comply with the City of Sacramento's exterior and interior noise level requirements, the project would not result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses nor would the project result in residential interior noise levels of 45 dBA L<sub>dn</sub> or greater. Therefore, a less-than-significant impact would result, and implementation of proposed project would have **no additional significant environmental effect** beyond what was previously evaluated in the Master EIR.

Question C

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. Construction at the project site would include site grading, clearing and excavation work associated with site preparation. The on-site equipment required for construction activities are expected to include excavators, graders, haul trucks, and a crane, among other construction equipment. Table 9 shows predicted construction noise levels for each of the project construction phases.

<b>Table 9</b>				
<b>Construction Equipment Noise Levels for Primary Construction Phases</b>				
<b>Equipment</b>	<b>Quantity</b>	<b>Usage (percent)</b>	<b>Maximum, L<sub>max</sub> (dBA at 50 feet)</b>	<b>Hourly Average, L<sub>eq</sub> (dBA at 50 feet)</b>
<b>Demolition</b>				
Concrete Saw	1	20	90	83
Excavator	3	40	81	82
Dozer	2	40	82	81
<b>Total:</b>				<b>87</b>
<b>Site Preparation</b>				
Dozer	3	40	82	83
Tractor/Loader/ Backhoe	4	40	84	86
<b>Total:</b>				<b>88</b>
<b>Grading</b>				
Grader	2	40	85	84
Dozer	1	40	82	78
Scraper	1	40	84	80
Tractor/Loader/ Backhoe	2	40	84	83
<b>Total:</b>				<b>88</b>
<b>Building Construction</b>				
Crane	1	16	81	73
Forklift	3	40	83	84
Generator	1	50	81	78
Tractor/Loader/ Backhoe	3	40	84	85
Welder/Torch	1	40	74	70
<b>Total:</b>				<b>88</b>
<b>Paving</b>				
Paver	2	50	77	77

*(table continued on next page)*

<b>Table 9</b>				
<b>Construction Equipment Noise Levels for Primary Construction Phases</b>				
<b>Equipment</b>	<b>Quantity</b>	<b>Usage (percent)</b>	<b>Maximum, L<sub>max</sub> (dBA at 50 feet)</b>	<b>Hourly Average, L<sub>eq</sub> (dBA at 50 feet)</b>
Paving Equipment	2	50	77	77
Rollers	2	20	80	76
<b>Total:</b>				<b>81</b>
<b>Architectural Coating</b>				
Air Compressor	1	40	79	75
<b>Total:</b>				<b>75</b>
<i>Source: FHWA, Roadway Construction Noise Model (RCNM), January 2006.</i>				

Based upon the Table 9 data, site preparation and grading are predicted to be the loudest phase of construction with an average noise exposure of 88 dBA at 50 feet. Per the Environmental Noise Assessment, the proposed project is predicted to generate construction noise levels ranging between 65 and 74 dBA L<sub>eq</sub> at the nearest noise sensitive receptors.

The City's Noise Ordinance exempts construction operations that occur between 7:00 AM and 6:00 PM, Monday through Saturday, and between 9:00 AM and 6:00 PM on Sundays, from the applicable noise standards. However, if construction operations were to occur during the noise-sensitive hours of 6:00 PM to 7:00 AM, Monday through Saturday, or from 6:00 PM to 9:00 AM on Sunday, the applicable noise standards could potentially be exceeded at the aforementioned sensitive receptors surrounding the project site. However, because the City has determined that all construction within the City limits must comply with the City's Noise Ordinance, nighttime construction activities would not occur and construction noise associated with use of on-site equipment during the project construction phases would be insignificant.

Because the proposed project would be required to adhere to the City's Noise Ordinance and the increase in noise levels from construction activities would be temporary, noise levels associated with construction of the proposed project would not result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance. Therefore, implementation of proposed project would have **no additional significant environmental effect** related to construction noise beyond what was previously evaluated in the Master EIR.

Question D through F

For structural damage, the California Department of Transportation (Caltrans) uses a vibration limit of 0.5 inches/second, peak particle velocity (in/sec ppv), for buildings structurally sound and designed to modern engineering standards; 0.2 in/sec ppv for buildings that are found to be structurally sound but where structural damage is a major concern; and a conservative limit of 0.08 in/sec ppv for ancient buildings or buildings that are documented to be structurally weakened.<sup>15</sup> Accordingly, the City uses a threshold of significance for vibration levels of 0.5 in/sec ppv for residential and commercial areas, and 0.2 in/sec ppv for historic buildings and archaeological sites.

Operations of the proposed residential project would not generate groundborne vibration. During project construction, heavy equipment would be used for grading excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of the construction. The primary vibration-generating activities would be grading, utilities placement, and parking lot construction. Table 10 shows the typical vibration levels produced by construction equipment.

<sup>15</sup> California Department of Transportation. *Transportation and Construction Vibration Guidance Manual*. September 2013.

<b>Type of Equipment</b>	<b>PPV at 25 feet (inches/second)</b>	<b>PPV at 50 feet (inches/second)</b>	<b>PPV at 100 feet (inches/second)</b>
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

*Source: Transit Noise and Vibration Impact Assessment Guidelines. Federal Transit Administration. May 2006.*

As shown in Table 10, construction activities are anticipated to generate vibration levels ranging from 0.003 in/sec ppv to 0.210 in/sec ppv at a distance of 25 feet. The nearest noise-sensitive receptors are located approximately 30 feet east of the project site boundary and, therefore, would experience vibration levels less than the 0.5 in/sec ppv threshold for residential areas, and implementation of proposed project would have **no additional significant environmental effect** related to groundborne vibration beyond what was previously evaluated in the Master EIR.

**MITIGATION MEASURES**

None required.

**FINDINGS**

The project would have no additional project-specific environmental effects relating to Noise.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p><b>10. PUBLIC SERVICES</b> Would the project:</p> <p>A) Would the project result in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan?</p>			X

**ENVIRONMENTAL SETTING**

The City of Sacramento provides fire, police, and parks and recreation services in the vicinity of the proposed project site.

The Sacramento Fire Department (SFD) provides fire protection services to the entire City and some small areas just outside the City boundaries within the County limits. SFD provides fire protection and emergency medical services to the project area. First-response service is provided by Station 15, located at 1591 Newborough Drive, approximately 0.16-mile east of the project site. Service is also provided by Station 14, located at 1341 North C Street, approximately 1.9 miles southeast of the site.

The Sacramento City Police Department (SPD) provides police protection services to the project area. The project area is serviced by North Command which is located at the 3550 Marysville Boulevard, approximately 4.25 miles away from the project site. In addition to the SPD, the Sacramento County Sheriff’s Department, California Highway Patrol (CHP), UC Davis Medical Center Police Department, and the Regional Transit Police Department aid the SPD to provide protection for the City.

The project site is within the Natomas Unified School District (NUSD). The NUSD serves 11,248 students on 14 campuses.<sup>16</sup> The nearest school, Bannon Creek Elementary School, is located approximately 0.28-miles north of the project site.

The City of Sacramento Department of Youth, Parks and Community Enrichment (Department of YPCE) oversees more than 4,255.5 acres of parkland, and manages more than 223 parks within the City. The project site is located approximately 612 feet to the south of Bannon Creek Park and Parkway and approximately 2,549.30 feet southwest of South Natomas Community Park.

**STANDARDS OF SIGNIFICANCE**

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan.

**SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

The Master EIR evaluated the potential effects of the 2035 General Plan on various public services. Police, fire protection, schools, libraries and emergency services were evaluated in Chapter 4.10 of the Master EIR.

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<sup>16</sup> Natomas Unified School District. *Overview*. Available at: <https://natomasunified.org/about-us/>. Accessed March 2021.

The General Plan provides that adequate staffing levels for police and fire are important for the long-term health, safety and well-being of the community (Goal PHS 1.1, PHS 2.1). The Master EIR concluded that effects of development that could occur under the General Plan would be less than significant.

General Plan policies that call for the City to consider impacts of new development on schools (see, for example, Policy ERC 1.1.2 setting forth locational criteria, and Policy ERC 1.1.4 that encourages joint-use development of facilities) reduce impacts on schools to a less-than-significant level (Impacts 4.10-3, 4). Impacts on library facilities were considered less than significant (Impact 4.10-5).

#### **ANSWERS TO CHECKLIST QUESTIONS**

The proposed project involves the development a 190-unit multi-family residential complex on approximately 9.06 acres. The development of the proposed project would introduce new residents to the area. As such, the proposed project would result in an increase in demand for fire and police protection services, as well as schools and other public facilities or services.

#### Question A

The following discussions pertains to the existing fire, police, and school facilities, as well as the proposed project's impacts related to such facilities and services.

##### *Fire Protection*

The SFD provides fire protection services to the entire City, and small areas within Sacramento County that include the Pacific Fruitridge and the Natomas Fire Protection Districts. The SFD serves a population of over 738,000 in a 358 square mile service area. The SFD has approximately 155 on-duty personnel working daily to serve the City.<sup>17</sup>

The closest fire station to the project site is SFD Station 15, approximately 0.16-mile east of the project site. Stated within the Sacramento General Plan EIR, the goal of the SFD is to have fire suppression and paramedic services arrive at the scene within four minutes. Considering the proximity of the project site to Station 15, it is reasonable to assume that response times from the SFD would meet the four-minute response time goal.

Previously mentioned, the proposed project is consistent with buildout of the Sacramento General Plan and, thus, the increase in population associated with the project has been anticipated by the City. Within the General Plan, Policy PHS 2.1.11 states that the City shall require development projects to contribute fees for fire protection services and facilities. As a result of Policy PHS 2.1.11, the project would be required to pay applicable development fees financially supporting the SFD. Considering that the project is consistent with the General Plan and the proximity of the site to Station 15, the proposed project would not result in the need for new or altered services related to fire protection and a less-than-significant impact would occur.

##### *Police Protection*

The SPD provides police protection services within the City boundaries. The SPD uses a variety of data that includes GIS based data, call and crime frequency information, and available personnel to rebalance the deployment of resources on an annual basis to meet the changing demands of the City. In addition, the Sacramento County Sheriff's Department provides police protection services outside the City limits but within the Planning Area. According to the General Plan EIR, as buildout of the General Plan occurs, the SPD would need new, decentralized facilities that would be required to maintain adequate response times. Currently, the SPD averages an eight minute and five second response time for Priority 2 calls.

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<sup>17</sup> Metro Fire Sacramento. *About Us*. Available at: <https://metrofire.ca.gov/about-us>. Accessed March 2021.

Similar to the SFD, the added population from the proposed project would create an increased demand in police services to the project area; however, as mentioned above, because the proposed project is consistent with the General Plan, the associated increase in population has already been anticipated by the City. The proposed General Plan policies include measures to accommodate for growth and increased service demands. Specifically, Policy PHS 1.1.1, calls for the City to prepare a Police Master plan to address staffing and facility needs. In addition, per Policy PHS 1.1.8 within the Master EIR, the City requires development projects to contribute fees for police facilities. As a result, development would pay applicable development impact fees to fund necessary police services. Implementation of policies and goal presented within the General Plan reduce growth inducing impacts on police services to a less-than-significant impact.

Considering the above, the proposed project is consistent with buildout of the Sacramento General Plan and, thus, the increase in population associated with the project has been anticipated by the City. As a result, the proposed project would not result in the need for new or altered services related to police protection and a less-than-significant impact would occur.

### *Schools*

The City is served by six school districts providing public elementary, middle school, and high school opportunities. The school districts include the Sacramento City Unified School District, Twin Rivers Unified School District, Robla School District, Natomas Unified School District, and the Elk Grove Unified School District. The proposed project is within the Natomas Unified School District. The Natomas Unified School District does not have any schools that are at or above capacity. According to the Sacramento General Plan EIR, Natomas Unified School District's current capacity is at 70 percent and is identified as a district with greater capacity for growth.

Development of the proposed project would generate additional students in the area. However, as discussed above, the proposed project would be consistent with the 2035 General Plan land use designation for the site. As such, the increase in students associated with buildout of the site has been addressed in the 2035 General Plan EIR. As stated within the General Plan EIR, all impacts on schools are considered to be less than significant with payment of the State Department of Education Development Fee, which was enacted to provide for school facilities construction, improvements, and expansion. Policies ERC 1.1.1 and 1.1.2 encourages the City to work with school districts to ensure that schools are provided to serve all existing and future residents and constructed in the neighborhoods that they serve, in safe locations, and connected to surrounding uses by walkways, bicycle paths, and greenway.

As a result, implementation of education development fees and policies within the General Plan reduce the proposed projects impacts on schools to a less-than-significant level.

### *Other Governmental Services*

The Sacramento Public Library (SPL) serves the cities of Sacramento, Citrus Heights, Elk Grove, Galt, Isleton, Rancho Cordova, and the County of Sacramento. The SPL authority is governed by a Joint Exercise of Powers Agreement between these cities and counties to provide public library services to all citizens in the jurisdiction. Currently, 16 new libraries are current planned for construction in the City and County of Sacramento by 2025. Based on plans set forth in the SPL Authority Facility Master Plan, the SPL expects to provide 1,007,274 sf of library space throughout the SPL Authority's service area by 2025. The new library spaced would meet the target level, 0.40 sf library facilities per capita, defined in the General Plan EIR.

The proposed project would result in an increase in demand for other governmental services, such as library service. The South Natomas Library, located approximately 0.52-mile north of the project site, currently serves the project site and the surrounding area.

Because the proposed project under the 2035 General Plan would be required to comply with the General Plan policies, and the SPL Facility Master Plan outlines plans to meet the library target level in 2025, the proposed project would not result in the need for new or altered services related to fire other governmental

services beyond what was anticipated in the 2035 General Plan and a less-than-significant impact would occur.

*Conclusion*

As noted above, the applicant would be required to pay all of the required development fees to the appropriate public services departments. Payment of such would ensure that impacts related to fire protection, police protection, school facilities, or other governmental services would be reduced to a less-than-significant level. Therefore, implementation of proposed project would have ***no additional significant environmental effect*** beyond what was previously evaluated in the Master EIR.

**MITIGATION MEASURES**

None required.

**FINDINGS**

The project would have no additional project-specific environmental effects relating to Public Services.



Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
11. <b>RECREATION</b> Would the project:			X
A) Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities?			
B) Create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan?			X

**ENVIRONMENTAL SETTING**

Natural resources and parks provide a wide range of recreational opportunities for residents in the vicinity of the project site. As noted by the City of Sacramento’s website and the City’s General Plan Background Report, the City currently contains 223 developed and undeveloped park sites, 88 miles of off-street bikeways and trails, 21 lakes/ponds or beaches, over 20 aquatic facilities, and extensive recreation facilities in the City parks. The developed park sites comprise 218 total parks with an area of over 4,300 acres of parkland. The proposed project is adjacent to various recreational and park facilities. The Bannon Creek Preserve is an open space park located immediately south of the project site. In addition, the South Natomas Community Park, approximately 24 acres, is 0.50-mile north of the project site.

**STANDARDS OF SIGNIFICANCE**

For purposes of this Initial Study, impacts to recreational resources are considered significant if the proposed project would do either of the following:

- Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities; or
- Create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan.

**SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

Chapter 4.9 of the Master EIR considered the effects of the 2035 General Plan on the City’s existing parkland, urban forest, recreational facilities and recreational services. The General Plan identified a goal of providing an integrated park and recreation system in the City (Goal ERC 2.1). New residential development will be required to dedicate land, pay in-lieu fees or otherwise contribute a fair share to the acquisition and development of parks and recreation facilities (Policy ERC 2.2.5). Impacts were considered less than significant after application of the applicable policies. (Impacts 4.9-1 and 4.9-2).

**ANSWERS TO CHECKLIST QUESTIONS**

Questions A and B

The proposed project includes the construction of a 190-unit multi-family residential complex. As shown in Figure 3, the proposed project includes a playground, pool, community club, and two dog parks. As a result, the proposed project would include recreational facilities on-site for future residences. However, as the proposed project would induce population growth, future residents of the proposed project are anticipated to utilize recreation facilities in the surrounding project area as well.

Implementation of the policies and goals within the General Plan would reduce impacts to parks and recreational facilities to a less-than-significant level. For example, Policy ERC 2.2.1 states that all new development shall be consistent with the applicable provisions of the Parks and Recreation Master Plan. In addition, because the proposed project is consistent with the 2035 General Plan, the increased population associated with the proposed project and increase in demand for recreational facilities was anticipated and analyzed within the 2035 General Plan Master EIR. Furthermore, pursuant to City Code 18.56.230, the proposed project would be required to pay a Park Development Impact Fee prior to issuance of a building permit. The City would use the Park Development Impact Fee to finance the design, construction, installation, improvement, and acquisition of park facilities for neighborhood parks within two miles of the development project, community parks within five miles of the development project, and regional and citywide park facilities located anywhere in the City.

Based on the above, given the project consistency with the Parks and Recreation Master Plan and the City's General Plan, and the required payment of the Park Development Impact Fee, implementation of the proposed project would result in ***no additional environmental effect*** related to recreation beyond what was analyzed in the 2035 Master EIR.

**MITIGATION MEASURES**

None required.

**FINDINGS**

The project would have no additional project-specific environmental effects relating to Recreation.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<b>12. TRANSPORTATION AND CIRCULATION</b> Would the project:			
A) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?			X
B) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X
C) Substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X
D) Result in inadequate emergency access?			X

**ENVIRONMENTAL SETTING**

The following section is based on information from the City of Sacramento 2035 General Plan, the 2035 General Plan Master EIR, and the City of Department of Public Works – Transportation Vehicle Miles Traveled (VMT) Technical Memorandum prepared for the proposed project (see Appendix F).

Roadways in the vicinity of the project site include West El Camino to the North and Natomas Park Drive to the west and south. West El Camino is four lane arterial roadway with an intersection at Natomas Park Drive northwest of the site with a 40 miles per hour (mph) posted speed limit. Natomas Park Drive is a four-lane roadway collector with a two-way left turn lane in the proximity of the project site with a 30 mph posted speed limit (major street).

I-5 is located approximately 0.34-mile west of the project site and I-80 is located approximately 1.28 miles north of the project site. The West El Camino/Natomas Park Drive and Natomas Park Drive/Capital Park Drive intersections are the closest intersections to the project site.

In the vicinity of the project site, continuous sidewalks exist along the northern side along West El Camino and southern side along Natomas Park Drive. Natomas Park Drive has Class II bike lines striped on both sides of the roadway. Additionally, the City’s Bikeways Master Plan shows a planned off-street trail continuing through the Bannon Creek Preserve to Garden Highway.

Public transit service within the study area is provided by bus, which is operated by the Sacramento Regional Transit (RT). The following routes provide services in the vicinity of the project site:

- **Route 88** provides service on West El Camino. The route features a bus stop on West El Camino directly north of the project site. The route begins at 9<sup>th</sup> Street and K Street and the last stop is Arden Way and Del Paso Boulevard. Monday through Friday, Route 88 starts operating at 5:40 AM to 9:23 PM. On Saturdays, Route 88 operates from 7:15 AM to 9:30 PM. On Sundays, Route 88 operates from 8:17 AM to 8:53 PM.
- **Route 86** provides service on Natomas Park Drive. The route features a bus stop in each direction of Natomas Park Drive with a stop on the southwestern side of the project site. The route begins at the Marconi/Arcade Light Rail Station and terminates at the Sacramento Valley Station downtown

where several other bus routes and light rail stations could be easily accessed. Monday through Friday, Route 86 operates on 60-minute headways from about 5:30 AM to 9:15 PM. On Saturdays, Route 86 operates from about 7:00 AM to 8:45 PM. On Sundays and Holidays, Route 86 operates from about 9:00 AM to 6:30 PM.

### **STANDARDS OF SIGNIFICANCE**

Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Pursuant to Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure of transportation impacts, with other relevant considerations consisting of the effects of the project on transit and non-motorized travel. VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle-trips, with one end within the project site. Based on current practices from the City of Sacramento for residential projects, transportation impacts for CEQA purposes are considered significant if the proposed project would generate Household VMT per capita figures that exceed 85 percent of the regional average for Household VMT per capita, consistent with technical advisory guidance published by the Governor's Office of Planning and Research (OPR) in 2018.

Several screening thresholds are used to quickly determine whether a project may be presumed to have a less-than-significant VMT impact without conducting a detailed project generated VMT analysis. For residential projects, screening criteria includes:

1. Small Projects – projects that generate or attract fewer than 110 trips per day;
2. Map-Based Screening – projects located in areas that are known to generate below-average VMT;
3. Near Transit Stations – projects within 0.5-mile of an existing major transit stop or an existing stop along a high-quality transit corridor; or
4. Affordable Residential Development – projects that include affordable housing within an infill location.

Lastly, for purposes of this Initial Study, impacts resulting from changes in transportation or circulation may be considered significant if construction and/or implementation of the proposed project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan Master EIR:

#### **Transit**

- Adversely affect public transit operations; or
- Fail to adequately provide for access to public transit.

#### **Bicycle Facilities**

- Adversely affect bicycle travel, bicycle paths; or
- Fail to adequately provide for access by bicycle.

#### **Pedestrian Circulation**

- Adversely affect pedestrian travel, pedestrian paths; or
- Fail to adequately provide for access by pedestrians.

#### **Construction-Related Traffic Impacts**

- Degrade an intersection or roadway to an unacceptable level;
- Cause inconveniences to motorists due to prolonged road closures; or
- Result in an increased frequency of potential conflicts between vehicles, pedestrians, and bicyclists.

## **SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

Transportation and circulation were discussed in the Master EIR in Chapter 4.12. Various modes of travel were included in the analysis, including vehicular, transit, bicycle, pedestrian and aviation components. Provisions of the 2035 General Plan that provide substantial guidance include Mobility Goal 1.1, calling for a transportation system that is effectively planned, managed, operated and maintained, promotion of multimodal choices (Policy M 1.2.1), support for state highway expansion and management consistent with the Sacramento Area Council of Governments Metropolitan Transportation Plan/Sustainable Communities Strategy (SACOG MTP/SCS) (Policy M 1.5.6) and development that encourages walking and biking (Policy LU 4.2.1).

While the General Plan includes numerous policies that direct the development of the City's transportation system, the Master EIR concluded that the General Plan development would result in significant and unavoidable effects. See Impacts 4.12-3 (roadway segments in adjacent communities, and Impact 4.12-4 (freeway segments).

### **ANSWERS TO CHECKLIST QUESTIONS**

#### Question A

The following analysis provides a summary of the project trip generation and distribution, and impacts to transit, bicycle, and pedestrian facilities.

#### *Project Trip Generation and Distribution*

According to the information provided by the Department of Public Works-Transportation, the proposed project would generate approximately 88 AM peak hour trips and 105 PM peak hour trips per day. The proposed project is consistent with the land use designation for the site per the 2035 General Plan. As such, the Master EIR included an analysis of the increase in traffic associated with buildout of the project site. The proposed project would not increase traffic volumes from what has been anticipated in the 2035 General Plan. Therefore, the proposed project would not conflict with a program plan, ordinance or policy addressing the circulation system beyond what has been anticipated by the City per the Master EIR, and a less-than-significant impact would occur.

#### *Transit, Bicycle, and Pedestrian Facilities*

As stated above, Sacramento RT 88 and 86 provide transit opportunities from the project site, and the project is consistent with the General Plan land use and zoning designations for the project site. Because the proposed project would merely serve to expand residential uses in the project site, the project would not add noticeable transit demand; however, any demand added to the transit system could be adequately accommodated by the existing/planned transit system and has been anticipated in the 2035 General Plan and Master EIR. Additionally, the proposed project would not result in removal of any existing bicycle or pedestrian facilities or preclude the implementation of any proposed or existing off-street trails in the vicinity of the project. In fact, the proposed project would provide pedestrian and bicycle access for the residents through the addition of trails from the project site to the Bannon Creek Preserve Trail. Furthermore, the project would include the provision of bicycle parking spaces and a shared electric bike and/or electric scooter program, and the applicant intends to provide a private shuttle service for future tenants.

#### *Conclusion*

Based on the above, the proposed project would not conflict with a program, plan, ordinance, or policy address the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Therefore, implementation of the proposed project would result in **no additional environmental effects** beyond what was analyzed in the 2035 Master EIR.

### Question B

Pursuant to SB 743 and technical guidance published by OPR, several screening procedures exist to potentially streamline project analysis. A VMT Technical Memorandum was prepared for the proposed project by the City Department of Public Works-Transportation. The VMT Technical Memorandum determined that the proposed project qualifies for Map-Based Screening. Maps created with VMT data can illustrate areas that are currently below threshold VMT. Because new development in such locations would likely result in a similar level of VMT, such maps can be used to screen out residential and office projects from needing to prepare a detailed VMT analysis.

The proposed project's estimated VMT was determined using the maps derived from the traffic analysis zone results from SACOG's regional travel forecasting model system. The maps use hexagonal shaped geographic areas (HEX) to establish a uniform grid of Household VMT per capita by tallying all household VMT's generated by residents within the HEX and dividing by the total population in the HEX. The proposed project falls within a HEX estimated to produce between 50 percent to 85 percent of the Regional Average, which is less than the average household VMT per capita for the region. As a result, VMT associated with the proposed project is considered to be less-than-significant based on the Map-Based Screening.

Based on the above, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), and implementation of the proposed project would result in ***no additional environmental effects*** beyond what was analyzed in the 2035 Master EIR.

### Question C

Currently, access to the site is provided by two driveways from Natomas Park Drive. Both existing driveways would be removed as part of the project, and access to the project site would be provided by way of a new gated entrance/exit to/from Natomas Park Drive (refer to Figure 4). Additionally, a new exit-only and EVA driveway would be provided onto West El Camino Avenue. Internal circulation would be provided by a 26-foot-wide roadway. While the project would include a change to the project access driveway, the proposed project would not redesign, alter, or modify existing public roadways in the project vicinity. As such, the project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), and implementation of the project would result in ***no additional environmental effects*** beyond what was analyzed in the 2035 Master EIR.

### Question D

The proposed project would be required to comply with all building, fire, and safety codes and specific development plans would be subject to review and approval by the City's Public Works Department and the SFD. Required review by the aforementioned departments would ensure that the proposed circulation system for the project site would provide adequate emergency access. In addition, Section 12.20.030 of the City's Municipal Code requires that a construction traffic control plan be prepared and approved prior to the beginning of project construction, to the satisfaction of the City Traffic Engineer and subject to review by all affected agencies. All work performed during construction must conform to the conditions and requirements of the approved plan. The plan would ensure that safe and efficient movement of traffic through the construction work zone(s) is maintained. At a minimum, the plan must include the following:

- Time and day of street closures;
- Proper advance warning and posted signage regarding street closures;
- Provision of driveway access plan to ensure safe vehicular, pedestrian, and bicycle movements;
- Safe and efficient access routes for emergency vehicles;
- Provisions for pedestrian safety;
- Use of manual traffic control when necessary;
- Number of anticipated truck trips, and time of day of arrival and departure of trucks;

- Provision of a truck circulation pattern and staging area with a limitation on the number of trucks that can be waiting and any limitations on the size and type of trucks appropriate for the surrounding transportation network; and
- The plan must be available at the site for inspection by the City representative during all work.

With implementation of the aforementioned traffic control plan, local roadways and freeway facilities would continue to operate at acceptable operating conditions during construction, and the proposed project would not result in inadequate emergency access to the project site. Therefore, the implementation of the project would result in ***no additional environmental effects*** beyond what was analyzed in the 2035 Master EIR.

**MITIGATION MEASURES**

None required.

**FINDINGS**

The project would have no additional project-specific environmental effects relating to Transportation and Circulation.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p><b>13. <u>TRIBAL CULTURAL RESOURCES</u></b> Would the project:</p> <p>A) Cause a substantial adverse change in the significance of a tribal cultural resource, as defined in Public Resources Code 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:</p> <p style="padding-left: 40px;">i. 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</p>		X	
<p style="padding-left: 40px;">ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>		X	

**ENVIRONMENTAL AND REGULATORY SETTING**

The City of Sacramento and the surrounding area are known to have been occupied by Native American groups for thousands of years prior to settlement by non-Native peoples. Archaeological materials, including human burials, have been found throughout the city. Human burials outside of formal cemeteries often occur in prehistoric contexts. Areas of high sensitivity for tribal cultural resources are located within close proximity to the Sacramento and American rivers and other watercourses.

The proposed project area is situated within the lands traditionally occupied by the Valley Nisenan, or Southern Maidu. The language of the Nisenan includes several dialects and is classified within the Maiduan family of the Penutian linguistic stock (Kroeber 1925). Valley Nisenan territory was divided into politically autonomous “triblet” areas, each including several large villages (Moratto 1984). Two important villages were located near the project area, on the south bank of the American River, Momol, to the west of the project area, and Yalisumni, to the east (Wilson and Towne 1978:388).

Nisenan houses were domed structures covered with earth and tule or grass that measured 10 to 15 feet in diameter. Brush shelters were used in the summer and at temporary camps during food-gathering rounds. Larger villages often had semi-subterranean dance houses that were covered in earth and tule or brush and had a central smoke hole at the top and an east-facing entrance. Another common village structure was a granary, which was used for storing acorns (Wilson and Towne 1978).



Valley Nisenan people followed a seasonal round of food gathering, as did most California Indians. Food staples included acorns, buckeyes, pine nuts, hazelnuts, various roots, seeds, mushrooms, greens, berries, and herbs. Game was roasted, baked, or dried and included mule deer, elk, antelope, black bear, beaver, squirrels, rabbits, and other small animals and insects. Salmon, whitefish, sturgeon, and suckers, as well as freshwater shellfish, were all caught and eaten (Wilson and Towne 1978).

Euro-American contact with the Nisenan began with infrequent excursions by Spanish explorers and Hudson's Bay Company trappers traveling through the Sacramento-San Joaquin Valley in the early 1800s (Wilson and Towne 1978). With the coming of Russian trappers, Spanish missionaries, and Euro-American settlers, traditional lifeways were threatened by competition for land and resources, and by the introduction of new diseases. The malaria epidemic of 1833 decimated the Valley Nisenan population, killing an estimated 75 percent of the population. The influx of Euro-Americans during the Gold Rush-era further reduced the population due to forced relocations and violent retribution from the miners for real or imagined affronts.

Despite these major and devastating historical setbacks, today many Native Americans in the proposed project area are maintaining traditional cultural practices. Sometimes supported by thriving business enterprises, Tribal groups maintain governments, historic preservation programs, education programs, cultural events, and numerous other programs that sustain a vibrant culture.

### **Data Sources and Methodology**

Under PRC Section 21080.3.1 and 21082.3, the City must consult with tribes traditionally and culturally affiliated with the project area that have requested formal notification and responded with a request for consultation. The parties must consult in good faith. Consultation is deemed concluded when the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource when one is present or when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed on during the consultation process must be recommended for inclusion in the environmental document.

A search of the Sacred Lands File was requested from the NAHC, and a response was received on April 15, 2021 indicating that Sacred Sites have not been identified within the project vicinity. Pursuant to AB 52, project notification letters were distributed to the appropriate tribes on May 7, 2021. One tribe requested consultation and, based on the location of the site, has provided recommended mitigation measures.

### **Federal Regulations**

Federal plans, policies, or regulations related to tribal cultural resources that are directly applicable to the proposed project do not exist. However, Section 106 of the National Historic Preservation Act does require consultation with Native Americans to identify and consider certain types of cultural resources. Cultural resources of Native American origin identified as a result of the identification efforts conducted under Section 106 may also qualify as tribal cultural resources under CEQA.

### **State Regulations**

- **California Environmental Quality Act:** CEQA requires that public agencies that finance or approve public or private projects must assess the effects of the project on tribal cultural resources. Tribal cultural resources are defined in PRC 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 that is (1) listed or determined eligible for listing on the California Register of Historical Resources (CRHR) or a local register, or (2) that are 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

- **California PRC Section 5024:** PRC Section 5024.1 establishes the CRHR, which is the authoritative guide for identifying the State’s historical resources to indicate what properties are to be protected, if feasible, from substantial adverse change. For a resource to be eligible for the CRHR, it must be more than 50 years old, retain its historic integrity, and satisfy one or more of the following criteria:
  1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
  2. Is associated with the lives of persons important in our past.
  3. 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.
  4. Has yielded, or may be likely to yield, information important in prehistory or history.

**STANDARDS OF SIGNIFICANCE**

For the purposes of this Initial Study, a tribal cultural resource is considered to be a significant resource if the resource is: 1) listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources; or 2) the resource has been 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. For purposes of this Initial Study, impacts on tribal cultural resources may be considered significant if construction and/or implementation of the proposed project would result in the following:

- Cause a substantial change in the significance of a tribal cultural resource as defined in Public Resources Code 21074.

**SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

The Master EIR evaluated the potential effects of development under the 2035 General Plan on prehistoric and historic resources (see Master EIR Chapter 4.4 and Appendix C – Background Report, B. Cultural Resources Appendix), but did not specifically address tribal cultural resources because that resource type had not yet been defined in CEQA at the time the Master EIR was adopted. The Master EIR identified significant and unavoidable effects on historic resources and archaeological resources, some of which could be tribal cultural resources as defined PRC Section 21074. Ground-disturbing activities resulting from implementation of development under the 2035 General Plan could affect the integrity of an archaeological site (which may be a tribal cultural resource), thereby causing a substantial change in the significance of the resource. General plan policies identified as reducing such effects on cultural resources that may also be tribal cultural resources include identification of resources on project sites (Policy HCR 2.1.1); implementation of applicable laws and regulations (Policy HCR 2.1.2); consultation with appropriate organizations and individuals including the Native American Heritage Commission and implementation of their consultation guidelines (Policy HCR 2.1.3); enforcement programs to promote the maintenance, rehabilitation, preservation, and interpretation of the City’s historic resources (Policy HCR 2.1.4); listing of qualified historic resources under appropriate national, State, and local registers (Policy HCR 2.1.5); consideration of historic and cultural resources in planning studies (Policy HCR 2.1.6); enforcement of compliance with local, State, and federal historic and cultural preservation requirements (Policy HCR 2.1.8); and early consultation with owners and land developers to minimize effects (Policy HCR 2.1.10).

Of particular relevance to this project are policies that ensure compliance with protocol that protect or mitigate impacts to archaeological resources (Policy HCR 2.1.16) and that encourage preservation and minimization of impacts on cultural resources (Policy HCR 2.1.17).

## ANSWERS TO CHECKLIST QUESTIONS

### Questions A)i and A)ii

As discussed in Section 4, Cultural Resources, of this IS/MND, the approximately 9.06-acre project site includes the existing Natomas Sports Club development and parking areas. The proposed project would demolish the existing facilities and redevelop the site with a 190-unit multi-family residential complex and associated improvements.

Given the already developed/previously disturbed nature of the project site, surface tribal cultural resources are not anticipated to be found on-site during grading and construction activities. However, due to the predominant historic theme of the region as a whole, which includes thousands of years of occupation by Native American groups prior to non-Native peoples settling in the region, the possibility exists that unknown resources could be encountered during grading and excavation activities associated with development of the project. Therefore, the proposed project could have a potentially significant impact related to damaging or destroying prehistoric cultural resources. However, with implementation of Mitigation Measures 13-1 through 13-4, the **effect can be mitigated to less than significant**.

## MITIGATION MEASURES

Implementation of the following mitigation measures would reduce impacts related to tribal cultural resources to a *less-than-significant* level.

**13-1      *Conduct Cultural Resources Sensitivity and Awareness Training Prior to Ground-Disturbing Activities***

*The City shall require the applicant/contractor to provide a cultural and tribal cultural resources sensitivity and awareness training program for all personnel involved in project construction, including field consultants and construction workers. The training will be developed in coordination with interested culturally affiliated Native American Tribes. The training will be conducted in coordination with qualified cultural resources specialists. The City may invite Native American Representatives from interested culturally affiliated Native American Tribes to participate. The training shall be conducted before any construction activities begins on the project site. The program will include relevant information regarding sensitive tribal cultural resources and archaeological resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations.*

*The worker cultural resources sensitivity and awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and who to contact if any potential Tribal Cultural Resources or archaeological resources or artifacts are encountered.*

*The program will emphasize the requirement for confidentiality and culturally-appropriate treatment of any discovery of significance to Native Americans and will discuss appropriate behaviors and responsive actions, consistent with Native American Tribal values.*

**13-2      *Due to the cultural sensitivity of the project area, the following mitigation measure is intended to address the potential for buried Tribal Cultural Resources (TCRs) that may be unearthed during ground disturbing activities.***

*A minimum of seven days prior to beginning earthwork, clearing and grubbing, or other soil disturbing activities, the applicant shall notify lead agency of the proposed earthwork start-date. The lead agency shall contact the consulting Native American tribes (Tribes) with the proposed earthwork start-date and a Tribal Representative or Tribal Monitor shall be invited*

to inspect the project site, including any soil piles, trenches, or other disturbed areas, within the first five days of groundbreaking activity, or as appropriate for the type and size of project. During this inspection, a Tribal Representative or Tribal Monitor may provide an on-site meeting for construction personnel information on TCRs and workers awareness brochure.

If any TCRs are encountered during this initial inspection, or during any subsequent construction activities, work shall be suspended within 100 feet of the find and the measures included in the **Inadvertent/Unanticipated Discoveries Mitigation Measure [MM 13-3]** shall be implemented.

Preservation in place is the preferred alternative under CEQA and every effort must be made to preserve the resources in place, including through project redesign.

The contractor shall implement any measures deemed by CEQA lead agency (The City) to be necessary and feasible to preserve in place, avoid, or minimize significant effects to the resources, including the use of a paid Native American Monitor during ground disturbing activities.

13-3

**In the Event that Tribal Cultural Resources are Discovered During Construction, Implement Procedures to Evaluate Tribal Cultural Resources and Implement Avoidance and Minimization Measures to Avoid Significant Impact.**

If archaeological resources, or tribal cultural resources, are encountered in the project area during construction, the following performance standards shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of tribal cultural resources:

- Each resource will be evaluated for California Register of Historical Resources (CRHR) eligibility through application of established eligibility criteria (California Code of Regulations 15064.636), in consultation with consulting Native American Tribes.

If a tribal cultural resource is determined to be eligible for listing on the CRHR, the City will avoid damaging effects to the resource in accordance with California PRC Section 21084.3, if feasible. If the City determines that the project may cause a significant impact to a tribal cultural resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to the resource. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less-than significant may be reached:

- Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treat the resource with culturally appropriate dignity taking into account the Tribal cultural values and meaning of the resource, including, but not limited to, the following:
  - Protect the cultural character and integrity of the resource.
  - Protect the traditional use of the resource.
  - Protect the confidentiality of the resource.

- *Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.*
- *Rebury the resource in place.*
- *Protect the resource.*

*Avoidance and preservation in place is the preferred manner of mitigating impacts to tribal cultural resources and archaeological resources and will be accomplished, if feasible, by several alternative means, including:*

- *Planning construction to avoid tribal cultural resources, archaeological sites and/or other resources; incorporating sites within parks, green-space or other open space; covering archaeological sites; deeding a site to a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity.*
- *Recommendations for avoidance of tribal cultural resources and Native American archaeological sites will be reviewed by the City representative, interested culturally affiliated Native American Tribes and other appropriate agencies, in light of factors such as costs, logistics, feasibility, design, technology and social, cultural and environmental considerations, and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the project area to avoid cultural resources, modification of the design to eliminate or reduce impacts to cultural resources or modification or realignment to avoid highly significant features within a cultural resource.*
- *Native American Representatives from interested culturally affiliated Native American Tribes will be allowed to review and comment on these analyses and shall have the opportunity to meet with the City representative and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.*
- *If the discovered resource can be avoided, the construction contractor(s), will install protective fencing outside the site boundary, including a 100-foot buffer area, before construction restarts. The boundary of a tribal cultural resource or a Native American archaeological site will be determined in consultation with interested culturally affiliated Native American Tribes and such Tribes will be invited to monitor the installation of fencing. Use of temporary and permanent forms of protective fencing will be determined in consultation with Native American Representatives from interested culturally affiliated Native American Tribes.*
- *The construction contractor(s) will maintain the protective fencing throughout construction to avoid the site during all remaining phases of construction. The area will be demarcated as an “Environmentally Sensitive Area”.*
- *Native American Representatives from interested culturally affiliated Native American Tribes and the City representative will also consult to develop measures for long term management of any discovered tribal cultural resources. Consultation will be limited to actions consistent with the jurisdiction of the City and taking into account ownership of the subject property. To the extent that the City has jurisdiction, routine operation and maintenance within tribal cultural resources retaining tribal cultural integrity shall be consistent with the avoidance and minimization standards identified in this mitigation measure.*

*To implement these avoidance and minimization standards, the following procedures shall be followed in the event of the discovery of a tribal cultural resource:*

- *If any tribal archaeological resources or Native American materials, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or*

*Native American architectural remains or articulated or disarticulated human remains are discovered on the project site, work shall be suspended within 100 feet of the find (based on the apparent distribution of cultural resources), and the construction contractor shall immediately notify the project's City representative.*

- *The City shall coordinate the investigation of the find with a qualified (meeting the Secretary of the Interior's Qualification Standards for Archaeology) archaeologist approved by the City and with one or more interested culturally affiliated Native American Tribes that respond to the City's invitation. As part of the site investigation and resource assessment, the City and the archaeologist shall consult with interested culturally affiliated Native American Tribes to assess the significance of the find, make recommendations for further evaluation and treatment as necessary and provide proper management recommendations should potential impacts to the resources be determined by the City to be significant. A written report detailing the site assessment, coordination activities, and management recommendations shall be provided to the City representative by the qualified archaeologist. These recommendations will be documented in the project record. For any recommendations made by interested culturally affiliated Native American Tribes which are not implemented, a justification for why the recommendation was not followed will be provided in the project record.*
- *The City shall consider management recommendations for tribal cultural resources, including Native American archaeological resources, that are deemed appropriate, including resource avoidance or, where avoidance is infeasible in light of project design or layout or is unnecessary to avoid significant effects, preservation in place or other measures. The contractor shall implement any measures deemed by the City to be necessary and feasible to avoid or minimize significant impacts to the cultural resources. These measures may include inviting an interested culturally affiliated Native American Tribe to monitor ground-disturbing activities whenever work is occurring within 100 feet of the location of a discovered tribal cultural resource or Native American archaeological site.*
- *If an adverse impact to tribal cultural resources, including Native American archaeological resources, occurs then consultation with interested culturally affiliated Tribes regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 shall occur, in order to identify mitigation for the impact.*

13-4

**Implement Procedures in the Event of the Inadvertent Discovery of Native American Human Remains.**

*If an inadvertent discovery of Native American human remains is made at any time during project-related construction activities or project planning, the City will implement the procedures listed above in Mitigation Measure 13-2. The following performance standards shall be met prior to implementing or continuing actions such as construction, that may result in damage to or destruction of human remains: In accordance with the California Health and Safety Code, if human remains are encountered during ground-disturbing activities, the City shall immediately halt potentially damaging excavation in the area of the burial and notify the Sacramento County Coroner and a professional archaeologist to determine the nature of the remains. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (California Health and Safety Code Section 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]). After the Coroner's findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD), in consultation with the landowner, shall determine the ultimate treatment and disposition*

*of the remains. The responsibilities of the City for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq.*

*If the human remains are of historic age and are determined to be not of Native American origin, the City will follow the provisions of the California Health and Safety Code Section 7000 (et seq.) regarding the disinterment and removal of non-Native American human remains.*

**FINDINGS**

All additional significant environmental effects of the project relating to Tribal Cultural Resources can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<b>14. UTILITIES AND SERVICE SYSTEMS</b>			
Would the project:			
A) Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments?			X
B) Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts?			X

### ENVIRONMENTAL SETTING

The project site's existing utilities and service systems are discussed below.

#### Wastewater

Wastewater collection and treatment services for the proposed project would be provided by the SASD and the SRCSD. Wastewater generated from the project area is collected in the SASD system through a series of sewer pipes and pump stations. Once collected in the SASD system, sewage flows into the SRCSD interceptor system, where the sewage is conveyed to the SRWWTP located near Elk Grove. The City's Department of Utilities is responsible for providing and maintaining the majority of the water, sewer collection, storm drainage, and flood control services for residents and businesses within City limits. The project would connect to the existing sanitary sewer main located in Natomas Park Drive through a network of eight-inch sewer lines.

#### Water Supply

The City uses surface water from the Sacramento and American rivers to meet the majority of its water demands. To meet the City's water demand, the City uses surface water from the Sacramento and American rivers, and groundwater pumped from the North American and South American Subbasins. According to the City's 2015 Urban Water Management Plan (UWMP), the City has a current total of 275,917 acre-feet per year (AFY) in water supplies during dry years and expects the total to increase to 294,419 AFY by 2035. The total City retail water demand in 2015 was 84,832 AFY and is expected to increase to 149,213 AFY in 2035. According to the Department of Utilities' 2019 Consumer Confidence Report, the City's drinking water meets or exceeds all federal and State drinking water standards.<sup>18</sup> The project would connect to the existing water main located in Natomas Park Drive through a network of water lines.

#### Solid Waste Disposal

The City of Sacramento does not provide commercial solid waste collection services. Rather, commercial garbage, recycling, and yard waste services are provided by a franchised hauler authorized by the Sacramento Solid Waste Authority to collect commercial garbage and commingled recycling within the City. The Sacramento County Kiefer Landfill, located at 12701 Kiefer Boulevard in Sloughhouse, California, is the primary location for the disposal of waste for the City. According to the Master EIR, the Kiefer Landfill should serve the City adequately until the year 2065. As growth continues in the City, in accordance with the County General Plan and the City's General Plan, population would increase and the solid waste stream

<sup>18</sup> City of Sacramento Department of Utilities. 2019 Consumer Confidence Report. Available at: [https://www.cityofsacramento.org/-/media/Water-Quality/CCR\\_web\\_r071020.pdf?la=en](https://www.cityofsacramento.org/-/media/Water-Quality/CCR_web_r071020.pdf?la=en). Accessed March 2021.



would continue to grow. However, implementation of the Solid Waste Authority and the Sacramento recycling requirements, would continue to significantly reduce potential cumulative impact on landfill capacity to a less-than-significant effect.

#### **STANDARDS OF SIGNIFICANCE**

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the following:

- Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments; or
- Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts.

#### **SUMMARY OF ANALYSIS UNDER THE 2035 GENERAL PLAN MASTER EIR AND APPLICABLE GENERAL PLAN POLICIES**

The Master EIR evaluated the effects of development under the 2035 General Plan on water supply, sewer and storm drainage, solid waste, electricity, natural gas and telecommunications. See Chapter 4.11.

The Master EIR evaluated the impacts of increased demand for water that would occur with development under the 2035 General Plan. Policies in the general plan would reduce the impact generally to a less-than-significant level (see Impact 4.11-1) but the need for new water supply facilities results in a significant and unavoidable effect (Impact 4.11-2). The potential need for expansion of wastewater treatment facilities was identified as having a significant and unavoidable effect (Impacts 4.11-4, 4.11-5). Impacts on solid waste facilities were less than significant (Impacts 4.11-7, 4.11-8).

#### **ANSWERS TO CHECKLIST QUESTIONS**

##### Questions A and B

The project site is currently developed and, therefore, connected to existing utilities and service systems. The project site is located adjacent to existing development, including a multi-family residential complex and commercial development. The nearby developments are connected to the City's water and utilize existing solid waste disposal services, as well as SASD's wastewater services. The proposed project would connect to the existing water and sewer lines adjacent to the site.

##### *Wastewater*

As discussed above, the proposed project would be provided wastewater collection and treatment services by the SASD and the SRCSD. Wastewater generated by the proposed project would be collected in the SASD system. SASD requires each building on each lot to have a separate connection to SASD's sewer system. Multiple buildings located within a single parcel must have a separate connection the SASD public sewer line. Once collected, the sewage would flow into the SRCSD interceptor system, where the sewage would be conveyed to the SRWWTP.

Based on an average wastewater generation rate of 310 gallons per day per unit, the proposed project is anticipated to generate approximately 58,900 gallons per day, or 0.06 million gallons per day (mgd). The existing permitted capacity at the SRWWTP is 181 mgd.<sup>19</sup> Per the SRWWTP's NPDES Permit (No. CA0077682), adopted in April of 2016, the average dry weather flow at that time was approximately 120

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<sup>19</sup> Sacramento Regional Community Services District. *Final Executive Summary: Sacramento Regional Wastewater Treatment Plant* [pg 7]. May 2008.

mgd.<sup>20</sup> Therefore, adequate capacity exists to treat the additional 0.06 mgd of wastewater that would be generated by the proposed project.

Furthermore, the project's consistency the allowable uses for the General Plan land use designation would ensure the demand for wastewater service would not exceed the amount anticipated for buildout of the Planning Area evaluated in the Master EIR. In addition, buildout capacity of the entire SASD service area was anticipated in the 2018 Sewer System Management Plan (SSMP).<sup>21</sup> As such, SASD has anticipated the need for wastewater services in the project area and requires development impact fees to support buildout demand of their service area (including the project site). Policy U 4.1.1 in the Master EIR requires the City to ensure that all new drainage facilities are adequality sized to accommodate stormwater runoff. Additionally, the SRCSD would require payment of sewer impact fees. All applicable impact fees would be required to be paid prior to issuance of a building permit.

Given the required payment of applicable impact fees, the SRCSD would be able to provide sufficient wastewater services and conveyance to serve full buildout of the City, including the project site, per the Master EIR. Therefore, adequate capacity exists to serve the project site's demands.

### *Water Supply*

The City is responsible for providing and maintaining water service for the project site. The 2015 UWMP analyzed the water supply, water demand, and water shortage contingency planning for the City's service area, which would include the project site. According to the 2015 UWMP, under all drought conditions, the City possesses sufficient water supply entitlements to meet the demands of the City's customers up to the year 2035.<sup>22</sup>

According to the 2015 UWMP, to obtain population projections for the year 2040, an assumption of a continued growth rate within the current service area and sphere of influence, consistent with the General Plan, was used. As a result, even though the project site was already developed with the existing sports club at the time that the 2015 UWMP was prepared, the population growth associated with redevelopment of the site with residential uses was accounted for in the regional growth estimates. Thus, the population growth associated with implementation of the proposed project was included within the growth projections evaluated in the 2015 UWMP.

As such, adequate capacity is expected to be available to serve the proposed project's water demands. The proposed project is consistent with land use and zoning designations and would not generate an increase in demand from what has already been anticipated in the Master EIR. As such, adequate capacity is expected to be available to serve the proposed project's water demands.

### *Solid Waste*

Solid waste collected at residential uses in the area is currently disposed of at the Kiefer Landfill. Kiefer Landfill, located at 12701 Kiefer Boulevard in Sloughhouse, California, is the primary location for the disposal of waste by the City. According to the Master EIR, the landfill is permitted to accept up to 10,815 tons per day and the current peak and average daily disposal is substantially lower than the permitted amount. The landfill is anticipated to be capable of adequately serving the area, including the anticipated population growth, until the year 2065.

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<sup>20</sup> California Regional Water Quality Control Board, Central Valley Region. *Order No. R5-2016-0020-01 NPDES No. CA0077682* [pg I-7]. April 2016.

<sup>21</sup> Sacramento Area Sewer District. *Sewer System Management Plan*. June 8, 2018.

<sup>22</sup> City of Sacramento. *2015 Urban Water Management Plan*. Available at: <https://www.cityofsacramento.org/-/media/Corporate/Files/DOU/Reports/City-of-Sacramento-Final-2015-UWMP-June-2016.pdf?la=en>. Accessed March 2021.

Per the CalRecycle Jurisdiction Diversion/Disposal Rate Summary for Sacramento, the most recently approved (2015) annual per capita disposal rate is 5.8 pounds per day per resident.<sup>23</sup> Given that the proposed project would house approximately 507 future residents,<sup>24</sup> operation of the proposed project would generate approximately 2,941 pounds of waste per day (1.5 tons). Operational waste generation of 1.5 tons per day would equal approximately 0.01 percent of the Kiefer Landfill's remaining daily capacity. Therefore, the proposed project's operational waste generation could be accommodated by the existing capacity of the Kiefer Landfill.

### Conclusion

Because adequate capacity exists to serve the project's demands in addition to existing commitments, and construction of new utilities or expansion of existing facilities would not be required, implementation of the proposed project would result in **no additional environmental effects** beyond what was analyzed in the 2035 Master EIR.

### **MITIGATION MEASURES**

None required.

### **FINDINGS**

The project would have no additional project-specific environmental effects relating to Utilities and Service Systems.

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<sup>23</sup> CalRecycle. *Jurisdiction Diversion/Disposal Rate Summary (2007 – Current)*. Available at: <https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006>. Accessed July 2021.

<sup>24</sup> This population estimate is based on the result of the CalEEMod modeling. See Appendix.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<b>15. 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?		X	
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.)		X	
C.) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X	

**ANSWERS TO CHECKLIST QUESTIONS**

Question A

Implementation of the proposed project would have the potential to adversely impact special-status animals and previously undiscovered cultural, tribal cultural resources, and/or human remains. The proposed project would implement and comply with applicable Sacramento 2035 General Plan policies, as discussed throughout this IS/MND. With implementation of the mitigation measures required by this IS/MND, compliance with 2035 General Plan policies, and application of standard BMPs during construction, development of the proposed project would not result in any of the following: 1) degrade the quality of the environment; 2) substantially reduce or impact the habitat of fish or wildlife species; 3) cause fish or wildlife populations to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history or prehistory. Therefore, with implementation of the mitigation measures included in this IS/MND, the ***effect can be mitigated to less than significant***.

Question B

The proposed project is an allowed use under the project site’s General Plan land use designation, and the population growth associated with development of the proposed project was accounted for in the regional population growth projection evaluated in the City’s 2035 General Plan EIR. Thus, the population growth associated with development of the project was included in the cumulative analysis of City buildout in the Master EIR. Applicable policies from the 2035 General Plan would be implemented as part of the proposed project, as well as the project-specific mitigation measures included in this IS/MND, to reduce the proposed project’s contribution to potentially cumulative impacts. The potential impacts of the proposed project would be individually limited and would not be cumulatively considerable. As demonstrated in this IS/MND, all potential environmental impacts that could occur as a result of project implementation would be reduced to a less-than-significant level with implementation of project-specific mitigation measures and compliance

with applicable 2035 General Plan policies. When viewed in conjunction with other closely related past, present or reasonably foreseeable future projects, development of the proposed project would not contribute to cumulative impacts in the City. Therefore, with implementation of the mitigation measures included in this IS/MND, the **effect can be mitigated to less than significant.**

Question C

Implementation of the proposed project could result in temporary impacts related to hazards during the construction period. The proposed project would be required to implement the project-specific mitigation measures within this IS/MND, as well as applicable policies of the 2035 General Plan, to reduce any potential direct or indirect impacts that could occur to human beings or various resources and, as demonstrated in this IS/MND, with implementation of the identified mitigation measures, all impacts would be reduced to less-than-significant levels. Therefore, with implementation of the mitigation measures included in this IS/MND, the **effect can be mitigated to less than significant.**

## **SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

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The environmental factors checked below would potentially be affected by this project.

- |  |   |
|--|---|
| <input type="checkbox"/> Aesthetics                      | <input type="checkbox"/> Hazards                              |
| <input checked="" type="checkbox"/> Air Quality          | <input type="checkbox"/> Noise                                |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Public Services                      |
| <input checked="" type="checkbox"/> Cultural Resources   | <input type="checkbox"/> Recreation                           |
| <input type="checkbox"/> Energy and Mineral Resources    | <input type="checkbox"/> Transportation/Circulation           |
| <input checked="" type="checkbox"/> Geology and Soils    | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Hydrology and Water Quality     | <input type="checkbox"/> Utilities and Service Systems        |
| <input type="checkbox"/> None Identified                 |   |

**SECTION V - DETERMINATION**

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**On the basis of the initial study:**

I find that (a) the proposed project is an anticipated subsequent project identified and described in the 2035 General Plan Master EIR; (b) the proposed project is consistent with the 2035 General Plan land use designation and the permissible densities and intensities of use for the project site; (c) that the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the Master EIR are adequate for the proposed project; and (d) the proposed project will have additional significant environmental effects not previously examined in the Master EIR. A Mitigated Negative Declaration will be prepared. Mitigation measures from the Master EIR will be applied to the project as appropriate, and additional feasible mitigation measures and alternatives will be incorporated to revise the proposed project before the negative declaration is circulated for public review, to avoid or mitigate the identified effects to a level of insignificance. (CEQA Guidelines Section 15178(b))

*Scott Johnson*

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Signature

August 16, 2021

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Date

Scott Johnson, Senior Planner

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Printed Name

## REFERENCES CITED

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It should be noted that all of the technical reports used for the purposes of the analysis throughout this Initial Study are available upon request to staff at the City of Sacramento Community Development Department located at 300 Richards Boulevard, Third Floor, Sacramento, CA 95811. The following documents are referenced information sources used for the analysis within this Initial Study:

1. Analytical Environmental Services. *Phase I Environmental Site Assessment for Demmon Partners 2450 Natomas Park Drive*. January 2021.
2. California Department of Conservation. *California Important Farmland Finder*. Available at: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed March 2021.
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4. California Department of Transportation. *Transportation and Construction Vibration Guidance Manual*. September 2013.
5. California Regional Water Quality Control Board, Central Valley Region. *Order No. R5-2016-0020-01 NPDES No. CA0077682*. April 2016.
6. CalRecycle. *Jurisdiction Diversion/Disposal Rate Summary (2007 – Current)*. Available at: <https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006>. Accessed July 2021.
7. City of Sacramento Department of Utilities. *2019 Consumer Confidence Report*. Available at: [https://www.cityofsacramento.org/-/media/Water-Quality/CCR\\_web\\_r071020.pdf?la=en](https://www.cityofsacramento.org/-/media/Water-Quality/CCR_web_r071020.pdf?la=en). Accessed March 2021.
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15. Regas Group Environmental Consultants. *Asbestos Inspection and Report*. June 4, 2021.
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17. Sacramento Area Sewer District. *Sewer Ordinance SDI-0072*. Effective May 27, 2016.
18. Sacramento Area Sewer District. *Sewer System Management Plan*. June 8, 2018.
19. Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment, Chapter 4: Operational Criteria Air Pollutant and Precursor Emissions*. June 2020.
20. Sacramento Metropolitan Air Quality Management District. *SMAQMD Operational Screening Levels*. April 2018.
21. Sacramento Regional Community Services District. *Final Executive Summary: Sacramento Regional Wastewater Treatment Plant*. May 2008.



22. U.S. Environmental Protection Agency. *User's Guide for the AMS/EPA Regulatory Model (AERMOD)*. December 2016.
23. United States Department of Agriculture. *Natural Resources Conservation Science*. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed May 2021.

## APPENDIX

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Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Annual

**Natomas Park Drive Apartments**  
**Sacramento Metropolitan AQMD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	353.00	Space	4.06	141,200.00	0
----- Apartments Mid Rise	190.00	----- Dwelling Unit	5.00	190,000.00	507

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	3.5	<b>Precipitation Freq (Days)</b>	58
<b>Climate Zone</b>	6			<b>Operational Year</b>	2024
<b>Utility Company</b>	Sacramento Municipal Utility District				
<b>CO2 Intensity (lb/MW hr)</b>	369.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Annual

Project Characteristics - CO2 intensity factor adjusted per SMUD's RPS projections.

Land Use - Lot acreage adjusted per site plan.

Construction Phase - Construction phase timing adjusted based on applicant-provided questionnaire.

Demolition -

Grading -

Vehicle Trips - Trip generation rate adjusted for consistency with City-provided information.

Mobile Land Use Mitigation - Project would improve pedestrian network connectivity on-site.

Area Mitigation - No hearths.

Energy Mitigation - Title 24 exceedance applied to reflect compliance with 2019 CBSC.

Water Mitigation - Water conservation strategy applied to reflect compliance with 2019 CalGreen Code and MWEL0.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	400.00
tblConstructionPhase	NumDays	230.00	400.00
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	10.00	80.00
tblLandUse	LotAcreage	3.18	4.06
tblProjectCharacteristics	CO2IntensityFactor	590.31	369.35
tblVehicleTrips	ST_TR	6.39	5.08
tblVehicleTrips	SU_TR	5.86	5.08
tblVehicleTrips	WD_TR	6.65	5.08

**2.0 Emissions Summary**

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**2.1 Overall Construction**  
**Unmitigated Construction**

Year	tons/yr														MT/yr	
ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBIO- CO2	Total CO2	CH4	N2O	CO2e	
2022	0.2353	2.3771	1.6327	3.2100e-003	0.8373	0.1137	0.9509	0.4454	0.1049	0.5503	0.0000	282.3140	282.3140	0.0830	0.0000	284.3882
2023	0.8916	2.3462	2.8614	6.3400e-003	0.2600	0.0964	0.3564	0.0809	0.1716	0.0000	564.4815	564.4815	0.0857	0.0000	566.6233	
2024	0.8564	1.8115	2.3063	5.3500e-003	0.1942	0.0676	0.2618	0.0522	0.1162	0.0000	476.9235	476.9235	0.0625	0.0000	478.4871	
Maximum	0.8916	2.3771	2.8614	6.3400e-003	0.8373	0.1137	0.9509	0.4454	0.1049	0.5503	0.0000	564.4815	564.4815	0.0857	0.0000	566.6233

**Mitigated Construction**

Year	tons/yr														MT/yr	
ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBIO- CO2	Total CO2	CH4	N2O	CO2e	
2022	0.2353	2.3771	1.6327	3.2100e-003	0.8373	0.1137	0.9509	0.4454	0.1049	0.5503	0.0000	282.3137	282.3137	0.0830	0.0000	284.3879
2023	0.8916	2.3462	2.8614	6.3400e-003	0.2600	0.0964	0.3564	0.0809	0.1716	0.0000	564.4811	564.4811	0.0857	0.0000	566.6229	
2024	0.8564	1.8115	2.3063	5.3500e-003	0.1942	0.0676	0.2618	0.0522	0.1162	0.0000	476.9232	476.9232	0.0625	0.0000	478.4868	
Maximum	0.8916	2.3771	2.8614	6.3400e-003	0.8373	0.1137	0.9509	0.4454	0.1049	0.5503	0.0000	564.4811	564.4811	0.0857	0.0000	566.6229

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-15-2022	8-14-2022	0.9784	0.9784
2	8-15-2022	11-14-2022	1.1945	1.1945
3	11-15-2022	2-14-2023	0.6813	0.6813
4	2-15-2023	5-14-2023	0.6757	0.6757
5	5-15-2023	8-14-2023	0.9294	0.9294
6	8-15-2023	11-14-2023	0.9306	0.9306
7	11-15-2023	2-14-2024	0.9109	0.9109
8	2-15-2024	5-14-2024	0.8687	0.8687
9	5-15-2024	8-14-2024	0.8869	0.8869
10	8-15-2024	9-30-2024	0.4323	0.4323
		Highest	1.1945	1.1945

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9313	0.0226	1.9631	1.0000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	3.2094	3.2094	3.0900e-003	0.0000	3.2868
Energy	9.9900e-003	0.0853	0.0363	5.4000e-004		6.9000e-003	6.9000e-003		6.9000e-003	6.9000e-003	0.0000	242.6064	242.6064	0.0132	4.1500e-003	244.1719
Mobile	0.2434	1.0176	2.8581	9.9200e-003	0.9231	7.7400e-003	0.9308	0.2474	7.2200e-003	0.2546	0.0000	913.1253	913.1253	0.0399	0.0000	914.1232
Waste						0.0000	0.0000		0.0000	0.0000	17.7414	0.0000	17.7414	1.0485	0.0000	43.9536
Water						0.0000	0.0000		0.0000	0.0000	4.3798	14.9099	19.2897	0.0163	9.7700e-003	22.6064
<b>Total</b>	<b>1.1847</b>	<b>1.1256</b>	<b>4.8575</b>	<b>0.0106</b>	<b>0.9231</b>	<b>0.0255</b>	<b>0.9486</b>	<b>0.2474</b>	<b>0.0250</b>	<b>0.2724</b>	<b>22.1212</b>	<b>1,173.8510</b>	<b>1,195.9722</b>	<b>1.1209</b>	<b>0.0139</b>	<b>1,228.1417</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Annual

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9313	0.0226	1.9631	1.0000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	3.2094	3.2094	3.0900e-003	0.0000	3.2868
Energy	9.4800e-003	0.0810	0.0345	5.2000e-004		6.5500e-003	6.5500e-003		6.5500e-003	6.5500e-003	0.0000	93.8257	93.8257	1.8000e-003	1.7200e-003	94.3832
Mobile	0.2341	0.9611	2.6177	8.9000e-003	0.8225	7.0200e-003	0.8295	0.2204	6.5400e-003	0.2270	0.0000	819.8429	819.8429	0.0365	0.0000	820.7549
Waste						0.0000	0.0000		0.0000	0.0000	17.7414	0.0000	17.7414	1.0485	0.0000	43.9536
Water						0.0000	0.0000		0.0000	0.0000	3.5038	11.9279	15.4318	0.0130	7.8100e-003	18.0851
<b>Total</b>	<b>1.1749</b>	<b>1.0648</b>	<b>4.6153</b>	<b>9.5200e-003</b>	<b>0.8225</b>	<b>0.0244</b>	<b>0.8469</b>	<b>0.2204</b>	<b>0.0240</b>	<b>0.2444</b>	<b>21.2453</b>	<b>928.8058</b>	<b>950.0511</b>	<b>1.1029</b>	<b>9.5300e-003</b>	<b>980.4636</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.83	5.40	4.99	9.85	10.90	4.19	10.72	10.90	4.12	10.28	3.96	20.88	20.56	1.61	31.54	20.17

**3.0 Construction Detail**

**Construction Phase**



Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/15/2022	8/5/2022	5	60	
2	Site Preparation	Site Preparation	8/6/2022	11/25/2022	5	80	
3	Grading	Grading	11/26/2022	1/20/2023	5	40	
4	Paving	Paving	1/21/2023	3/17/2023	5	40	
5	Building Construction	Building Construction	3/18/2023	9/27/2024	5	400	
6	Architectural Coating	Architectural Coating	4/1/2023	10/11/2024	5	400	

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

**Acres of Grading (Grading Phase): 20**

**Acres of Paving: 4.06**

**Residential Indoor: 384,750; Residential Outdoor: 128,250; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,472 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	155.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	196.00	43.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	39.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0175	0.0000	0.0175	2.6400e-003	0.0000	2.6400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0792	0.7716	0.6178	1.1600e-003		0.0373	0.0373		0.0347	0.0347	0.0000	101.9707	101.9707	0.0286	0.0000	102.6868
<b>Total</b>	<b>0.0792</b>	<b>0.7716</b>	<b>0.6178</b>	<b>1.1600e-003</b>	<b>0.0175</b>	<b>0.0373</b>	<b>0.0547</b>	<b>2.6400e-003</b>	<b>0.0347</b>	<b>0.0373</b>	<b>0.0000</b>	<b>101.9707</b>	<b>101.9707</b>	<b>0.0286</b>	<b>0.0000</b>	<b>102.6868</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.2 Demolition - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.2000e-004	0.0187	4.4800e-003	6.0000e-005	1.3100e-003	6.0000e-005	1.3700e-003	3.6000e-004	6.0000e-005	4.2000e-004	0.0000	5.7900	5.7900	3.3000e-004	0.0000	5.7983
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4600e-003	9.2000e-004	0.0105	3.0000e-005	3.3000e-003	2.0000e-005	3.3300e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.7273	2.7273	7.0000e-005	0.0000	2.7290
<b>Total</b>	<b>1.9800e-003</b>	<b>0.0197</b>	<b>0.0150</b>	<b>9.0000e-005</b>	<b>4.6100e-003</b>	<b>8.0000e-005</b>	<b>4.7000e-003</b>	<b>1.2400e-003</b>	<b>8.0000e-005</b>	<b>1.3200e-003</b>	<b>0.0000</b>	<b>8.5173</b>	<b>8.5173</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>8.5272</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0175	0.0000	0.0175	2.6400e-003	0.0000	2.6400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0792	0.7716	0.6178	1.1600e-003		0.0373	0.0373		0.0347	0.0347	0.0000	101.9706	101.9706	0.0286	0.0000	102.6866
<b>Total</b>	<b>0.0792</b>	<b>0.7716</b>	<b>0.6178</b>	<b>1.1600e-003</b>	<b>0.0175</b>	<b>0.0373</b>	<b>0.0547</b>	<b>2.6400e-003</b>	<b>0.0347</b>	<b>0.0373</b>	<b>0.0000</b>	<b>101.9706</b>	<b>101.9706</b>	<b>0.0286</b>	<b>0.0000</b>	<b>102.6866</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Annual

**3.2 Demolition - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.2000e-004	0.0187	4.4800e-003	6.0000e-005	1.3100e-003	6.0000e-005	1.3700e-003	3.6000e-004	6.0000e-005	4.2000e-004	0.0000	5.7900	5.7900	3.3000e-004	0.0000	5.7983
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4600e-003	9.2000e-004	0.0105	3.0000e-005	3.3000e-003	2.0000e-005	3.3300e-003	8.8000e-004	2.0000e-005	9.0000e-004	0.0000	2.7273	2.7273	7.0000e-005	0.0000	2.7290
<b>Total</b>	<b>1.9800e-003</b>	<b>0.0197</b>	<b>0.0150</b>	<b>9.0000e-005</b>	<b>4.6100e-003</b>	<b>8.0000e-005</b>	<b>4.7000e-003</b>	<b>1.2400e-003</b>	<b>8.0000e-005</b>	<b>1.3200e-003</b>	<b>0.0000</b>	<b>8.5173</b>	<b>8.5173</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>8.5272</b>

**3.3 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.7227	0.0000	0.7227	0.3972	0.0000	0.3972	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1268	1.3233	0.7879	1.5200e-003		0.0645	0.0645		0.0593	0.0593	0.0000	133.7576	133.7576	0.0433	0.0000	134.8391
<b>Total</b>	<b>0.1268</b>	<b>1.3233</b>	<b>0.7879</b>	<b>1.5200e-003</b>	<b>0.7227</b>	<b>0.0645</b>	<b>0.7872</b>	<b>0.3972</b>	<b>0.0593</b>	<b>0.4566</b>	<b>0.0000</b>	<b>133.7576</b>	<b>133.7576</b>	<b>0.0433</b>	<b>0.0000</b>	<b>134.8391</b>

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**3.3 Site Preparation - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3300e-003	1.4600e-003	0.0168	5.0000e-005	5.2900e-003	4.0000e-005	5.3200e-003	1.4100e-003	3.0000e-005	1.4400e-003	0.0000	4.3637	4.3637	1.1000e-004	0.0000	4.3663
<b>Total</b>	<b>2.3300e-003</b>	<b>1.4600e-003</b>	<b>0.0168</b>	<b>5.0000e-005</b>	<b>5.2900e-003</b>	<b>4.0000e-005</b>	<b>5.3200e-003</b>	<b>1.4100e-003</b>	<b>3.0000e-005</b>	<b>1.4400e-003</b>	<b>0.0000</b>	<b>4.3637</b>	<b>4.3637</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>4.3663</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.7227	0.0000	0.7227	0.3972	0.0000	0.3972	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1268	1.3233	0.7879	1.5200e-003		0.0645	0.0645		0.0593	0.0593	0.0000	133.7574	133.7574	0.0433	0.0000	134.8389
<b>Total</b>	<b>0.1268</b>	<b>1.3233</b>	<b>0.7879</b>	<b>1.5200e-003</b>	<b>0.7227</b>	<b>0.0645</b>	<b>0.7872</b>	<b>0.3972</b>	<b>0.0593</b>	<b>0.4566</b>	<b>0.0000</b>	<b>133.7574</b>	<b>133.7574</b>	<b>0.0433</b>	<b>0.0000</b>	<b>134.8389</b>

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**3.3 Site Preparation - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3300e-003	1.4600e-003	0.0168	5.0000e-005	5.2900e-003	4.0000e-005	5.3200e-003	1.4100e-003	3.0000e-005	1.4400e-003	0.0000	4.3637	4.3637	1.1000e-004	0.0000	4.3663
<b>Total</b>	<b>2.3300e-003</b>	<b>1.4600e-003</b>	<b>0.0168</b>	<b>5.0000e-005</b>	<b>5.2900e-003</b>	<b>4.0000e-005</b>	<b>5.3200e-003</b>	<b>1.4100e-003</b>	<b>3.0000e-005</b>	<b>1.4400e-003</b>	<b>0.0000</b>	<b>4.3637</b>	<b>4.3637</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>4.3663</b>

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0859	0.0000	0.0859	0.0425	0.0000	0.0425	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0244	0.2607	0.1909	3.7000e-004		0.0118	0.0118		0.0108	0.0108	0.0000	32.5685	32.5685	0.0105	0.0000	32.8318
<b>Total</b>	<b>0.0244</b>	<b>0.2607</b>	<b>0.1909</b>	<b>3.7000e-004</b>	<b>0.0859</b>	<b>0.0118</b>	<b>0.0976</b>	<b>0.0425</b>	<b>0.0108</b>	<b>0.0533</b>	<b>0.0000</b>	<b>32.5685</b>	<b>32.5685</b>	<b>0.0105</b>	<b>0.0000</b>	<b>32.8318</b>

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**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	3.8000e-004	4.3600e-003	1.0000e-005	1.3800e-003	1.0000e-005	1.3900e-003	3.7000e-004	1.0000e-005	3.7000e-004	0.0000	1.1364	1.1364	3.0000e-005	0.0000	1.1371
<b>Total</b>	<b>6.1000e-004</b>	<b>3.8000e-004</b>	<b>4.3600e-003</b>	<b>1.0000e-005</b>	<b>1.3800e-003</b>	<b>1.0000e-005</b>	<b>1.3900e-003</b>	<b>3.7000e-004</b>	<b>1.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>1.1364</b>	<b>1.1364</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.1371</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0859	0.0000	0.0859	0.0425	0.0000	0.0425	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0244	0.2607	0.1909	3.7000e-004		0.0118	0.0118		0.0108	0.0108	0.0000	32.5684	32.5684	0.0105	0.0000	32.8318
<b>Total</b>	<b>0.0244</b>	<b>0.2607</b>	<b>0.1909</b>	<b>3.7000e-004</b>	<b>0.0859</b>	<b>0.0118</b>	<b>0.0976</b>	<b>0.0425</b>	<b>0.0108</b>	<b>0.0533</b>	<b>0.0000</b>	<b>32.5684</b>	<b>32.5684</b>	<b>0.0105</b>	<b>0.0000</b>	<b>32.8318</b>



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**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e-004	3.8000e-004	4.3600e-003	1.0000e-005	1.3800e-003	1.0000e-005	1.3900e-003	3.7000e-004	1.0000e-005	3.7000e-004	0.0000	1.1364	1.1364	3.0000e-005	0.0000	1.1371
<b>Total</b>	<b>6.1000e-004</b>	<b>3.8000e-004</b>	<b>4.3600e-003</b>	<b>1.0000e-005</b>	<b>1.3800e-003</b>	<b>1.0000e-005</b>	<b>1.3900e-003</b>	<b>3.7000e-004</b>	<b>1.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>1.1364</b>	<b>1.1364</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.1371</b>

**3.4 Grading - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0558	0.0000	0.0558	0.0260	0.0000	0.0260	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0128	0.1345	0.1106	2.2000e-004		5.8100e-003	5.8100e-003		5.3500e-003	5.3500e-003	0.0000	19.5455	19.5455	6.3200e-003	0.0000	19.7035
<b>Total</b>	<b>0.0128</b>	<b>0.1345</b>	<b>0.1106</b>	<b>2.2000e-004</b>	<b>0.0558</b>	<b>5.8100e-003</b>	<b>0.0616</b>	<b>0.0260</b>	<b>5.3500e-003</b>	<b>0.0313</b>	<b>0.0000</b>	<b>19.5455</b>	<b>19.5455</b>	<b>6.3200e-003</b>	<b>0.0000</b>	<b>19.7035</b>

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**3.4 Grading - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.1000e-004	2.4000e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.6562	0.6562	1.0000e-005	0.0000	0.6566
<b>Total</b>	<b>3.4000e-004</b>	<b>2.1000e-004</b>	<b>2.4000e-003</b>	<b>1.0000e-005</b>	<b>8.3000e-004</b>	<b>1.0000e-005</b>	<b>8.3000e-004</b>	<b>2.2000e-004</b>	<b>1.0000e-005</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.6562</b>	<b>0.6562</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.6566</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0558	0.0000	0.0558	0.0260	0.0000	0.0260	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0128	0.1345	0.1106	2.2000e-004		5.8100e-003	5.8100e-003		5.3500e-003	5.3500e-003	0.0000	19.5454	19.5454	6.3200e-003	0.0000	19.7035
<b>Total</b>	<b>0.0128</b>	<b>0.1345</b>	<b>0.1106</b>	<b>2.2000e-004</b>	<b>0.0558</b>	<b>5.8100e-003</b>	<b>0.0616</b>	<b>0.0260</b>	<b>5.3500e-003</b>	<b>0.0313</b>	<b>0.0000</b>	<b>19.5454</b>	<b>19.5454</b>	<b>6.3200e-003</b>	<b>0.0000</b>	<b>19.7035</b>

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**3.4 Grading - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.4000e-004	2.1000e-004	2.4000e-003	1.0000e-005	8.3000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.6562	0.6562	1.0000e-005	0.0000	0.6566
<b>Total</b>	<b>3.4000e-004</b>	<b>2.1000e-004</b>	<b>2.4000e-003</b>	<b>1.0000e-005</b>	<b>8.3000e-004</b>	<b>1.0000e-005</b>	<b>8.3000e-004</b>	<b>2.2000e-004</b>	<b>1.0000e-005</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>0.6562</b>	<b>0.6562</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.6566</b>

**3.5 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0207	0.2038	0.2917	4.6000e-004		0.0102	0.0102		9.3900e-003	9.3900e-003	0.0000	40.0537	40.0537	0.0130	0.0000	40.3776
Paving	5.3200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0260</b>	<b>0.2038</b>	<b>0.2917</b>	<b>4.6000e-004</b>		<b>0.0102</b>	<b>0.0102</b>		<b>9.3900e-003</b>	<b>9.3900e-003</b>	<b>0.0000</b>	<b>40.0537</b>	<b>40.0537</b>	<b>0.0130</b>	<b>0.0000</b>	<b>40.3776</b>

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**3.5 Paving - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.1000e-004	5.5000e-004	6.4100e-003	2.0000e-005	2.2000e-003	1.0000e-005	2.2200e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.7499	1.7499	4.0000e-005	0.0000	1.7509
<b>Total</b>	<b>9.1000e-004</b>	<b>5.5000e-004</b>	<b>6.4100e-003</b>	<b>2.0000e-005</b>	<b>2.2000e-003</b>	<b>1.0000e-005</b>	<b>2.2200e-003</b>	<b>5.9000e-004</b>	<b>1.0000e-005</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>1.7499</b>	<b>1.7499</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.7509</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0207	0.2038	0.2917	4.6000e-004		0.0102	0.0102		9.3900e-003	9.3900e-003	0.0000	40.0537	40.0537	0.0130	0.0000	40.3775
Paving	5.3200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0260</b>	<b>0.2038</b>	<b>0.2917</b>	<b>4.6000e-004</b>		<b>0.0102</b>	<b>0.0102</b>		<b>9.3900e-003</b>	<b>9.3900e-003</b>	<b>0.0000</b>	<b>40.0537</b>	<b>40.0537</b>	<b>0.0130</b>	<b>0.0000</b>	<b>40.3775</b>

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**3.5 Paving - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.1000e-004	5.5000e-004	6.4100e-003	2.0000e-005	2.2000e-003	1.0000e-005	2.2200e-003	5.9000e-004	1.0000e-005	6.0000e-004	0.0000	1.7499	1.7499	4.0000e-005	0.0000	1.7509
<b>Total</b>	<b>9.1000e-004</b>	<b>5.5000e-004</b>	<b>6.4100e-003</b>	<b>2.0000e-005</b>	<b>2.2000e-003</b>	<b>1.0000e-005</b>	<b>2.2200e-003</b>	<b>5.9000e-004</b>	<b>1.0000e-005</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>1.7499</b>	<b>1.7499</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>1.7509</b>

**3.6 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1612	1.4745	1.6650	2.7600e-003		0.0717	0.0717		0.0675	0.0675	0.0000	237.5999	237.5999	0.0565	0.0000	239.0129
<b>Total</b>	<b>0.1612</b>	<b>1.4745</b>	<b>1.6650</b>	<b>2.7600e-003</b>		<b>0.0717</b>	<b>0.0717</b>		<b>0.0675</b>	<b>0.0675</b>	<b>0.0000</b>	<b>237.5999</b>	<b>237.5999</b>	<b>0.0565</b>	<b>0.0000</b>	<b>239.0129</b>

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**3.6 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0102	0.3618	0.0983	1.0500e-003	0.0258	5.2000e-004	0.0263	7.4400e-003	5.0000e-004	7.9400e-003	0.0000	100.6158	100.6158	5.1500e-003	0.0000	100.7446
Worker	0.0609	0.0368	0.4291	1.3000e-003	0.1476	9.8000e-004	0.1485	0.0392	9.0000e-004	0.0402	0.0000	117.1861	117.1861	2.6700e-003	0.0000	117.2529
<b>Total</b>	<b>0.0710</b>	<b>0.3986</b>	<b>0.5274</b>	<b>2.3500e-003</b>	<b>0.1733</b>	<b>1.5000e-003</b>	<b>0.1748</b>	<b>0.0467</b>	<b>1.4000e-003</b>	<b>0.0481</b>	<b>0.0000</b>	<b>217.8019</b>	<b>217.8019</b>	<b>7.8200e-003</b>	<b>0.0000</b>	<b>217.9975</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1612	1.4745	1.6650	2.7600e-003		0.0717	0.0717		0.0675	0.0675	0.0000	237.5996	237.5996	0.0565	0.0000	239.0126
<b>Total</b>	<b>0.1612</b>	<b>1.4745</b>	<b>1.6650</b>	<b>2.7600e-003</b>		<b>0.0717</b>	<b>0.0717</b>		<b>0.0675</b>	<b>0.0675</b>	<b>0.0000</b>	<b>237.5996</b>	<b>237.5996</b>	<b>0.0565</b>	<b>0.0000</b>	<b>239.0126</b>

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**3.6 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0102	0.3618	0.0983	1.0500e-003	0.0258	5.2000e-004	0.0263	7.4400e-003	5.0000e-004	7.9400e-003	0.0000	100.6158	100.6158	5.1500e-003	0.0000	100.7446
Worker	0.0609	0.0368	0.4291	1.3000e-003	0.1476	9.8000e-004	0.1485	0.0392	9.0000e-004	0.0402	0.0000	117.1861	117.1861	2.6700e-003	0.0000	117.2529
<b>Total</b>	<b>0.0710</b>	<b>0.3986</b>	<b>0.5274</b>	<b>2.3500e-003</b>	<b>0.1733</b>	<b>1.5000e-003</b>	<b>0.1748</b>	<b>0.0467</b>	<b>1.4000e-003</b>	<b>0.0481</b>	<b>0.0000</b>	<b>217.8019</b>	<b>217.8019</b>	<b>7.8200e-003</b>	<b>0.0000</b>	<b>217.9975</b>

**3.6 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1435	1.3108	1.5763	2.6300e-003		0.0598	0.0598		0.0563	0.0563	0.0000	226.0529	226.0529	0.0535	0.0000	227.3893
<b>Total</b>	<b>0.1435</b>	<b>1.3108</b>	<b>1.5763</b>	<b>2.6300e-003</b>		<b>0.0598</b>	<b>0.0598</b>		<b>0.0563</b>	<b>0.0563</b>	<b>0.0000</b>	<b>226.0529</b>	<b>226.0529</b>	<b>0.0535</b>	<b>0.0000</b>	<b>227.3893</b>

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**3.6 Building Construction - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2200e-003	0.3376	0.0874	9.9000e-004	0.0245	4.7000e-004	0.0250	7.0800e-003	4.5000e-004	7.5300e-003	0.0000	95.1521	95.1521	4.8400e-003	0.0000	95.2731
Worker	0.0544	0.0316	0.3780	1.1800e-003	0.1404	9.1000e-004	0.1413	0.0373	8.4000e-004	0.0382	0.0000	107.1365	107.1365	2.2900e-003	0.0000	107.1938
<b>Total</b>	<b>0.0637</b>	<b>0.3692</b>	<b>0.4654</b>	<b>2.1700e-003</b>	<b>0.1649</b>	<b>1.3800e-003</b>	<b>0.1662</b>	<b>0.0444</b>	<b>1.2900e-003</b>	<b>0.0457</b>	<b>0.0000</b>	<b>202.2886</b>	<b>202.2886</b>	<b>7.1300e-003</b>	<b>0.0000</b>	<b>202.4669</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1435	1.3108	1.5763	2.6300e-003		0.0598	0.0598		0.0563	0.0563	0.0000	226.0526	226.0526	0.0535	0.0000	227.3890
<b>Total</b>	<b>0.1435</b>	<b>1.3108</b>	<b>1.5763</b>	<b>2.6300e-003</b>		<b>0.0598</b>	<b>0.0598</b>		<b>0.0563</b>	<b>0.0563</b>	<b>0.0000</b>	<b>226.0526</b>	<b>226.0526</b>	<b>0.0535</b>	<b>0.0000</b>	<b>227.3890</b>



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**3.6 Building Construction - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2200e-003	0.3376	0.0874	9.9000e-004	0.0245	4.7000e-004	0.0250	7.0800e-003	4.5000e-004	7.5300e-003	0.0000	95.1521	95.1521	4.8400e-003	0.0000	95.2731
Worker	0.0544	0.0316	0.3780	1.1800e-003	0.1404	9.1000e-004	0.1413	0.0373	8.4000e-004	0.0382	0.0000	107.1365	107.1365	2.2900e-003	0.0000	107.1938
<b>Total</b>	<b>0.0637</b>	<b>0.3692</b>	<b>0.4654</b>	<b>2.1700e-003</b>	<b>0.1649</b>	<b>1.3800e-003</b>	<b>0.1662</b>	<b>0.0444</b>	<b>1.2900e-003</b>	<b>0.0457</b>	<b>0.0000</b>	<b>202.2886</b>	<b>202.2886</b>	<b>7.1300e-003</b>	<b>0.0000</b>	<b>202.4669</b>

**3.7 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5892					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0187	0.1270	0.1766	2.9000e-004		6.9000e-003	6.9000e-003		6.9000e-003	6.9000e-003	0.0000	24.8942	24.8942	1.4900e-003	0.0000	24.9315
<b>Total</b>	<b>0.6078</b>	<b>0.1270</b>	<b>0.1766</b>	<b>2.9000e-004</b>		<b>6.9000e-003</b>	<b>6.9000e-003</b>		<b>6.9000e-003</b>	<b>6.9000e-003</b>	<b>0.0000</b>	<b>24.8942</b>	<b>24.8942</b>	<b>1.4900e-003</b>	<b>0.0000</b>	<b>24.9315</b>

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**3.7 Architectural Coating - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0115	6.9600e-003	0.0812	2.5000e-004	0.0279	1.9000e-004	0.0281	7.4300e-003	1.7000e-004	7.6000e-003	0.0000	22.1802	22.1802	5.1000e-004	0.0000	22.1928
<b>Total</b>	<b>0.0115</b>	<b>6.9600e-003</b>	<b>0.0812</b>	<b>2.5000e-004</b>	<b>0.0279</b>	<b>1.9000e-004</b>	<b>0.0281</b>	<b>7.4300e-003</b>	<b>1.7000e-004</b>	<b>7.6000e-003</b>	<b>0.0000</b>	<b>22.1802</b>	<b>22.1802</b>	<b>5.1000e-004</b>	<b>0.0000</b>	<b>22.1928</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5892					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0187	0.1270	0.1766	2.9000e-004		6.9000e-003	6.9000e-003		6.9000e-003	6.9000e-003	0.0000	24.8942	24.8942	1.4900e-003	0.0000	24.9314
<b>Total</b>	<b>0.6078</b>	<b>0.1270</b>	<b>0.1766</b>	<b>2.9000e-004</b>		<b>6.9000e-003</b>	<b>6.9000e-003</b>		<b>6.9000e-003</b>	<b>6.9000e-003</b>	<b>0.0000</b>	<b>24.8942</b>	<b>24.8942</b>	<b>1.4900e-003</b>	<b>0.0000</b>	<b>24.9314</b>

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**3.7 Architectural Coating - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0115	6.9600e-003	0.0812	2.5000e-004	0.0279	1.9000e-004	0.0281	7.4300e-003	1.7000e-004	7.6000e-003	0.0000	22.1802	22.1802	5.1000e-004	0.0000	22.1928
<b>Total</b>	<b>0.0115</b>	<b>6.9600e-003</b>	<b>0.0812</b>	<b>2.5000e-004</b>	<b>0.0279</b>	<b>1.9000e-004</b>	<b>0.0281</b>	<b>7.4300e-003</b>	<b>1.7000e-004</b>	<b>7.6000e-003</b>	<b>0.0000</b>	<b>22.1802</b>	<b>22.1802</b>	<b>5.1000e-004</b>	<b>0.0000</b>	<b>22.1928</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6194					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0185	0.1249	0.1855	3.0000e-004		6.2400e-003	6.2400e-003		6.2400e-003	6.2400e-003	0.0000	26.1709	26.1709	1.4700e-003	0.0000	26.2077
<b>Total</b>	<b>0.6379</b>	<b>0.1249</b>	<b>0.1855</b>	<b>3.0000e-004</b>		<b>6.2400e-003</b>	<b>6.2400e-003</b>		<b>6.2400e-003</b>	<b>6.2400e-003</b>	<b>0.0000</b>	<b>26.1709</b>	<b>26.1709</b>	<b>1.4700e-003</b>	<b>0.0000</b>	<b>26.2077</b>

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**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0114	6.6100e-003	0.0791	2.5000e-004	0.0294	1.9000e-004	0.0296	7.8100e-003	1.8000e-004	7.9800e-003	0.0000	22.4112	22.4112	4.8000e-004	0.0000	22.4232
<b>Total</b>	<b>0.0114</b>	<b>6.6100e-003</b>	<b>0.0791</b>	<b>2.5000e-004</b>	<b>0.0294</b>	<b>1.9000e-004</b>	<b>0.0296</b>	<b>7.8100e-003</b>	<b>1.8000e-004</b>	<b>7.9800e-003</b>	<b>0.0000</b>	<b>22.4112</b>	<b>22.4112</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>22.4232</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6194					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0185	0.1249	0.1855	3.0000e-004		6.2400e-003	6.2400e-003		6.2400e-003	6.2400e-003	0.0000	26.1708	26.1708	1.4700e-003	0.0000	26.2077
<b>Total</b>	<b>0.6379</b>	<b>0.1249</b>	<b>0.1855</b>	<b>3.0000e-004</b>		<b>6.2400e-003</b>	<b>6.2400e-003</b>		<b>6.2400e-003</b>	<b>6.2400e-003</b>	<b>0.0000</b>	<b>26.1708</b>	<b>26.1708</b>	<b>1.4700e-003</b>	<b>0.0000</b>	<b>26.2077</b>

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**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0114	6.6100e-003	0.0791	2.5000e-004	0.0294	1.9000e-004	0.0296	7.8100e-003	1.8000e-004	7.9800e-003	0.0000	22.4112	22.4112	4.8000e-004	0.0000	22.4232
<b>Total</b>	<b>0.0114</b>	<b>6.6100e-003</b>	<b>0.0791</b>	<b>2.5000e-004</b>	<b>0.0294</b>	<b>1.9000e-004</b>	<b>0.0296</b>	<b>7.8100e-003</b>	<b>1.8000e-004</b>	<b>7.9800e-003</b>	<b>0.0000</b>	<b>22.4112</b>	<b>22.4112</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>22.4232</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Improve Pedestrian Network

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2341	0.9611	2.6177	8.9000e-003	0.8225	7.0200e-003	0.8295	0.2204	6.5400e-003	0.2270	0.0000	819.8429	819.8429	0.0365	0.0000	820.7549
Unmitigated	0.2434	1.0176	2.8581	9.9200e-003	0.9231	7.7400e-003	0.9308	0.2474	7.2200e-003	0.2546	0.0000	913.1253	913.1253	0.0399	0.0000	914.1232

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	965.20	965.20	965.20	2,476,808	2,206,836
Parking Lot	0.00	0.00	0.00		
Total	965.20	965.20	965.20	2,476,808	2,206,836

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776
Parking Lot	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776

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**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	143.7692	143.7692	0.0113	2.3400e-003	144.7473
NaturalGas Mitigated	9.4800e-003	0.0810	0.0345	5.2000e-004		6.5500e-003	6.5500e-003		6.5500e-003	6.5500e-003	0.0000	93.8257	93.8257	1.8000e-003	1.7200e-003	94.3832
NaturalGas Unmitigated	9.9900e-003	0.0853	0.0363	5.4000e-004		6.9000e-003	6.9000e-003		6.9000e-003	6.9000e-003	0.0000	98.8372	98.8372	1.8900e-003	1.8100e-003	99.4245

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**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.85214e+006	9.9900e-003	0.0853	0.0363	5.4000e-004		6.9000e-003	6.9000e-003		6.9000e-003	6.9000e-003	0.0000	98.8372	98.8372	1.8900e-003	1.8100e-003	99.4245
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>9.9900e-003</b>	<b>0.0853</b>	<b>0.0363</b>	<b>5.4000e-004</b>		<b>6.9000e-003</b>	<b>6.9000e-003</b>		<b>6.9000e-003</b>	<b>6.9000e-003</b>	<b>0.0000</b>	<b>98.8372</b>	<b>98.8372</b>	<b>1.8900e-003</b>	<b>1.8100e-003</b>	<b>99.4245</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.75823e+006	9.4800e-003	0.0810	0.0345	5.2000e-004		6.5500e-003	6.5500e-003		6.5500e-003	6.5500e-003	0.0000	93.8257	93.8257	1.8000e-003	1.7200e-003	94.3832
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>9.4800e-003</b>	<b>0.0810</b>	<b>0.0345</b>	<b>5.2000e-004</b>		<b>6.5500e-003</b>	<b>6.5500e-003</b>		<b>6.5500e-003</b>	<b>6.5500e-003</b>	<b>0.0000</b>	<b>93.8257</b>	<b>93.8257</b>	<b>1.8000e-003</b>	<b>1.7200e-003</b>	<b>94.3832</b>



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**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	808727	135.4896	0.0106	2.2000e-003	136.4115
Parking Lot	49420	8.2796	6.5000e-004	1.3000e-004	8.3359
<b>Total</b>		<b>143.7692</b>	<b>0.0113</b>	<b>2.3300e-003</b>	<b>144.7473</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9313	0.0226	1.9631	1.0000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	3.2094	3.2094	3.0900e-003	0.0000	3.2868
Unmitigated	0.9313	0.0226	1.9631	1.0000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	3.2094	3.2094	3.0900e-003	0.0000	3.2868

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1209					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7512					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0593	0.0226	1.9631	1.0000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	3.2094	3.2094	3.0900e-003	0.0000	3.2868
<b>Total</b>	<b>0.9313</b>	<b>0.0226</b>	<b>1.9631</b>	<b>1.0000e-004</b>		<b>0.0109</b>	<b>0.0109</b>		<b>0.0109</b>	<b>0.0109</b>	<b>0.0000</b>	<b>3.2094</b>	<b>3.2094</b>	<b>3.0900e-003</b>	<b>0.0000</b>	<b>3.2868</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1209					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7512					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0593	0.0226	1.9631	1.0000e-004		0.0109	0.0109		0.0109	0.0109	0.0000	3.2094	3.2094	3.0900e-003	0.0000	3.2868
<b>Total</b>	<b>0.9313</b>	<b>0.0226</b>	<b>1.9631</b>	<b>1.0000e-004</b>		<b>0.0109</b>	<b>0.0109</b>		<b>0.0109</b>	<b>0.0109</b>	<b>0.0000</b>	<b>3.2094</b>	<b>3.2094</b>	<b>3.0900e-003</b>	<b>0.0000</b>	<b>3.2868</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	15.4318	0.0130	7.8100e-003	18.0851
Unmitigated	19.2897	0.0163	9.7700e-003	22.6064

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	12.3793 / 7.80432	19.2897	0.0163	9.7700e-003	22.6064
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>19.2897</b>	<b>0.0163</b>	<b>9.7700e-003</b>	<b>22.6064</b>

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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	9.90341 / 6.24346	15.4318	0.0130	7.8100e-003	18.0851
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>15.4318</b>	<b>0.0130</b>	<b>7.8100e-003</b>	<b>18.0851</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	17.7414	1.0485	0.0000	43.9536
Unmitigated	17.7414	1.0485	0.0000	43.9536

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**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	87.4	17.7414	1.0485	0.0000	43.9536
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>17.7414</b>	<b>1.0485</b>	<b>0.0000</b>	<b>43.9536</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	87.4	17.7414	1.0485	0.0000	43.9536
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>17.7414</b>	<b>1.0485</b>	<b>0.0000</b>	<b>43.9536</b>

**9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**Natomas Park Drive Apartments**  
**Sacramento Metropolitan AQMD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	353.00	Space	4.06	141,200.00	0
----- Apartments Mid Rise	190.00	----- Dwelling Unit	5.00	190,000.00	507

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	3.5	<b>Precipitation Freq (Days)</b>	58
<b>Climate Zone</b>	6			<b>Operational Year</b>	2024
<b>Utility Company</b>	Sacramento Municipal Utility District				
<b>CO2 Intensity (lb/MW hr)</b>	369.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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



Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

Project Characteristics - CO2 intensity factor adjusted per SMUD's RPS projections.

Land Use - Lot acreage adjusted per site plan.

Construction Phase - Construction phase timing adjusted based on applicant-provided questionnaire.

Demolition -

Grading -

Vehicle Trips - Trip generation rate adjusted for consistency with City-provided information.

Mobile Land Use Mitigation - Project would improve pedestrian network connectivity on-site.

Area Mitigation - No hearths.

Energy Mitigation - Title 24 exceedance applied to reflect compliance with 2019 CBSC.

Water Mitigation - Water conservation strategy applied to reflect compliance with 2019 CalGreen Code and MWEL0.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	400.00
tblConstructionPhase	NumDays	230.00	400.00
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	10.00	80.00
tblLandUse	LotAcreage	3.18	4.06
tblProjectCharacteristics	CO2IntensityFactor	590.31	369.35
tblVehicleTrips	ST_TR	6.39	5.08
tblVehicleTrips	SU_TR	5.86	5.08
tblVehicleTrips	WD_TR	6.65	5.08

## 2.0 Emissions Summary

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Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

Year	lb/day															
ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBIO-CO2	Total CO2	CH4	N2O	CO2e	
2022	3.2375	33.1167	21.1526	0.0419	18.2032	1.6135	19.8167	9.9670	1.4844	11.4514	0.0000	4,071.781	4,071.781	1.1955	4,098.460	
2023	8.7261	19.5612	24.9157	0.0570	6.6664	7.4421	3.3978	0.7445	4.1114	0.0000	5,601.912	5,601.912	0.9316	0.0000	5,619.834	
2024	8.5594	18.4332	24.3476	0.0563	2.0463	0.6901	2.7364	0.5486	0.6526	1.2012	0.0000	5,530.950	5,530.950	0.7080	0.0000	5,548.649
Maximum	8.7261	33.1167	24.9157	0.0570	18.2032	1.6135	19.8167	9.9670	1.4844	11.4514	0.0000	5,601.912	5,601.912	1.1955	0.0000	5,619.834

**Mitigated Construction**

Year	lb/day															
ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBIO-CO2	Total CO2	CH4	N2O	CO2e	
2022	3.2375	33.1167	21.1526	0.0419	18.2032	1.6135	19.8167	9.9670	1.4844	11.4514	0.0000	4,071.781	4,071.781	1.1955	4,098.460	
2023	8.7261	19.5612	24.9157	0.0570	6.6664	7.4421	3.3978	0.7445	4.1114	0.0000	5,601.912	5,601.912	0.9316	0.0000	5,619.834	
2024	8.5594	18.4332	24.3476	0.0563	2.0463	0.6901	2.7364	0.5486	0.6526	1.2012	0.0000	5,530.950	5,530.950	0.7080	0.0000	5,548.649
Maximum	8.7261	33.1167	24.9157	0.0570	18.2032	1.6135	19.8167	9.9670	1.4844	11.4514	0.0000	5,601.912	5,601.912	1.1955	0.0000	5,619.834

## Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

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

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2527	0.1809	15.7046	8.3000e-004		0.0870	0.0870		0.0870	0.0870	0.0000	28.3022	28.3022	0.0273	0.0000	28.9843
Energy	0.0547	0.4676	0.1990	2.9800e-003		0.0378	0.0378		0.0378	0.0378		596.9828	596.9828	0.0114	0.0109	600.5303
Mobile	1.6981	5.3878	17.7360	0.0590	5.2506	0.0424	5.2930	1.4031	0.0395	1.4426		5,975.6132	5,975.6132	0.2478		5,981.8086
<b>Total</b>	<b>7.0055</b>	<b>6.0363</b>	<b>33.6396</b>	<b>0.0628</b>	<b>5.2506</b>	<b>0.1672</b>	<b>5.4178</b>	<b>1.4031</b>	<b>0.1643</b>	<b>1.5674</b>	<b>0.0000</b>	<b>6,600.8982</b>	<b>6,600.8982</b>	<b>0.2865</b>	<b>0.0109</b>	<b>6,611.3232</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2527	0.1809	15.7046	8.3000e-004		0.0870	0.0870		0.0870	0.0870	0.0000	28.3022	28.3022	0.0273	0.0000	28.9843
Energy	0.0520	0.4439	0.1889	2.8300e-003		0.0359	0.0359		0.0359	0.0359		566.7128	566.7128	0.0109	0.0104	570.0805
Mobile	1.6442	5.1010	16.1291	0.0529	4.6783	0.0384	4.7167	1.2502	0.0358	1.2860		5,363.5412	5,363.5412	0.2259		5,369.1874
<b>Total</b>	<b>6.9488</b>	<b>5.7258</b>	<b>32.0226</b>	<b>0.0566</b>	<b>4.6783</b>	<b>0.1613</b>	<b>4.8396</b>	<b>1.2502</b>	<b>0.1587</b>	<b>1.4088</b>	<b>0.0000</b>	<b>5,958.5562</b>	<b>5,958.5562</b>	<b>0.2640</b>	<b>0.0104</b>	<b>5,968.2522</b>

## Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.81	5.14	4.81	9.88	10.90	3.54	10.67	10.90	3.44	10.12	0.00	9.73	9.73	7.87	5.03	9.73

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/15/2022	8/5/2022	5	60	
2	Site Preparation	Site Preparation	8/6/2022	11/25/2022	5	80	
3	Grading	Grading	11/26/2022	1/20/2023	5	40	
4	Paving	Paving	1/21/2023	3/17/2023	5	40	
5	Building Construction	Building Construction	3/18/2023	9/27/2024	5	400	
6	Architectural Coating	Architectural Coating	4/1/2023	10/11/2024	5	400	

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

**Acres of Grading (Grading Phase): 20**

**Acres of Paving: 4.06**

**Residential Indoor: 384,750; Residential Outdoor: 128,250; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,472 (Architectural Coating – sqft)**

#### OffRoad Equipment

## Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	155.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	196.00	43.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	39.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5816	0.0000	0.5816	0.0881	0.0000	0.0881			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>	<b>0.5816</b>	<b>1.2427</b>	<b>1.8242</b>	<b>0.0881</b>	<b>1.1553</b>	<b>1.2433</b>		<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.2 Demolition - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0170	0.6050	0.1453	2.0000e-003	0.0449	1.9800e-003	0.0469	0.0123	1.8900e-003	0.0142		214.1513	214.1513	0.0120		214.4507
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0277	0.4133	1.1100e-003	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		110.8487	110.8487	2.7500e-003		110.9174
<b>Total</b>	<b>0.0732</b>	<b>0.6326</b>	<b>0.5586</b>	<b>3.1100e-003</b>	<b>0.1590</b>	<b>2.7300e-003</b>	<b>0.1618</b>	<b>0.0426</b>	<b>2.5800e-003</b>	<b>0.0451</b>		<b>325.0000</b>	<b>325.0000</b>	<b>0.0147</b>		<b>325.3681</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5816	0.0000	0.5816	0.0881	0.0000	0.0881			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>	<b>0.5816</b>	<b>1.2427</b>	<b>1.8242</b>	<b>0.0881</b>	<b>1.1553</b>	<b>1.2433</b>	<b>0.0000</b>	<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>



Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.2 Demolition - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0170	0.6050	0.1453	2.0000e-003	0.0449	1.9800e-003	0.0469	0.0123	1.8900e-003	0.0142		214.1513	214.1513	0.0120		214.4507
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0277	0.4133	1.1100e-003	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		110.8487	110.8487	2.7500e-003		110.9174
<b>Total</b>	<b>0.0732</b>	<b>0.6326</b>	<b>0.5586</b>	<b>3.1100e-003</b>	<b>0.1590</b>	<b>2.7300e-003</b>	<b>0.1618</b>	<b>0.0426</b>	<b>2.5800e-003</b>	<b>0.0451</b>		<b>325.0000</b>	<b>325.0000</b>	<b>0.0147</b>		<b>325.3681</b>

**3.3 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0663</b>	<b>1.6126</b>	<b>19.6788</b>	<b>9.9307</b>	<b>1.4836</b>	<b>11.4143</b>		<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.3 Site Preparation - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0673	0.0332	0.4959	1.3400e-003	0.1369	9.0000e-004	0.1378	0.0363	8.3000e-004	0.0372		133.0184	133.0184	3.3000e-003		133.1009
<b>Total</b>	<b>0.0673</b>	<b>0.0332</b>	<b>0.4959</b>	<b>1.3400e-003</b>	<b>0.1369</b>	<b>9.0000e-004</b>	<b>0.1378</b>	<b>0.0363</b>	<b>8.3000e-004</b>	<b>0.0372</b>		<b>133.0184</b>	<b>133.0184</b>	<b>3.3000e-003</b>		<b>133.1009</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0663</b>	<b>1.6126</b>	<b>19.6788</b>	<b>9.9307</b>	<b>1.4836</b>	<b>11.4143</b>	<b>0.0000</b>	<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.3 Site Preparation - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0673	0.0332	0.4959	1.3400e-003	0.1369	9.0000e-004	0.1378	0.0363	8.3000e-004	0.0372		133.0184	133.0184	3.3000e-003		133.1009
<b>Total</b>	<b>0.0673</b>	<b>0.0332</b>	<b>0.4959</b>	<b>1.3400e-003</b>	<b>0.1369</b>	<b>9.0000e-004</b>	<b>0.1378</b>	<b>0.0363</b>	<b>8.3000e-004</b>	<b>0.0372</b>		<b>133.0184</b>	<b>133.0184</b>	<b>3.3000e-003</b>		<b>133.1009</b>

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>6.5523</b>	<b>0.9409</b>	<b>7.4932</b>	<b>3.3675</b>	<b>0.8656</b>	<b>4.2331</b>		<b>2,872.0464</b>	<b>2,872.0464</b>	<b>0.9289</b>		<b>2,895.2684</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0277	0.4133	1.1100e-003	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		110.8487	110.8487	2.7500e-003		110.9174
<b>Total</b>	<b>0.0561</b>	<b>0.0277</b>	<b>0.4133</b>	<b>1.1100e-003</b>	<b>0.1141</b>	<b>7.5000e-004</b>	<b>0.1149</b>	<b>0.0303</b>	<b>6.9000e-004</b>	<b>0.0310</b>		<b>110.8487</b>	<b>110.8487</b>	<b>2.7500e-003</b>		<b>110.9174</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>6.5523</b>	<b>0.9409</b>	<b>7.4932</b>	<b>3.3675</b>	<b>0.8656</b>	<b>4.2331</b>	<b>0.0000</b>	<b>2,872.0464</b>	<b>2,872.0464</b>	<b>0.9289</b>		<b>2,895.2684</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0277	0.4133	1.1100e-003	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		110.8487	110.8487	2.7500e-003		110.9174
<b>Total</b>	<b>0.0561</b>	<b>0.0277</b>	<b>0.4133</b>	<b>1.1100e-003</b>	<b>0.1141</b>	<b>7.5000e-004</b>	<b>0.1149</b>	<b>0.0303</b>	<b>6.9000e-004</b>	<b>0.0310</b>		<b>110.8487</b>	<b>110.8487</b>	<b>2.7500e-003</b>		<b>110.9174</b>

**3.4 Grading - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
<b>Total</b>	<b>1.7109</b>	<b>17.9359</b>	<b>14.7507</b>	<b>0.0297</b>	<b>6.5523</b>	<b>0.7749</b>	<b>7.3273</b>	<b>3.3675</b>	<b>0.7129</b>	<b>4.0804</b>		<b>2,872.6910</b>	<b>2,872.6910</b>	<b>0.9291</b>		<b>2,895.9182</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.4 Grading - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0249	0.3804	1.0700e-003	0.1141	7.3000e-004	0.1148	0.0303	6.7000e-004	0.0309		106.6812	106.6812	2.4700e-003		106.7429
<b>Total</b>	<b>0.0525</b>	<b>0.0249</b>	<b>0.3804</b>	<b>1.0700e-003</b>	<b>0.1141</b>	<b>7.3000e-004</b>	<b>0.1148</b>	<b>0.0303</b>	<b>6.7000e-004</b>	<b>0.0309</b>		<b>106.6812</b>	<b>106.6812</b>	<b>2.4700e-003</b>		<b>106.7429</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
<b>Total</b>	<b>1.7109</b>	<b>17.9359</b>	<b>14.7507</b>	<b>0.0297</b>	<b>6.5523</b>	<b>0.7749</b>	<b>7.3273</b>	<b>3.3675</b>	<b>0.7129</b>	<b>4.0804</b>	<b>0.0000</b>	<b>2,872.6910</b>	<b>2,872.6910</b>	<b>0.9291</b>		<b>2,895.9182</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.4 Grading - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0249	0.3804	1.0700e-003	0.1141	7.3000e-004	0.1148	0.0303	6.7000e-004	0.0309		106.6812	106.6812	2.4700e-003		106.7429
<b>Total</b>	<b>0.0525</b>	<b>0.0249</b>	<b>0.3804</b>	<b>1.0700e-003</b>	<b>0.1141</b>	<b>7.3000e-004</b>	<b>0.1148</b>	<b>0.0303</b>	<b>6.7000e-004</b>	<b>0.0309</b>		<b>106.6812</b>	<b>106.6812</b>	<b>2.4700e-003</b>		<b>106.7429</b>

**3.5 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.2659					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2987</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.5 Paving - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0249	0.3804	1.0700e-003	0.1141	7.3000e-004	0.1148	0.0303	6.7000e-004	0.0309		106.6812	106.6812	2.4700e-003		106.7429
<b>Total</b>	<b>0.0525</b>	<b>0.0249</b>	<b>0.3804</b>	<b>1.0700e-003</b>	<b>0.1141</b>	<b>7.3000e-004</b>	<b>0.1148</b>	<b>0.0303</b>	<b>6.7000e-004</b>	<b>0.0309</b>		<b>106.6812</b>	<b>106.6812</b>	<b>2.4700e-003</b>		<b>106.7429</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.2659					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2987</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>



Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.5 Paving - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0249	0.3804	1.0700e-003	0.1141	7.3000e-004	0.1148	0.0303	6.7000e-004	0.0309		106.6812	106.6812	2.4700e-003		106.7429
<b>Total</b>	<b>0.0525</b>	<b>0.0249</b>	<b>0.3804</b>	<b>1.0700e-003</b>	<b>0.1141</b>	<b>7.3000e-004</b>	<b>0.1148</b>	<b>0.0303</b>	<b>6.7000e-004</b>	<b>0.0309</b>		<b>106.6812</b>	<b>106.6812</b>	<b>2.4700e-003</b>		<b>106.7429</b>

**3.6 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.6 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0974	3.4830	0.9014	0.0103	0.2587	4.8900e-003	0.2636	0.0744	4.6800e-003	0.0791		1,093.9150	1,093.9150	0.0536		1,095.2550
Worker	0.6854	0.3256	4.9702	0.0140	1.4910	9.5600e-003	1.5005	0.3955	8.8100e-003	0.4043		1,393.9681	1,393.9681	0.0322		1,394.7734
<b>Total</b>	<b>0.7828</b>	<b>3.8085</b>	<b>5.8716</b>	<b>0.0243</b>	<b>1.7497</b>	<b>0.0145</b>	<b>1.7641</b>	<b>0.4699</b>	<b>0.0135</b>	<b>0.4834</b>		<b>2,487.8831</b>	<b>2,487.8831</b>	<b>0.0858</b>		<b>2,490.0283</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.6 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0974	3.4830	0.9014	0.0103	0.2587	4.8900e-003	0.2636	0.0744	4.6800e-003	0.0791		1,093.9150	1,093.9150	0.0536		1,095.2550
Worker	0.6854	0.3256	4.9702	0.0140	1.4910	9.5600e-003	1.5005	0.3955	8.8100e-003	0.4043		1,393.9681	1,393.9681	0.0322		1,394.7734
<b>Total</b>	<b>0.7828</b>	<b>3.8085</b>	<b>5.8716</b>	<b>0.0243</b>	<b>1.7497</b>	<b>0.0145</b>	<b>1.7641</b>	<b>0.4699</b>	<b>0.0135</b>	<b>0.4834</b>		<b>2,487.8831</b>	<b>2,487.8831</b>	<b>0.0858</b>		<b>2,490.0283</b>

**3.6 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>		<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.6 Building Construction - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0928	3.4177	0.8425	0.0102	0.2587	4.6600e-003	0.2633	0.0744	4.4500e-003	0.0789		1,087.5194	1,087.5194	0.0529		1,088.8430
Worker	0.6436	0.2943	4.6107	0.0135	1.4910	9.3500e-003	1.5003	0.3955	8.6100e-003	0.4041		1,339.7090	1,339.7090	0.0291		1,340.4355
<b>Total</b>	<b>0.7364</b>	<b>3.7120</b>	<b>5.4532</b>	<b>0.0237</b>	<b>1.7496</b>	<b>0.0140</b>	<b>1.7636</b>	<b>0.4699</b>	<b>0.0131</b>	<b>0.4830</b>		<b>2,427.2285</b>	<b>2,427.2285</b>	<b>0.0820</b>		<b>2,429.2785</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>	<b>0.0000</b>	<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.6 Building Construction - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0928	3.4177	0.8425	0.0102	0.2587	4.6600e-003	0.2633	0.0744	4.4500e-003	0.0789		1,087.5194	1,087.5194	0.0529			1,088.8430
Worker	0.6436	0.2943	4.6107	0.0135	1.4910	9.3500e-003	1.5003	0.3955	8.6100e-003	0.4041		1,339.7090	1,339.7090	0.0291			1,340.4355
<b>Total</b>	<b>0.7364</b>	<b>3.7120</b>	<b>5.4532</b>	<b>0.0237</b>	<b>1.7496</b>	<b>0.0140</b>	<b>1.7636</b>	<b>0.4699</b>	<b>0.0131</b>	<b>0.4830</b>		<b>2,427.2285</b>	<b>2,427.2285</b>	<b>0.0820</b>			<b>2,429.2785</b>

**3.7 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	6.0426					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168			281.8690
<b>Total</b>	<b>6.2342</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>			<b>281.8690</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.7 Architectural Coating - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1364	0.0648	0.9890	2.7800e-003	0.2967	1.9000e-003	0.2986	0.0787	1.7500e-003	0.0805		277.3712	277.3712	6.4100e-003		277.5314
<b>Total</b>	<b>0.1364</b>	<b>0.0648</b>	<b>0.9890</b>	<b>2.7800e-003</b>	<b>0.2967</b>	<b>1.9000e-003</b>	<b>0.2986</b>	<b>0.0787</b>	<b>1.7500e-003</b>	<b>0.0805</b>		<b>277.3712</b>	<b>277.3712</b>	<b>6.4100e-003</b>		<b>277.5314</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.0426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>6.2342</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.7 Architectural Coating - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1364	0.0648	0.9890	2.7800e-003	0.2967	1.9000e-003	0.2986	0.0787	1.7500e-003	0.0805		277.3712	277.3712	6.4100e-003		277.5314
<b>Total</b>	<b>0.1364</b>	<b>0.0648</b>	<b>0.9890</b>	<b>2.7800e-003</b>	<b>0.2967</b>	<b>1.9000e-003</b>	<b>0.2986</b>	<b>0.0787</b>	<b>1.7500e-003</b>	<b>0.0805</b>		<b>277.3712</b>	<b>277.3712</b>	<b>6.4100e-003</b>		<b>277.5314</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.0426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>6.2233</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1281	0.0586	0.9174	2.6800e-003	0.2967	1.8600e-003	0.2985	0.0787	1.7100e-003	0.0804		266.5748	266.5748	5.7800e-003		266.7193
<b>Total</b>	<b>0.1281</b>	<b>0.0586</b>	<b>0.9174</b>	<b>2.6800e-003</b>	<b>0.2967</b>	<b>1.8600e-003</b>	<b>0.2985</b>	<b>0.0787</b>	<b>1.7100e-003</b>	<b>0.0804</b>		<b>266.5748</b>	<b>266.5748</b>	<b>5.7800e-003</b>		<b>266.7193</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.0426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>6.2233</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>



Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1281	0.0586	0.9174	2.6800e-003	0.2967	1.8600e-003	0.2985	0.0787	1.7100e-003	0.0804		266.5748	266.5748	5.7800e-003		266.7193
<b>Total</b>	<b>0.1281</b>	<b>0.0586</b>	<b>0.9174</b>	<b>2.6800e-003</b>	<b>0.2967</b>	<b>1.8600e-003</b>	<b>0.2985</b>	<b>0.0787</b>	<b>1.7100e-003</b>	<b>0.0804</b>		<b>266.5748</b>	<b>266.5748</b>	<b>5.7800e-003</b>		<b>266.7193</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Improve Pedestrian Network

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.6442	5.1010	16.1291	0.0529	4.6783	0.0384	4.7167	1.2502	0.0358	1.2860		5,363.541 2	5,363.541 2	0.2259		5,369.187 4
Unmitigated	1.6981	5.3878	17.7360	0.0590	5.2506	0.0424	5.2930	1.4031	0.0395	1.4426		5,975.613 2	5,975.613 2	0.2478		5,981.808 6

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	965.20	965.20	965.20	2,476,808	2,206,836
Parking Lot	0.00	0.00	0.00		
Total	965.20	965.20	965.20	2,476,808	2,206,836

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776
Parking Lot	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**5.0 Energy Detail**

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Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0520	0.4439	0.1889	2.8300e-003		0.0359	0.0359		0.0359	0.0359		566.7128	566.7128	0.0109	0.0104	570.0805
NaturalGas Unmitigated	0.0547	0.4676	0.1990	2.9800e-003		0.0378	0.0378		0.0378	0.0378		596.9828	596.9828	0.0114	0.0109	600.5303

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5074.35	0.0547	0.4676	0.1990	2.9800e-003		0.0378	0.0378		0.0378	0.0378		596.9828	596.9828	0.0114	0.0109	600.5303
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0547</b>	<b>0.4676</b>	<b>0.1990</b>	<b>2.9800e-003</b>		<b>0.0378</b>	<b>0.0378</b>		<b>0.0378</b>	<b>0.0378</b>		<b>596.9828</b>	<b>596.9828</b>	<b>0.0114</b>	<b>0.0109</b>	<b>600.5303</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	4.81706	0.0520	0.4439	0.1889	2.8300e-003		0.0359	0.0359		0.0359	0.0359		566.7128	566.7128	0.0109	0.0104	570.0805
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0520</b>	<b>0.4439</b>	<b>0.1889</b>	<b>2.8300e-003</b>		<b>0.0359</b>	<b>0.0359</b>		<b>0.0359</b>	<b>0.0359</b>		<b>566.7128</b>	<b>566.7128</b>	<b>0.0109</b>	<b>0.0104</b>	<b>570.0805</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.2527	0.1809	15.7046	8.3000e-004		0.0870	0.0870		0.0870	0.0870	0.0000	28.3022	28.3022	0.0273	0.0000	28.9843
Unmitigated	5.2527	0.1809	15.7046	8.3000e-004		0.0870	0.0870		0.0870	0.0870	0.0000	28.3022	28.3022	0.0273	0.0000	28.9843

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6622					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.1160					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4744	0.1809	15.7046	8.3000e-004		0.0870	0.0870		0.0870	0.0870		28.3022	28.3022	0.0273		28.9843
<b>Total</b>	<b>5.2527</b>	<b>0.1809</b>	<b>15.7046</b>	<b>8.3000e-004</b>		<b>0.0870</b>	<b>0.0870</b>		<b>0.0870</b>	<b>0.0870</b>	<b>0.0000</b>	<b>28.3022</b>	<b>28.3022</b>	<b>0.0273</b>	<b>0.0000</b>	<b>28.9843</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6622					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.1160					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4744	0.1809	15.7046	8.3000e-004		0.0870	0.0870		0.0870	0.0870		28.3022	28.3022	0.0273		28.9843
<b>Total</b>	<b>5.2527</b>	<b>0.1809</b>	<b>15.7046</b>	<b>8.3000e-004</b>		<b>0.0870</b>	<b>0.0870</b>		<b>0.0870</b>	<b>0.0870</b>	<b>0.0000</b>	<b>28.3022</b>	<b>28.3022</b>	<b>0.0273</b>	<b>0.0000</b>	<b>28.9843</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Summer

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**Natomas Park Drive Apartments**  
**Sacramento Metropolitan AQMD Air District, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	353.00	Space	4.06	141,200.00	0
----- Apartments Mid Rise	190.00	----- Dwelling Unit	5.00	190,000.00	507

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	3.5	<b>Precipitation Freq (Days)</b>	58
<b>Climate Zone</b>	6			<b>Operational Year</b>	2024
<b>Utility Company</b>	Sacramento Municipal Utility District				
<b>CO2 Intensity (lb/MW hr)</b>	369.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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



Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

Project Characteristics - CO2 intensity factor adjusted per SMUD's RPS projections.

Land Use - Lot acreage adjusted per site plan.

Construction Phase - Construction phase timing adjusted based on applicant-provided questionnaire.

Demolition -

Grading -

Vehicle Trips - Trip generation rate adjusted for consistency with City-provided information.

Mobile Land Use Mitigation - Project would improve pedestrian network connectivity on-site.

Area Mitigation - No hearths.

Energy Mitigation - Title 24 exceedance applied to reflect compliance with 2019 CBSC.

Water Mitigation - Water conservation strategy applied to reflect compliance with 2019 CalGreen Code and MWEL0.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	400.00
tblConstructionPhase	NumDays	230.00	400.00
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	10.00	80.00
tblLandUse	LotAcreage	3.18	4.06
tblProjectCharacteristics	CO2IntensityFactor	590.31	369.35
tblVehicleTrips	ST_TR	6.39	5.08
tblVehicleTrips	SU_TR	5.86	5.08
tblVehicleTrips	WD_TR	6.65	5.08

## 2.0 Emissions Summary

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Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**2.1 Overall Construction (Maximum Daily Emission)**

**Unmitigated Construction**

Year	lb/day														
ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2022	3.2323	33.1245	21.1002	0.0418	18.2032	1.6135	19.8167	9.9670	1.4844	11.4514	0.0000	4,054.944	4,054.944	1.1951	4,081.628
2023	8.6706	19.6874	24.1327	0.0547	6.6664	0.7873	7.4421	3.3978	0.7449	4.1114	0.0000	5,370.372	5,370.372	0.9313	5,388.282
2024	8.5092	18.5485	23.6065	0.0541	2.0463	0.6905	2.7368	0.5486	0.6530	1.2016	0.0000	5,307.692	5,307.692	0.7078	5,325.387
Maximum	8.6706	33.1245	24.1327	0.0547	18.2032	1.6135	19.8167	9.9670	1.4844	11.4514	0.0000	5,370.372	5,370.372	1.1951	5,388.282

**Mitigated Construction**

Year	lb/day														
ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2022	3.2323	33.1245	21.1002	0.0418	18.2032	1.6135	19.8167	9.9670	1.4844	11.4514	0.0000	4,054.944	4,054.944	1.1951	4,081.628
2023	8.6706	19.6874	24.1327	0.0547	6.6664	0.7873	7.4421	3.3978	0.7449	4.1114	0.0000	5,370.372	5,370.372	0.9313	5,388.282
2024	8.5092	18.5485	23.6065	0.0541	2.0463	0.6905	2.7368	0.5486	0.6530	1.2016	0.0000	5,307.692	5,307.692	0.7078	5,325.387
Maximum	8.6706	33.1245	24.1327	0.0547	18.2032	1.6135	19.8167	9.9670	1.4844	11.4514	0.0000	5,370.372	5,370.372	1.1951	5,388.282

## Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

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

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2527	0.1809	15.7046	8.3000e-004		0.0870	0.0870		0.0870	0.0870	0.0000	28.3022	28.3022	0.0273	0.0000	28.9843
Energy	0.0547	0.4676	0.1990	2.9800e-003		0.0378	0.0378		0.0378	0.0378		596.9828	596.9828	0.0114	0.0109	600.5303
Mobile	1.2577	5.7411	16.2102	0.0533	5.2506	0.0428	5.2934	1.4031	0.0399	1.4430		5,405.4297	5,405.4297	0.2460		5,411.5806
<b>Total</b>	<b>6.5651</b>	<b>6.3896</b>	<b>32.1138</b>	<b>0.0571</b>	<b>5.2506</b>	<b>0.1676</b>	<b>5.4182</b>	<b>1.4031</b>	<b>0.1647</b>	<b>1.5678</b>	<b>0.0000</b>	<b>6,030.7147</b>	<b>6,030.7147</b>	<b>0.2848</b>	<b>0.0109</b>	<b>6,041.0952</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2527	0.1809	15.7046	8.3000e-004		0.0870	0.0870		0.0870	0.0870	0.0000	28.3022	28.3022	0.0273	0.0000	28.9843
Energy	0.0520	0.4439	0.1889	2.8300e-003		0.0359	0.0359		0.0359	0.0359		566.7128	566.7128	0.0109	0.0104	570.0805
Mobile	1.2060	5.4136	14.9249	0.0478	4.6783	0.0388	4.7171	1.2502	0.0362	1.2864		4,852.2198	4,852.2198	0.2254		4,857.8556
<b>Total</b>	<b>6.5106</b>	<b>6.0384</b>	<b>30.8184</b>	<b>0.0515</b>	<b>4.6783</b>	<b>0.1617</b>	<b>4.8400</b>	<b>1.2502</b>	<b>0.1591</b>	<b>1.4092</b>	<b>0.0000</b>	<b>5,447.2348</b>	<b>5,447.2348</b>	<b>0.2636</b>	<b>0.0104</b>	<b>5,456.9203</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.83	5.50	4.03	9.81	10.90	3.53	10.67	10.90	3.43	10.12	0.00	9.68	9.68	7.44	5.03	9.67

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/15/2022	8/5/2022	5	60	
2	Site Preparation	Site Preparation	8/6/2022	11/25/2022	5	80	
3	Grading	Grading	11/26/2022	1/20/2023	5	40	
4	Paving	Paving	1/21/2023	3/17/2023	5	40	
5	Building Construction	Building Construction	3/18/2023	9/27/2024	5	400	
6	Architectural Coating	Architectural Coating	4/1/2023	10/11/2024	5	400	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 20

Acres of Paving: 4.06

Residential Indoor: 384,750; Residential Outdoor: 128,250; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,472 (Architectural Coating – sqft)

#### OffRoad Equipment

## Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	155.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	196.00	43.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	39.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5816	0.0000	0.5816	0.0881	0.0000	0.0881			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>	<b>0.5816</b>	<b>1.2427</b>	<b>1.8242</b>	<b>0.0881</b>	<b>1.1553</b>	<b>1.2433</b>		<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.2 Demolition - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0176	0.6269	0.1552	1.9600e-003	0.0449	2.0500e-003	0.0470	0.0123	1.9600e-003	0.0143		210.8037	210.8037	0.0125		211.1167
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0518	0.0342	0.3510	9.8000e-004	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		97.3592	97.3592	2.4100e-003		97.4196
<b>Total</b>	<b>0.0693</b>	<b>0.6611</b>	<b>0.5061</b>	<b>2.9400e-003</b>	<b>0.1590</b>	<b>2.8000e-003</b>	<b>0.1618</b>	<b>0.0426</b>	<b>2.6500e-003</b>	<b>0.0452</b>		<b>308.1629</b>	<b>308.1629</b>	<b>0.0149</b>		<b>308.5363</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5816	0.0000	0.5816	0.0881	0.0000	0.0881			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
<b>Total</b>	<b>2.6392</b>	<b>25.7194</b>	<b>20.5941</b>	<b>0.0388</b>	<b>0.5816</b>	<b>1.2427</b>	<b>1.8242</b>	<b>0.0881</b>	<b>1.1553</b>	<b>1.2433</b>	<b>0.0000</b>	<b>3,746.7812</b>	<b>3,746.7812</b>	<b>1.0524</b>		<b>3,773.0920</b>



Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.2 Demolition - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0176	0.6269	0.1552	1.9600e-003	0.0449	2.0500e-003	0.0470	0.0123	1.9600e-003	0.0143		210.8037	210.8037	0.0125		211.1167
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0518	0.0342	0.3510	9.8000e-004	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		97.3592	97.3592	2.4100e-003		97.4196
<b>Total</b>	<b>0.0693</b>	<b>0.6611</b>	<b>0.5061</b>	<b>2.9400e-003</b>	<b>0.1590</b>	<b>2.8000e-003</b>	<b>0.1618</b>	<b>0.0426</b>	<b>2.6500e-003</b>	<b>0.0452</b>		<b>308.1629</b>	<b>308.1629</b>	<b>0.0149</b>		<b>308.5363</b>

**3.3 Site Preparation - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0663</b>	<b>1.6126</b>	<b>19.6788</b>	<b>9.9307</b>	<b>1.4836</b>	<b>11.4143</b>		<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.3 Site Preparation - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0621	0.0410	0.4212	1.1700e-003	0.1369	9.0000e-004	0.1378	0.0363	8.3000e-004	0.0372		116.8311	116.8311	2.9000e-003		116.9035
<b>Total</b>	<b>0.0621</b>	<b>0.0410</b>	<b>0.4212</b>	<b>1.1700e-003</b>	<b>0.1369</b>	<b>9.0000e-004</b>	<b>0.1378</b>	<b>0.0363</b>	<b>8.3000e-004</b>	<b>0.0372</b>		<b>116.8311</b>	<b>116.8311</b>	<b>2.9000e-003</b>		<b>116.9035</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
<b>Total</b>	<b>3.1701</b>	<b>33.0835</b>	<b>19.6978</b>	<b>0.0380</b>	<b>18.0663</b>	<b>1.6126</b>	<b>19.6788</b>	<b>9.9307</b>	<b>1.4836</b>	<b>11.4143</b>	<b>0.0000</b>	<b>3,686.0619</b>	<b>3,686.0619</b>	<b>1.1922</b>		<b>3,715.8655</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.3 Site Preparation - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0621	0.0410	0.4212	1.1700e-003	0.1369	9.0000e-004	0.1378	0.0363	8.3000e-004	0.0372		116.8311	116.8311	2.9000e-003		116.9035
<b>Total</b>	<b>0.0621</b>	<b>0.0410</b>	<b>0.4212</b>	<b>1.1700e-003</b>	<b>0.1369</b>	<b>9.0000e-004</b>	<b>0.1378</b>	<b>0.0363</b>	<b>8.3000e-004</b>	<b>0.0372</b>		<b>116.8311</b>	<b>116.8311</b>	<b>2.9000e-003</b>		<b>116.9035</b>

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289		2,895.2684
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>6.5523</b>	<b>0.9409</b>	<b>7.4932</b>	<b>3.3675</b>	<b>0.8656</b>	<b>4.2331</b>		<b>2,872.0464</b>	<b>2,872.0464</b>	<b>0.9289</b>		<b>2,895.2684</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0518	0.0342	0.3510	9.8000e-004	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		97.3592	97.3592	2.4100e-003		97.4196
<b>Total</b>	<b>0.0518</b>	<b>0.0342</b>	<b>0.3510</b>	<b>9.8000e-004</b>	<b>0.1141</b>	<b>7.5000e-004</b>	<b>0.1149</b>	<b>0.0303</b>	<b>6.9000e-004</b>	<b>0.0310</b>		<b>97.3592</b>	<b>97.3592</b>	<b>2.4100e-003</b>		<b>97.4196</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289		2,895.2684
<b>Total</b>	<b>1.9486</b>	<b>20.8551</b>	<b>15.2727</b>	<b>0.0297</b>	<b>6.5523</b>	<b>0.9409</b>	<b>7.4932</b>	<b>3.3675</b>	<b>0.8656</b>	<b>4.2331</b>	<b>0.0000</b>	<b>2,872.0464</b>	<b>2,872.0464</b>	<b>0.9289</b>		<b>2,895.2684</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0518	0.0342	0.3510	9.8000e-004	0.1141	7.5000e-004	0.1149	0.0303	6.9000e-004	0.0310		97.3592	97.3592	2.4100e-003		97.4196
<b>Total</b>	<b>0.0518</b>	<b>0.0342</b>	<b>0.3510</b>	<b>9.8000e-004</b>	<b>0.1141</b>	<b>7.5000e-004</b>	<b>0.1149</b>	<b>0.0303</b>	<b>6.9000e-004</b>	<b>0.0310</b>		<b>97.3592</b>	<b>97.3592</b>	<b>2.4100e-003</b>		<b>97.4196</b>

**3.4 Grading - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
<b>Total</b>	<b>1.7109</b>	<b>17.9359</b>	<b>14.7507</b>	<b>0.0297</b>	<b>6.5523</b>	<b>0.7749</b>	<b>7.3273</b>	<b>3.3675</b>	<b>0.7129</b>	<b>4.0804</b>		<b>2,872.6910</b>	<b>2,872.6910</b>	<b>0.9291</b>		<b>2,895.9182</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.4 Grading - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0485	0.0307	0.3216	9.4000e-004	0.1141	7.3000e-004	0.1148	0.0303	6.7000e-004	0.0309		93.7046	93.7046	2.1600e-003		93.7585
<b>Total</b>	<b>0.0485</b>	<b>0.0307</b>	<b>0.3216</b>	<b>9.4000e-004</b>	<b>0.1141</b>	<b>7.3000e-004</b>	<b>0.1148</b>	<b>0.0303</b>	<b>6.7000e-004</b>	<b>0.0309</b>		<b>93.7046</b>	<b>93.7046</b>	<b>2.1600e-003</b>		<b>93.7585</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
<b>Total</b>	<b>1.7109</b>	<b>17.9359</b>	<b>14.7507</b>	<b>0.0297</b>	<b>6.5523</b>	<b>0.7749</b>	<b>7.3273</b>	<b>3.3675</b>	<b>0.7129</b>	<b>4.0804</b>	<b>0.0000</b>	<b>2,872.6910</b>	<b>2,872.6910</b>	<b>0.9291</b>		<b>2,895.9182</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.4 Grading - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0485	0.0307	0.3216	9.4000e-004	0.1141	7.3000e-004	0.1148	0.0303	6.7000e-004	0.0309		93.7046	93.7046	2.1600e-003		93.7585
<b>Total</b>	<b>0.0485</b>	<b>0.0307</b>	<b>0.3216</b>	<b>9.4000e-004</b>	<b>0.1141</b>	<b>7.3000e-004</b>	<b>0.1148</b>	<b>0.0303</b>	<b>6.7000e-004</b>	<b>0.0309</b>		<b>93.7046</b>	<b>93.7046</b>	<b>2.1600e-003</b>		<b>93.7585</b>

**3.5 Paving - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.2659					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2987</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>		<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.5 Paving - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0485	0.0307	0.3216	9.4000e-004	0.1141	7.3000e-004	0.1148	0.0303	6.7000e-004	0.0309		93.7046	93.7046	2.1600e-003		93.7585
<b>Total</b>	<b>0.0485</b>	<b>0.0307</b>	<b>0.3216</b>	<b>9.4000e-004</b>	<b>0.1141</b>	<b>7.3000e-004</b>	<b>0.1148</b>	<b>0.0303</b>	<b>6.7000e-004</b>	<b>0.0309</b>		<b>93.7046</b>	<b>93.7046</b>	<b>2.1600e-003</b>		<b>93.7585</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.2659					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2987</b>	<b>10.1917</b>	<b>14.5842</b>	<b>0.0228</b>		<b>0.5102</b>	<b>0.5102</b>		<b>0.4694</b>	<b>0.4694</b>	<b>0.0000</b>	<b>2,207.5841</b>	<b>2,207.5841</b>	<b>0.7140</b>		<b>2,225.4336</b>



Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.5 Paving - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0485	0.0307	0.3216	9.4000e-004	0.1141	7.3000e-004	0.1148	0.0303	6.7000e-004	0.0309		93.7046	93.7046	2.1600e-003		93.7585
<b>Total</b>	<b>0.0485</b>	<b>0.0307</b>	<b>0.3216</b>	<b>9.4000e-004</b>	<b>0.1141</b>	<b>7.3000e-004</b>	<b>0.1148</b>	<b>0.0303</b>	<b>6.7000e-004</b>	<b>0.0309</b>		<b>93.7046</b>	<b>93.7046</b>	<b>2.1600e-003</b>		<b>93.7585</b>

**3.6 Building Construction - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.6 Building Construction - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1036	3.5180	1.0396	0.0101	0.2587	5.3200e-003	0.2640	0.0744	5.0900e-003	0.0795		1,065.6765	1,065.6765	0.0579		1,067.1238
Worker	0.6339	0.4016	4.2020	0.0123	1.4910	9.5600e-003	1.5005	0.3955	8.8100e-003	0.4043		1,224.4063	1,224.4063	0.0282		1,225.1113
<b>Total</b>	<b>0.7375</b>	<b>3.9196</b>	<b>5.2415</b>	<b>0.0223</b>	<b>1.7497</b>	<b>0.0149</b>	<b>1.7645</b>	<b>0.4699</b>	<b>0.0139</b>	<b>0.4838</b>		<b>2,290.0828</b>	<b>2,290.0828</b>	<b>0.0861</b>		<b>2,292.2351</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.6 Building Construction - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1036	3.5180	1.0396	0.0101	0.2587	5.3200e-003	0.2640	0.0744	5.0900e-003	0.0795		1,065.6765	1,065.6765	0.0579		1,067.1238
Worker	0.6339	0.4016	4.2020	0.0123	1.4910	9.5600e-003	1.5005	0.3955	8.8100e-003	0.4043		1,224.4063	1,224.4063	0.0282		1,225.1113
<b>Total</b>	<b>0.7375</b>	<b>3.9196</b>	<b>5.2415</b>	<b>0.0223</b>	<b>1.7497</b>	<b>0.0149</b>	<b>1.7645</b>	<b>0.4699</b>	<b>0.0139</b>	<b>0.4838</b>		<b>2,290.0828</b>	<b>2,290.0828</b>	<b>0.0861</b>		<b>2,292.2351</b>

**3.6 Building Construction - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>		<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.6 Building Construction - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0986	3.4508	0.9715	9.9800e-003	0.2587	5.0400e-003	0.2637	0.0744	4.8200e-003	0.0792		1,059.5514	1,059.5514	0.0572		1,060.9812
Worker	0.5969	0.3630	3.8850	0.0118	1.4910	9.3500e-003	1.5003	0.3955	8.6100e-003	0.4041		1,176.8288	1,176.8288	0.0254		1,177.4635
<b>Total</b>	<b>0.6955</b>	<b>3.8137</b>	<b>4.8565</b>	<b>0.0218</b>	<b>1.7496</b>	<b>0.0144</b>	<b>1.7640</b>	<b>0.4699</b>	<b>0.0134</b>	<b>0.4834</b>		<b>2,236.3802</b>	<b>2,236.3802</b>	<b>0.0826</b>		<b>2,238.4447</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>	<b>0.0000</b>	<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.6 Building Construction - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0986	3.4508	0.9715	9.9800e-003	0.2587	5.0400e-003	0.2637	0.0744	4.8200e-003	0.0792		1,059.5514	1,059.5514	0.0572		1,060.9812
Worker	0.5969	0.3630	3.8850	0.0118	1.4910	9.3500e-003	1.5003	0.3955	8.6100e-003	0.4041		1,176.8288	1,176.8288	0.0254		1,177.4635
<b>Total</b>	<b>0.6955</b>	<b>3.8137</b>	<b>4.8565</b>	<b>0.0218</b>	<b>1.7496</b>	<b>0.0144</b>	<b>1.7640</b>	<b>0.4699</b>	<b>0.0134</b>	<b>0.4834</b>		<b>2,236.3802</b>	<b>2,236.3802</b>	<b>0.0826</b>		<b>2,238.4447</b>

**3.7 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.0426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>6.2342</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.7 Architectural Coating - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1261	0.0799	0.8361	2.4500e-003	0.2967	1.9000e-003	0.2986	0.0787	1.7500e-003	0.0805		243.6319	243.6319	5.6100e-003		243.7722
<b>Total</b>	<b>0.1261</b>	<b>0.0799</b>	<b>0.8361</b>	<b>2.4500e-003</b>	<b>0.2967</b>	<b>1.9000e-003</b>	<b>0.2986</b>	<b>0.0787</b>	<b>1.7500e-003</b>	<b>0.0805</b>		<b>243.6319</b>	<b>243.6319</b>	<b>5.6100e-003</b>		<b>243.7722</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.0426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
<b>Total</b>	<b>6.2342</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.7 Architectural Coating - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1261	0.0799	0.8361	2.4500e-003	0.2967	1.9000e-003	0.2986	0.0787	1.7500e-003	0.0805		243.6319	243.6319	5.6100e-003		243.7722
<b>Total</b>	<b>0.1261</b>	<b>0.0799</b>	<b>0.8361</b>	<b>2.4500e-003</b>	<b>0.2967</b>	<b>1.9000e-003</b>	<b>0.2986</b>	<b>0.0787</b>	<b>1.7500e-003</b>	<b>0.0805</b>		<b>243.6319</b>	<b>243.6319</b>	<b>5.6100e-003</b>		<b>243.7722</b>

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.0426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>6.2233</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1188	0.0722	0.7730	2.3500e-003	0.2967	1.8600e-003	0.2985	0.0787	1.7100e-003	0.0804		234.1649	234.1649	5.0500e-003		234.2912
<b>Total</b>	<b>0.1188</b>	<b>0.0722</b>	<b>0.7730</b>	<b>2.3500e-003</b>	<b>0.2967</b>	<b>1.8600e-003</b>	<b>0.2985</b>	<b>0.0787</b>	<b>1.7100e-003</b>	<b>0.0804</b>		<b>234.1649</b>	<b>234.1649</b>	<b>5.0500e-003</b>		<b>234.2912</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	6.0426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
<b>Total</b>	<b>6.2233</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>



Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1188	0.0722	0.7730	2.3500e-003	0.2967	1.8600e-003	0.2985	0.0787	1.7100e-003	0.0804		234.1649	234.1649	5.0500e-003		234.2912
<b>Total</b>	<b>0.1188</b>	<b>0.0722</b>	<b>0.7730</b>	<b>2.3500e-003</b>	<b>0.2967</b>	<b>1.8600e-003</b>	<b>0.2985</b>	<b>0.0787</b>	<b>1.7100e-003</b>	<b>0.0804</b>		<b>234.1649</b>	<b>234.1649</b>	<b>5.0500e-003</b>		<b>234.2912</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Transit Accessibility

Improve Pedestrian Network

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2060	5.4136	14.9249	0.0478	4.6783	0.0388	4.7171	1.2502	0.0362	1.2864		4,852.2198	4,852.2198	0.2254		4,857.8556
Unmitigated	1.2577	5.7411	16.2102	0.0533	5.2506	0.0428	5.2934	1.4031	0.0399	1.4430		5,405.4297	5,405.4297	0.2460		5,411.5806

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	965.20	965.20	965.20	2,476,808	2,206,836
Parking Lot	0.00	0.00	0.00		
Total	965.20	965.20	965.20	2,476,808	2,206,836

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.00	5.00	6.50	46.50	12.50	41.00	86	11	3
Parking Lot	10.00	5.00	6.50	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776
Parking Lot	0.566033	0.037143	0.208217	0.113428	0.016713	0.004955	0.018463	0.024036	0.001978	0.001883	0.005758	0.000618	0.000776

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**5.0 Energy Detail**

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Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0520	0.4439	0.1889	2.8300e-003		0.0359	0.0359		0.0359	0.0359		566.7128	566.7128	0.0109	0.0104	570.0805
NaturalGas Unmitigated	0.0547	0.4676	0.1990	2.9800e-003		0.0378	0.0378		0.0378	0.0378		596.9828	596.9828	0.0114	0.0109	600.5303

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	5074.35	0.0547	0.4676	0.1990	2.9800e-003		0.0378	0.0378		0.0378	0.0378		596.9828	596.9828	0.0114	0.0109	600.5303
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0547</b>	<b>0.4676</b>	<b>0.1990</b>	<b>2.9800e-003</b>		<b>0.0378</b>	<b>0.0378</b>		<b>0.0378</b>	<b>0.0378</b>		<b>596.9828</b>	<b>596.9828</b>	<b>0.0114</b>	<b>0.0109</b>	<b>600.5303</b>

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	4.81706	0.0520	0.4439	0.1889	2.8300e-003		0.0359	0.0359		0.0359	0.0359		566.7128	566.7128	0.0109	0.0104	570.0805
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0520</b>	<b>0.4439</b>	<b>0.1889</b>	<b>2.8300e-003</b>		<b>0.0359</b>	<b>0.0359</b>		<b>0.0359</b>	<b>0.0359</b>		<b>566.7128</b>	<b>566.7128</b>	<b>0.0109</b>	<b>0.0104</b>	<b>570.0805</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.2527	0.1809	15.7046	8.3000e-004		0.0870	0.0870		0.0870	0.0870	0.0000	28.3022	28.3022	0.0273	0.0000	28.9843
Unmitigated	5.2527	0.1809	15.7046	8.3000e-004		0.0870	0.0870		0.0870	0.0870	0.0000	28.3022	28.3022	0.0273	0.0000	28.9843

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6622					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.1160					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4744	0.1809	15.7046	8.3000e-004		0.0870	0.0870		0.0870	0.0870		28.3022	28.3022	0.0273		28.9843
<b>Total</b>	<b>5.2527</b>	<b>0.1809</b>	<b>15.7046</b>	<b>8.3000e-004</b>		<b>0.0870</b>	<b>0.0870</b>		<b>0.0870</b>	<b>0.0870</b>	<b>0.0000</b>	<b>28.3022</b>	<b>28.3022</b>	<b>0.0273</b>	<b>0.0000</b>	<b>28.9843</b>

Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6622					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.1160					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4744	0.1809	15.7046	8.3000e-004		0.0870	0.0870		0.0870	0.0870		28.3022	28.3022	0.0273		28.9843
<b>Total</b>	<b>5.2527</b>	<b>0.1809</b>	<b>15.7046</b>	<b>8.3000e-004</b>		<b>0.0870</b>	<b>0.0870</b>		<b>0.0870</b>	<b>0.0870</b>	<b>0.0000</b>	<b>28.3022</b>	<b>28.3022</b>	<b>0.0273</b>	<b>0.0000</b>	<b>28.9843</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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## Natomas Park Drive Apartments - Sacramento Metropolitan AQMD Air District, Winter

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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**Natomas Park Drive Apartments**  
**Sacramento Metropolitan AQMD Air District, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**



Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	4	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	10	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	3.72200E-002	2.51970E-001	3.62120E-001	5.90000E-004	1.31500E-002	1.31500E-002	0.00000E+000	5.10651E+001	5.10651E+001	2.96000E-003	0.00000E+000	5.11392E+001
Concrete/Industrial Saws	1.07300E-002	8.40300E-002	1.09940E-001	1.90000E-004	4.51000E-003	4.51000E-003	0.00000E+000	1.61297E+001	1.61297E+001	8.80000E-004	0.00000E+000	1.61517E+001
Cranes	5.98200E-002	6.41160E-001	3.15930E-001	1.01000E-003	2.67300E-002	2.45900E-002	0.00000E+000	8.87157E+001	8.87157E+001	2.86900E-002	0.00000E+000	8.94330E+001
Excavators	2.21600E-002	1.93750E-001	3.58080E-001	5.70000E-004	9.37000E-003	8.62000E-003	0.00000E+000	4.98973E+001	4.98973E+001	1.61400E-002	0.00000E+000	5.03007E+001
Forklifts	5.90800E-002	5.53530E-001	6.85270E-001	9.20000E-004	3.31600E-002	3.05100E-002	0.00000E+000	8.05748E+001	8.05748E+001	2.60600E-002	0.00000E+000	8.12263E+001
Generator Sets	5.91400E-002	5.26440E-001	7.33340E-001	1.32000E-003	2.39400E-002	2.39400E-002	0.00000E+000	1.13041E+002	1.13041E+002	4.78000E-003	0.00000E+000	1.13161E+002
Graders	8.06000E-003	1.00620E-001	3.42200E-002	1.30000E-004	3.22000E-003	2.96000E-003	0.00000E+000	1.16323E+001	1.16323E+001	3.76000E-003	0.00000E+000	1.17263E+001
Pavers	7.68000E-003	7.53100E-002	1.15330E-001	1.90000E-004	3.54000E-003	3.26000E-003	0.00000E+000	1.65187E+001	1.65187E+001	5.34000E-003	0.00000E+000	1.66522E+001
Paving Equipment	6.83000E-003	6.41200E-002	1.02270E-001	1.60000E-004	3.12000E-003	2.87000E-003	0.00000E+000	1.43142E+001	1.43142E+001	4.63000E-003	0.00000E+000	1.44299E+001
Rollers	6.15000E-003	6.44000E-002	7.40900E-002	1.00000E-004	3.54000E-003	3.26000E-003	0.00000E+000	9.22090E+000	9.22090E+000	2.98000E-003	0.00000E+000	9.29546E+000
Rubber Tired Dozers	1.66280E-001	1.74623E+000	7.12830E-001	1.71000E-003	8.27500E-002	7.61300E-002	0.00000E+000	1.50055E+002	1.50055E+002	4.85300E-002	0.00000E+000	1.51268E+002
Tractors/Loaders/Backhoes	1.13500E-001	1.14935E+000	1.66474E+000	2.32000E-003	5.69100E-002	5.23600E-002	0.00000E+000	2.03805E+002	2.03805E+002	6.59100E-002	0.00000E+000	2.05453E+002
Welders	4.90800E-002	2.80230E-001	3.34200E-001	5.10000E-004	1.02800E-002	1.02800E-002	0.00000E+000	3.76441E+001	3.76441E+001	3.98000E-003	0.00000E+000	3.77436E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	3.72200E-002	2.51970E-001	3.62120E-001	5.90000E-004	1.31500E-002	1.31500E-002	0.00000E+000	5.10650E+001	5.10650E+001	2.96000E-003	0.00000E+000	5.11391E+001
Concrete/Industrial Saws	1.07300E-002	8.40300E-002	1.09940E-001	1.90000E-004	4.51000E-003	4.51000E-003	0.00000E+000	1.61297E+001	1.61297E+001	8.80000E-004	0.00000E+000	1.61517E+001
Cranes	5.98200E-002	6.41160E-001	3.15930E-001	1.01000E-003	2.67300E-002	2.45900E-002	0.00000E+000	8.87156E+001	8.87156E+001	2.86900E-002	0.00000E+000	8.94329E+001
Excavators	2.21600E-002	1.93750E-001	3.58080E-001	5.70000E-004	9.37000E-003	8.62000E-003	0.00000E+000	4.98972E+001	4.98972E+001	1.61400E-002	0.00000E+000	5.03007E+001
Forklifts	5.90800E-002	5.53530E-001	6.85270E-001	9.20000E-004	3.31600E-002	3.05100E-002	0.00000E+000	8.05747E+001	8.05747E+001	2.60600E-002	0.00000E+000	8.12262E+001
Generator Sets	5.91400E-002	5.26440E-001	7.33340E-001	1.32000E-003	2.39400E-002	2.39400E-002	0.00000E+000	1.13041E+002	1.13041E+002	4.78000E-003	0.00000E+000	1.13161E+002
Graders	8.06000E-003	1.00620E-001	3.42200E-002	1.30000E-004	3.22000E-003	2.96000E-003	0.00000E+000	1.16323E+001	1.16323E+001	3.76000E-003	0.00000E+000	1.17263E+001
Pavers	7.68000E-003	7.53100E-002	1.15330E-001	1.90000E-004	3.54000E-003	3.26000E-003	0.00000E+000	1.65186E+001	1.65186E+001	5.34000E-003	0.00000E+000	1.66522E+001
Paving Equipment	6.83000E-003	6.41200E-002	1.02270E-001	1.60000E-004	3.12000E-003	2.87000E-003	0.00000E+000	1.43142E+001	1.43142E+001	4.63000E-003	0.00000E+000	1.44299E+001
Rollers	6.15000E-003	6.44000E-002	7.40900E-002	1.00000E-004	3.54000E-003	3.26000E-003	0.00000E+000	9.22089E+000	9.22089E+000	2.98000E-003	0.00000E+000	9.29545E+000
Rubber Tired Dozers	1.66280E-001	1.74623E+000	7.12830E-001	1.71000E-003	8.27500E-002	7.61300E-002	0.00000E+000	1.50054E+002	1.50054E+002	4.85300E-002	0.00000E+000	1.51268E+002
Tractors/Loaders/Balckhoes	1.13500E-001	1.14935E+000	1.66474E+000	2.32000E-003	5.69100E-002	5.23600E-002	0.00000E+000	2.03805E+002	2.03805E+002	6.59100E-002	0.00000E+000	2.05453E+002
Welders	4.90800E-002	2.80230E-001	3.34200E-001	5.10000E-004	1.02800E-002	1.02800E-002	0.00000E+000	3.76441E+001	3.76441E+001	3.98000E-003	0.00000E+000	3.77435E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17497E-006	1.17497E-006	0.00000E+000	0.00000E+000	1.17327E-006
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23995E-006	1.23995E-006	0.00000E+000	0.00000E+000	1.23826E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23992E-006	1.23992E-006	0.00000E+000	0.00000E+000	1.22997E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20247E-006	1.20247E-006	0.00000E+000	0.00000E+000	1.19283E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.24108E-006	1.24108E-006	0.00000E+000	0.00000E+000	1.10802E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15002E-006	1.15002E-006	0.00000E+000	0.00000E+000	1.14881E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.71935E-006	1.71935E-006	0.00000E+000	0.00000E+000	1.70556E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21075E-006	1.21075E-006	0.00000E+000	0.00000E+000	1.20104E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.39722E-006	1.39722E-006	0.00000E+000	0.00000E+000	1.38601E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.08449E-006	1.08449E-006	0.00000E+000	0.00000E+000	1.07579E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19956E-006	1.19956E-006	0.00000E+000	0.00000E+000	1.18994E-006
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17760E-006	1.17760E-006	0.00000E+000	0.00000E+000	1.21682E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.32823E-006	1.32823E-006	0.00000E+000	0.00000E+000	1.32473E-006

**Fugitive Dust Mitigation**

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)

No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.06	0.02	0.06	0.02	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.34	0.09	0.34	0.09	0.00	0.00
Demolition	Fugitive Dust	0.02	0.00	0.02	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.14	0.07	0.14	0.07	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.72	0.40	0.72	0.40	0.00	0.00
Site Preparation	Roads	0.01	0.00	0.01	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	100.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	3.85	5.55	8.41	10.28	9.30	9.42	0.00	10.22	10.22	8.59	0.00	10.21
Natural Gas	5.11	5.06	5.07	3.70	5.07	5.07	0.00	5.07	5.07	4.76	4.97	5.07
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	20.00	20.00	20.00	20.06	20.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Mobile Mitigation

Project Setting: Suburban Center

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00	0.00	0.00	
No	Land Use	Increase Diversity	0.09	0.31		
No	Land Use	Improve Walkability Design	0.00	0.00		
No	Land Use	Improve Destination Accessibility	0.00	0.00		
Yes	Land Use	Increase Transit Accessibility	0.18	0.20		
No	Land Use	Integrate Below Market Rate Housing	0.00	0.00		
	Land Use	Land Use SubTotal	0.10			

Yes	Neighborhood Enhancements	Improve Pedestrian Network	1.00	Project Site	
No	Neighborhood Enhancements	Provide Traffic Calming Measures	0.00		
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.01		
No	Parking Policy Pricing	Limit Parking Supply	0.00	0.00	
No	Parking Policy Pricing	Unbundle Parking Costs	0.00	0.00	
No	Parking Policy Pricing	On-street Market Pricing	0.00	0.00	
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00	0.00	
No	Transit Improvements	Expand Transit Network	0.00	0.00	
No	Transit Improvements	Increase Transit Frequency	0.00		0.00
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.11		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"	4.50		
No	Commute	Workplace Parking Charge		0.00	
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program	10.00		
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.11		

### Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
Yes	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

### Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	7.00	
No	Install High Efficiency Lighting	0.00	
Yes	On-site Renewable	0.00	100.00



Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy	20.00	20.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

**Solid Waste Mitigation**

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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# AERMOD Model Options

## Model Options

Pathway	Keyword	Description	Value
CO	TITLEONE	Project title 1	Natomas Park Drive Apartments
CO	TITLETWO	Project title 2	
CO	MODELOPT	Model options	DFAULT,CONC,NODRYDPLT,NOWETDPLT
CO	AVERTIME	Averaging times	1,ANNUAL
CO	URBANOPT	Urban options	
CO	POLLUTID	Pollutant ID	PM25 H1H
CO	HALFLIFE	Half life	
CO	DCAYCOEF	Decay coefficient	
CO	FLAGPOLE	Flagpole receptor heights	1.8
CO	RUNORNOT	Run or Not	RUN
CO	EVENTFIL	Event file	F
CO	SAVEFILE	Save file	F
CO	INITFILE	Initialization file	
CO	MULTYEAR	Multiple year option	N/A
CO	DEBUGOPT	Debug options	N/A
CO	ERRORFIL	Error file	F
SO	ELEVUNIT	Elevation units	METERS
SO	EMISUNIT	Emission units	N/A
RE	ELEVUNIT	Elevation units	METERS
ME	SURFFILE	Surface met file	C:\Users\bshea\Desktop\METEOR~1\SACINT~1.SFC
ME	PROFFILE	Profile met file	C:\Users\bshea\Desktop\METEOR~1\SACINT~1.PFL
ME	SURFDATA	Surf met data info.	93225 2014
ME	UAIRDATA	U-Air met data info.	23230 2014
ME	SITEDATA	On-site met data info.	
ME	PROFBASE	Elev. above MSL	8.23
ME	STARTEND	Start-end met dates	
ME	WDROTATE	Wind dir. rot. adjust.	
ME	WINDCATS	Wind speed cat. max.	
ME	SCIMBYHR	SCIM sample params	
EV	DAYTABLE	Print summary opt.	N/A
OU	EVENTOUT	Output info. level	N/A

OU | DAYTABLE | Print summary opt.

## Source Parameter Tables

### All Sources

Source ID / Pollutant ID	Source Type	Description	UTM		Elev.	Emiss. Rate	Emiss. Units	Release Height
			East (m)	North (m)	(m)			(m)
HUNH2001	VOLUME		630216.7	4274621.1	0	0.0007987552	(g/s)	5
HUNH2002	VOLUME		630280.3	4274621.1	0	0.0007987552	(g/s)	5
HUNH2003	VOLUME		630216.7	4274684.7	0	0.0007987552	(g/s)	5
HUNH2004	VOLUME		630280.3	4274684.7	0	0.0007987552	(g/s)	5
HUNH2005	VOLUME		630216.7	4274748.3	0	0.0007987552	(g/s)	5
HUNH2006	VOLUME		630280.3	4274748.3	0	0.0007987552	(g/s)	5
HUNH2007	VOLUME		630280.3	4274812	0	0.0007987552	(g/s)	5

### Volume Sources

Source ID / Pollutant ID	Description	UTM		Elev.	Emiss. Rate	Release Height	Init. Lat. Dim.	Init. Vert. Dim.
		East (m)	North (m)	(m)	(g/s)	(m)	(m)	(m)
HUNH2001		630216.7	4274621.1	0	0.0007987552	5	29.59	1
HUNH2002		630280.3	4274621.1	0	0.0007987552	5	29.59	1
HUNH2003		630216.7	4274684.7	0	0.0007987552	5	29.59	1
HUNH2004		630280.3	4274684.7	0	0.0007987552	5	29.59	1
HUNH2005		630216.7	4274748.3	0	0.0007987552	5	29.59	1
HUNH2006		630280.3	4274748.3	0	0.0007987552	5	29.59	1
HUNH2007		630280.3	4274812	0	0.0007987552	5	29.59	1

## BREEZE AERMOD Model Results

### Max. Annual ( 4 YEARS) Results of Pollutant: PM25 (ug/m\*\*3)

Group ID	High	Avg. Conc.	UTM		Elev. (m)	Hill Ht. (m)	Flag Ht. (m)	Rec. Type	Grid ID
			East (m)	North (m)					
ALL	1ST	0.10969	630341.70	4274709.60	0.00	0.00	1.80	DC	
	2ND	0.10933	630341.70	4274714.60	0.00	0.00	1.80	DC	
	3RD	0.10882	630341.70	4274719.60	0.00	0.00	1.80	DC	
	4TH	0.10813	630341.70	4274724.60	0.00	0.00	1.80	DC	
	5TH	0.10612	630342.10	4274643.30	0.00	0.00	1.80	DC	
	6TH	0.10197	630317.00	4274567.30	0.00	0.00	1.80	DC	
	7TH	0.10087	630302.00	4274557.30	0.00	0.00	1.80	DC	
	8TH	0.10066	630312.00	4274562.30	0.00	0.00	1.80	DC	
	9TH	0.09959	630346.70	4274694.60	0.00	0.00	1.80	DC	
	10TH	0.09936	630346.70	4274699.60	0.00	0.00	1.80	DC	

### Highest Results of Pollutant: PM25

Avg. Per.	Grp ID	High	Type	Val	Units	Date	UTM		Elev. (m)	Hill Ht. (m)	Flag Ht. (m)	Rec. Type	Grid ID
						YYMMDDHH	East (m)	North (m)					
1-HR	ALL	1ST	Avg. Conc.	5.49300	ug/m**3	14121409	630188.60	4274561.80	0.00	0.00	1.80	DC	

### Summary of Total Messages

#	Message Type
0	Fatal Error Message(s)
6	Warning Message(s)
996	Informational Message(s)
43680	Hours Were Processed
452	Calm Hours Identified
544	Missing Hours Identified ( 1.25 Percent)

### Error & Warning Messages

Msg. Type	Pathway	Ref. #	Description
WARNING	CO	<a href="#">W276</a>	Special proc for 1h-NO2/SO2 24hPM25 NAAQS disabled PM25 H1H
WARNING	CO	<a href="#">W363</a>	Multiyr 24h/Ann PM25 processing not applicable for PM25 H1H

WARNING	ME	<a href="#">W186</a>	THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
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# AERMOD Model Options

## Model Options

Pathway	Keyword	Description	Value
CO	TITLEONE	Project title 1	Natomas Park Drive Apartments
CO	TITLETWO	Project title 2	
CO	MODELOPT	Model options	DFAULT,CONC,NODRYDPLT,NOWETDPLT
CO	AVERTIME	Averaging times	1,ANNUAL
CO	URBANOPT	Urban options	
CO	POLLUTID	Pollutant ID	PM25 H1H
CO	HALFLIFE	Half life	
CO	DCAYCOEF	Decay coefficient	
CO	FLAGPOLE	Flagpole receptor heights	1.8
CO	RUNORNOT	Run or Not	RUN
CO	EVENTFIL	Event file	F
CO	SAVEFILE	Save file	F
CO	INITFILE	Initialization file	
CO	MULTYEAR	Multiple year option	N/A
CO	DEBUGOPT	Debug options	N/A
CO	ERRORFIL	Error file	F
SO	ELEVUNIT	Elevation units	METERS
SO	EMISUNIT	Emission units	N/A
RE	ELEVUNIT	Elevation units	METERS
ME	SURFFILE	Surface met file	C:\Users\bshea\Desktop\METEOR~1\SACINT~1.SFC
ME	PROFFILE	Profile met file	C:\Users\bshea\Desktop\METEOR~1\SACINT~1.PFL
ME	SURFDATA	Surf met data info.	93225 2014
ME	UAIRDATA	U-Air met data info.	23230 2014
ME	SITEDATA	On-site met data info.	
ME	PROFBASE	Elev. above MSL	8.23
ME	STARTEND	Start-end met dates	
ME	WDROTATE	Wind dir. rot. adjust.	
ME	WINDCATS	Wind speed cat. max.	
ME	SCIMBYHR	SCIM sample params	
EV	DAYTABLE	Print summary opt.	N/A
OU	EVENTOUT	Output info. level	N/A

OU | DAYTABLE | Print summary opt.

## Source Parameter Tables

### All Sources

Source ID / Pollutant ID	Source Type	Description	UTM		Elev.	Emiss. Rate	Emiss. Units	Release Height
			East (m)	North (m)	(m)			(m)
HUNH2001	VOLUME		630216.7	4274621.1	0	0.00019018	(g/s)	5
HUNH2002	VOLUME		630280.3	4274621.1	0	0.00019018	(g/s)	5
HUNH2003	VOLUME		630216.7	4274684.7	0	0.00019018	(g/s)	5
HUNH2004	VOLUME		630280.3	4274684.7	0	0.00019018	(g/s)	5
HUNH2005	VOLUME		630216.7	4274748.3	0	0.00019018	(g/s)	5
HUNH2006	VOLUME		630280.3	4274748.3	0	0.00019018	(g/s)	5
HUNH2007	VOLUME		630280.3	4274812.0	0	0.00019018	(g/s)	5

### Volume Sources

Source ID / Pollutant ID	Description	UTM		Elev.	Emiss. Rate	Release Height	Init. Lat. Dim.	Init. Vert. Dim.
		East (m)	North (m)	(m)	(g/s)	(m)	(m)	(m)
HUNH2001		630216.7	4274621.1	0	0.00019018	5	29.59	1
HUNH2002		630280.3	4274621.1	0	0.00019018	5	29.59	1
HUNH2003		630216.7	4274684.7	0	0.00019018	5	29.59	1
HUNH2004		630280.3	4274684.7	0	0.00019018	5	29.59	1
HUNH2005		630216.7	4274748.3	0	0.00019018	5	29.59	1
HUNH2006		630280.3	4274748.3	0	0.00019018	5	29.59	1
HUNH2007		630280.3	4274812.0	0	0.00019018	5	29.59	1



# BREEZE AERMOD Model Results

## Max. Annual ( 4 YEARS) Results of Pollutant: PM25 (ug/m\*\*3)

Group ID	High	Avg. Conc.	UTM		Elev. (m)	Hill Ht. (m)	Flag Ht. (m)	Rec. Type	Grid ID
			East (m)	North (m)					
ALL	1ST	0.02612	630341.70	4274709.60	0.00	0.00	1.80	DC	
	2ND	0.02603	630341.70	4274714.60	0.00	0.00	1.80	DC	
	3RD	0.02591	630341.70	4274719.60	0.00	0.00	1.80	DC	
	4TH	0.02575	630341.70	4274724.60	0.00	0.00	1.80	DC	
	5TH	0.02527	630342.10	4274643.30	0.00	0.00	1.80	DC	
	6TH	0.02428	630317.00	4274567.30	0.00	0.00	1.80	DC	
	7TH	0.02402	630302.00	4274557.30	0.00	0.00	1.80	DC	
	8TH	0.02397	630312.00	4274562.30	0.00	0.00	1.80	DC	
	9TH	0.02371	630346.70	4274694.60	0.00	0.00	1.80	DC	
	10TH	0.02366	630346.70	4274699.60	0.00	0.00	1.80	DC	

## Highest Results of Pollutant: PM25

Avg. Per.	Grp ID	High	Type	Val	Units	Date	UTM		Elev. (m)	Hill Ht. (m)	Flag Ht. (m)	Rec. Type	Grid ID
						YYMMDDHH	East (m)	North (m)					
1-HR	ALL	1ST	Avg. Conc.	1.30786	ug/m**3	14121409	630188.60	4274561.80	0.00	0.00	1.80	DC	

## Summary of Total Messages

#	Message Type
0	Fatal Error Message(s)
6	Warning Message(s)
996	Informational Message(s)
43680	Hours Were Processed
452	Calm Hours Identified
544	Missing Hours Identified ( 1.25 Percent)

## Error & Warning Messages

Msg. Type	Pathway	Ref. #	Description
WARNING	CO	<a href="#">W276</a>	Special proc for 1h-NO2/SO2 24hPM25 NAAQS disabled PM25 H1H
WARNING	CO	<a href="#">W363</a>	Multiyr 24h/Ann PM25 processing not applicable for PM25 H1H

WARNING	ME	<a href="#">W186</a>	THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
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HARP2 - HRACalc (dated 19044) 5/6/2021 2:32:54 PM - Output Log

GLCs loaded successfully  
Pollutants loaded successfully  
\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: All  
Calculation Method: HighEnd

\*\*\*\*\*  
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25  
Total Exposure Duration: 3

Exposure Duration Bin Distribution  
3rd Trimester Bin: 0.25  
0<2 Years Bin: 2  
2<9 Years Bin: 1  
2<16 Years Bin: 0  
16<30 Years Bin: 0  
16 to 70 Years Bin: 0

\*\*\*\*\*  
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True  
Soil: False  
Dermal: False  
Mother's milk: False  
Water: False  
Fish: False  
Homegrown crops: False  
Beef: False  
Dairy: False  
Pig: False  
Chicken: False  
Egg: False

\*\*\*\*\*  
INHALATION

Daily breathing rate: LongTerm24HR

\*\*Worker Adjustment Factors\*\*

Worker adjustment factors enabled: NO

**\*\*Fraction at time at home\*\***

3rd Trimester to 16 years: OFF

16 years to 70 years: ON

\*\*\*\*\*

#### TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.

Tier2 - What was changed: ED or start age changed|

Calculating cancer risk

Cancer risk saved to: C:\Users\bshea\Desktop\HARP\Natomas Mit1\_CancerRisk.csv

Calculating chronic risk

Chronic risk saved to: C:\Users\bshea\Desktop\HARP\Natomas Mit1\_NCChronicRisk.csv

Calculating acute risk

Acute risk saved to: C:\Users\bshea\Desktop\HARP\Natomas Mit1\_NCAcuteRisk.csv

HRA ran successfully

\*HARP - HRACalc v19044 5/6/2021 2:32:54 PM - Cancer Risk - Input File: C:\Users\bshea\Desktop\HARP\Natomas Mit1\_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	RISK_SUM	SCENARIO	DETAILS	INH_RISK	SOIL_RISK
1			9901	DieselExhPM	0.02612	9.95E-06	3YrCancerHighEnd_Inh_FAH16to70	*	9.95E-06	0.00E+00

DERMAL_RISK	MMILK_RISK	WATER_RISK	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISK	PIG_RISK	CHICKEN_RISK	EGG_RISK	1ST_DRIVER
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA

2ND_DRIVER	PASTURE_CONC	FISH_CONC	WATER_CONC
NA	0.00E+00	0.00E+00	0.00E+00

\*HARP - HRACalc v19044 5/6/2021 2:32:54 PM - Chronic Risk - Input File: C:\Users\bshea\Desktop\HARP\Natomas Mit1\_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV
1			9901	DieselExhPM	0.02612	NonCancerChronicHighEnd_Inh	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00



REPRO/DEVEL	RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL	DETAILS	INH_CONC	SOIL_DOSE
0.00E+00	5.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	*	2.61E-02	0.00E+00

DERMAL_DOSE	MMILK_DOSE	WATER_DOSE	FISH_DOSE	CROP_DOSE	BEEF_DOSE	DAIRY_DOSE	PIG_DOSE	CHICKEN_DOSE	EGG_DOSE
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1ST_DRIVER	2ND_DRIVER	3RD_DRIVER	PASTURE_CONC	FISH_CONC	WATER_CONC
INHALATION	NA	NA	0.00E+00	0.00E+00	0.00E+00

\*HARP - HRACalc v19044 5/6/2021 2:32:54 PM - Acute Risk - Input File: C:\Users\bshea\Desktop\HARP\Natomas Mit1\_HRAInput.hra

INDEX	GRP1	GRP2	POLID	POLABBREV	CONC	SCENARIO	CV	CNS	IMMUN	KIDNEY	GILV	REPRO/DEVEL
1			9901	DieselExhPM	1.30786	NonCancerAcute	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

RESP	SKIN	EYE	BONE/TEETH	ENDO	BLOOD	ODOR	GENERAL
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00



# California Tree and Landscape Consulting, Inc.

June 14, 2021 Revised July 29, 2021

Mitchell McKinzie  
 Demmon Partners  
 601 University Avenue, Suite 110  
 Sacramento, California 95825  
 Via Email: [mitchell@demmonpartners.com](mailto:mitchell@demmonpartners.com)

## PRELIMINARY ARBORIST FINDINGS FOR A CONCEPTUAL DEVELOPMENT PLAN

**RE: 2450 Natomas Park Drive, City of Sacramento Jurisdiction**

### Executive Summary:

Demmon Partners contacted California Tree and Landscape Consulting, Inc. to inventory and evaluate the protected trees on the site or within 25' of development for the purpose of processing plans for site improvements<sup>1</sup>. The property falls under the jurisdiction of the City of Sacramento. See Supporting Information Appendix A – Tree Location Map.

Cathie Bown, ISA Certified Arborist #WE-13086A, was on site January 12, 2021; Nicole Harrison, ISA Certified Arborist #WE-6500AM visited the site several times between January and June, 2021. A total of 143 trees were evaluated on the parcel and 13 trees from the neighboring properties are included due to their proximity to the proposed development<sup>2</sup>. There are 53 trees on the parcel which are considered 'Private-Protected' by the City of Sacramento Tree Preservation Code Chapter 12.56, of which eight (8) are proposed for removal for the project. **A waiver of mitigation fees is proposed for five (5) of the trees<sup>4,5</sup>. In addition, there are four (4) unprotected trees on the parcel to be preserved that should be considered as a credit for mitigation – See Table 2 below.**

**Table 1 – Tree Inventory**

Tree Species	Trees Inventoried	Trees located on the Parcel <sup>2</sup>	Trees located on the Parcel Protected by Sacramento City Tree Preservation Code	Proposed for Removal
Coast Live Oak, <i>Quercus agrifolia</i>	10	8	8 (Private Protected)	3 <sup>3</sup>
Coast Redwood, <i>Sequoia sempervirens</i> <sup>3B</sup>	10	0		0
Deodar Cedar, <i>Cedrus deodara</i>	3	2	1 (Private Protected)	1
Flowering Ornamental Pear, <i>Pyrus calleryana</i>	35	35	0	26
Fremont Cottonwood, <i>Populus fremontii</i>	3	3	2 (Private Protected)	3 <sup>4</sup>
Holly Oak, <i>Quercus ilex</i>	9	9	0	3
Canary Island Pine, <i>Pinus canariensis</i>	4	4	3 (Private Protected)	4

<sup>1</sup> Preliminary Grading Plans by RSC Engineering, dated 4/9/2021; Sheet GR1

<sup>2</sup> CalTLC is not a licensed land surveyor. Tree ownership was not determined. Conclusions within this report are based on existing fences or other landmarks which may not represent the actual property boundary

<sup>3</sup> Coast Live Oaks along the pathway beside the recent parking lot installation are all diseased and/or dying. Treatment may save some but most will require removal, up to 3 located on this parcel and 2 which are off-site. None of these trees are proposed for removal because of the development.

<sup>3B</sup>. All Coast Redwood located offsite were not measured. It is assumed they will all meet the requirement for Private Protected trees.

<sup>4</sup> The Cottonwood are high risk in a public place and are both recommended for removal. See attached Tree Risk Assessment.

Tree Species	Trees Inventoried	Trees located on the Parcel <sup>2</sup>	Protected by Sacramento City Tree Preservation Code	Proposed for Removal
Maple, <i>Acer sp.</i>	8	8	0	8
Mediterranean Fan Palm, <i>Chamaerops humilis</i>	4	4	0	4
Queen Palm, <i>Syagrus romanzoffiana</i>	2	2	0	2
Red Oak, <i>Quercus rubra</i>	22	22	4 (Private Protected)	0 <sup>5</sup>
Sawleaf Zelkova, <i>Zelkova serrata</i>	1	1	0	0
Valley Oak, <i>Quercus lobata</i>	45	45	35 (Private Protected)	0 <sup>6</sup>
<b>Total</b>	<b>156</b>	<b>143</b>	<b>53</b>	<b>54</b>

See Appendices for specific information on each tree and preservation requirements and/or restrictions.

**Table 2 – Mitigation Requirements**

Tree	Common	Botanical	Total	Condition	Development Status <sup>7</sup>	Mitigation	Running Total
2554	Fremont Cottonwood	<i>Populus fremontii</i>	25	2 Major Structure or Health Problems	<b>Proposed for Removal with Waiver due to uncorrectable structural defect</b>	<b>No</b>	
2556	Fremont Cottonwood	<i>Populus fremontii</i>	46	1 Extreme Structure or Health Problems	<b>Proposed for Removal with Waiver due to High Risk</b>	<b>No</b>	
2560	Coast Live Oak	<i>Quercus agrifolia</i>	25	0 - Dead	<b>Remove with Waiver due to Condition - Dead/Diseased</b>	<b>No</b>	
2561	Coast Live Oak	<i>Quercus agrifolia</i>	23	0 - Dead	<b>Remove with Waiver due to Condition – Dead/Diseased</b>	<b>No</b>	
2562	Coast Live Oak	<i>Quercus agrifolia</i>	19	2 Major Structure or Health Problems	<b>Remove with Waiver due to Condition - Diseased</b>	<b>No</b>	
2593	Canary Island Pine	<i>Pinus canariensis</i>	28	3 Fair - Minor Problems	Proposed for Removal	Yes	28
2595	Canary Island Pine	<i>Pinus canariensis</i>	31	3 Fair - Minor Problems	Proposed for Removal	Yes	59
2596	Canary Island Pine	<i>Pinus canariensis</i>	28	3 Fair - Minor Problems	Proposed for Removal	Yes	87
						<b>Total</b>	<b>87</b>
2579	Red Oak	<i>Quercus rubra</i>	21	3 Fair - Minor Problems	Preserved	(21)	66
2584	Red Oak	<i>Quercus rubra</i>	21	3 Fair - Minor Problems	Preserved	(21)	45
2586	Red Oak	<i>Quercus rubra</i>	22	3 Fair - Minor Problems	Preserved	(22)	23
2589	Red Oak	<i>Quercus rubra</i>	19	3 Fair - Minor Problems	Preserved	(21)	2
						<b>Total</b>	<b>2</b>

<sup>5</sup> Minor revisions to the grading plan to relocate proposed storm drain will be required to preserve these trees.

<sup>6</sup> Minor revisions to the grading plan and/or arborist onsite supervision during development may be required for trees closest to the development area.

<sup>7</sup> See Appendix 6 for Specific Information regarding application for fee waiver.

## Methods

**Appendix B** in this report is the detailed inventory and recommendations for the trees. The following terms and Table A – Ratings Description will further explain our findings.

The protected trees evaluated as part of this report have a numbered tag that was placed on each one that is 1-1/8" x 1-3/8", green anodized aluminum, "acorn" shaped, and labeled: CalTLC, Auburn, CA with 1/4" pre-stamped tree number and Tree Tag. They are attached with a natural-colored aluminum 10d nail, installed at approximately 6' above ground level on the approximate north side of the tree. The tag should last ~10 – 20+ years depending on the species, before it is enveloped by the trees' normal growth cycle.

A Level 2 – Basic Visual Assessment was performed in accordance with the International Society of Arboriculture's best management practices. This assessment level is limited to the observation of conditions and defects which are readily visible. Additional limiting factors, such as blackberries, poison oak, and/or debris piled at the base of a tree can inhibit the visual assessment.

**Tree Location:** The GPS location of each tree was collected using the ESRI's ArcGIS collector application on an Apple iPhone or Samsung. The data was then processed in ESRI's ArcMap by Julie McNamara, M.S. GISci, to produce the tree location map.

**Tree Measurements:** DBH (diameter breast high) is normally measured at 4'6" (above the average ground height for "Urban Forestry"), but if that varies then the location where it is measured is noted. A Swedish caliper was used to measure the DBH for trees less than 23" in diameter and a steel diameter tape for trees greater than 23". A Stanley laser distance meter was used to measure distances. Canopy radius measurements may also have been estimated due to obstructions.

## Terms

Field Tag #	The pre-stamped tree number on the tag which is installed at approximately 6' above ground level on the north side of the tree.
City Tag #	The number listed on the City of Sacramento tree inventory in the ARC GIS system found online at: <a href="http://saccity.maps.arcgis.com">saccity.maps.arcgis.com</a>
Species	The species of a tree is listed by our local and correct common name and botanical name by genus (capitalized) and species (lower case). Oaks frequently cross-pollinate and hybridize, but the identification is towards the strongest characteristics.
DBH	Diameter breast high' is normally measured at 4'6" (above the average ground height for "Urban Forestry"), but if that varies then the location where it is measured is noted in the next column "measured at"
DSH	"Diameter at standard height" is the same as DBH except as follows (according to the City of Sacramento requirements): (1) For a tree that branches at or below 4.5', DSH means the diameter at the narrowest point between the grade and the branching point; and (2) For a tree with a common root system that branches at the ground, DSH means the sum of the diameter of the largest trunk plus one-half the cumulative diameter of the remaining trunks at 4.5' above natural grade.
Canopy radius and Protection Zone Area	The farthest extent of the crown composed of leaves and small twigs. Most trees are not evenly balanced. This measurement represents the longest extension from the trunk to the outer canopy. The dripline measurement is from the center point of the tree and is shown on the Tree Location Map as a circle. This measurement further defines the radius of the protection zone to be specified on any development plans unless otherwise indicated in the arborist recommendations, Appendix 2.



**Critical Root Zone** The radius of the critical root zone is a circle equal to the trunk diameter” converted to’ and factored by tree age, condition and health pursuant to the industry standard. Best Management Practices: Managing Trees During Construction, the companion publication to the Approved American National Standard, provides guidance regarding minimum tree root protection zones for long term survival. In instances where a tree is multi-stemmed the protected root zone is equal to the extrapolated diameter (sum of the area of each stem converted to a single stem) factored by tree age, condition and health.

**Arborist Rating** Subjective to condition and is based on both the health and structure of the tree. All of the trees were rated for condition, per the recognized national standard as set up by the Council of Tree and Landscape Appraisers and the International Society of Arboriculture (ISA) on a numeric scale of 5 (being the highest) to 0 (the worst condition, dead) as in Chart A. The rating was done in the field at the time of the measuring and inspection.

<b>Arborist Ratings</b>		
No problem(s)	Excellent	<b>5</b>
No apparent problem(s)	Good	<b>4</b>
Minor problem(s)	Fair	<b>3</b>
Major problem(s)	Fair to Poor	<b>2</b>
Extreme problem(s)	Poor	<b>1</b>
Dead	Dead	<b>0</b>

**Rating #0:** This indicates a tree that has no significant sign of life.

**Rating #1:** The problems are extreme. This rating is assigned to a tree that has structural and/or health problems that no amount of work or effort can change. The issues may or may not be considered a dangerous situation.

**Rating #2:** The tree has major problems. If the option is taken to preserve the tree, its condition could be improved with correct arboricultural work including, but not limited to: pruning, cabling, bracing, bolting, guying, spraying, mistletoe removal, vertical mulching, fertilization, etc. If the recommended actions are completed correctly, hazard can be reduced and the rating can be elevated to a 3. If no action is taken the tree is considered a liability and should be removed.

**Rating #3:** The tree is in fair condition. There are some minor structural or health problems that pose no immediate danger. When the recommended actions in an arborist report are completed correctly the defect(s) can be minimized or eliminated.

**Rating #4:** The tree is in good condition and there are no apparent problems that a Certified Arborist can see from a visual ground inspection. If potential structural or health problems are tended to at this stage future hazard can be reduced and more serious health problems can be averted.

**Rating #5:** No problems found from a visual ground inspection. Structurally, these trees have properly spaced branches and near perfect characteristics for the species. Highly rated trees are not common in natural or developed landscapes. No tree is ever perfect especially with the unpredictability of nature, but with this highest rating, the condition should be considered excellent.

**Notes:** Provide notable details about each tree which are factors considered in the determination of the tree rating including: (a) condition of root crown and/or roots; (b) condition of trunk; (c) condition of limbs and structure; (d) growth history and twig condition; (e) leaf appearance; and (f) dripline environment. Notes also indicate if the standard tree evaluation procedure was not followed (for example - why DBH may have been measured at a location other than the standard 54”). Additionally, notes will list any evaluation limiting factors such as debris at the base of a tree.

**Development Restrictions/Actions** Recommended actions to increase health and longevity.

**Development Impacts** Projected development impacts are based solely on distance relationships between tree location and grading. Field inspections and findings during the project at the time of grading and trenching can change relative impacts. Closely followed guidelines and requirements can result in a higher chance of survival, while requirements that are overlooked can result in a dramatically lower chance of survival. Impacts are measured as follows:

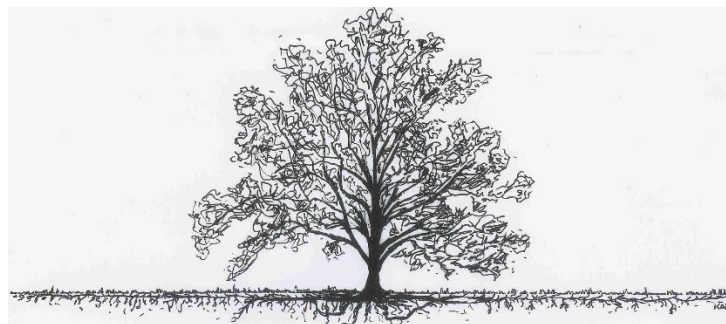
Impact Term:	Long Term Result of Impact:
Negligible	Tree is unlikely to show any symptoms. Chance of survival post development is excellent. Impacts to the Protected Root Zone are less than 5%.
Minor	Tree is likely to show minor symptoms. Chance of survival post development is good. Impacts to the Protected Root Zone are less than 15% and species tolerance is good.
Moderate	Tree is likely to show moderate symptoms. Chance of survival post development is fair. Impacts to the Protected Root Zone are less than 35% and species tolerance is good or moderate.
Severe	Tree is likely to show moderate symptoms annually and a pattern of decline. Chance of long-term survival post development is low. Impacts to the Protected Root Zone are up to 50% and species tolerance is moderate to poor.
Critical	Tree is likely to show moderate to severe symptoms annually and a pattern of decline. Chance of long-term survival post development is negligible. Impacts to the Protected Root Zone are up to 80%.

### Discussion

Trees need to be protected from normal construction practices if they are to remain healthy and viable on the site. Our recommendations are based on experience and the County ordinance requirements to enhance tree longevity. This requires their root zones remain intact and viable despite the use of heavy equipment to install foundations, driveways, underground utilities, and landscape irrigation systems. Simply walking and driving on soil can have serious consequences for tree health. Tree Protection measures should be incorporated into the site plans in order to protect the trees.

### Root Structure

The majority of a tree's roots are contained in a radius from the main trunk outward approximately two to three times the canopy of the tree. These roots are located in the top 6" to 3' of soil. It is a common misconception that a tree underground resembles the canopy. The correct root structure of a tree is in the drawing below. All plants' roots need both water and air for survival. Poor canopy development or canopy decline in mature trees after development is often the result of inadequate root space and/or soil compaction.



**The reality of where roots are generally located**

Our native oak trees are easily damaged or killed by having the soil within the Protected Root Zone (PRZ) disturbed or compacted. All of the work initially performed around protected trees that will be saved should be done by people rather than by wheeled or track type tractors. Oaks are fragile giants that can take little change in soil grade, compaction, or warm season watering. Don't be fooled into believing that warm season watering has no adverse effects

on native oaks. Decline and eventual death can take as long as 5-20 years with poor care and inappropriate watering. Oaks can live hundreds of years if treated properly during construction, as well as later with proper pruning, and the appropriate landscape/irrigation design.

### **Arborist Classifications**

There are different types of Arborists:

**Tree Removal and/or Pruning Companies:** These companies may be licensed by the State of California to do business, but they do not necessarily know anything about trees;

**Arborists:** Arborist is a broad term. It is intended to mean someone with specialized knowledge of trees but is often used to imply knowledge that is not there.

**ISA Certified Arborist:** An International Society of Arboriculture Certified Arborist is someone who has been trained and tested to have specialized knowledge of trees. You can look up certified arborists at the International Society of Arboriculture website: isa-arbor.org.

**Consulting Arborist:** An American Society of Consulting Arborists Registered Consulting Arborist is someone who has been trained and tested to have specialized knowledge of trees and trained and tested to provide high quality reports and documentation. You can look up registered consulting arborists at the American Society of Consulting Arborists website: asca-consultants.org

### **RECOMMENDATIONS: Summary of Tree Protection Measures**

The Owner and/or Developer should ensure the project arborist's protection measures are incorporated into the site plans and followed. Tree specific protection measures will be developed when the final grading plans are produced.

1. The project arborist is required to inspect the tree protection fencing prior to grading and/or grubbing for compliance with the required protection zones.
2. Clearance pruning should include removal of all the lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site. The Project Arborist should approve the extent of foliage elevation and oversee the pruning to be performed by a contractor who is an ISA Certified Arborist.
3. Chemical Stress Treatments to be performed by a licensed pesticide applicator under the project arborist supervision should include a (1) tree growth regulator, such as Paclobutrazol; (2) preventative leaf fungicide; and (3) preventative insecticides for leaf feeding insects and boring insects unless otherwise directed by the project arborist.
4. Hardwood mulch is required inside the protection fencing (see protection detail). Mulch composition is to be from onsite materials, such as trees to be removed, or only as approved by the project arborist. Decorative bark, including Cedar and Redwood, do not qualify.
5. Any and all work to be performed inside the protected root zone fencing shall be supervised by the project arborist.

6. All stumps within the root zone of trees to be preserved shall be ground out using a stump router or left in place. No trunk within the root zone of other trees shall be removed using a backhoe or other piece of grading equipment.
7. Trenching inside the protected root zone shall be by a hydraulic or air spade, placing pipes underneath the roots, or boring deeper trenches underneath the roots.
8. The project arborist will monitor the site during (and after) construction to ensure protection measures are followed and make recommendations for care of the trees on site, as needed.

Follow all of the General Development Guidelines, Appendix 3, for all trees not identified as requiring special preservation measures in the summary and in Appendix 2.

Report Prepared by:



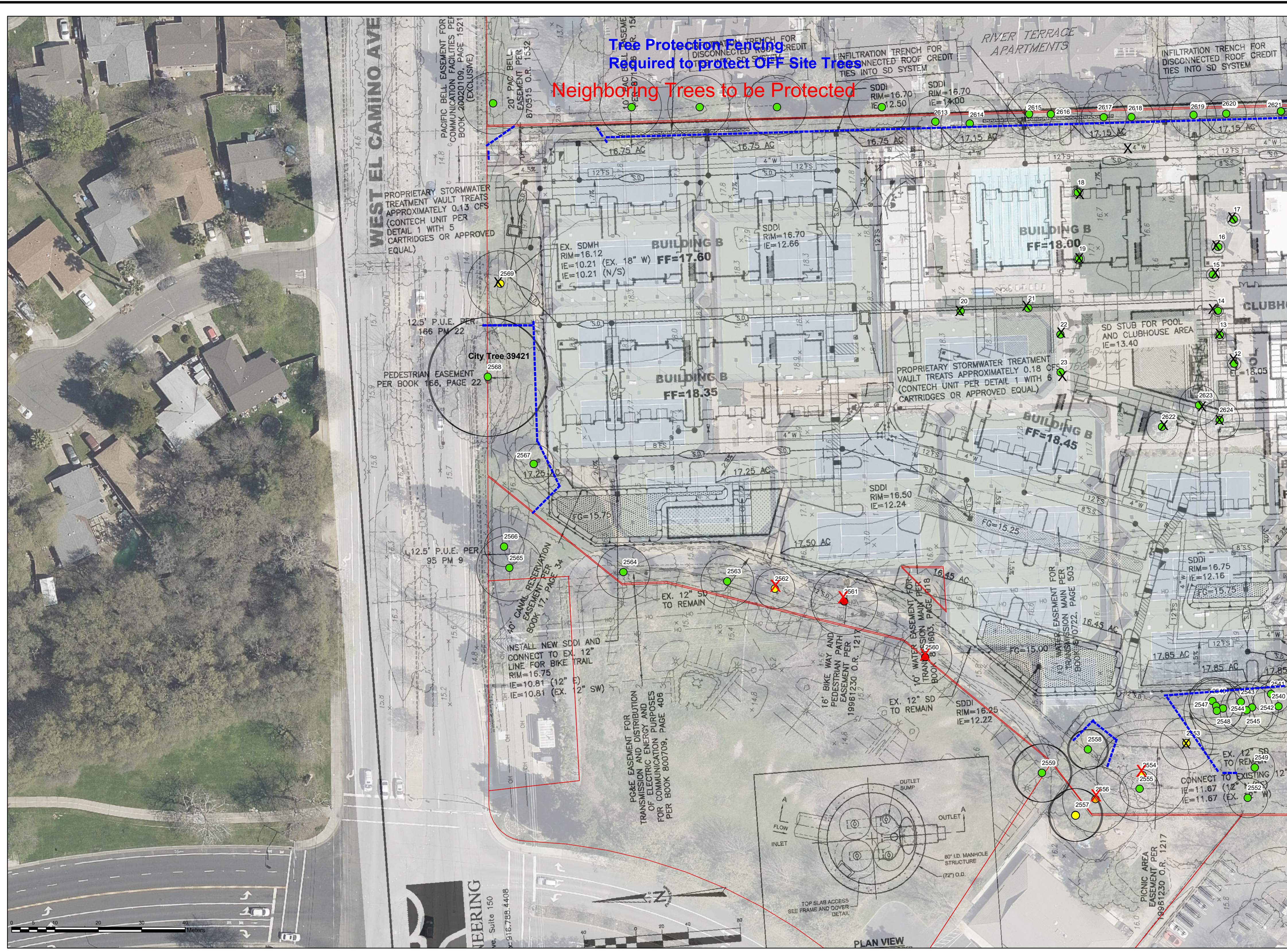
Nicole Harrison

ISA Certified Arborist #WC-6500AM, TRAQ  
ASCA Registered Consulting Arborist #719

- Appendix 1 – Tree Location Map and Protection Plan (TPP1.0)
- Appendix 2 – Tree Data – All Trees; List of Protected Trees
- Appendix 3 – General Development Guidelines
- Appendix 4 – Site Photographs
- Appendix 5 – Fee Waiver Application Support

### Bibliography

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- Urban, J. (2008). *Up by the Roots*. Champaign: International Society of Arboriculture.

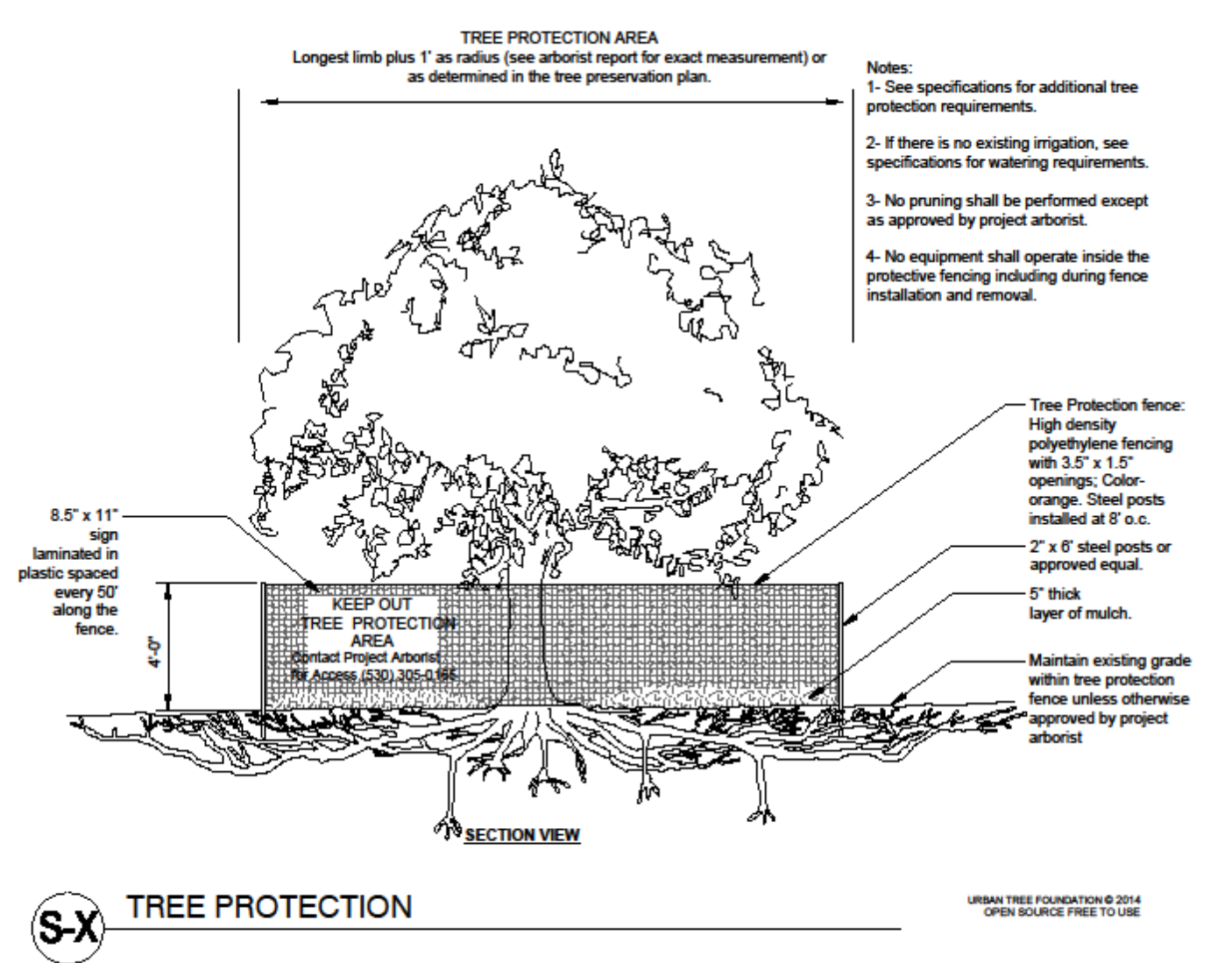


**California Tree & Landscape Consulting, Inc.**

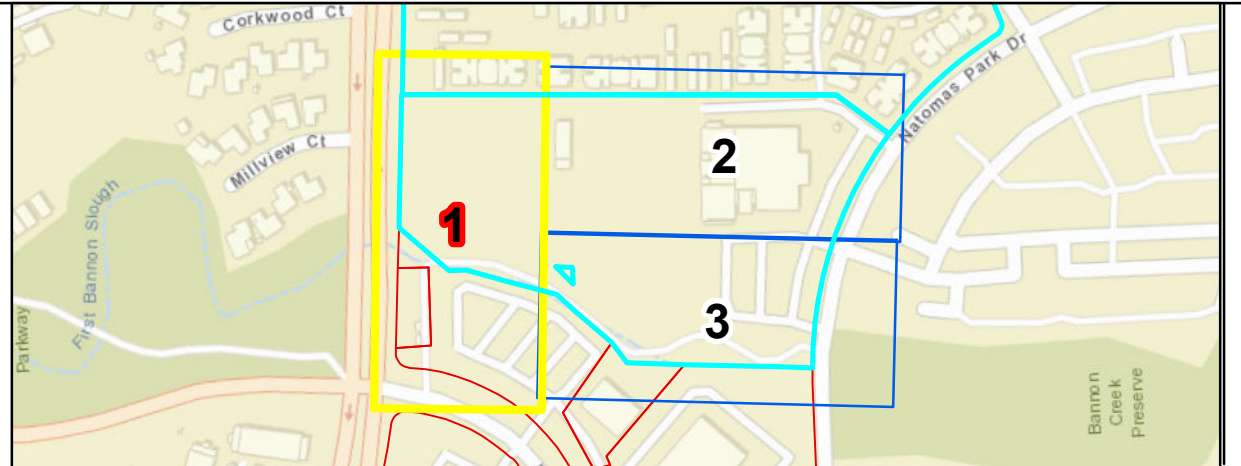
1243 High Street  
Auburn, CA 95603

**TREE PROTECTION GENERAL REQUIREMENTS**

1. The project arborist for this project is California Tree & Landscape Consulting. The primary contact information is Nicole Harrison (530) 305-0165. The project arborist may continue to provide expertise and make additional recommendations during the construction process if and when additional impacts occur or tree response is poor. Monitoring and construction oversight by the project arborist is recommended for all projects and required when a final letter of assessment is required by the jurisdiction.
2. The project arborist should inspect the exclusionary root protection fencing installed by the contractors prior to any grading and/or grubbing for compliance with the recommended protection zones. Additionally, the project arborist shall inspect the fencing at the onset of each phase of construction. The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.
3. The project arborist should directly supervise any clearance pruning, irrigation, fertilization, placement of mulch and/or chemical treatments. If clearance pruning is required, the Project Arborist should approve the extent of foliage elevation and oversee the pruning to be performed by a contractor who is an ISA Certified Arborist. Clearance pruning should include removal of all the lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site.
4. No trunk within the root protection zone of any trees shall be removed using a backhoe or other piece of grading equipment.
5. Clearly designate an area on the site that is outside of the protection area of all trees where construction materials may be stored, and parking can take place. No materials or parking shall take place within the protection zones of any trees on or off the site.
6. Any and all work to be performed inside the protected root zone fencing, including all grading and utility trenching, shall be approved and/or supervised by the project arborist.
7. Trenching, if required, inside the protected root zone shall be approved and/or supervised by the project arborist and may be required to be performed by hand, by a hydraulic or air spade, or other method which will place pipes underneath the roots without damage to the roots.
8. The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.



**TREE PRESERVATION PLAN**



>Tree locations are approximate and were collected using ISO apple products.  
>Property line information was downloaded from Sacramento County on 01/19/2021.  
>Development plans provided by LPAS Architecture dated 04/09/2021.

Property Line Measured	Arborist Rating
Tree Canopy Tree	0 Dead
Protection Fencing	1 Extreme Structure or Health Problems
Protected Tree TBR	2 Major Structure or Health Problems
X Unprotected Tree TBR	3 Fair - Minor Problems
○ Unprotected Tree to be Saved for Mitigation Credit	4 Good - No Apparent Problems
	5 Excellent

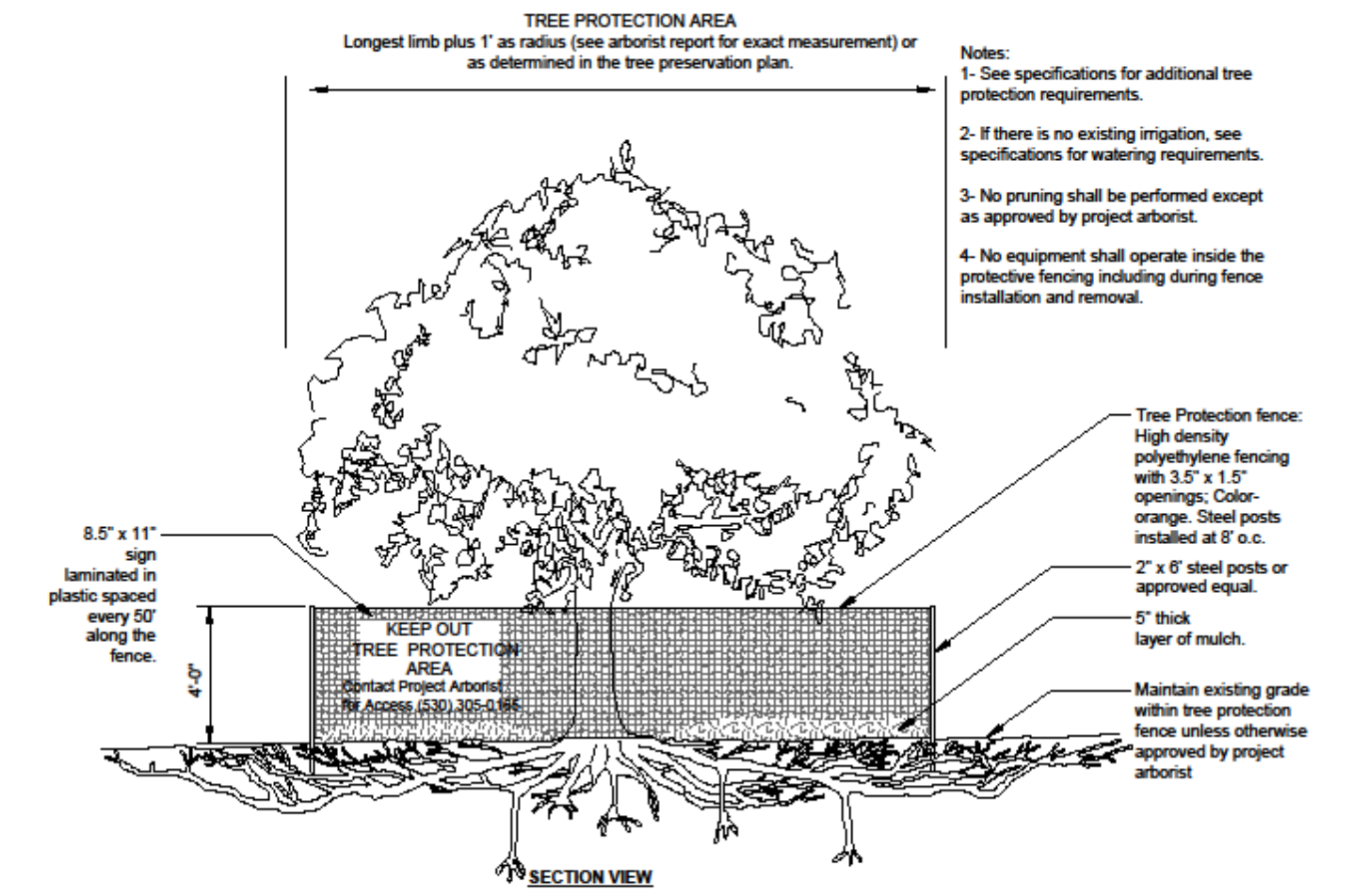
<p>Sheet No. TPP 1.1</p>	<p><b>NATOMAS PARK APARTMENTS</b></p> <p>2450 Natomas Park Drive Sacramento, Sacramento County, CA</p>
	<p>Project Number: 1194-00006</p>
	<p>Date: 6/14/2021</p>

# California Tree & Landscape Consulting, Inc.

1243 High Street  
Auburn, CA 95603

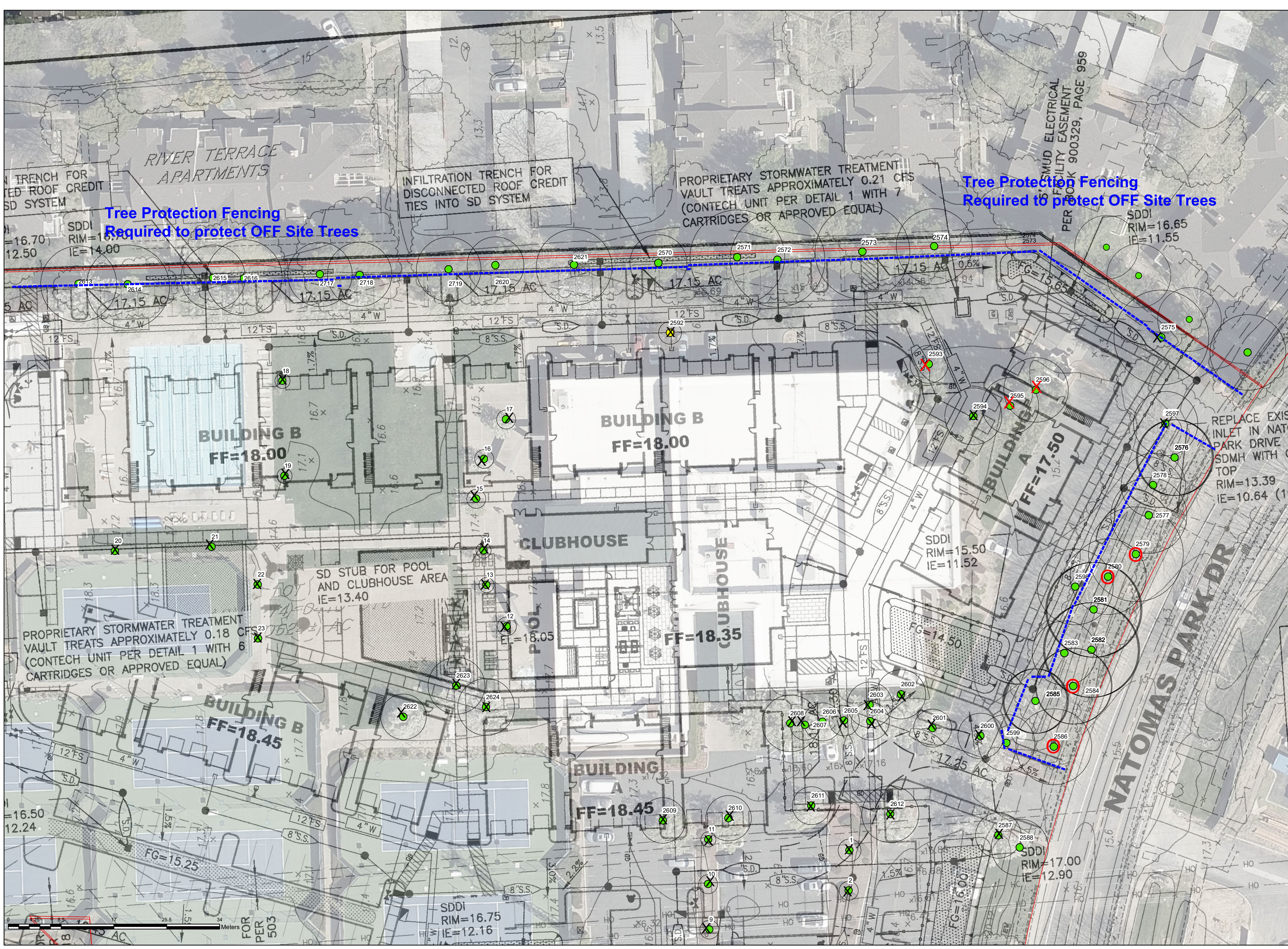
## TREE PROTECTION GENERAL REQUIREMENTS

- The project arborist for this project is California Tree & Landscape Consulting. The primary contact information is Nicole Harrison (530) 305-0165. The project arborist may continue to provide expertise and make additional recommendations during the construction process if and when additional impacts occur or tree response is poor. Monitoring and construction oversight by the project arborist is recommended for all projects and required when a final letter of assessment is required by the jurisdiction.
- The project arborist should inspect the exclusionary root protection fencing installed by the contractors prior to any grading and/or grubbing for compliance with the recommended protection zones. Additionally, the project arborist shall inspect the fencing at the onset of each phase of construction. The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.
- The project arborist should directly supervise any clearance pruning, irrigation, fertilization, placement of mulch and/or chemical treatments. If clearance pruning is required, the Project Arborist should approve the extent of foliage elevation and oversee the pruning to be performed by a contractor who is an ISA Certified Arborist. Clearance pruning should include removal of all the lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site.
- No trunk within the root protection zone of any trees shall be removed using a backhoe or other piece of grading equipment.
- Clearly designate an area on the site that is outside of the protection area of all trees where construction materials may be stored, and parking can take place. No materials or parking shall take place within the protection zones of any trees on or off the site.
- Any and all work to be performed inside the protected root zone fencing, including all grading and utility trenching, shall be approved and/or supervised by the project arborist.
- Trenching, if required, inside the protected root zone shall be approved and/or supervised by the project arborist and may be required to be performed by hand, by a hydraulic or air spade, or other method which will place pipes underneath the roots without damage to the roots.
- The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.

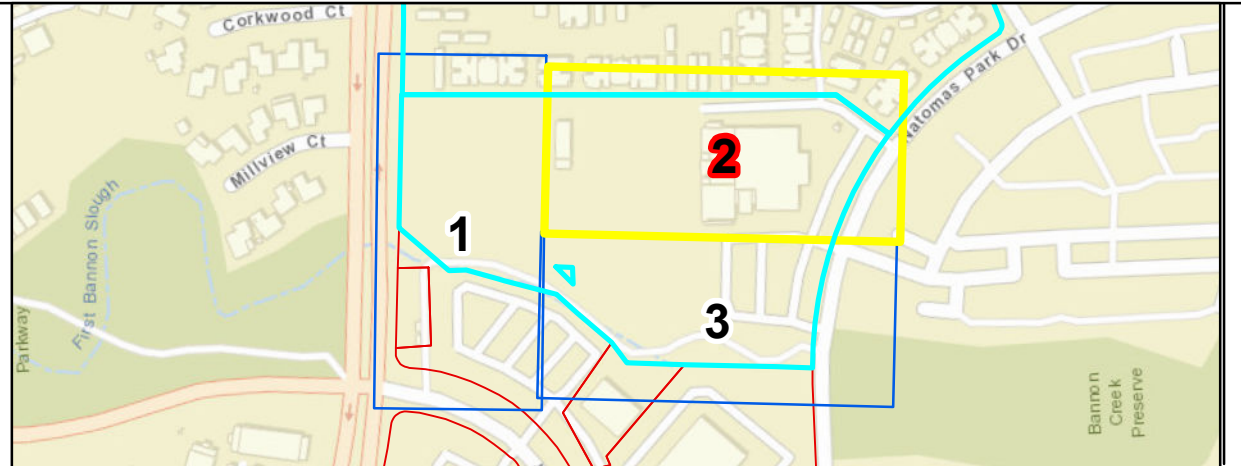


8.5" x 11" sign laminated in plastic spaced every 50' along the fence.

**TSX** TREE PROTECTION



## TREE PRESERVATION PLAN



>Tree locations are approximate and were collected using ISO apple products.  
>Property line information was downloaded from Sacramento County on 01/19/2021.  
>Development plans provided by LPAS Architecture dated 04/09/2021.

Property Line Measured	Arborist Rating
Tree Canopy Tree	0 Dead
Protection Fencing	1 Extreme Structure or Health Problems
Protected Tree TBR	2 Major Structure or Health Problems
X Unprotected Tree TBR	3 Fair - Minor Problems
O Unprotected Tree to be Saved for Mitigation Credit	4 Good - No Apparent Problems
	5 Excellent



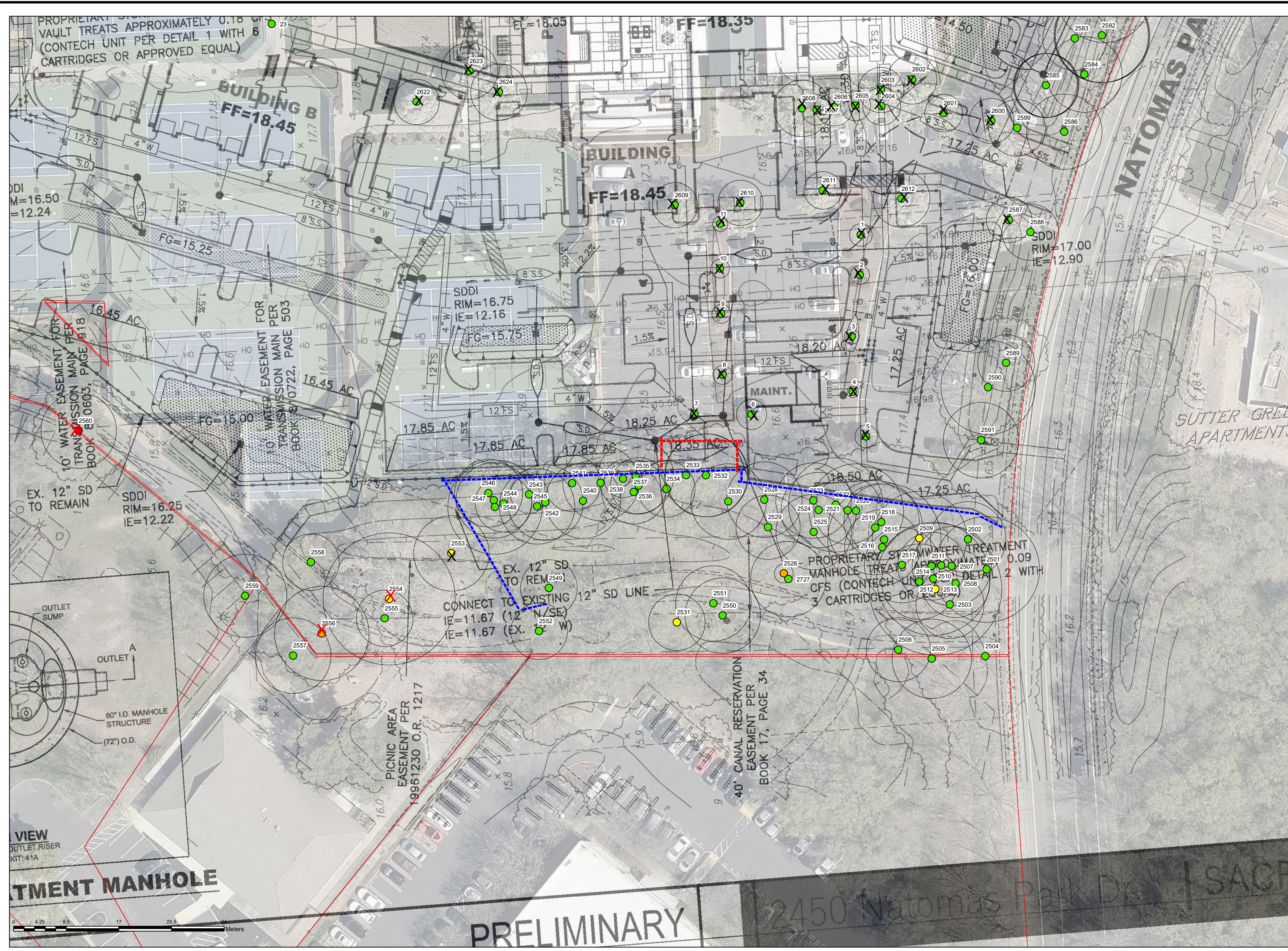
## NATOMAS PARK APARTMENTS

2450 Natomas Park Drive  
Sacramento, Sacramento County, CA

Sheet No.  
TPP 1.2

Project Number: 1194-00006

Date: 6/14/2021

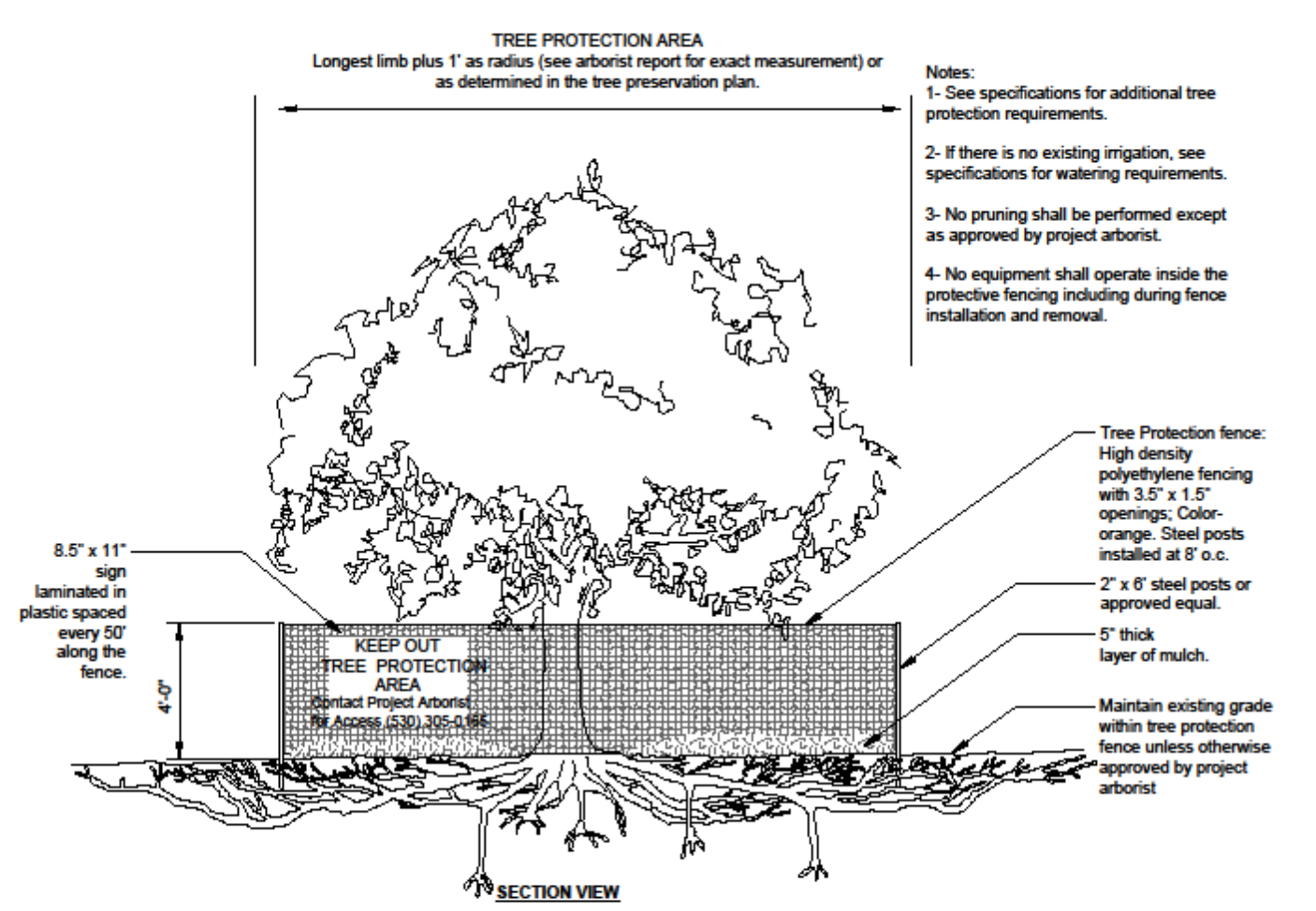


### California Tree & Landscape Consulting, Inc.

1243 High Street  
Auburn, CA 95603

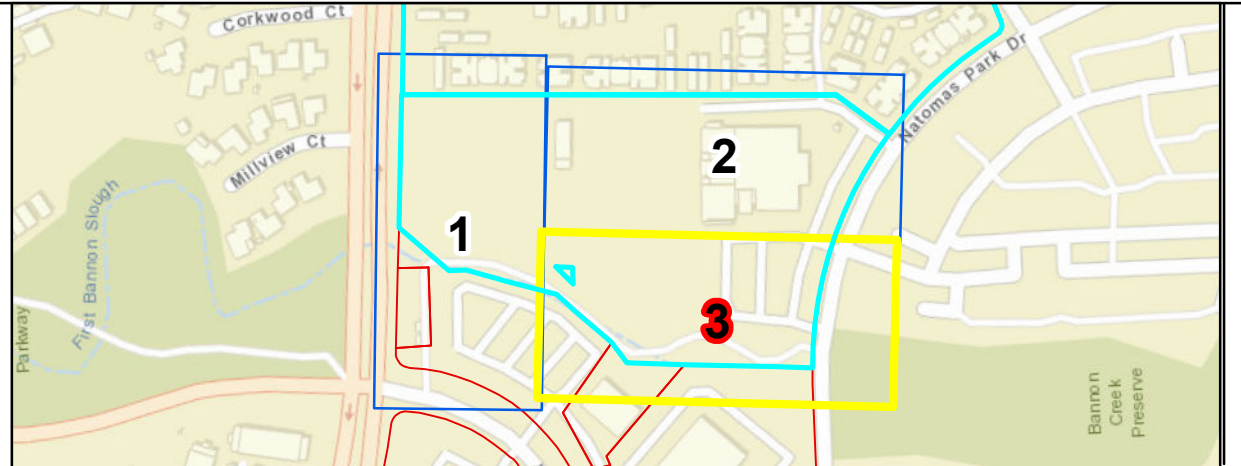
#### TREE PROTECTION GENERAL REQUIREMENTS

1. The project arborist for this project is California Tree & Landscape Consulting. The primary contact information is Nicole Harrison (530) 305-0165. The project arborist may continue to provide expertise and make additional recommendations during the construction process if and when additional impacts occur or tree response is poor. Monitoring and construction oversight by the project arborist is recommended for all projects and required when a final letter of assessment is required by the jurisdiction.
2. The project arborist should inspect the exclusionary root protection fencing installed by the contractors prior to any grading and/or grubbing for compliance with the recommended protection zones. Additionally, the project arborist shall inspect the fencing at the onset of each phase of construction. The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.
3. The project arborist should directly supervise any clearance pruning, irrigation, fertilization, placement of mulch and/or chemical treatments. If clearance pruning is required, the Project Arborist should approve the extent of foliage elevation and oversee the pruning to be performed by a contractor who is an ISA Certified Arborist. Clearance pruning should include removal of all the lower foliage that may interfere with equipment PRIOR to having grading or other equipment on site.
4. No trunk within the root protection zone of any trees shall be removed using a backhoe or other piece of grading equipment.
5. Clearly designate an area on the site that is outside of the protection area of all trees where construction materials may be stored, and parking can take place. No materials or parking shall take place within the protection zones of any trees on or off the site.
6. Any and all work to be performed inside the protected root zone fencing, including all grading and utility trenching, shall be approved and/or supervised by the project arborist.
7. Trenching, if required, inside the protected root zone shall be approved and/or supervised by the project arborist and may be required to be performed by hand, by a hydraulic or air spade, or other method which will place pipes underneath the roots without damage to the roots.
8. The root protection zone for trees is specified as the 'canopy radius' in Appendix 2 in the arborist report unless otherwise specified by the arborist. Note 'dripline' is not an acceptable location for installation of tree protection fencing.



TSX TREE PROTECTION

### TREE PRESERVATION PLAN



>Tree locations are approximate and were collected using ISO apple products.  
>Property line information was downloaded from Sacramento County on 01/19/2021.  
>Development plans provided by LPAS Architecture dated 04/09/2021.

Legend	Arborist Rating
Property Line Measured Tree	0 Dead
Canopy Tree Protection	1 Extreme Structure or Health Problems
Fencing	2 Major Structure or Health Problems
Protected Tree TBR	3 Fair - Minor Problems
X Unprotected Tree TBR	4 Good - No Apparent Problems
Unprotected Tree to be Saved for Mitigation Credit	5 Excellent



### NATOMAS PARK APARTMENTS

2450 Natomas Park Drive  
Sacramento, Sacramento County, CA

Sheet No.  
TPP 1.3

Project Number: 1194-00006

Date: 6/14/2021

Protected Trees are shown in Bold

## APPENDIX 2 – TREE DATA

Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
1		Maple	<i>Acer sp.</i>		5	6	3 Fair - Minor Problems	No		Proposed for Removal
2		Maple	<i>Acer sp.</i>		4	5	3 Fair - Minor Problems	No		Proposed for Removal
3		Maple	<i>Acer sp.</i>		3	4	3 Fair - Minor Problems	No		Proposed for Removal
4		Maple	<i>Acer sp.</i>		2	3	3 Fair - Minor Problems	No		Proposed for Removal
5		Holly Oak	<i>Quercus ilex</i>		5	6	3 Fair - Minor Problems	No		Proposed for Removal
6		Holly Oak	<i>Quercus ilex</i>		8	8	3 Fair - Minor Problems	No		Proposed for Removal
7		Holly Oak	<i>Quercus ilex</i>		1	1	3 Fair - Minor Problems	No		Proposed for Removal
8		Maple	<i>Acer sp.</i>		5	5	3 Fair - Minor Problems	No		Proposed for Removal
9		Maple	<i>Acer sp.</i>		5	5	3 Fair - Minor Problems	No		Proposed for Removal
10		Maple	<i>Acer sp.</i>		5	5	3 Fair - Minor Problems	No		Proposed for Removal
11		Maple	<i>Acer sp.</i>		4	4	3 Fair - Minor Problems	No		Proposed for Removal
12		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		5	5	3 Fair - Minor Problems	No		Proposed for Removal
13		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		4	4	3 Fair - Minor Problems	No		Proposed for Removal
14		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		4	4	3 Fair - Minor Problems	No		Proposed for Removal
15		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		5	5	3 Fair - Minor Problems	No		Proposed for Removal



Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
16		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		8	5	3 Fair - Minor Problems	No		Proposed for Removal
17		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		8	5	3 Fair - Minor Problems	No		Proposed for Removal
18		Queen Palm	<i>Syagrus romanzoffiana</i>		3	4	3 Fair - Minor Problems	No		Proposed for Removal
19		Queen Palm	<i>Syagrus romanzoffiana</i>		4	4	3 Fair - Minor Problems	No		Proposed for Removal
20		Mediterranean Fan Palm	<i>Chamaerops humilis</i>		7	5	3 Fair - Minor Problems	No		Proposed for Removal
21		Mediterranean Fan Palm	<i>Chamaerops humilis</i>		6	4	3 Fair - Minor Problems	No		Proposed for Removal
22		Mediterranean Fan Palm	<i>Chamaerops humilis</i>		8	8	3 Fair - Minor Problems	No		Proposed for Removal
23		Mediterranean Fan Palm	<i>Chamaerops humilis</i>		7	6	3 Fair - Minor Problems	No		Proposed for Removal
<b>24</b>	<b>Yes</b>	<b>Coast Redwood</b>	<b><i>Sequoia sempervirens</i></b>		<b>28</b>	<b>12</b>	<b>3 Fair - Minor Problems</b>	<b>Yes</b>	<b>Located apx. 10' east of property line.</b>	
<b>25</b>	<b>Yes</b>	<b>Coast Redwood</b>	<b><i>Sequoia sempervirens</i></b>		<b>30</b>	<b>14</b>	<b>3 Fair - Minor Problems</b>	<b>Yes</b>	<b>Located apx. 10' east of property line.</b>	
<b>26</b>	<b>Yes</b>	<b>Coast Redwood</b>	<b><i>Sequoia sempervirens</i></b>		<b>31</b>	<b>15</b>	<b>3 Fair - Minor Problems</b>	<b>Yes</b>	<b>Located apx. 10' east of property line.</b>	
<b>27-32</b>	<b>Yes</b>	<b>Coast Redwood</b>	<b><i>Sequoia sempervirens</i></b>		<b>+26</b>	<b>14</b>	<b>3 Fair - Minor Problems</b>	<b>Yes</b>	<b>Not Measured -no access, east of property line. 6 Total Trees</b>	Possible Impacts, Review in the field during development for minor changes in locations of infiltration

Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
2501		Red Oak	<i>Quercus rubra</i>		18	28	3 Fair - Minor Problems	No	One-sided south. Codominant at 10' with included bark. Closing wound on north side.	
2502		Red Oak	<i>Quercus rubra</i>		19	20	3 Fair - Minor Problems	No	One-sided east. Multiple codominant stems with inclusions.	
2503		Red Oak	<i>Quercus rubra</i>		14	18	3 Fair - Minor Problems	No	One-sided southwest. Multiple codominant stems with inclusions.	
2504		Red Oak	<i>Quercus rubra</i>		17		3 Fair - Minor Problems	No	Buttressing roots. Multiple codominant stems with inclusions starting at 8'.	
2505		Red Oak	<i>Quercus rubra</i>		12	21	3 Fair - Minor Problems	No	One-sided west. Multiple codominant stems with inclusions. Multiple 2-inch limb failures.	
2506		Red Oak	<i>Quercus rubra</i>		8	17	3 Fair - Minor Problems	No	One-sided west. Codominant at 6' with included bark. Second codominant stems with included bark at 7'. Multiple small limb failures.	
<b>2507</b>		<b>Valley Oak</b>	<b><i>Quercus lobata</i></b>		<b>20</b>	<b>21</b>	<b>3 Fair - Minor Problems</b>	<b>Yes</b>	<b>DBH measured at 2'. Codominant at 2.5' with included bark. Second limb 6". One-sided south. Poor structure. Multiple limb failures.</b>	
<b>2508</b>		<b>Valley Oak</b>	<b><i>Quercus lobata</i></b>		<b>20</b>	<b>18</b>	<b>3 Fair - Minor Problems</b>	<b>Yes</b>	<b>Codominant at 12' with included bark. One-sided west.</b>	
<b>2509</b>		<b>Valley Oak</b>	<b><i>Quercus lobata</i></b>		<b>13</b>	<b>25</b>	<b>2 Major Structure or Health Problems</b>	<b>Yes</b>	<b>One-sided east. Strong lean east. Large branch failure, possibly from another tree.</b>	

Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
2510		Valley Oak	<i>Quercus lobata</i>		18		3 Fair - Minor Problems	Yes	Codominant at 7' with included bark. Second codominant stems at 8' with included bark with 4-inch limb failure. Deadwood in canopy.	
2511		Valley Oak	<i>Quercus lobata</i>		18	18	3 Fair - Minor Problems	Yes	Phototropic growth. Competing with neighboring trees.	
2512		Valley Oak	<i>Quercus lobata</i>		18	30	3 Fair - Minor Problems	Yes	One-sided west. Codominant at 7'. Leans west.	
2513		Valley Oak	<i>Quercus lobata</i>		22	35	2 Major Structure or Health Problems	Yes	Strong lean west. One-sided with codominant stems at 5' with included bark. Multiple clearance pruning cuts.	
2514		Valley Oak	<i>Quercus lobata</i>		15	20	3 Fair - Minor Problems	Yes	DBH measured at 1 foot. Second limb 9". Codominant with included bark. One-sided west.	
2515		Valley Oak	<i>Quercus lobata</i>		25	30	3 Fair - Minor Problems	Yes	Codominant at 15' with included bark.	
2516		Valley Oak	<i>Quercus lobata</i>		11	20	3 Fair - Minor Problems	No	One-sided west. Suppressed by neighboring trees.	
2517		Valley Oak	<i>Quercus lobata</i>		8	20	3 Fair - Minor Problems	No	One-sided west. Suppressed by neighboring trees. Small branch failures.	
2518		Valley Oak	<i>Quercus lobata</i>		12	20	3 Fair - Minor Problems	Yes	One-sided east. Suppressed by neighboring trees.	
2519		Valley Oak	<i>Quercus lobata</i>		25	25	3 Fair - Minor Problems	Yes	Codominant at 5' with included bark. Multiple codominant stems with inclusions up canopy.	
2520		Valley Oak	<i>Quercus lobata</i>		25	25	3 Fair - Minor Problems	Yes	Codominant at 5' with included bark. One-sided east. Small limb deadwood.	
2521		Valley Oak	<i>Quercus lobata</i>		25	18	3 Fair - Minor Problems	Yes	One-sided east. Suppressed by neighboring trees.	

Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
2522		Valley Oak	<i>Quercus lobata</i>		18	25	3 Fair - Minor Problems	Yes	One-sided/leaning east.	
2523		Valley Oak	<i>Quercus lobata</i>		17	20	3 Fair - Minor Problems	Yes	Multiple codominant stems at 12' with included bark. Branches crossing. Poor structure.	
2524		Valley Oak	<i>Quercus lobata</i>		12	20	3 Fair - Minor Problems	Yes	Suppressed by neighboring trees. Thin canopy. Epicormic growth.	
2525		Valley Oak	<i>Quercus lobata</i>		29	20	3 Fair - Minor Problems	Yes	DBH measured at 3.5'. Codominant at 4' with included bark. Multiple codominant stems with inclusions throughout canopy. One-sided west.	
2526		Valley Oak	<i>Quercus lobata</i>		8	5	1 Extreme Structure or Health Problems	No	Multiple branch failures. Topping cuts.	
2527		Valley Oak	<i>Quercus lobata</i>		10	20	3 Fair - Minor Problems	No	One-sided southwest.	
2528		Valley Oak	<i>Quercus lobata</i>		22	20	3 Fair - Minor Problems	Yes	Most of canopy on east side, codominant at 15' with included bark. Multiple codominant stems with inclusions throughout canopy. Small limb failures.	
2529		Valley Oak	<i>Quercus lobata</i>		19	17	3 Fair - Minor Problems	Yes	One-sided west. Codominant at 5' with included bark.	
2530		Valley Oak	<i>Quercus lobata</i>		23	20	3 Fair - Minor Problems	Yes	Multiple codominant stems at 10' and up with included bark. Majority of canopy on east side.	
2531		Valley Oak	<i>Quercus lobata</i>		35	15	2 Major Structure or Health Problems	Yes	Multiple limb failures and bark defects.	
2532		Valley Oak	<i>Quercus lobata</i>		13	22	3 Fair - Minor Problems	Yes	One-sided east. Codominant at 15' with included bark.	

Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
2534		Valley Oak	<i>Quercus lobata</i>		17	15	3 Fair - Minor Problems	Yes	Codominant at 5' with included bark. Poor structure.	
2535		Valley Oak	<i>Quercus lobata</i>		10	20	3 Fair - Minor Problems	No	One-sided east. Suppressed by neighboring trees.	
2536		Valley Oak	<i>Quercus lobata</i>		17	15	3 Fair - Minor Problems	Yes	Codominant at 15' with included bark. Poor structure, growing into canopy of neighboring trees. Small limb limb deadwood.	
2537		Valley Oak	<i>Quercus lobata</i>		27	17	3 Fair - Minor Problems	Yes	DBH measured at 3'. Codominant at 3.5' with included bark. One-sided west.	
2538		Valley Oak	<i>Quercus lobata</i>		8	10	3 Fair - Minor Problems	No	One-sided east. Epicormic growth.	
2539		Valley Oak	<i>Quercus lobata</i>		25	20	3 Fair - Minor Problems	Yes	Multiple codominant stems with included bark. Poor structure.	
2540		Valley Oak	<i>Quercus lobata</i>		13	20	3 Fair - Minor Problems	Yes	One-sided west.	
2541		Valley Oak	<i>Quercus lobata</i>		19	15	3 Fair - Minor Problems	Yes		
2542		Sawleaf Zelkova	<i>Zelkova serrata</i>		22	20	3 Fair - Minor Problems	No	DBH measured at 3'. Codominant at 3.5' with included bark. One-sided west with branches 3' from ground.	
2543		Valley Oak	<i>Quercus lobata</i>		9	10	3 Fair - Minor Problems	No	One-sided east.	
2544		Valley Oak	<i>Quercus lobata</i>		7	15	3 Fair - Minor Problems	No	One-sided west. Suppressed by neighboring trees.	
2545		Valley Oak	<i>Quercus lobata</i>		16	20	3 Fair - Minor Problems	Yes	One-sided east. Suppressed by neighboring trees.	
2546		Valley Oak	<i>Quercus lobata</i>		26	18	3 Fair - Minor Problems	Yes	Codominant at 5' with included bark. Crossing branches.	

Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
2547		Valley Oak	<i>Quercus lobata</i>		10	20	3 Fair - Minor Problems	No	Codominant at 5' with included bark. Poor structure.	
2548		Valley Oak	<i>Quercus lobata</i>		18	25	3 Fair - Minor Problems	Yes	One-sided west. Codominant at 10' with included bark, 4-6" branch failures.	
2549		Coast Live Oak	<i>Quercus agrifolia</i>		18	15	3 Fair - Minor Problems	Yes	One-sided west with correction at top of canopy. Mild trunk damage from minor vandalism.	
2550		Valley Oak	<i>Quercus lobata</i>		25	20	3 Fair - Minor Problems	Yes	Codominant at 4.5' with included bark. One-sided east.	
2551		Valley Oak	<i>Quercus lobata</i>		14	20	3 Fair - Minor Problems	Yes	Codominant at 1 foot. Second branch at 6". One-sided east.	
2552		Coast Live Oak	<i>Quercus agrifolia</i>		16	15	3 Fair - Minor Problems	Yes	Bark damage on north side. Codominant at 10 and 11' with included bark.	
2553		Fremont Cottonwood	<i>Populus fremontii</i>		11	20	2 Major Structure or Health Problems	No	Splits at 6". Second branch at 9". Multiple closing pruning cuts, epicormic growth. Poor structure. Leans east.	<b>Proposed for Removal</b>
2554		Fremont Cottonwood	<i>Populus fremontii</i>	25	25	35	2 Major Structure or Health Problems	Yes	Very large multi stem. Only able to measure one. Multiple large pruning cuts. Multiple large limb failures. Poor structure.	<b>Proposed for Removal with Waiver due to uncorrectible structural defect</b>
2555		Valley Oak	<i>Quercus lobata</i>		10	15	3 Fair - Minor Problems	No	Leans southwest. Suppressed by neighboring Cottonwood.	
2556		Fremont Cottonwood	<i>Populus fremontii</i>		46	25	1 Extreme Structure or Health Problems	Yes	Leans west. One-sided canopy, small limb failures high up in canopy.	<b>Proposed for Removal with Waiver due to High Risk</b>

Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
2557	Yes	Coast Live Oak	<i>Quercus agrifolia</i>	Yes	27	20	2 Major Structure or Health Problems	Yes	Codominant at 10' with included bark. Multiple codominant stems up canopy. Bark damage on north and south sides.	Treat for Disease
2558		Coast Live Oak	<i>Quercus agrifolia</i>		16	15	3 Fair - Minor Problems	Yes	Codominant at 10' with included bark. Small branch deadwood.	Treat for Disease
2559	Yes	Coast Live Oak	<i>Quercus agrifolia</i>	Yes	24	22	3 Fair - Minor Problems	Yes	Multiple codominant stems, first one at 10' with included bark. Multiple closing pruning cuts, borer bark damage to lower trunk.	Treat for Disease
2560		Coast Live Oak	<i>Quercus agrifolia</i>		25	20	0 - Dead	Yes	Multiple codominant stems starting at 10' with included bark. Leaves are brown and dry. Tree is 90% dead, suspect SOD.	<i>Remove with Waiver due to Condition - Dead due to Disease</i>
2561		Coast Live Oak	<i>Quercus agrifolia</i>		23	25	0 - Dead	Yes	Multiple codominant stems starting at 10'. Leaves are brown and dry. Borer damage on bark. Tree is 90% dead, suspect SOD.	<i>Remove with Waiver due to Condition - Dead due to Disease</i>
2562		Coast Live Oak	<i>Quercus agrifolia</i>		19	15	2 Major Structure or Health Problems	Yes	Codominant at 8' with included bark. Leans southwest. Failure at top of canopy. Bug bark damage.	<i>Remove with Waiver due to Condition - Diseased</i>
2563		Coast Live Oak	<i>Quercus agrifolia</i>		21	20	2 Major Structure or Health Problems	Yes	Slight lean southwest. Bug bark damage.	Diseased - Treat or Remove
2564		Coast Live Oak	<i>Quercus agrifolia</i>		24	20	3 Fair - Minor Problems	Yes	Leans southwest.	Diseased - Treat
2565	Yes	Deodar Cedar	<i>Cedrus deodara</i>		32	25	3 Fair - Minor Problems	Yes	Slight lean southwest. Small branch deadwood.	
2566	Yes	Coast Redwood	<i>Sequoia sempervirens</i>		47	15	3 Fair - Minor Problems	Yes		

Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
2567		Deodar Cedar	<i>Cedrus deodara</i>		26	15	3 Fair - Minor Problems	Yes		
2568-39421		Valley Oak	<i>Quercus lobata</i>		53	45	3 Fair - Minor Problems	Yes	8-inch branch failure in canopy southwest side. Large cavity on northeast side from large limb failure.	
2569		Deodar Cedar	<i>Cedrus deodara</i>		20	25	3 Fair - Minor Problems	No	Leans slightly west. Trunk flare is over utility entry/ supporting roots growing around manhole.	Proposed for Removal
2570		Holly Oak	<i>Quercus ilex</i>		8	15	3 Fair - Minor Problems	No	Leans southwest. One-sided canopy suppressed by neighboring tree.	
2571		Holly Oak	<i>Quercus ilex</i>		15	25	3 Fair - Minor Problems	No	One-sided west. Suppressed by neighboring trees.	
2572		Holly Oak	<i>Quercus ilex</i>		19	25	3 Fair - Minor Problems	No	Multiple codominant stems starting at 9'. Leans west. One-sided canopy suppressed by neighboring Redwoods.	
2573		Holly Oak	<i>Quercus ilex</i>		13	25	3 Fair - Minor Problems	No	Multiple codominant stems starting at 10'. Leans west. Suppressed by neighboring Redwoods.	
2574		Holly Oak	<i>Quercus ilex</i>		14	20	3 Fair - Minor Problems	No	2 foot closing trunk wound on north side. Leans west. One-sided canopy suppressed by neighboring Redwoods.	
2575		Holly Oak	<i>Quercus ilex</i>		18	25	3 Fair - Minor Problems	No	Multiple codominant stems starting at 10'. One-sided canopy west. Suppressed by neighboring Redwoods.	
2576		Red Oak	<i>Quercus rubra</i>		25	20	3 Fair - Minor Problems	Yes	Multiple codominant stems starting at 15'. Small limb failures.	



Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
2577		Red Oak	<i>Quercus rubra</i>		17	20	3 Fair - Minor Problems	No	Codominant at 6' with included bark. Most of canopy on south side. Small limb failures.	
2578		Red Oak	<i>Quercus rubra</i>		13	17	3 Fair - Minor Problems	No	Multiple codominant stems starting at 10'. One-sided north.	Impacted, move storm drain
<b>2579</b>		<b>Red Oak</b>	<b><i>Quercus rubra</i></b>		<b>21</b>	<b>25</b>	<b>3 Fair - Minor Problems</b>	<b>No</b>	Multiple codominant stems starting at 10'. Small limb failures.	<b>Preserve for Mitigation Credit</b>
<b>2580</b>		<b>Red Oak</b>	<b><i>Quercus rubra</i></b>		<b>17</b>	<b>20</b>	<b>3 Fair - Minor Problems</b>	<b>No</b>	Multiple codominant stems with including bark starting at 10'.	<b>Preserve for Mitigation Credit</b>
<b>2581</b>		<b>Red Oak</b>	<b><i>Quercus rubra</i></b>		<b>25</b>	<b>25</b>	<b>3 Fair - Minor Problems</b>	<b>Yes</b>	<b>Multiple codominant stems starting at 10'.</b>	
<b>2582</b>		<b>Red Oak</b>	<b><i>Quercus rubra</i></b>		<b>27</b>	<b>25</b>	<b>3 Fair - Minor Problems</b>	<b>Yes</b>	<b>Multiple codominant stems starting at 10'. Small limb failures.</b>	
2583		Red Oak	<i>Quercus rubra</i>		11	17	3 Fair - Minor Problems	No	Codominant at 6' with multiple codominant stems at 7 and 8'. One-sided north.	Impacted, move storm drain
<b>2584</b>		<b>Red Oak</b>	<b><i>Quercus rubra</i></b>		<b>21</b>	<b>20</b>	<b>3 Fair - Minor Problems</b>	<b>No</b>	Multiple codominant stems starting at 10'.	<b>Preserve for Mitigation Credit</b>
<b>2585</b>		<b>Red Oak</b>	<b><i>Quercus rubra</i></b>		<b>25</b>	<b>17</b>	<b>3 Fair - Minor Problems</b>	<b>Yes</b>	<b>Small limb failure south and west sides. Most of canopy on north side. Multiple codominant starting at 6'.</b>	<b>Impacted, move storm drain</b>
<b>2586</b>		<b>Red Oak</b>	<b><i>Quercus rubra</i></b>		<b>22</b>	<b>20</b>	<b>3 Fair - Minor Problems</b>	<b>No</b>	Multiple codominant starting at 6'. One-sided canopy southwest.	<b>Preserve for Mitigation Credit</b>
2587		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		13	12	3 Fair - Minor Problems	No	Codominant at 6' with included bark. One-sided north. Small limb failures.	Proposed for Removal
2588		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		17	15	3 Fair - Minor Problems	No	Multiple codominant stems at 6'.	Proposed for Removal

Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
2589		Red Oak	<i>Quercus rubra</i>		19	15	3 Fair - Minor Problems	No	Codominant at 12'. Multiple small limb failures. Borer damage.	Preserve for Mitigation Credit
2590		Red Oak	<i>Quercus rubra</i>		22	25	3 Fair - Minor Problems	No	Multiple codominant stems starting at 10'. Small limb failures.	
2591		Red Oak	<i>Quercus rubra</i>		11	20	3 Fair - Minor Problems	No	Codominant at 6' with included bark. Uneven canopy. Small branch failures on north side with woodpecker damage. One-sided south.	
2592		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		9	6	2 Major Structure or Health Problems	No	In parking lot island. Leans east. Multiple cankers throughout trunk.	Proposed for Removal
2593		Canary Island Pine	<i>Pinus canariensis</i>		28	10	3 Fair - Minor Problems	Yes	Surfacing girdling roots.	Proposed for Removal
2594		Canary Island Pine	<i>Pinus canariensis</i>		20	15	3 Fair - Minor Problems	No	Suppressed by surrounding trees.	Proposed for Removal
2595		Canary Island Pine	<i>Pinus canariensis</i>		31	15	3 Fair - Minor Problems	Yes	Suppressed by neighboring trees.	Proposed for Removal
2596		Canary Island Pine	<i>Pinus canariensis</i>		28	17	3 Fair - Minor Problems	Yes	Suppressed by surrounding trees.	Proposed for Removal
2597		Red Oak	<i>Quercus rubra</i>		15	17	3 Fair - Minor Problems	No	One-sided north. Multiple codominant stems starting at 8'.	Impacted, move storm drain
2598		Red Oak	<i>Quercus rubra</i>		15	20	3 Fair - Minor Problems	No	One-sided north. Suppressed by neighboring trees.	Impacted, move storm drain
2599		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		12	15	3 Fair - Minor Problems	No	Multiple codominant starting at 7'.	Proposed for Removal
2600		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		9	12	3 Fair - Minor Problems	No	Codominant at 6' with included bark.	Proposed for Removal

Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
2601		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		10	10	3 Fair - Minor Problems	No	Multiple codominant stems starting at 6'. Small branch failures. Surfacing roots, mistletoe.	Proposed for Removal
2602		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		12	13	3 Fair - Minor Problems	No	Multiple codominant stems starting at 10'. Small pruning cuts on north side.	Proposed for Removal
2603		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		13	12	3 Fair - Minor Problems	No	Multiple codominant stems starting at 6'. Multiple pruning cuts.	Proposed for Removal
2604		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		11	10	3 Fair - Minor Problems	No	Multiple codominant stems starting at 6'. Multiple pruning cuts.	Proposed for Removal
2605		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		8	8	3 Fair - Minor Problems	No	Codominant at 10' with included bark.	Proposed for Removal
2606		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		11	10	3 Fair - Minor Problems	No	Multiple codominant stems starting at 7'. Multiple pruning cuts. One-sided canopy west.	Proposed for Removal
2607		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		10	8	3 Fair - Minor Problems	No	Multiple codominant stems starting at 7'. Multiple pruning cuts.	Proposed for Removal
2608		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		12	15	3 Fair - Minor Problems	No	Multiple codominant stems starting at 9'. Multiple pruning cuts.	Proposed for Removal
2609		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		11	12	3 Fair - Minor Problems	No	Parking lot tree. Multiple codominant stems with included bark starting at 9'.	Proposed for Removal
2610		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		10	12	3 Fair - Minor Problems	No	Parking lot tree. Multiple codominant stems starting at 9'.	Proposed for Removal
2611		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		9	10	3 Fair - Minor Problems	No	Parking lot tree. Multiple codominant stems starting at 6'.	Proposed for Removal

Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
2612		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		13	15	3 Fair - Minor Problems	No	Parking lot tree. Multiple codominant stems starting at 9'.	Proposed for Removal
2613		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		19	20	3 Fair - Minor Problems	No	Multiple codominant stems with included bark starting at 6'. 5-inch branch failures high up in canopy.	
2614		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		16	22	3 Fair - Minor Problems	No	Multiple codominant stems with included bark starting at 6'. One-sided canopy southwest.	
2615		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		12	17	3 Fair - Minor Problems	No	Multiple codominant stems starting at 10'.	
2616		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		18	20	3 Fair - Minor Problems	No	Multiple codominant stems starting at 10'. One-sided canopy west.	
2617		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		18	17	3 Fair - Minor Problems	No	Multiple codominant stems starting at 6'. One-sided canopy west.	
2618		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		16	17	3 Fair - Minor Problems	No	Codominant starting at 6'. One-sided canopy west.	
2619		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		15	17	3 Fair - Minor Problems	No	Multiple codominant stems starting at 7'. One-sided canopy west. Suppressed by neighboring trees.	
2620		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		12	15	3 Fair - Minor Problems	No	Multiple codominant stems starting at 8'. One-sided canopy west. Suppressed by neighboring trees.	
2621		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		22	20	3 Fair - Minor Problems	No	Multiple codominant stems starting at 10'. One-sided canopy west. Multiple small to medium branch failures.	

Tree	Off-Site	Common	Botanical	Multi-	Total	DLR	Condition	Protected	Notable Characteristics	Development Status
2622		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		11	12	3 Fair - Minor Problems	No	Multiple codominant stems starting at 5'.	Proposed for Removal
2623		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		11	15	3 Fair - Minor Problems	No	Multiple codominant stems starting at 5'. One-sided canopy northeast.	Proposed for Removal
2624		Flowering Ornamental Pear	<i>Pyrus calleryana</i>		15	15	3 Fair - Minor Problems	No	Multiple codominant stems starting at 5'. Epicormic tree.	Proposed for Removal

**LIST OF PROTECTED TREES**

Tree	Off-Site	Species Common Name	Botanical Name	Multi-Stem Dia.	Total DSH	DLR	Condition	Notable Characteristics	Development Status
24	Yes	Coast Redwood	<i>Sequoia sempervirens</i>		28	12	3 Fair - Minor Problems	Located apx. 10' east of property line.	Preserved (When all arborist recommendations are followed)
25	Yes	Coast Redwood	<i>Sequoia sempervirens</i>		30	14	3 Fair - Minor Problems	Located apx. 10' east of property line.	Preserved (When all arborist recommendations are followed)
26	Yes	Coast Redwood	<i>Sequoia sempervirens</i>		31	15	3 Fair - Minor Problems	Located apx. 10' east of property line.	Preserved (When all arborist recommendations are followed)
27	Yes	Coast Redwood	<i>Sequoia sempervirens</i>		26	14	3 Fair - Minor Problems	Located apx. 10' east of property line.	Preserved (When all arborist recommendations are followed)
2507		Valley Oak	<i>Quercus lobata</i>		20	21	3 Fair - Minor Problems	DBH measured at 2'. Codominant at 2.5' with included bark. Second limb 6". One-sided south. Poor structure. Multiple limb failures.	Preserved
2508		Valley Oak	<i>Quercus lobata</i>		20	18	3 Fair - Minor Problems	Codominant at 12' with included bark. One-sided west.	Preserved

Tree	Off-Site	Species Common Name	Botanical Name	Multi-Stem Dia.	Total DSH	DLR	Condition	Notable Characteristics	Development Status
2509		Valley Oak	<i>Quercus lobata</i>		13	25	2 Major Structure or Health Problems	One-sided east. Strong lean east. Large branch failure, possibly from another tree.	Preserved
2510		Valley Oak	<i>Quercus lobata</i>		18		3 Fair - Minor Problems	Codominant at 7' with included bark. Second codominant stems at 8' with included bark with 4-inch limb failure. Deadwood in canopy.	Preserved
2511		Valley Oak	<i>Quercus lobata</i>		18	18	3 Fair - Minor Problems	Phototropic growth. Competing with neighboring trees.	Preserved
2512		Valley Oak	<i>Quercus lobata</i>		18	30	3 Fair - Minor Problems	One-sided west. Codominant at 7'. Leans west.	Preserved
2513		Valley Oak	<i>Quercus lobata</i>		22	35	2 Major Structure or Health Problems	Strong lean west. One-sided with codominant stems at 5' with included bark. Multiple clearance pruning cuts.	Preserved
2514		Valley Oak	<i>Quercus lobata</i>		15	20	3 Fair - Minor Problems	DBH measured at 1 foot. Second limb 9". Codominant with included bark. One-sided west.	Preserved
2515		Valley Oak	<i>Quercus lobata</i>		25	30	3 Fair - Minor Problems	Codominant at 15' with included bark.	Preserved
2518		Valley Oak	<i>Quercus lobata</i>		12	20	3 Fair - Minor Problems	One-sided east. Suppressed by neighboring trees.	Preserved
2519		Valley Oak	<i>Quercus lobata</i>		25	25	3 Fair - Minor Problems	Codominant at 5' with included bark. Multiple codominant stems with inclusions up canopy.	Preserved
2520		Valley Oak	<i>Quercus lobata</i>		25	25	3 Fair - Minor Problems	Codominant at 5' with included bark. One-sided east. Small limb deadwood.	Preserved (When all arborist recommendations are followed)
2521		Valley Oak	<i>Quercus lobata</i>		25	18	3 Fair - Minor Problems	One-sided east. Suppressed by neighboring trees.	Preserved (When all arborist recommendations are followed)

Tree	Off-Site	Species Common Name	Botanical Name	Multi-Stem Dia.	Total DSH	DLR	Condition	Notable Characteristics	Development Status
2522		Valley Oak	<i>Quercus lobata</i>		18	25	3 Fair - Minor Problems	One-sided/leaning east.	Preserved (When all arborist recommendations are followed)
2523		Valley Oak	<i>Quercus lobata</i>		17	20	3 Fair - Minor Problems	Multiple codominant stems at 12' with included bark. Branches crossing. Poor structure.	Preserved (When all arborist recommendations are followed)
2524		Valley Oak	<i>Quercus lobata</i>		12	20	3 Fair - Minor Problems	Suppressed by neighboring trees. Thin canopy. Epicormic growth.	Preserved
2525		Valley Oak	<i>Quercus lobata</i>		29	20	3 Fair - Minor Problems	DBH measured at 3.5'. Codominant at 4' with included bark. Multiple codominant stems with inclusions throughout canopy. One-sided west.	Preserved
2528		Valley Oak	<i>Quercus lobata</i>		22	20	3 Fair - Minor Problems	Most of canopy on east side, codominant at 15' with included bark. Multiple codominant stems with inclusions throughout canopy. Small limb failures.	Preserved (When all arborist recommendations are followed)
2529		Valley Oak	<i>Quercus lobata</i>		19	17	3 Fair - Minor Problems	One-sided west. Codominant at 5' with included bark.	Preserved
2530		Valley Oak	<i>Quercus lobata</i>		23	20	3 Fair - Minor Problems	Multiple codominant stems at 10' and up with included bark. Majority of canopy on east side.	Preserved
2531		Valley Oak	<i>Quercus lobata</i>		35	15	2 Major Structure or Health Problems	Multiple limb failures and bark defects.	Preserved
2532		Valley Oak	<i>Quercus lobata</i>		13	22	3 Fair - Minor Problems	One-sided east. Codominant at 15' with included bark.	Preserved (When all arborist recommendations are followed)
2534		Valley Oak	<i>Quercus lobata</i>		17	15	3 Fair - Minor Problems	Codominant at 5' with included bark. Poor structure.	Preserved (When all arborist recommendations are followed)

Tree	Off-Site	Species Common Name	Botanical Name	Multi-Stem Dia.	Total DSH	DLR	Condition	Notable Characteristics	Development Status
2536		Valley Oak	<i>Quercus lobata</i>		17	15	3 Fair - Minor Problems	Codominant at 15' with included bark. Poor structure, growing into canopy of neighboring trees. Small limb limb deadwood.	Preserved (When all arborist recommendations are followed)
2537		Valley Oak	<i>Quercus lobata</i>		27	17	3 Fair - Minor Problems	DBH measured at 3'. Codominant at 3.5' with included bark. One-sided west.	Preserved
2539		Valley Oak	<i>Quercus lobata</i>		25	20	3 Fair - Minor Problems	Multiple codominant stems with included bark. Poor structure.	Preserved (When all arborist recommendations are followed)
2540		Valley Oak	<i>Quercus lobata</i>		13	20	3 Fair - Minor Problems	One-sided west.	Preserved
2541		Valley Oak	<i>Quercus lobata</i>		19	15	3 Fair - Minor Problems		Preserved (When all arborist recommendations are followed)
2545		Valley Oak	<i>Quercus lobata</i>		16	20	3 Fair - Minor Problems	One-sided east. Suppressed by neighboring trees.	Preserved
2546		Valley Oak	<i>Quercus lobata</i>		26	18	3 Fair - Minor Problems	Codominant at 5' with included bark. Crossing branches.	Preserved
2548		Valley Oak	<i>Quercus lobata</i>		18	25	3 Fair - Minor Problems	One-sided west. Codominant at 10' with included bark, 4-6" branch failures.	Preserved
2549		Coast Live Oak	<i>Quercus agrifolia</i>		18	15	3 Fair - Minor Problems	One-sided west with correction at top of canopy. Mild trunk damage from minor vandalism.	Preserved
2550		Valley Oak	<i>Quercus lobata</i>		25	20	3 Fair - Minor Problems	Codominant at 4.5' with included bark. One-sided east.	Preserved
2551		Valley Oak	<i>Quercus lobata</i>		14	20	3 Fair - Minor Problems	Codominant at 1 foot. Second branch at 6". One-sided east.	Preserved
2552		Coast Live Oak	<i>Quercus agrifolia</i>		16	15	3 Fair - Minor Problems	Bark damage on north side. Codominant at 10 and 11' with included bark.	Preserved



Tree	Off-Site	Species Common Name	Botanical Name	Multi-Stem Dia.	Total DSH	DLR	Condition	Notable Characteristics	Development Status
2554		Fremont Cottonwood	<i>Populus fremontii</i>	25	25	35	2 Major Structure or Health Problems	Very large multi stem. Only able to measure one. Multiple large pruning cuts. Multiple large limb failures. Poor structure.	<b>Proposed for Removal with Waiver due to uncorrectible structural defect</b>
2556		Fremont Cottonwood	<i>Populus fremontii</i>		46	25	1 Extreme Structure or Health Problems	Leans west. One-sided canopy, small limb failures high up in canopy.	<b>Proposed for Removal with Waiver due to High Risk</b>
2557	Yes	Coast Live Oak	<i>Quercus agrifolia</i>		27	20	2 Major Structure or Health Problems	Codominant at 10' with included bark. Multiple codominant stems up canopy. Bark damage on north and south sides.	Treat for Disease
2558		Coast Live Oak	<i>Quercus agrifolia</i>		16	15	3 Fair - Minor Problems	Codominant at 10' with included bark. Small branch deadwood.	Treat for Disease
2559	Yes	Coast Live Oak	<i>Quercus agrifolia</i>		24	22	3 Fair - Minor Problems	Multiple codominant stems, first one at 10' with included bark. Multiple closing pruning cuts, borer bark damage to lower trunk.	Treat for Disease
2560		Coast Live Oak	<i>Quercus agrifolia</i>		25	20	0 - Dead	Multiple codominant stems starting at 10' with included bark. Leaves are brown and dry. Tree is 90% dead, suspect SOD.	<b>Remove with Waiver due to Condition - Dead due to Disease</b>
2561		Coast Live Oak	<i>Quercus agrifolia</i>		23	25	0 - Dead	Multiple codominant stems starting at 10'. Leaves are brown and dry. Borer damage on bark. Tree is 90% dead, suspect SOD.	<b>Remove with Waiver due to Condition - Dead due to Disease</b>
2562		Coast Live Oak	<i>Quercus agrifolia</i>		19	15	2 Major Structure or Health Problems	Codominant at 8' with included bark. Leans southwest. Failure at top of canopy. Bug bark damage.	<b>Remove with Waiver due to Condition - Diseased</b>

Tree	Off-Site	Species Common Name	Botanical Name	Multi-Stem Dia.	Total DSH	DLR	Condition	Notable Characteristics	Development Status
2563		Coast Live Oak	<i>Quercus agrifolia</i>		21	20	2 Major Structure or Health Problems	Slight lean southwest. Bug bark damage.	Diseased - Treat or Remove
2564		Coast Live Oak	<i>Quercus agrifolia</i>		24	20	3 Fair - Minor Problems	Leans southwest.	Diseased - Treat
2565	Yes	Deodar Cedar	<i>Cedrus deodara</i>		32	25	3 Fair - Minor Problems	Slight lean southwest. Small branch deadwood.	Preserved
2566	Yes	Coast Redwood	<i>Sequoia sempervirens</i>		47	15	3 Fair - Minor Problems		Preserved
2567		Deodar Cedar	<i>Cedrus deodara</i>		26	15	3 Fair - Minor Problems		Preserved (When all arborist recommendations are followed)
2568-39421		Valley Oak	<i>Quercus lobata</i>		53	45	3 Fair - Minor Problems	8-inch branch failure in canopy southwest side. Large cavity on northeast side from large limb failure.	Preserved
2576		Red Oak	<i>Quercus rubra</i>		25	20	3 Fair - Minor Problems	Multiple codominant stems starting at 15'. Small limb failures.	Impacted, move storm drain
2581		Red Oak	<i>Quercus rubra</i>		25	25	3 Fair - Minor Problems	Multiple codominant stems starting at 10'.	Preserved
2582		Red Oak	<i>Quercus rubra</i>		27	25	3 Fair - Minor Problems	Multiple codominant stems starting at 10'. Small limb failures.	Preserved
2585		Red Oak	<i>Quercus rubra</i>		25	17	3 Fair - Minor Problems	Small limb failure south and west sides. Most of canopy on north side. Multiple codominant starting at 6'.	Impacted, move storm drain
2593		Canary Island Pine	<i>Pinus canariensis</i>		28	10	3 Fair - Minor Problems	Surfacing girdling roots.	Proposed for Removal
2595		Canary Island Pine	<i>Pinus canariensis</i>		31	15	3 Fair - Minor Problems	Suppressed by neighboring trees.	Proposed for Removal
2596		Canary Island Pine	<i>Pinus canariensis</i>		28	17	3 Fair - Minor Problems	Suppressed by surrounding trees.	Proposed for Removal

## APPENDIX 3 - GENERAL PRACTICES FOR TREE PROTECTION

### Definitions

Root zone: The roots of trees grow fairly close to the surface of the soil, and spread out in a radial direction from the trunk of tree. A general rule of thumb is that they spread 2 to 3 times the radius of the canopy, or 1 to 1 ½ times the height of the tree. It is generally accepted that disturbance to root zones should be kept as far as possible from the trunk of a tree.

Inner Bark: The bark on large valley oaks and coast live oaks is quite thick, usually 1" to 2". If the bark is knocked off a tree, the inner bark, or cambial region, is exposed or removed. The cambial zone is the area of tissue responsible for adding new layers to the tree each year, so by removing it, the tree can only grow new tissue from the edges of the wound. In addition, the wood of the tree is exposed to decay fungi, so the trunk present at the time of the injury becomes susceptible to decay. Tree protection measures require that no activities occur which can knock the bark off the trees.

### Methods Used in Tree Protection:

No matter how detailed Tree Protection Measures are in the initial Arborist Report, they will not accomplish their stated purpose unless they are applied to individual trees and a Project Arborist is hired to oversee the construction. The Project Arborist should have the ability to enforce the Protection Measures. The Project Arborist should be hired as soon as possible to assist in design and to become familiar with the project. He must be able to read and understand the project drawings and interpret the specifications. He should also have the ability to cooperate with the contractor, incorporating the contractor's ideas on how to accomplish the protection measures, wherever possible. It is advisable for the Project Arborist to be present at the Pre-Bid tour of the site, to answer questions the contractors may have about Tree Protection Measures. This also lets the contractors know how important tree preservation is to the developer.

Root Protection Zone (RPZ): Since in most construction projects it is not possible to protect the entire root zone of a tree, a Root Protection Zone is established for each tree to be preserved. The minimum Root Protection Zone is the area underneath the tree's canopy (out to the dripline, or edge of the canopy), plus 1'. The Project Arborist must approve work within the RPZ.

Irrigate, Fertilize, Mulch: Prior to grading on the site near any tree, the area within the Tree Protection fence should be fertilized with 4 pounds of nitrogen per 1000 square', and the fertilizer irrigated in. The irrigation should percolate at least 24" into the soil. This should be done no less than 2 weeks prior to grading or other root disturbing activities. After irrigating, cover the RPZ with at least 12" of leaf and twig mulch. Such mulch can be obtained from chipping or grinding the limbs of any trees removed on the site. Acceptable mulches can be obtained from nurseries or other commercial sources. Fibrous or shredded redwood or cedar bark mulch shall not be used anywhere on site.

Fence: Fence around the Root Protection Zone and restrict activity therein to prevent soil compaction by vehicles, foot traffic or material storage. The fenced area shall be off limits to all construction equipment, unless there is express written notification provided by the Project Arborist, and impacts are discussed and mitigated prior to work commencing.

No storage or cleaning of equipment or materials, or parking of any equipment can take place within the fenced off area, known as the RPZ.

The fence should be highly visible, and stout enough to keep vehicles and other equipment out. I recommend the fence be made of orange plastic protective fencing, kept in place by t-posts set no farther apart than 6'.

In areas of intense impact, a 6' chain link fence is preferred.

In areas with many trees, the RPZ can be fenced as one unit, rather than separately for each tree.

Where tree trunks are within 3' of the construction area, place 2" by 4" boards vertically against the tree trunks, even if fenced off. Hold the boards in place with wire. Do not nail them directly to the tree. The purpose of the boards is to protect the trunk, should any equipment stray into the RPZ.

Elevate Foliage: Where indicated, remove lower foliage from a tree to prevent limb breakage by equipment. Low foliage can usually be removed without harming the tree, unless more than 25% of the foliage is removed. Branches need to be removed at the anatomically correct location in order to prevent decay organisms from entering the trunk. For this reason, a contractor who is an ISA Certified Arborist should perform all pruning on protected trees.<sup>8</sup>

Expose and Cut Roots: Breaking roots with a backhoe, or crushing them with a grader, causes significant injury, which may subject the roots to decay. Ripping roots may cause them to splinter toward the base of the tree, creating much more injury than a clean cut would make. At any location where the root zone of a tree will be impacted by a trench or a cut (including a cut required for a fill and compaction), the roots shall be exposed with either a backhoe digging radially to the trunk, by hand digging, or by a hydraulic air spade, and then cut cleanly with a sharp instrument, such as chainsaw with a carbide chain. Once the roots are severed, the area behind the cut should be moistened and mulched. A root protection fence should also be erected to protect the remaining roots, if it is not already in place. Further grading or backhoe work required outside the established RPZ can then continue without further protection measures.

Protect Roots in Deeper Trenches: The location of utilities on the site can be very detrimental to trees. Design the project to use as few trenches as possible, and to keep them away from the major trees to be protected. Wherever possible, in areas where trenches will be very deep, consider boring under the roots of the trees, rather than digging the trench through the roots. This technique can be quite useful for utility trenches and pipelines.

Protect Roots in Small Trenches: After all construction is complete on a site, it is not unusual for the landscape contractor to come in and sever a large number of "preserved" roots during the installation of irrigation systems. The Project Arborist must therefore approve the landscape and irrigation plans. The irrigation system needs to be designed so the main lines are located outside the root zone of major trees, and the secondary lines are either laid on the surface (drip systems), or carefully dug with a hydraulic or air spade, and the flexible pipe fed underneath the major roots.

Design the irrigation system so it can slowly apply water (no more than ¼" to ½" of water per hour) over a longer period of time. This allows deep soaking of root zones. The system also needs to accommodate infrequent irrigation settings of once or twice a month, rather than several times a week.

Monitoring Tree Health During and After Construction: The Project Arborist should visit the site at least twice a month during construction to be certain the tree protection measures are being followed, to monitor the health of impacted trees, and make recommendations as to irrigation or other needs. After construction is complete, the arborist should monitor the site monthly for one year and make recommendations for care where needed. If longer term monitoring is required, the arborist should report this to the developer and the planning agency overseeing the project.

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<sup>8</sup> International Society of Arboriculture (ISA), maintains a program of Certifying individuals. Each Certified Arborist has a number and must maintain continuing education credits to remain Certified.

Appendix 4 – Site Photographs



Historical Google Street View. Looking West at grove of valley oak along the west property line.



Photo by Nicole Harrison, June 15, 2021. Looking approximately North at the grove of valley oak along the west property line. Some of these trees are in close proximity to existing infrastructure and will require arborist supervision during development to prevent and /or evaluate root damage.





Historical Google Street Views. Looking South. Note Offsite Coast Redwood along the east property line.

Photo by Nicole Harrison, June 16, 2021. Looking approximately North at the Holly oak in a planter behind the curb along the east property line. Most of the offsite Coast Redwood trees are protected by the retention of these trees. Removal of these trees and installation of the infiltration system should require arborist supervision to prevent and/or evaluate root damage to the off site trees.





Historical Google Street Views. Looking West at City Tree 39421

Photo by Nicole Harrison, April 9, 2021. Looking east at the canopy of City tree 39421 that encroaches into the development area. Some pruning may be required for clearance. An initial assessment indicates it will be less than 5% of the canopy and (3) pruning wounds approximately 6" diameter may be required.





Photos by Nicole Harrison. Above April 9, 2021. The walking path that roughly follows the west side of the property from Natomas Park Drive to West El Camino has several mature coast live oak in poor health. All of these trees are diseased and may die and require removal within the next year or two.



Tree 2562 with evidence of Hypoxylon, a secondary fungus associated with Sudden Oak Death (Phytophthora Ramorum)





Recently dead from disease




Tree 2557, showing classic symptoms of disease and root failure, upper crown thinning.



Appendix 6 – Fee Waiver

2554	Fremont Cottonwood	<i>Populus fremontii</i>	25	2 Major Structure or Health Problems	<b><i>Proposed for Removal with Waiver due to uncorrectable structural defect</i></b>	
<p>Multi-stem structure with included bark between stems</p>						
2556	Fremont Cottonwood	<i>Populus fremontii</i>	46	1 Extreme Structure or Health Problems	<b><i>Proposed for Removal with Waiver due to High Risk</i></b>	<p><b><i>See Attached Tree Risk Assessment form</i></b></p>
2560	Coast Live Oak	<i>Quercus agrifolia</i>	25	0 - Dead	<b><i>Remove with Waiver due to Condition - Dead/Diseased</i></b>	<p><b><i>Tree is Dead</i></b></p>

<p>2561</p>	<p>Coast Live Oak</p>	<p><i>Quercus agrifolia</i></p>	<p>23</p>	<p>0 - Dead</p>	<p><b>Remove with Waiver due to Condition – Dead/Diseased</b></p>	
<p>Tree is Dead</p>						
<p>2562</p>	<p>Coast Live Oak</p>	<p><i>Quercus agrifolia</i></p>	<p>19</p>	<p>2 Major Structure or Health Problems</p>	<p><b>Remove with Waiver due to Condition - Diseased</b></p>	<p><b>Tree is Dying</b></p>

# ISA Basic Tree Risk Assessment Form

Client Demmon's Farmers Date 6/16/2021 Time \_\_\_\_\_  
 Address/Tree location 2400 N. Zuma Park Drive Tree no. 2556 Sheet 1 of 3  
 Tree species Western Cottonwood dbh 46" Height 75' Crown spread dia. \_\_\_\_\_  
 Assessor(s) Nicole Harrison NEBCO Time frame 3yrs Tools used \_\_\_\_\_

## Target Assessment

Target number	Target description	Target zone			Occupancy rate 1 - rare 2 - occasional 3 - frequent 4 - constant	Practical to move target?	Restriction practical?
		Target within drip line	Target within 1 x Ht.	Target within 1.5 x Ht.			
1	walking path	✓			2	No	No
2	school yard	✓			3	No	No
3							
4							

## Site Factors

History of failures \_\_\_\_\_ Topography Flat  Slope  % Aspect \_\_\_\_\_  
 Site changes None  Grade change  Site clearing  Changed soil hydrology  Root cuts  Describe path up to flare, fire  
 Soil conditions Limited volume  Saturated  Shallow  Compacted  Pavement over roots  35% Describe wind  
 Prevailing wind direction \_\_\_\_\_ Common weather Strong winds  Ice  Snow  Heavy rain  Describe \_\_\_\_\_

## Tree Health and Species Profile

Vigor Low  Normal  High  Foliage None (seasonal)  None (dead)  Normal \_\_\_\_\_% Chlorotic \_\_\_\_\_% Necrotic \_\_\_\_\_%  
 Pests \_\_\_\_\_ Abiotic \_\_\_\_\_  
 Species failure profile Branches  Trunk  Roots  Describe poor structure and limb death/drop are common

## Load Factors

Wind exposure Protected  Partial  Full  Wind funneling  Relative crown size Small  Medium  Large   
 Crown density Sparse  Normal  Dense  Interior branches Few  Normal  Dense  Vines/Mistletoe/Moss   
 Recent or planned change in load factors \_\_\_\_\_

## Tree Defects and Conditions Affecting the Likelihood of Failure

### — Crown and Branches —

Unbalanced crown  LCR \_\_\_\_\_% Cracks  Lightning damage   
 Dead twigs/branches  \_\_\_\_\_% overall Max. dia. \_\_\_\_\_ Codominant  e 25' into 2 e 30' into 6 Included bark   
 Broken/Hangers Number \_\_\_\_\_ Max. dia. \_\_\_\_\_ Weak attachments  dead/cracking @ Cavity/Nest hole \_\_\_\_\_% circ.  
 Over-extended branches  Previous branch failures  Similar branches present   
 Pruning history Dead/Missing bark  Cankers/Galls/Burls  Sapwood damage/decay   
 Crown cleaned  Thinned  Raised  Conks  Heartwood decay   
 Reduced  Topped  Lion-tailed  Response growth \_\_\_\_\_  
 Flush cuts  Other \_\_\_\_\_  
 Main concern(s) Crack DND @ LOWEST CODOM. JUNCTION; 2ND - UPPER CROWN 5 rams  
and from failures  
 Load on defect N/A  Minor  Moderate  Significant   
 Likelihood of failure Improbable  Possible  Probable  Imminent

### — Trunk —

Dead/Missing bark  Abnormal bark texture/color   
 Codominant stems  Included bark  Cracks   
 Sapwood damage/decay  Cankers/Galls/Burls  Sap ooze   
 Lightning damage  Heartwood decay  Conks/Mushrooms   
 Cavity/Nest hole \_\_\_\_\_% circ. Depth \_\_\_\_\_ Poor taper   
 Lean \_\_\_\_\_\* Corrected? \_\_\_\_\_  
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_  
 Load on defect N/A  Minor  Moderate  Significant   
 Likelihood of failure Improbable  Possible  Probable  Imminent

### — Roots and Root Collar —

Collar buried/Not visible  Depth \_\_\_\_\_ Stem girdling   
 Dead  Decay  Conks/Mushrooms   
 Ooze  Cavity  \_\_\_\_\_% circ.  
 Cracks  Cut/Damaged roots  Distance from trunk \_\_\_\_\_  
 Root plate lifting  Soil weakness   
 Response growth \_\_\_\_\_  
 Main concern(s) \_\_\_\_\_  
 Load on defect N/A  Minor  Moderate  Significant   
 Likelihood of failure Improbable  Possible  Probable  Imminent

Risk Categorization

Condition number	Tree part	Conditions of concern	Part size	Fall distance	Target number	Target protection	Likelihood												Consequences				Risk rating of part (from Matrix 2)
							Failure				Impact				Failure & Impact (from Matrix 1)				Negligible	Minor	Significant	Severe	
							Improbable	Possible	Probable	Imminent	Very low	Low	Medium	High	Unlikely	Somewhat	Likely	Very likely					
1	CODOM STEM S	POOR CONNECT INCLUDED BK CRACK/DWD	15	30	1	NONE	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	High
			15	45	2	NONE	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	High
2	CODOM STEM @ 20 T	POOR CONNECT INCLUDED BK	20	40	1	NONE	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	MID
			20				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
3							<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
4							<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Matrix 1. Likelihood matrix.

Likelihood of Failure	Likelihood of Impacting Target			
	Very low	Low	Medium	High
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix 2. Risk rating matrix.

Likelihood of Failure & Impact	Consequences of Failure			
	Negligible	Minor	Significant	Severe
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

Notes, explanations, descriptions Tree has phototropic lean over path toward school yard cracking at main cdl would drop 15" stem onto school yard

Mitigation options Removal of 15" stem would increase likelihood of additional failures. Removal of both probable failure stems would result in very poor remaining canopy & high probability of additional failures

Residual risk \_\_\_\_\_  
 Residual risk \_\_\_\_\_  
 Residual risk \_\_\_\_\_  
 Residual risk \_\_\_\_\_

Overall tree risk rating Low  Moderate  High  Extreme

Work priority 1  2  3  4

Overall residual risk Low  Moderate  High  Extreme

Recommended inspection interval \_\_\_\_\_

Data  Final  Preliminary  Advanced assessment needed  No  Yes-Type/Reason AERIAL INSPECTION

Inspection limitations  None  Visibility  Access  Vines  Root collar buried Describe \_\_\_\_\_



Shows Lean toward schood yard



Two Codominant stems could fail onto school yard



**Old Failures and rams head connection**



**GEOTECHNICAL EXPLORATION REPORT**  
on  
**PROPOSED NATOMAS PARK DRIVE APARTMENTS**  
**Natomas Park Drive & Garden Highway**  
**Sacramento, California**  
for  
**DEMMON PARTNERS**



By

**KC ENGINEERING COMPANY**

**Project No. VV3853**

**8 June 2015**



865 Cotting Lane, Suite A  
Vacaville, California 95688  
(707) 447-4025, fax 447-4143



8798 Airport Road  
Redding, California 96002  
(530) 222-0832, fax 222-1611

**KC ENGINEERING COMPANY**  
A SUBSIDIARY OF MATERIALS TESTING, INC.

Project No. VV3853  
8 June 2015

Mr. Charlie Demmon  
Demmon Partners  
1451 River Park Drive, Suite 121  
Sacramento, CA 95815

Subject: Proposed Natomas Park Drive Apartments  
Natomas Park Drive & Garden Highway  
Sacramento, California  
**GEOTECHNICAL EXPLORATION REPORT**

Dear Mr. Demmon:

In accordance with your authorization, **KC ENGINEERING COMPANY** has explored the geotechnical conditions of the surface and subsurface soils at the subject site of the proposed multi-family apartment project to be located on Natomas Park Drive in Sacramento, California.

The accompanying report presents our conclusions and recommendations based on our exploration. Our findings indicate that the proposed multi-family apartment project is geotechnically feasible for construction on the subject site provided the recommendations of this report are carefully followed and are incorporated into the project plans and specifications.

Should you have any questions relating the contents of this letter or require additional information, please contact our office at your convenience.

Reviewed By;

David V. Cymanski, G.E.  
Principal Engineer



Respectfully Submitted,  
**KC ENGINEERING CO.**

Eric S. Smith, P.E.  
Project Engineer



Copies: 1 email to Client, 3 mail

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## GEOTECHNICAL EXPLORATION

### Purpose and Scope

The purpose of the geotechnical exploration for the proposed multi-family apartment project in Sacramento, California was to determine the surface and subsurface soil conditions at the subject site. Based on the results of the exploration, geotechnical criteria were established for the grading of the site, the design of foundations, pavement sections and the construction of other related facilities on the property.

In accordance with your authorization, our exploration services included the following tasks:

- a. A review of available geotechnical and geologic literature concerning the site and vicinity;
- b. Site reconnaissance by the Geotechnical Engineer;
- c. Drilling of five exploratory borings and sampling of the subsurface soils.
- d. Laboratory testing of the samples obtained to determine their engineering characteristics;
- e. Analysis of the data and formulation of conclusions and recommendations; and
- f. Preparation of this written report.

### Site Location and Description

The subject site is located on the northwest corner of Natomas Park Drive and Garden Highway in Sacramento, California, as shown on Figure 1, "Aerial Vicinity Map". The property is a vacant lot approximately 10.93 acres, and is about a half a mile north of the American River and Discovery Park. The site is bounded by Natomas Park Drive on the north and east, Garden Highway on the south and a small dense wooded area followed by a commercial office building on the west. The topography of the site is relatively flat, with the exception of the south boundary and southeast corner of the property that contains the Garden Highway embankment with a slope approximately 2H:1V (horizontal to vertical) of about 15 feet high. The lot contains an electrical tower in the northwest corner of the property with a transmission line running in the north/south direction along the western half of the site. Remnants of an asphalt paved parking lot, from a previous development is located at the north side of the lot and the north and east perimeter of the property contains a concrete pedestrian sidewalk. Vegetation on the site consists of native grass, weeds, bushes and mature trees surrounding the perimeter of the property.

The above description is based on a reconnaissance of the site by the Geotechnical Engineer, a review of a Google Aerial image dated 7/2/14 and a review of a Conceptual Site Plan prepared by

LPAS dated 2/12/15. The Google Aerial image was used as the basis for our “Aerial Vicinity Map”, and the Conceptual Site Plan used as our “Site Plan” included as Figures 1 and 2, respectively, in the Appendix.

### **Proposed Development**

Based on our review of the conceptual site plan by LPAS, the proposed project is planned to be a multi-family apartment project consisting of a 251-unit apartment community. The proposed apartment structures are expected to be three-stories, constructed of wood framing with slab on grade floors. Structural building loads are anticipated to be typical of similar construction. The complex is also expected to include a leasing/clubhouse, fitness center and swimming pool. Additional improvements consist of underground utilities, paved roadway and parking areas, lighting and landscaping. Grading is expected to consist of fill of 1 to 2 feet for achieving design grade for the building pads and on the order of 4 feet or less for constructing driveway entrances.

### **Field Exploration**

The field exploration was performed on 12 May 2015 and included a reconnaissance of the site and the drilling of 5 exploratory test borings at the approximate locations shown on Figure 2, “Site Plan” included in the Appendix.

The borings were drilled to a maximum depth of 45.0 feet below the existing ground surface. The drilling was performed with truck-mounted Mobile B-24 rig using a power-driven, 4-inch diameter continuous flight solid auger. Visual classifications were made from the auger cuttings and the samples in the field. As the drilling proceeded, representative disturbed tube samples were obtained by driving a 3-inch O.D., California Modified split-tube sampler, containing thin brass liners, into the boring bottom in accordance with ASTM D3550. Disturbed samples were also obtained by driving a 2-inch O.D., split-barrel SPT sampler into the boring bottom in accordance with ASTM D1586. The samplers were driven into the in-situ soils under the impact of a 140 pound hammer having a free fall of 30 inches. The number of blows required to advance the sampler 12 inches into the soil were adjusted to the standard penetration resistance (N-Value). The raw blow counts obtained using the California sampler were corrected to equivalent N-Values using Burmister’s (1948) energy and diameter correction formula. When the sampler was withdrawn from the boring bottom, the brass liners containing the relatively undisturbed samples were removed, examined for identification purposes, labeled and sealed to preserve the natural or in-situ moisture content.

The samples were then transported to our laboratory for testing. Classifications made in the field were verified in the laboratory after further examination and testing. The stratification of the soils,

descriptions, location of undisturbed soil samples and standard penetration resistance are shown on the respective “Log of Test Boring” contained within the Appendix.

### **Laboratory Testing**

The laboratory testing program was directed towards providing sufficient information for the determination of the engineering characteristics of the site soils so that the recommendations outlined in this report could be formulated. The laboratory test results are presented on the respective Boring Logs and data sheets in the Appendix.

Moisture content and dry density tests (ASTM D2937) were performed on representative relatively undisturbed soil samples in order to determine the consistency of the soil and the moisture variation throughout the explored soil profile as well as estimate the compressibility of the underlying soils.

The strength parameters of the foundation soils were determined from a direct shear test (ASTM D3080) performed on a selected relatively undisturbed soil sample and an unconfined compression tests (ASTM D2166) performed on a relatively undisturbed samples. Standard field penetration resistance (N-Values) also assisted in the determination of strength and bearing capacity. The standard penetration resistances are recorded on the respective "Logs of Test Boring" in the Appendix.

In order to assist in the identification and classification of the subsurface soils, sieve analysis tests (ASTM D6913 & D422) and Atterberg Limits tests (ASTM D4318) were performed on selected soil samples. The Atterberg Limits test results were used to estimate the expansion potential of the near surface soils. The results also aided in our liquefaction analysis.

One laboratory consolidation test (ASTM D2435) was performed on a sample of the underlying clayey soil deposits to determine their compressibility. The result was used to estimate the potential settlement of the proposed improvements.

Two R-Value tests (Cal Test 301) were performed on bulk samples to assist in pavement section design. The bulk samples were obtained from the upper 2 feet at the locations shown on Figure 2.

Representative bulk samples of the near surface soils were obtained to evaluate the presence and concentration of water soluble sulfates in accordance with California Test Method 417. These test results were used to identify the corrosion potential of the soils to concrete. A discussion is presented in the Foundation section of this report.

## **Subsurface Conditions**

Based on our field exploration and laboratory testing, the subsurface soil conditions vary across the site. The surficial soil in Borings 1 through 4, consist of a moderately expansive, stiff, silt layer 3 feet below the surface in Boring 1, and firm to stiff sandy clay and silty clay layer 3 to 5 feet below the surface in Boring 2 through 4. Below the surficial soil layer, in Borings 1 through 4, firm to very stiff silty clay and sandy clay layers extend 37 to 42 feet below the surface, underlain by very dense, poorly graded gravel and rounded stone with little sand until boring termination. In Boring 5, a 6 inch asphalt and aggregate pavement section exists at the surface, underlain by firm to very stiff, moderately expansive silty clay to 38 feet below grade, underlain by very dense, poorly graded, gravel and rounded stone.

The groundwater level encountered in the borings ranged from 15.5 to 16.0 feet below the ground surface. Fluctuations in the groundwater level can occur with variations in seasonal rainfall, subsurface stratification, and irrigation on the site and vicinity.

A more thorough description and stratification of the soils encountered along with the results of the laboratory tests are presented on the respective “Log of Test Boring” in the Appendix. The approximate location of the borings is shown on Figure 2, “Site Plan,” in the Appendix.

## **Site Geology**

According to the Preliminary Geologic Map of the Sacramento 30’ x 60’ Quadrangle<sup>1</sup>, the geologic deposits underlying the site are mapped as Holocene aged alluvium deposits. The alluvium deposits consist of varying layers of sands, gravels, silts and clays. The subsurface deposits encountered during our exploration resemble the alluvium deposits.

## **Geo-Hazards**

### ***Seismicity***

The site is not located within an Alquist-Priolo Special Studies Zone<sup>2</sup>. There are no known active or inactive faults crossing the site as mapped and/or recognized by the State of California. Earthquake related ground shaking should be expected during the design life of the structures at the site. However, Sacramento is located in a moderate seismically-active region and earthquake

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<sup>1</sup> Gutierrez, C. 2011, Geologic Map of the Sacramento 30’ x 60’ Quadrangle, California Geological Survey.

<sup>2</sup> Hart, E.W. and Bryant, W.A., 1997, *Fault-Rupture Hazard Zones in California, Alquist-Priolo Earthquake Fault Zoning Act with Index to Earthquake Fault Zones Maps*, California Department of Conservation, Division of Mines and Geology, Special Publication 42, Interim Revision 2007.

related ground shaking could be expected during the design life of structures constructed on the site. The California Geological Survey has defined an active fault as one that has had surface displacement in the last 11,000 years, or has experienced earthquakes in recorded history.

Based on our review of the Fault Activity Map of California<sup>3</sup> and the USGS Fault Database<sup>4</sup>, the nearest active faults are the Dunnigan Fault, Great Valley 4 Fault and Foothills Fault System located approximately 21.7 miles northwest, 30.0 miles west and 30.7 miles east of the site, respectively.

Structures at the site should be designed to withstand the anticipated ground accelerations. Based on the USGS Seismic Design Maps<sup>5</sup> website and ASCE 7-10, the 2013 CBC earthquake design values are as follows.

Site Class: D

Design Spectral Response Accelerations:  $S_{DS} = 0.566$ ;  $S_{D1} = 0.354g$

### ***Fault Rupture***

The site is not located within an Alquist-Priolo Earthquake Fault Zone. Based on our review of geologic maps, no known active or inactive faults cross or project toward the subject site. In addition, no evidence of active faulting was visible on the site during our site reconnaissance. Therefore, it is our opinion that there is no potential for fault-related surface rupture at the subject site.

### ***Landsliding***

The subject site and immediate vicinity is relatively flat and therefore, not subject to seismically-induced landslide hazards. With regards to the landside levee slope embankment, no signs of loose colluvial soils were present or evidence of slope instability was observed. Therefore, the potential for landsliding hazards to occur on the levee is very unlikely.

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<sup>3</sup> Jennings, C.W. and Bryant, W.A., 2010, *Fault Activity Map of California*, California Geological Survey Geologic Data Map No. 6, scale 1:750,000.

<sup>4</sup> U.S. Geological Survey and California Geological Survey, 2006, Quaternary Fault and Fold Database for the United States, accessed 6/1/15, from USGS web site: <http://earthquake.usgs.gov/regional/qfaults/>.

<sup>5</sup> <http://geohazards.usgs.gov/designmaps/us/application.php>, accessed 6/1/15

### ***Liquefaction***

Soil liquefaction is a phenomenon in which loose and saturated cohesionless soils are subject to a temporary, but essentially total loss of shear strength, due to pore pressure build-up under the reversing cyclic shear stresses associated with earthquakes. Soils typically found most susceptible to liquefaction are saturated and loose, fine to medium grained sand having a uniform particle range and less than 35% fines passing the No. 200 sieve, and a corrected standard penetration blow count  $(N_1)_{60}$  less than 30. According to Special Publication 117A by the California Geological Society, the assessment of hazards associated with potential liquefaction of soil deposits at a site must consider translational site instability (i.e. lateral spreading, etc.) and more localized hazards such as bearing failure and settlement. The acceptable factor of safety against liquefaction is recommended in SP117 to be 1.3 or greater.

The data used for evaluating liquefaction potential of the subsurface soils consisted of the in-situ Standard Penetration Resistance values  $(N_1)_{60}$  values, the unit weights, gradations, in-situ moisture contents, the groundwater level, and the location of the site to the nearest active fault and the predicted ground surface acceleration. The soil materials encountered on the property consists primarily of cohesive silty and sandy clays with a range of 69% to 98% fines passing the No. 200 sieve. Given the high percentage of fines found throughout the soil profile, it is our opinion that the site soils are not subject to liquefaction hazards.

### **Settlement Considerations**

It is noted that firm to stiff silty clay layers were encountered at varying depths in all the borings. In order to determine the compressibility and potential settlement of these soils, a laboratory consolidation test (ASTM D2435) was performed on a relatively undisturbed soil sample. The result is presented in the Appendix. The sample was found to be over-consolidated but may still have the potential for settlement to exist under current conditions and proposed structure loads. Therefore, we performed a settlement analysis.

Our analysis revealed that up to 1 inch of long-term consolidation settlement may occur across the site due to the proposed development. Differential settlement can be assumed to be approximately one-half of the total or approximately ½ inch across the structure footprints. The anticipated differential settlement values from consolidation should be considered by the Structural Engineer and incorporated in the design of the foundation system.



## DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

### General

From a geotechnical point of view, the proposed multi-family apartment project is feasible for construction on the subject site provided the recommendations presented in this report are incorporated into the project plans and specifications.

All grading and foundation plans for the development should be reviewed by **KC ENGINEERING CO.** prior to contract bidding or submittal to governmental agencies to ensure that the geotechnical recommendations contained herein are incorporated and utilized in design.

**KC ENGINEERING CO.** should be notified at least two working days prior to site clearing, grading, and/or foundation operations on the property. This will give the Soil Engineer ample time to discuss the geotechnical characteristics of the site that may be encountered in the field.

Field observation and testing during the grading and/or foundation operations shall be provided by representatives of **KC ENGINEERING CO.** to enable them to form an opinion regarding the adequacy of the site preparation, the acceptability of fill materials, and the extent to which the earthwork construction and the degree of compaction comply with the specification requirements.

### Geotechnical Considerations

The primary geotechnical considerations for the property are the presence of moderately expansive near surface soil conditions and the potential for consolidation settlement. The sites soils are subject to heave and shrink movements with changes in moisture content. These movements may affect foundations, concrete flatwork and pavements. In addition, the potential for total settlement at much as 1 inch and differential settlement of 0.5 inches may exist due to the varying layers of firm to stiff material found.

It is the opinion of **KC ENGINEERING COMPANY** that the proposed apartment structures may be supported on a properly designed and constructed well-reinforced, deepened and interconnected spread footing foundation system. Alternatively, the structures may be supported on thickened post-tension slab foundations to minimize the effects of total and differential settlement. Grading, foundation design, and drainage recommendations are presented herein.

## **Grading**

Grading activities during the rainy season will be hampered by excessive moisture. Grading activities may be performed during the wet/rainy season, however, achieving proper compaction may be difficult due to excessive moisture resulting in project delays to grade the site and/or use of lime treatment. Grading performed during the dry months will minimize the occurrence of the above problems.

The surface of the site in areas to be graded should be stripped to remove all existing surface vegetation and/or other deleterious materials. It is estimated that stripping depths of approximately 1 to 2 inches may be necessary depending on actual conditions at the time of development.

In the building pad and adjacent flatwork areas plus an additional 5 horizontal feet, we recommend that the surface soils be over excavated 12 inches and the bottom 12 inches scarified and moisture conditioned and compacting to a minimum degree of relative compaction of 90% at least 3 percent above optimum moisture content as determined by ASTM D1557 Laboratory Test Procedure. After processing and compacting the bottom 12 inches, the site may be brought to the desired finished grades by placing engineered fill in lifts of 8 to 12 inches in uncompacted thickness, moisture conditioned and compacted to a relative compaction of 90% at 3% or more above optimum moisture content in accordance with the aforementioned test procedure. In all other cut and fill areas, we recommend that the upper 12 inches be scarified, moisture conditioned and compacted as noted above. All soils encountered during our investigation are suitable for use as engineered fill when placed and compacted at the recommended moisture content.

All fill material should be approved by the Soil Engineer. The material should be a soil or soil-rock mixture which is free from excessive organic matter or other deleterious substances. The fill material should not contain rocks or lumps over 6 inches in greatest dimension and not more than 15% larger than 2-½ inches. All soils encountered during our investigation, except any excessive organic contaminated materials, would be suitable for use as engineered fill and trench backfill when placed and compacted at the recommended moisture content.

Should import material be used to establish the proper grading for the proposed development, the import material should be approved by the Soil Engineer before it is brought to the site and meet the following requirements:

- a. Have an R-Value of not less than 25;
- b. Have a Plasticity Index not higher than 12;
- c. Not more than 15% passing the No. 200 sieve;
- d. No rocks larger than 6 inches in maximum size;

Prior to compaction, each layer should be spread evenly and should be thoroughly blade mixed during the spreading to obtain uniformity of material in each layer. The fill should be brought to a water content that will permit proper compaction by either (a) aerating the material if it is too wet, or (b) spraying the material with water if it is too dry. Compaction should be performed by footed rollers or other types of approved compaction equipment and methods. Compaction equipment should be of such design that they will be able to compact the fill to the specified density. Rolling of each layer should be continuous over its entire area and the equipment should make sufficient trips to ensure that the required density has been obtained. No ponding or jetting is permitted.

The standard test used to define maximum densities and optimum moisture content of all compaction work shall be the Laboratory Test procedure ASTM D1557 and field tests shall be expressed as a relative compaction in terms of the maximum dry density and optimum moisture content obtained in the laboratory by the foregoing standard procedure. Field density and moisture tests shall be made in each compacted layer by the Soil Engineer of Record in accordance with Laboratory Test Procedure ASTM D6938. When footed rollers are used for compaction, the density and moisture tests shall be taken in the compacted material below the surface disturbed by the roller. When these tests indicate that the compaction requirements on any layer of fill, or portion thereof, have not been met, the particular layer, or portion thereof, shall be reworked until the compaction requirements have been met.

### **Surface Drainage**

A very important factor affecting the performance of structures, flatwork and pavements is the proper design, implementation, and maintenance of surface drainage, as well as maintaining uniform moisture conditions around the structures. Ponded water will cause swelling and/or loss of soil strength and may also seep under structures. Should surface water be allowed to seep under the structures, differential foundation movement resulting in structural damage and/or standing water under the slab may occur. This may cause dampness to the floor which may result in mildew, staining, and/or warping of floor coverings. To minimize the potential for the above problems, dampproofing and/or waterproofing should be provided as required by Section 1805 of the 2013 CBC. In addition, the following surface drainage measures are recommended and must be maintained by the property owner in perpetuity:

- a) Liberal building pad slopes and drainage must be provided by the project Civil Engineer to remove all storm water from the pads and to prevent storm and/or irrigation water from ponding adjacent to the structure foundations. The finished pad grade around the structures should be compacted and sloped 5% away from the exterior

- foundations and as required in Section 1804.3 of the 2013 CBC. All hardscapes constructed adjacent to the structures must have positive drainage.
- b) Enclosed or trapped planter areas adjacent to the structure foundation should be avoided if possible. Where enclosed planter areas are constructed, these areas must be provided with adequate measures to drain surface water (irrigation and rainfall) away from the foundation or other improvements. Positive surface gradients and/or controlled drainage area inlets should be provided. Care should be taken to adequately slope surface grades away from the structure foundation and into area inlets. Drainage area inlets should be piped to a suitable discharge facility.
  - c) The construction of continuous roof gutters is recommended. The downspouts should be connected to a closed pipe system to carry storm water away from the structures. In doing this, the possibility of soil saturation adjacent to the foundation and engineered fills is reduced. Downspout water may be allowed to discharge directly onto concrete or asphalt hardscape surfaces provided positive drainage is provided as designed by the Civil Engineer and maintained.
  - d) Over-irrigation of plants is a common source of water migrating beneath a structure. Consequently, the amount of irrigation should not be any more than the amount necessary to support growth of the plants. Foliage requiring little irrigation (drip system) is recommended for the areas immediately adjacent to the structure.
  - e) Site drainage should be designed by the project Civil Engineer. Civil engineering, hydraulic engineering, and surveying expertise is necessary to design proper surface drainage to assure that the flow of water is directed away from the foundations and other site improvements.
  - f) Landscape mounds or concrete flatwork should not be constructed to block or obstruct the surface drainage paths. The Landscape Architect or other landscaper should be made aware of these landscaping recommendations and should implement them as designed. The surface drainage facilities should be constructed by the contractor as designed by the Civil Engineer.

### **Foundations**

Based on the results of the field and laboratory testing program, the sites near surface foundation soils are considered moderately expansive and subject to consolidation settlement. Provided that the site is graded as recommended above, the proposed structures may be founded on deepened,

well-reinforced and inter-connected spread footing foundation system or a thickened post-tension foundation. Recommendation for both are provided below.

### ***Spread-Footings***

A continuous spread footing should be placed around the perimeter of the structures and any interior foundations should be continuously connected to the perimeter. Isolated footings should not be utilized unless connected with embedded reinforced tie-beams. All footings should extend to a minimum depth of 24 inches below lowest adjacent pad grade (i.e., trenching depth below interior slab subgrade soil). At this depth, the recommended design bearing pressure for the continuous footings should not exceed 2,000 p.s.f. due to dead plus live loads. The above allowable pressures may be increased by 1/3 due to transient loads which include wind and seismic. All foundations must be adequately reinforced to provide structural continuity and resist the anticipated loads as determined by the project Structural Engineer. However, continuous footings are to be reinforced with a minimum of four No. 5 bars, two at the top and two near the bottom of the footing. Additional reinforcement will be as required by the structural engineer and in accordance with structural building code requirements. Foundations designed in accordance with the above criteria are expected to experience a total settlement of less than 1.0 inch with less than 0.5 of an inch of differential settlement across the structure footprint.

To accommodate lateral building loads, the passive resistance of the foundation soil can be utilized. The passive soil pressures can be assumed to act against the front face of the footing below a depth of 1 foot below the ground surface. It is recommended that a passive pressure equivalent to that of a fluid weighing 200 p.c.f. be used. For design purposes, an allowable friction coefficient of 0.32 can be assumed at the base of the spread footings. These two modes of resistance should not be added unless the frictional component is reduced by 50 percent since the mobilization of the passive resistance requires some horizontal movement, effectively reducing the frictional resistance.

A bulk sample of the near surface soil was collected and transported to Sunland Analytical in Rancho Cordova for testing of water soluble sulfates in accordance with California Test Method 417. The testing indicates a sulfate content of 34.31 ppm and 27.28 ppm (mg/kg) for the samples collected. It is noted that the sulfate test results indicate “not-applicable” or “S0” sulfate exposure to concrete as identified in Section 1904.1 of the 2013 California Building Code and Tables 4.2.1 and 4.3.1 of ACI 318-11 Building Code Requirements for Structural Concrete. No cement type restriction is required, however, we do recommend that a Type I/II cement be utilized.

***Post-Tension***

Post-tensioned slabs should be a minimum 10 inches in thickness (for uniform thickness slabs) and designed using the following criteria which is based on the design method of the “Standard Requirements for Design of Shallow Post-Tensioned Concrete Foundations on Expansive Soils”, dated May 2008, Third Edition, prepared by the Post Tensioning Institute:

Edge Moisture Variation Distance:

$$e_m \text{ (Edge Lift)} = 4.0 \text{ feet}$$

$$e_m \text{ (Center Lift)} = 7.5 \text{ feet}$$

Differential Movement:

$$y_m \text{ (Edge Lift)} = 1.35 \text{ inches}$$

$$y_m \text{ (Center Lift)} = -0.95 \text{ inches}$$

Estimated Differential Settlement: = 0.5 inches

In addition to the recommendations and guidelines in the Third Edition by the PTI, the following recommendations should also be incorporated into the design and construction for the above structural mat foundation systems:

- a) An allowable bearing capacity of 1,000 p.s.f. may be utilized and may be increased by one-third to resist short-term wind and seismic loading.
- b) To resist lateral loading, a coefficient of friction between the perimeter concrete thickened edge and the soil of 0.32 may be used.
- c) All areas to receive slabs should be thoroughly wetted and soaked to over optimum moisture content and to seal any desiccation cracks prior to placing the underslab components. This work should be performed under the observation of the Soil Engineer and approved prior to concrete placement.
- d) The reinforcement and/or cables shall be placed in the center of the slab unless otherwise designated by the Structural Engineer.
- e) A vapor retarder membrane should be installed between the prepared building pad and the interior slab to minimize moisture condensation under the floor coverings and/or upward vapor transmission. The vapor barrier membrane should be a minimum 15-mil extruded polyolefin plastic that complies with ASTM E1745 Class A and have a

- permeance of less than 0.01 perms per ASTM E96 or ASTM F1249. It is noted that polyethylene films (visqueen) do not meet these specifications. The vapor barrier must be adequately lapped and taped/sealed at penetrations and seams in accordance with ASTM E1643 and the manufacturer's specifications. The vapor retarder must be placed continuously across the slab area.
- f) The slabs should be thickened a minimum of 12 inches wide at the edges and extend below pad grade at least 4 inches to create frictional resistance for lateral loading, to provide additional edge rigidity, and to minimize moisture infiltration under the slab.
  - g) Water vapor migrating to the surface of the concrete can adversely affect floor covering adhesives. Provisions should be provided in the concrete mix design to minimize moisture emissions. This should include the selection of a water-cement ratio which inhibits water permeation (0.45 max). Additional suitable admixtures to limit water transmission may also be utilized. The slabs should not be subjected to rainfall or cleaning water prior to placement of the floor coverings. In addition, we recommend that a Type I/II cement be utilized in the concrete mix to provide an additional protection against sulfate attack.
  - h) Exterior porches and attached covered patios areas should also be designed as part of the same post-tension foundation system.
  - i) We recommend that appropriate provisions be provided by the Structural Engineer and Contractor to minimize slab cracking, such as curing measures and/or admixtures to minimize concrete shrinkage and curling. American Concrete Institute and CBC methods and guidelines of curing, such as wet curing or membrane curing, are recommended to minimize plastic and drying shrinkage cracking and curling.
  - j) The foundation plans, specifications, calculations and concrete mix designs should be provided to the Structural Engineer and the Soils Engineer for review prior to construction to ensure conformance with the above recommendations.

### **Slab-on-Grade Construction**

Interior and exterior concrete flatwork, including garage floors, driveways and non-structural detached patios and flatwork may experience some cracking due to finishing and curing methods as well as moisture variations within the underlying clay soils. To reduce the potential cracking of the slabs-on-grade, the following recommendations are made:

- a) All areas to receive slabs should be thoroughly soaked to seal any desiccation cracks prior to placing concrete. This work should be done under the observation of the Soil Engineer.
- b) Slabs should be underlain by a minimum of 4 inches of angular gravel or clean crushed rock material placed between the finished subgrade and the slabs to serve as a capillary break between the subsoil and the slab. The gravel should not have more than 10% passing the No. 4 sieve per CBC Section 1805.4.1.
- c) All Slabs and driveways should be a minimum of 5 inches thick and reinforced with a minimum of No. 4 rebar spaced 18 inches center to center, each way. The actual slab thickness and reinforcement should be determined by the project structural engineer in accordance with the structural requirements and the anticipated loading conditions. The reinforcement shall be placed in the center of the slab unless otherwise designated by the design engineer.
- d) A vapor retarder membrane should be installed between the prepared building pad and the interior slab to minimize moisture condensation under the floor coverings and/or upward vapor transmission. The vapor barrier membrane should be a minimum 15-mil extruded polyolefin plastic that complies with ASTM E1745 Class A and have a permeance of less than 0.01 perms per ASTM E96 or ASTM F1249. It is noted that polyethylene films (visqueen) do not meet these specifications. The vapor barrier must be adequately lapped and taped/sealed at penetrations and seems in accordance with ASTM E1643 and the manufacturer's specifications. The vapor retarder must be placed continuously across the slab area.
- e) Garage floors and slabs for driveways, and exterior flatwork should be placed structurally independent of the foundations. A 30-pound felt strip, expansion joint material, or other positive separator should be provided around the edge of all floating slabs to prevent bonding to the foundation. In addition, we do recommend that exterior slabs where adjacent to buildings be rebar doweled to the perimeter foundation to minimize vertical deflections. A doweling detail should be provided by the Structural Engineer.
- f) Exterior slabs should be provided with crack control saw cut joints or tool joints to allow for expansion and contraction of the concrete. In general, contraction joints should be spaced no more than 20 times the slab thickness in each direction. The layout of the joints should be determined by the project Structural Engineer and/or Architect.



- g) We recommend that appropriate provisions be provided by the Structural Engineer and Contractor to minimize slab cracking, such as curing measures and/or admixtures to minimize concrete shrinkage and curling. American Concrete Institute and CBC methods and guidelines of curing, such as wet curing or membrane curing, are recommended to minimize plastic and drying shrinkage cracking and curling.

### **Pavement Areas**

The roadways are anticipated to consist of either asphalt concrete (AC) or Portland cement concrete (PCC) surfaces. Recommendations for both pavement surfaces are presented below. We emphasize that the performance of the pavement is critically dependent upon adequate and uniform compaction of the subgrade soils, as well as engineered fill and utility trench backfill within the limits of pavements. Pavements will typically have poor performance and shorter life where water is allowed to migrate into the aggregate base and subgrade soils. The main source of water into a pavement section is landscape planters constructed within or adjacent to pavement areas. Where this is planned, it is recommended to extend the curbs into the soil subgrade at least 2 inches. The construction of all pavements should conform to the requirements set forth by the latest Standard Specifications of the Department of Transportation of the State of California (Caltrans) and/or City of Sacramento.

R-Value: Bulk samples were obtained of the near surface soils within the planned roadways that are relatively representative of the anticipated subgrade soils. The samples were tested in accordance with the California Test Method 301 to determine the R-Value for the site soils. R-Values of 19 and 21 were determined for the two samples obtained as shown in the Appendix. Due to anticipated soil variations, we recommend a maximum R-Value of 15 for design.

Preparation of Subgrade: After underground utilities have been placed in the areas to receive pavement and removal of excess material has been completed, the upper 8 inches of the subgrade soil shall be scarified, moisture conditioned and compacted to a minimum relative compaction of 95% at a moisture content at 3% or more above optimum in accordance with the grading recommendations specified in this report. Prior to placement of aggregate baserock, it is recommended that the subgrade be proof rolled and observed for deflection by the Soils Engineer. Should deflection and/or pumping conditions be encountered, stabilization recommendations will be provided based on field conditions.

Aggregate Base: All aggregate base material placed subsequently should also be compacted to a minimum relative compaction of 95% based on the ASTM Test Procedure D1557. Aggregate base should meet the minimum requirements of Caltrans Class 2 per Section 26. The recommended

aggregate base thicknesses for asphalt concrete pavements are noted in the table below. The minimum aggregate base thickness for Portland cement concrete PCC alley and roadway pavements is 6 compacted inches.

Asphalt Concrete: Bulk samples of the surface soils were obtained from the proposed roadway locations for R-Value testing (California Test Method 301). Based on the lowest R-Value of 15 and a range of traffic indices provided by the City Street Design Table 3.01, the recommended pavement sections were calculated in accordance with Topic 608 of the California Department of Transportation Highway Design Manual. The appropriate traffic index (TI) and any minimum pavement sections should be determined by the Civil Engineer in conformance with the City of Sacramento Specifications.

Traffic Condition	Traffic Index (TI)	Asphalt Concrete (inches)	Class II Aggregate Base <sup>1</sup> (inches)
Parking Stalls	4.5	3.0	6.5
Driveways	6.0	3.0	11.5

NOTES:

- (1) Minimum R-Value = 78 per Section 26
- (2) All layers in compacted thickness to CalTrans Standard Specifications.

Portland Cement Concrete: Where PCC pavement areas are utilized, the concrete should be poured on the compacted aggregate base layer. The concrete section should be designed by the project Structural Engineer. We recommend a minimum of 7 inches thick PCC reinforced with a minimum of No. 4 rebar spaced at 16 inches on center, each way, underlain by 6 inches of compacted Class 2 aggregate base. Additional reinforcement may be required by the Structural Engineer.

### **Retaining Walls**

Any retaining walls that are to be constructed such as site walls should be designed to resist lateral pressures exerted from a media having an equivalent fluid weight as noted in the following table. Walls should be founded on spread footings as noted above.

Gradient of Back Slope	Equivalent Fluid Weight (p.c.f.)			Coefficient Of Friction
	Unrestrained Condition (Active)	Restrained Condition (At Rest)	Passive Resistance	
Horizontal	60	80	200	0.32

It should be noted that the effects of any surcharge or compaction loads behind the walls must be accounted for in the design of the walls. In addition, an earthquake load of  $15H^2$  applied at  $0.6H$  where  $H$  = wall height, from the bottom of the wall is applicable. Restrained conditions should be used where framing or other structural members rests on top or is connected to the top of walls.

The above criteria are based on fully drained conditions. In order to achieve fully-drained conditions, a drainage filter blanket should be placed behind the wall. The blanket should be a minimum of 12 inches thick and should extend the full height of the wall. If the excavated area behind the wall exceeds 12 inches, the entire excavated space behind the 12-inch blanket should consist of compacted engineered fill or blanket material. The drainage blanket material may consist of either granular crushed rock or drain pipe fully encapsulated in geotextile filter fabric (Mirafi 140N or equivalent) or Class II permeable material that meets CalTrans Specification, Section 68. A 4-inch diameter SDR35 perforated drain pipe should be installed in the bottom of the drainage blanket and should be underlain by 4 inches of filter type material. Piping with a minimum gradient of 2% shall be provided to discharge water that collects behind the walls to an adequately controlled discharge system away from the structure foundations.

If mechanically stabilized earth, segmental retaining walls such as Keystone walls are utilized, the design and construction of these proposed flexible modular retaining wall systems should conform to the recommendations of the manufacturer and/or Keystone Retaining Wall Systems or the National Concrete Masonry Association (NCMA). The following soil parameters would be applicable for design using on-site soil materials within the reinforced, retained and bearing zones:  $\phi = 26$  degrees,  $c = 50$  p.s.f.,  $\gamma = 120$  p.c.f. The wall backfill within the reinforced zone may consist of the on-site soil materials provided it has a maximum Liquid Limit of 40 and a maximum Plasticity Index of 20. The wall embedment should conform to the recommendations by Keystone or NCMA.

### **Swimming Pools**

The pool walls should be designed to resist a lateral soil pressure exerted from a media having an equivalent fluid weight of 80 p.c.f. In addition, the pool shell should be designed to be as rigid and uniform as possible.

A gravel blanket consisting of an eight (8) inch thick layer of clean gravel, under the pool shell is recommended. A hydrostatic relief valve should be installed in the bottom of the pool shell to prevent damage during future maintenance. The gravel should be placed as high up the pool wall as practical. A perforated pipe should be placed in the lowest section of the gravel and be discharge to daylight or a sump. Water proofing should be provided around the pool walls.

It is recommended that the pool deck/flatwork adjacent to the pool areas be reinforced, as designed by the project structural engineer, and cantilevered over the pool bond beam in lieu of the standard coping. Minimum slab-on-grade recommendations are provided above. This will eliminate construction expansion joints between the pool coping and deck slab, which is a continuing maintenance problem. A watertight seal should be placed beneath the concrete slab at the contact with the pool bond beam. Alternatively, the surrounding deck slabs may be structurally connected to the pool shell.

The surrounding concrete flatwork (pool decking) should have positive surface drainage and be provided with an adequate number of surface drains and conduit system to remove surface runoff from rainfall and pool splash. In addition, all concrete flatwork should be provided with construction joints at regular intervals to provide for expansion and contraction of the slab components.

The Soil Engineer should review the pool plans and calculations prior to construction and observe the pool excavation at the completion of excavating activities.

### **Underground Utility and Excavations**

Groundwater was encountered at depths ranging from 15.5 to 16.0 feet below the existing ground surface. Shallower groundwater levels may be encountered. Therefore, depending on the time of year of underground construction groundwater will likely be encountered, especially in deeper utilities. Temporary dewatering and shoring are the responsibility of the Contractor.

Should groundwater be encountered, the utility construction should begin at its lowest point and proceed uphill. The utility trench should be over-excavated 6 to 12 inches below the Sacramento required pipe bedding material. Crushed aggregate drainrock (3/4") should be placed in the bottom of the trench followed by filter fabric and the City standard bedding material. A sump area should be excavated at the lowest point of the open excavation/trench to facilitate pumping of collected water. The collected water should be pumped to a City approved discharge facility.

Utility excavations extending underneath all new traffic areas must be backfilled with native or approved import material and compacted to relative compaction of 90% to within 18 inches of the subgrade. The upper 18 inches should be compacted to 95% relative compaction in accordance with Laboratory Test Procedure ASTM D1557. Backfilling and compaction of these excavations must meet the requirements set forth by the City of Sacramento.

Applicable safety standards require that excavations in excess of 5 feet must be properly shored or that the walls of the excavation slope back to provide safety for installation of lines. If excavation

wall sloping is performed, the inclination should vary with the soil type. The soils at the site are considered to be OSHA Type B. However, should groundwater be encountered, a Type C soil should be used. During excavation operations, the underground contractor should consult with the Soil Engineer for additional recommendations as deemed necessary.

With respect to state-of-the-art construction or local requirements, utility lines are generally bedded with granular materials. These materials can convey surface or subsurface water beneath the structures. It is, therefore, recommended that all utility trenches which possess the potential to transport water be sealed with a compacted impervious cohesive soil material or lean concrete where the trench enters/exits the building perimeter. This impervious seal should extend a minimum of 2 feet away from the building perimeter.

## LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. It should be noted that it is the responsibility of the owner or his representative to notify ***KC ENGINEERING CO.***, or the Soil Engineer of Record, a minimum of two working days before any clearing, grading, or foundation excavation operations can commence at the site.
2. The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed in the borings and from a reconnaissance of the site. Should any variations or undesirable conditions be encountered during the development of the site, ***KC ENGINEERING CO.***, or the Soil Engineer of Record, will provide supplemental recommendations as dictated by the field conditions.
3. This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information and recommendations contained herein are brought to the attention of the Architect and Engineer for the project and incorporated into the plans and that the necessary steps are taken to see that the Contractor and Subcontractors carry out such recommendations in the field.
4. At the present date, the findings of this report are valid for the property investigated. With the passage of time, significant changes in the conditions of a property can occur due to natural processes or works of man on this or adjacent properties. In addition, legislation or the broadening of knowledge may result in changes in applicable standards. Changes outside of our control may render this report invalid, wholly or partially. Therefore, this report should not be considered valid after a period of two (2) years without our review, nor should it be used, or is it applicable, for any properties other than those investigated.
5. Notwithstanding, all the foregoing applicable codes must be adhered to at all times.

## **APPENDIX**

**Aerial Vicinity Map**

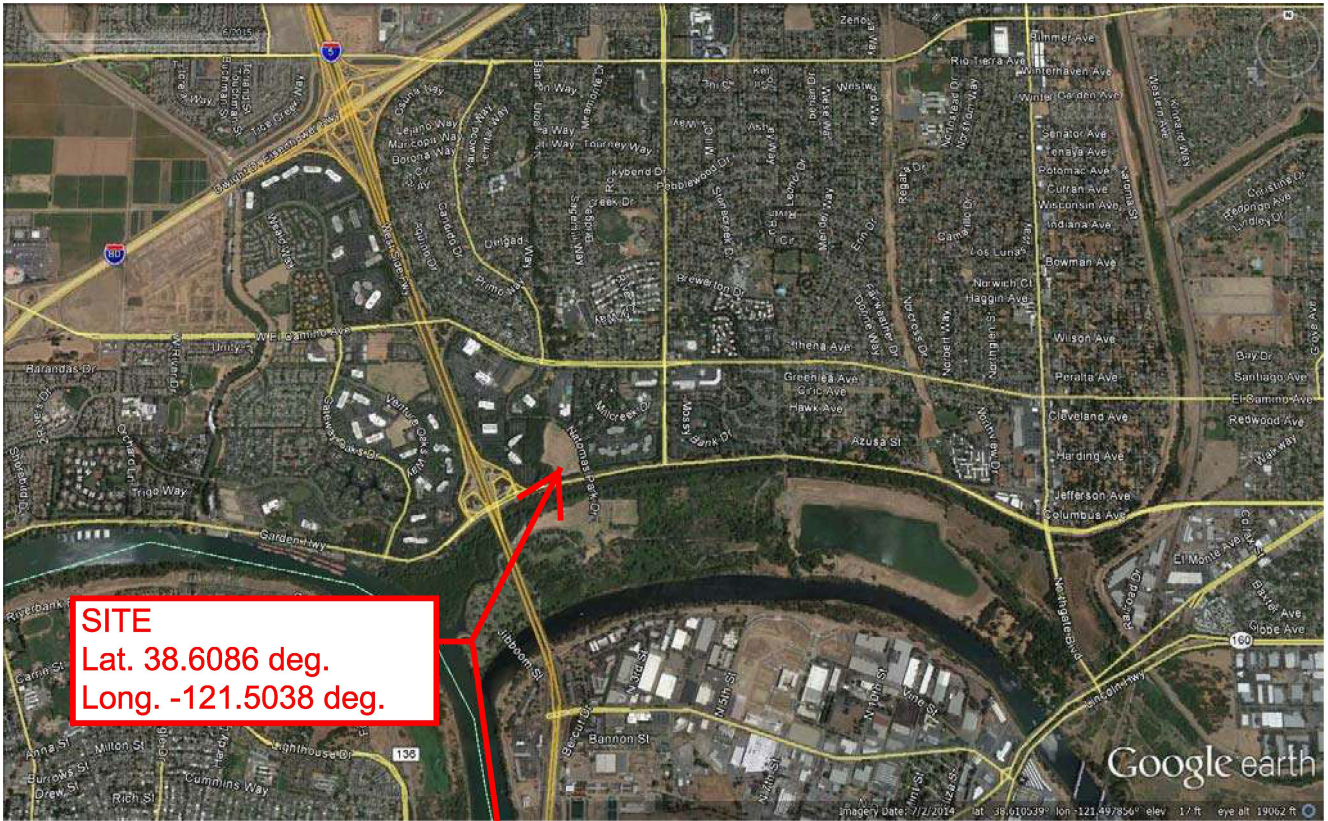
**Site Plan**

**Log of Test Borings**

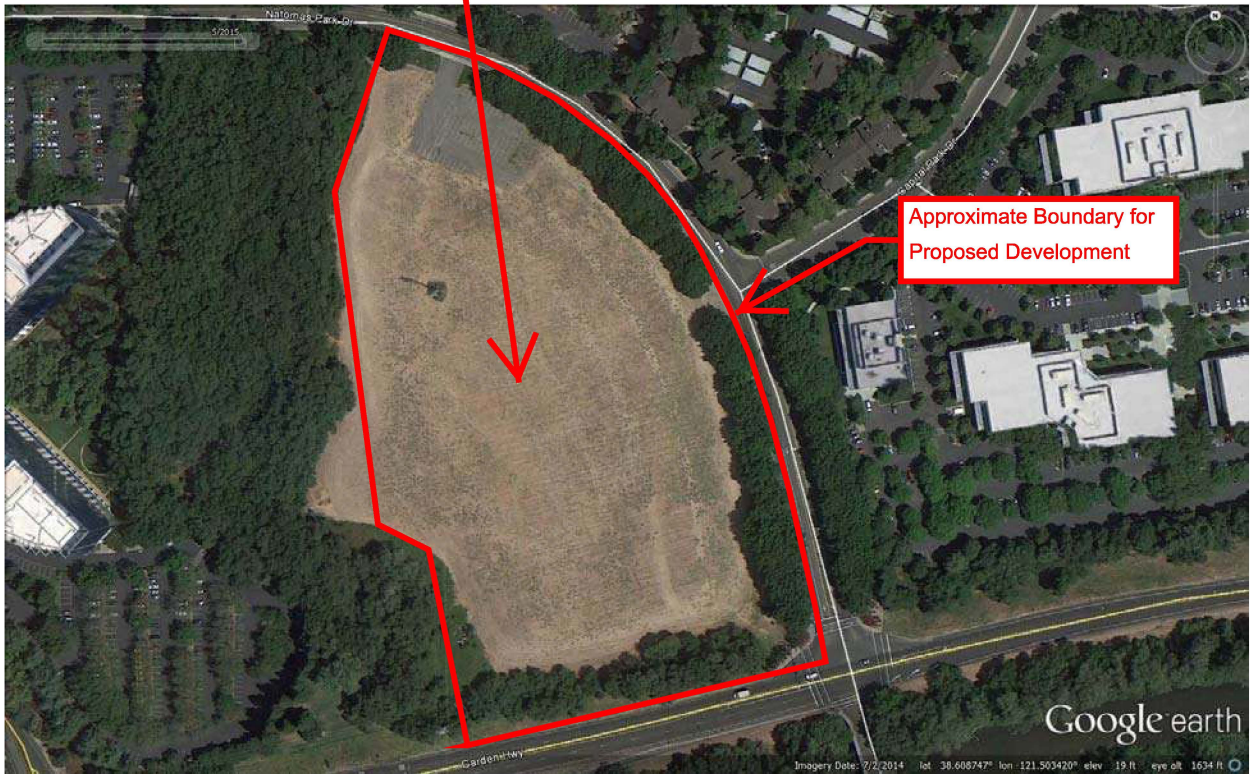
**Subsurface Exploration Legend**

**Laboratory Test Results**

**USGS Seismic Design Criteria**



**SITE**  
 Lat. 38.6086 deg.  
 Long. -121.5038 deg.



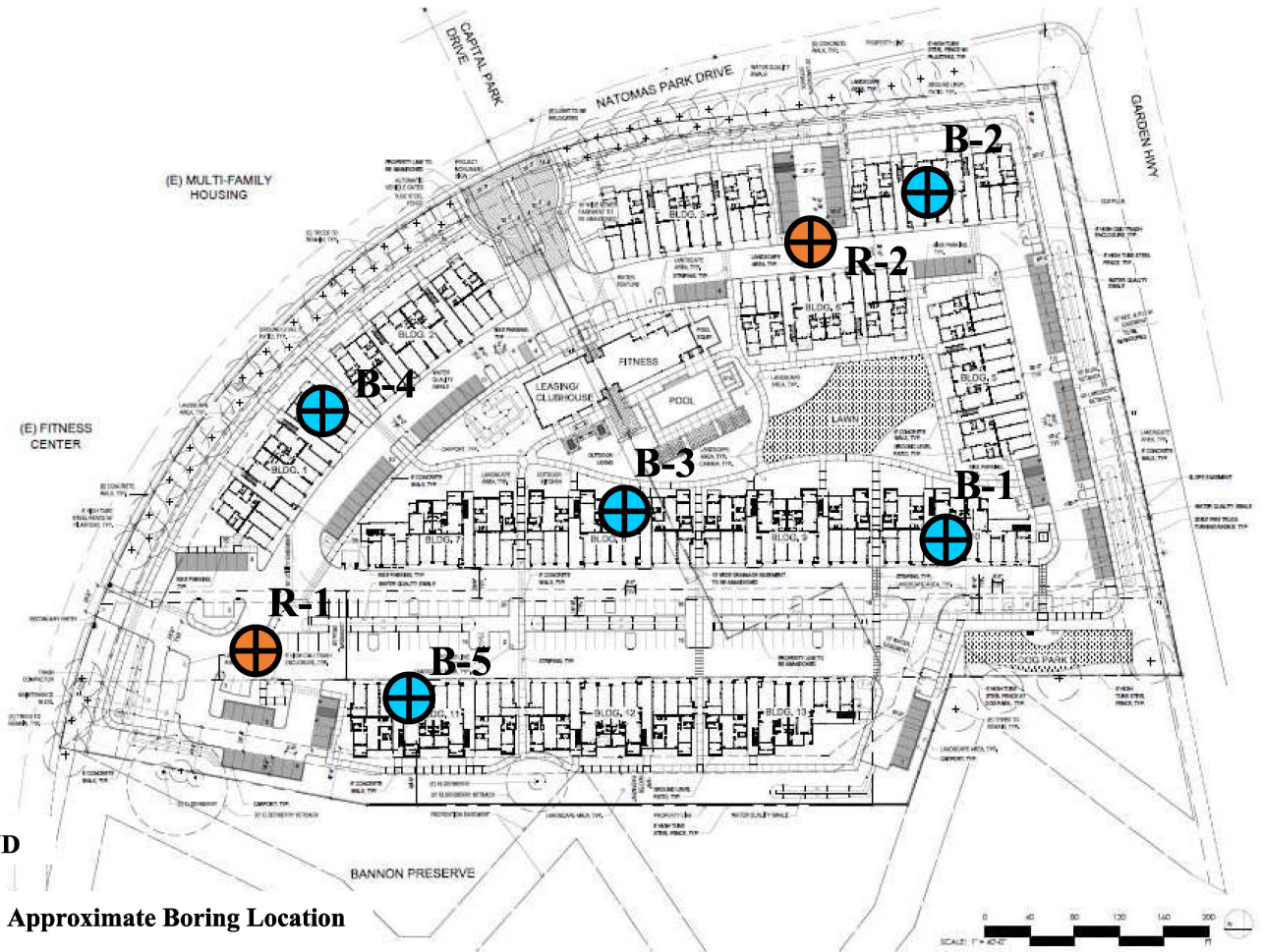
**Approximate Boundary for  
 Proposed Development**



**KC ENGINEERING COMPANY**  
 865 Cotting Lane, Suite A  
 Vacaville, CA 95688  
 707.447.4025

Project No. VV3853  
 Proposed Natomas Park Drive Apartments  
 Natomas Park Drive & Garden Highway  
 Sacramento, California  
**Figure 1 – AERIAL VICINITY MAP**





**LEGEND**



Approximate Boring Location



Approximate R-Value Location

**NATOMAS PARK DRIVE APARTMENTS**

SACRAMENTO, CA

**CONCEPTUAL SITE PLAN**

DATE: 02/12/2015  
 PROJECT NO: 1194-0001  
 SCALE: 1" = 40'-0"  
 SHEET: A1.00



**KC ENGINEERING COMPANY**  
 865 Cotting Lane, Suite A  
 Vacaville, CA 95688  
 707-447-4025

Project No. VV3853  
 Proposed Natomas Park Drive Apartments  
 Natomas Park Drive & Garden Highway  
 Sacramento, California  
**Figure 2 – SITE PLAN**

# LOG OF TEST BORING

## BORING NO.: 1

PROJECT: Proposed Natomas Park Dr. Apts  
 CLIENT: Demmon Partners  
 LOCATION: Natomas Park Drive & Garden Highway  
 DRILLER: Hillside Drilling  
 DRILL RIG: Mobile B-24  
 DEPTH TO WATER: INITIAL  $\nabla$  16

PROJECT NO.: VV3853  
 DATE: 5/12/15  
 ELEVATION: n/a  
 LOGGED BY: ES  
 BORING DIAMETER: 4"  
 FINAL:  $\nabla$  AFTER: HRS

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, $\phi$ &c, Gradation)
0				Brown SILT; moist, stiff. (NATIVE)	ML				
1-1						11	85.5	23.0	LL=48% PI=18 <200=96%
1-2				Brown Silty CLAY; moist, very stiff.	CL	17	89.6	21.8	
5									
1-3				As Above, stiff.		14			Qp=2.5 tsf
10									
1-4				Gray & Reddish Brown Silty CLAY; moist, firm.	CL	7	77.7	40.0	Qp=1.5 tsf
15									
1-5				As Above, stiff.		14			Qp=2.7 tsf
20									
25				Brown Sandy CLAY; moist, stiff.					







This information pertains only to this boring and is not necessarily indicative of the whole site.

# LOG OF TEST BORING

BORING NO.: 1

PROJECT: Proposed Natomas Park Dr. Apts  
 CLIENT: Demmon Partners  
 LOCATION: Natomas Park Drive & Garden Highway  
 DRILLER: Hillside Drilling  
 DRILL RIG: Mobile B-24  
 DEPTH TO WATER: INITIAL  $\nabla$  16

PROJECT NO.: VV3853  
 DATE: 5/12/15  
 ELEVATION: n/a  
 LOGGED BY: ES  
 BORING DIAMETER: 4"  
 FINAL:  $\nabla$ : AFTER: HRS

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEO TECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, $\phi$ &c, Gradation)
30	1-6			As Above		10	97.8	27.0	Qp=2.0 tsf <200=74%
35				Increased Drill Resistance					
40	1-7			No Recovery		11			4" Cave-In
45	1-8			Drill Chatter Gravel & Rounded Stone, Poorly Graded w/ little sand; wet, very dense.	GP	50-6"			
45				Boring Terminated @ 45'. Groundwater encountered @ 16'.					
50									
55									






This information pertains only to this boring and is not necessarily indicative of the whole site.

# LOG OF TEST BORING

BORING NO.: 2

PROJECT: Proposed Natomas Park Dr. Apts  
 CLIENT: Demmon Partners  
 LOCATION: Natomas Park Drive & Garden Highway  
 DRILLER: Hillside Drilling  
 DRILL RIG: Mobile B-24  
 DEPTH TO WATER: INITIAL  $\nabla$  15.5

PROJECT NO.: VV3853  
 DATE: 5/12/15  
 ELEVATION: n/a  
 LOGGED BY: ES  
 BORING DIAMETER: 4"  
 FINAL:  $\nabla$  AFTER: HRS

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, $\phi$ &c, Gradation)
0				Brown Sandy CLAY; moist, stiff. (NATIVE)	CL				
	2-1	■				14	98.7	18.1	
5	2-2	■		Brown & Gray Silty CLAY; moist, stiff.	CL	10	93.7	23.7	UCC=4430 psf
10	2-3	■		As Above, very stiff.		16			
15	2-4	■		Gray & Reddish Brown Silty CLAY; moist, firm.	CL	7	80.8	37.4	<200=87%
20									
25	2-5	■		Bluish Gray & Brown Silty CLAY; moist, stiff.	CL	14	110.8	12.0	Qp=3.5tsf <200=91%

This information pertains only to this boring and is not necessarily indicative of the whole site.

# LOG OF TEST BORING

BORING NO.: 2

PROJECT: Proposed Natomas Park Dr. Apts  
 CLIENT: Demmon Partners  
 LOCATION: Natomas Park Drive & Garden Highway  
 DRILLER: Hillside Drilling  
 DRILL RIG: Mobile B-24  
 DEPTH TO WATER: INITIAL  $\nabla$  15.5

PROJECT NO.: VV3853  
 DATE: 5/12/15  
 ELEVATION: n/a  
 LOGGED BY: ES  
 BORING DIAMETER: 4"  
 FINAL:  $\nabla$ :                      AFTER:                      HRS

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, $\phi$ &c, Gradation)
30									
35	2-6	■		As Above, firm.		7			
40				Drill Resistance (Chatter) Gravel w/ Sand; wet, very dense.	GP	50-6"			
42	2-7	■		Boring Terminated @ 42'. Water Encountered @ 15.5'.					
45									
50									
55									

This information pertains only to this boring and is not necessarily indicative of the whole site.

# LOG OF TEST BORING

BORING NO.: 3

PROJECT: Proposed Natomas Park Dr. Apts  
 CLIENT: Demmon Partners  
 LOCATION: Natomas Park Drive & Garden Highway  
 DRILLER: Hillside Drilling  
 DRILL RIG: Mobile B-24  
 DEPTH TO WATER: INITIAL  $\nabla$  16'

PROJECT NO.: VV3853  
 DATE: 5/12/15  
 ELEVATION: n/a  
 LOGGED BY: ES  
 BORING DIAMETER: 4"  
 FINAL:  $\nabla$  AFTER: HRS

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, $\phi$ &c, Gradation)
0				Brown Silty CLAY; moist, firm. (NATIVE)	CL				
3-1						5	76.1	38.9	Qp=3.5 tsf c=227 psf $\phi$ =21.8 deg
5				Gray & Reddish Brown Silty CLAY; moist, stiff.	CL				
3-2						13			Qp=2.5 tsf
10									
3-3				As Above, firm.		7	87.8	30.2	<200=80%
15									
20									
				Bluish Gray & Brown Silty CLAY; moist, very stiff.	CL				
25						22			Pc' =3095 psf Qp=2.5 tsf

This information pertains only to this boring and is not necessarily indicative of the whole site.

# LOG OF TEST BORING

BORING NO.: 3

PROJECT: Proposed Natomas Park Dr. Apts

PROJECT NO.: VV3853

CLIENT: Demmon Partners

DATE: 5/12/15

LOCATION: Natomas Park Drive & Garden Highway

ELEVATION: n/a

DRILLER: Hillside Drilling

LOGGED BY: ES

DRILL RIG: Mobile B-24

BORING DIAMETER: 4"

DEPTH TO WATER: INITIAL  $\nabla$  16'

FINAL:  $\nabla$ : AFTER: HRS

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, $\phi$ &c, Gradation)
30									
35				Drill Resistance (Chatter)					
38.5	3-5			GRAVEL w/ Sand; wet, very dense. Boring Terminated @ 38.5'. Groundwater encountered @ 16'.	GP	50-6"			
40									
45									
50									
55									

This information pertains only to this boring and is not necessarily indicative of the whole site.

# LOG OF TEST BORING

BORING NO.: 4

PROJECT: Proposed Natomas Park Dr. Apts  
 CLIENT: Demmon Partners  
 LOCATION: Natomas Park Drive & Garden Highway  
 DRILLER: Hillside Drilling  
 DRILL RIG: Mobile B-24  
 DEPTH TO WATER: INITIAL  $\nabla$  15.5'

PROJECT NO.: VV3853  
 DATE: 5/12/15  
 ELEVATION: n/a  
 LOGGED BY: ES  
 BORING DIAMETER: 4"  
 FINAL:  $\nabla$  AFTER: HRS

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, $\phi$ &c, Gradation)	
0				Brown Sandy CLAY w/ silt; moist, stiff. (NATIVE)	CL					
4-1						10	84.1	29.4	<200=71%	
5					Gray & Reddish Brown Silty CLAY; moist, firm to stiff.	CL				
4-2					As Above		8	81.7	35.2	UCC=2710 psf Qp=3.0 tsf
10										
15				$\nabla$						
4-3				Bluish Gray & Brown Silty CLAY; moist, stiff.	CL	14	89.8	31.9	Qp=2.0 tsf	
20										
25				Gray & Brown Sandy CLAY; moist, firm to stiff.	CL					

This information pertains only to this boring and is not necessarily indicative of the whole site.







# LOG OF TEST BORING

BORING NO.: 4

PROJECT: Proposed Natomas Park Dr. Apts  
 CLIENT: Demmon Partners  
 LOCATION: Natomas Park Drive & Garden Highway  
 DRILLER: Hillside Drilling  
 DRILL RIG: Mobile B-24  
 DEPTH TO WATER: INITIAL  $\nabla$  15.5'

PROJECT NO.: VV3853  
 DATE: 5/12/15  
 ELEVATION: n/a  
 LOGGED BY: ES  
 BORING DIAMETER: 4"  
 FINAL:  $\nabla$ : AFTER: HRS

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, $\phi$ &c, Gradation)
30	4-4			As Above		8	85.2	36.6	Qp=1.7 tsf <200=69%
35									
40				Drill Resistance (Chatter)					
40	4-5			GRAVEL w/ Sand; wet, very dense.	GP	50-6"			
45				Boring Terminated @ 43'. Groundwater encountered @ 15.5'.					
50									
55									





This information pertains only to this boring and is not necessarily indicative of the whole site.

# LOG OF TEST BORING

BORING NO.: 5

PROJECT: Proposed Natomas Park Dr. Apts  
 CLIENT: Demmon Partners  
 LOCATION: Natomas Park Drive & Garden Highway  
 DRILLER: Hillside Drilling  
 DRILL RIG: Mobile B-24  
 DEPTH TO WATER: INITIAL  $\nabla$  16'

PROJECT NO.: VV3853  
 DATE: 5/12/15  
 ELEVATION: n/a  
 LOGGED BY: ES  
 BORING DIAMETER: 4"  
 FINAL:  $\nabla$ :                      AFTER:                      HRS

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, $\phi$ &c, Gradation)
0				2" Asphalt, 4" Agg. Base					
	5-1	■		Brown Silty CLAY; moist, firm to stiff.	CL	7	67.3	47.3	LL=58% PI=18 Qp=1.5 tsf
5	5-2	■		As Above, stiff.		9	83.3	33.7	
10	5-3	■		As Above		10	86.4	34.3	Qp=3.0 tsf
15				$\nabla$					
20	5-4	■		Bluish Gray & Brown Silty CLAY; moist, very stiff.	CL	18			
25									



This information pertains only to this boring and is not necessarily indicative of the whole site.

# LOG OF TEST BORING

BORING NO.: 5

PROJECT: Proposed Natomas Park Dr. Apts  
 CLIENT: Demmon Partners  
 LOCATION: Natomas Park Drive & Garden Highway  
 DRILLER: Hillside Drilling  
 DRILL RIG: Mobile B-24  
 DEPTH TO WATER: INITIAL  $\nabla$  16'

PROJECT NO.: VV3853  
 DATE: 5/12/15  
 ELEVATION: n/a  
 LOGGED BY: ES  
 BORING DIAMETER: 4"  
 FINAL:  $\nabla$ : AFTER: HRS

DEPTH	SAMPLE NO.	SAMPLER	GRAPHIC LOG	GEOTECHNICAL DESCRIPTION AND CLASSIFICATION	SOIL CLASSIFICATION	CONVERTED SPT BLOW COUNT (BLOWS/FT.)	DRY DENSITY (PCF)	MOISTURE CONTENT (PERCENT)	ADDITIONAL TESTS AND REMARKS (LL, PI, UCC, $\phi$ &c, Gradation)
30				Brown Silty CLAY; moist, firm.	CL	7	92.4	31.4	Qp=1.5 tsf <200=72%
35	5-5			Drill Resistance (Chatter) Boring Terminated @ 38'. Groundwater encountered @ 16'.					
40									
45									
50									
55									

This information pertains only to this boring and is not necessarily indicative of the whole site.

# UNIFIED SOIL CLASSIFICATION SYSTEM



**MTI-KC ENGINEERING COMPANY**  
865 Cotting Lane, Ste A, Vacaville, CA 95688  
8798 Airport Road, Redding, CA 96002

## SAMPLER AND LAB TESTING LEGEND

	Auger
	Bulk Sample, taken from auger cuttings
	California Sampler
	Bulk/Grab Sample
	Pitcher
	Standard Penetration Test
	Shelby Tube
	No Recovery

LL=Liquid Limit (%)  
PI=Plasticity Index  
Φ=Friction Angle  
C=Cohesion  
UCC=Unconfined Compression  
R value=Resistance Value  
Consol=Consolidation Test

MAJOR DIVISIONS		SYMBOLS		TYPICAL NAMES	
COARSE GRAINED SOILS More than half of material is retained on the No. 200 Sieve	GRAVEL More than half of coarse fraction is larger than No. 4 sieve	Clean gravels (<5% fines)	GW		Well graded gravels, gravel-sand mixtures, little or no fines (Cu>4 & 1<Cc<3)
		Gravel with fines (5-12% fines)	GP		Poorly graded gravels, gravel-sand mixtures, little or no fines (Cu < 4 and/or 1>Cc>3)
	SAND Half or more of the coarse fraction is smaller than No. 4 sieve	Clean sands (<5% fines)	SW		Well graded sands, gravelly sands, little or no fines (Cu>6 & 1<Cc<3)
		Poorly graded sands, gravelly sands, little or no fines (Cu<6 and/or 1>Cc>3)	SP		
		Silty sands and gravel-sand-silt mixtures (PI<4 or below "A" line)	SM		
		Clayey sands and gravel-sand-clay mixtures (PI>7 & on or above "A" line)	SC		
FINE GRAINED SOILS Half or more of the material is smaller than No. 200	SILTS AND CLAYS Liquid Limit is less than 50%		ML		Inorganic silts with gravel and sand having slight plasticity (PI<4 or below "A" line)
			CL		Inorganic clays of low to med. plasticity with gravel and sand (PI>7 & on or above "A" line)
			OL		Organic silts and clays of low plasticity
	SILTS AND CLAYS Liquid Limit is 50% or more		MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts (PI below "A" line)
			CH		Inorganic clays of high plasticity, fat clays (PI on or above "A" line)
			OH		Organic silts and clays of medium to high plasticity
HIGHLY ORGANIC SOILS			Pt		Peat and other highly organic soils

## SOIL GRAIN SIZE U.S. STANDARD SIEVE OPENINGS

CLAY		SILT		SAND			GRAVEL		COBBLES	BOULDERS
		FINE	MEDIUM	COARSE	FINE	COARSE				
0.002		0.075	0.425	2.00	4.75	19.0	75	300		

## SOIL GRAIN SIZE IN MILLIMETERS

### RELATIVE DENSITY (Coarse-grained soils)

SANDS & GRAVELS	BLOWS/FOOT <sup>1</sup>
Very Loose	0 - 4
Loose	4 - 10
Medium Dense	10 - 30
Dense	30 - 50
Very Dense	> 50

### CONSISTENCY (Fine-grained soils)

SILTS & CLAYS	STRENGTH <sup>2</sup>	BLOWS/FOOT <sup>1</sup>
Very Soft	< 500	0 - 2
Soft	500 - 1,000	2 - 4
Firm	1,000 - 2,000	4 - 8
Stiff	2,000 - 4,000	8 - 15
Very Stiff	4,000 - 8,000	15 - 30
Hard	> 8,000	>30

1 - Number of blows of 140 pound hammer falling 30 inches to drive a 2-inch O.D. split spoon sampler (ASTM D1586)

2 - Unconfined compressive strength in lb/ft<sup>2</sup> as determined by lab testing or approximated by the standard penetration test (ASTM D1586) or pocket penetrometer.

### WEATHERING (Bedrock)

Fresh	No visible sign of decomposition or discoloration; rings under hammer impact
Slightly weathered	Slight discoloration inwards from open fractures; little or no effect on normal cementation; otherwise similar to Fresh
Moderately weathered	Discoloration throughout; weaker minerals decomposed; strength somewhat less than fresh rock but cores can not be broken by hand or scraped with knife; texture preserved; cementation little to not affected; fractures may contain filling
Highly weathered	Most minerals somewhat decomposed; specimens can be broken by hand with effort or shaved with knife; texture becoming indistinct but fabric preserved; faint fractures
Completely weathered	Minerals decomposed to soil but fabric and structure preserved; specimens can be easily crumbled or penetrated

### STRENGTH (Bedrock)

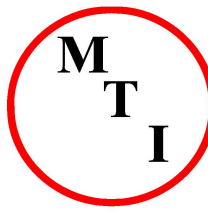
Plastic	Very low strength
Friable	Crumbles easily by rubbing with fingers
Weak	An unfractured specimen will crumble under light hammer blows
Moderately strong	Specimen will withstand a few heavy hammer blows before breaking
Strong	Specimen will withstand a few heavy ringing blows and will yield with difficulty only dust and small flying fragments
Very strong	Specimen will resist heavy ringing hammer blows and will yield with difficulty only dust and small flying fragments

### BEDDING (Bedrock)

BEDDING (Bedrock)	SPACING (inches)
Very thickly bedded	> 48
Thickly bedded	24 to 48
Thin bedded	2.5 to 24
Very thin bedded	5/8 to 2.5
Laminated	1/8 to 5/8
Thinly laminated	<1/8

### FRACTURING (Bedrock)

FRACTURING (Bedrock)	SPACING (inches)
Very little fractured	> 48
Occasionally fractured	12 to 48
Moderately fractured	6 to 12
Closely fractured	1 to 6
Intensely fractured	5/8 to 1
Crushed	<5/8



# Materials Testing, Inc.

8798 Airport Road  
Redding, California 96002  
(530) 222-1116, fax 222-1611

865 Cotting Lane, Suite A  
Vacaville, California 95688  
(707) 447-4025, fax 447-4143

**Client:** Demmon Partners  
1451 River Park Drive, Suite 121  
Sacramento, CA 95815

**Client No.:** VV3853-001  
**Report No.:** 0300-001  
**Date:** 06/02/15

**Project:** Proposed Natomas Park Drive Apartments  
Sacramento, California

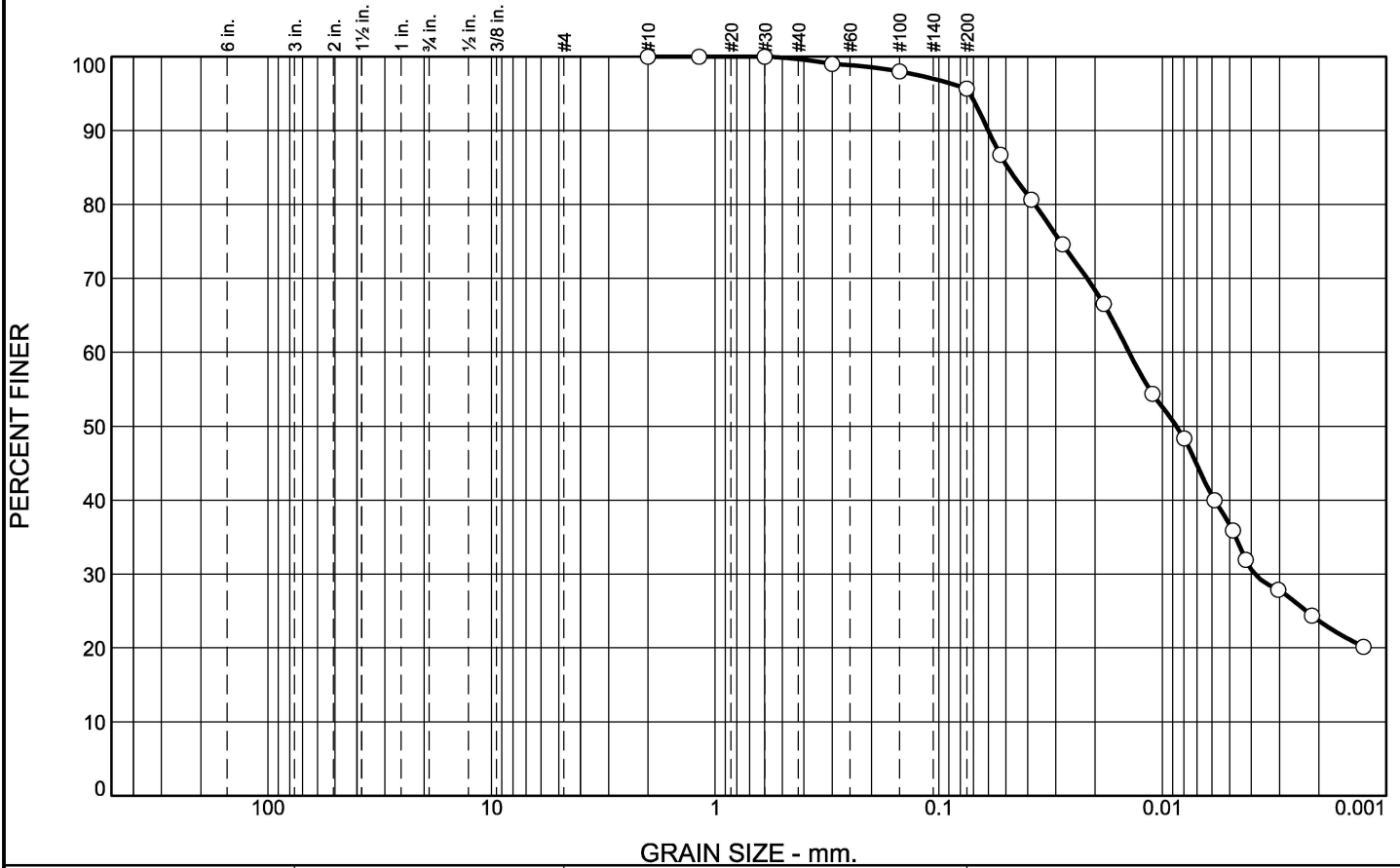
**Submitted by:** KC Engineering

## Density of Soil in Place by the Drive-Cylinder Method (ASTM D2937) and Liquid Limit, Plastic Limit & Plasticity Index of Soils (ASTM D4318)

Sample #	Description	Dry Density p.c.f.	Moisture Content %	Liquid Limit	Plastic Limit	Plastic Index
1-1 @ 2.0'	Brown Silt	85.5	23.0	48	30	18
1-2 @ 4.5'	Brown Silty Clay (visual)	89.6	21.8	---	---	---
1-4 @ 14.5'	Brown Silty Clay (visual)	77.7	40.0	---	---	---
1-6 @ 29.5'	Brown Sandy Clay (visual)	97.8	27.0	---	---	---
2-1 @ 2.0'	Brown Sandy Clay (visual)	98.7	18.1	---	---	---
2-2 @ 4.5'	Brown Silty Clay (visual)	93.7	23.7	---	---	---
2-4 @ 14.5'	Brown Silty Clay (visual)	80.8	37.4	---	---	---
2-5 @ 24.5'	Dark Brown Silty Clay (visual)	110.8	12.0	---	---	---
3-1 @ 3.0'	Brown Silty Clay (visual)	76.1	38.9	---	---	---
3-3 @ 13.0'	Brown Silty Clay (visual)	87.8	30.2	---	---	---
4-1 @ 2.0'	Brown Sandy Clay with silt (visual)	84.1	29.4	---	---	---
4-2 @ 8.0'	Brown Silty Clay (visual)	81.7	35.2	---	---	---
4-3 @ 18.0'	Brown Silty Clay (visual)	89.8	31.9	---	---	---
4-4 @ 29.0'	Brown Sandy Clay (visual)	85.2	36.6	---	---	---
5-1 @ 2.0'	Brown Silty Clay (visual)	67.3	47.3	58	40	18
5-2 @ 6.0'	Brown Silty Clay (visual)	83.3	33.7	---	---	---
5-3 @ 11.0'	Brown Silty Clay (visual)	86.4	34.3	---	---	---
5-5 @ 34.0'	Brown Silty Clay (visual)	92.4	31.4	---	---	---

Construction Materials Testing and Quality Control Services  
Soil - Concrete - Asphalt - Steel - Masonry

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	0	0	0	4	59	37

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#10	100		
#16	100		
#30	100		
#50	99		
#100	98		
#200	96		

**Material Description**

Brown Silt (visual)

**Atterberg Limits**

PL= 30      LL= 48      PI= 18

**Coefficients**

D<sub>90</sub>= 0.0601      D<sub>85</sub>= 0.0491      D<sub>60</sub>= 0.0141  
D<sub>50</sub>= 0.0086      D<sub>30</sub>= 0.0039      D<sub>15</sub>=  
D<sub>10</sub>=              C<sub>u</sub>=              C<sub>c</sub>=

**Classification**

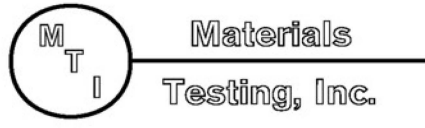
USCS= ML              AASHTO= A-7-5(21)

**Remarks**

Hydrometer performed in accordance with ASTM D422.  
Atterberg Limits performed in accordance with ASTM D4318.

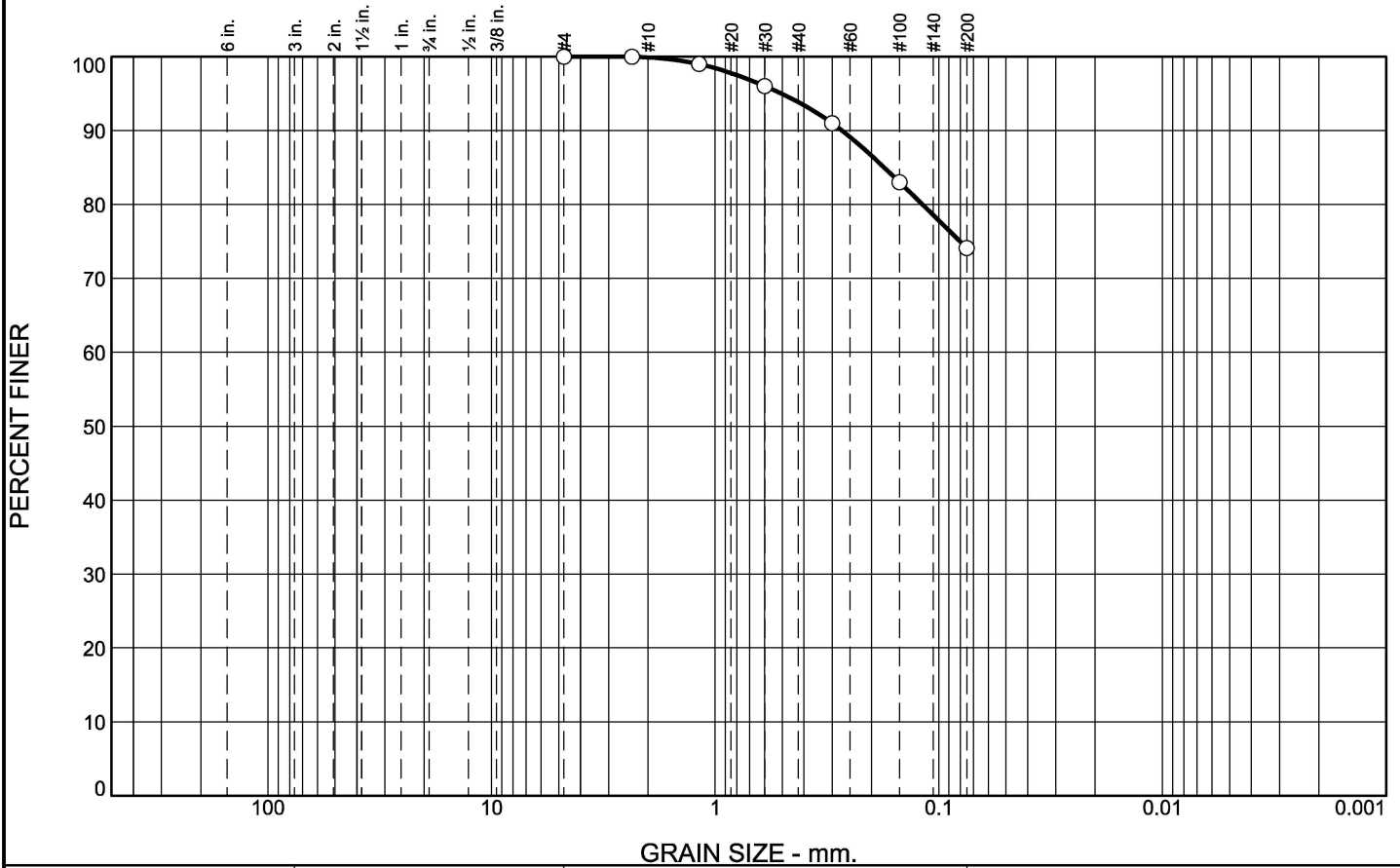
\* (no specification provided)

**Location:** 1-1      **Sample Number:** 1      **Depth:** 2.0'      **Date:** 06/02/15



**Client:** Demmon Partners  
**Project:** Proposed Natomas Park Drive Apartments  
Sacramento, CA  
**Project No:** VV3853-001      **Figure** 0300-002

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	0	0	6	20	74	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100		
#8	100		
#16	99		
#30	96		
#50	91		
#100	83		
#200	74		

**Material Description**

Brown Sandy Clay (visual)

**Atterberg Limits**

PL= ---      LL= ---      PI= ---

**Coefficients**

D<sub>90</sub>= 0.2712      D<sub>85</sub>= 0.1758      D<sub>60</sub>=  
D<sub>50</sub>=                      D<sub>30</sub>=                      D<sub>15</sub>=  
D<sub>10</sub>=                      C<sub>u</sub>=                      C<sub>c</sub>=

**Classification**

USCS= CL                      AASHTO=

**Remarks**

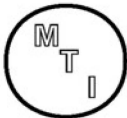
Material tested in accordance with ASTM D6913.

\* (no specification provided)

**Location:** 1-6  
**Sample Number:** 6

**Depth:** 29.5'

**Date:** 06/02/15



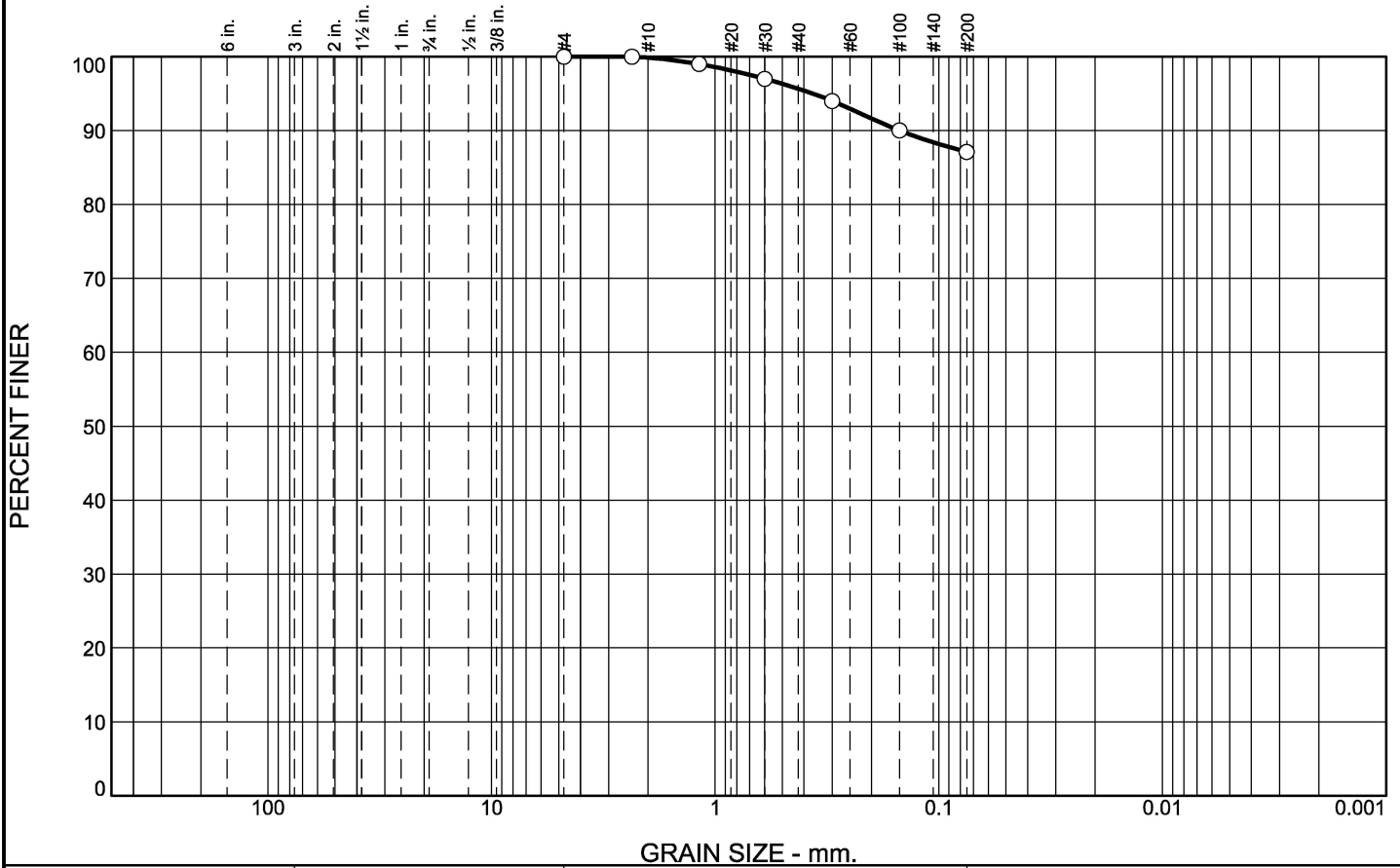
**Materials Testing, Inc.**

**Client:** Demmon Partners  
**Project:** Proposed Natomas Park Drive Apartments  
Sacramento, CA

**Project No:** VV3853-001

**Figure** 0300-003

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	0	0	4	9	87	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100		
#8	100		
#16	99		
#30	97		
#50	94		
#100	90		
#200	87		

**Material Description**

Brown Silty Clay (visual)

**Atterberg Limits**

PL= ---      LL= ---      PI= ---

**Coefficients**

D<sub>90</sub>= 0.1500      D<sub>85</sub>=      D<sub>60</sub>=  
D<sub>50</sub>=      D<sub>30</sub>=      D<sub>15</sub>=  
D<sub>10</sub>=      C<sub>u</sub>=      C<sub>c</sub>=

**Classification**

USCS= CL-ML      AASHTO=

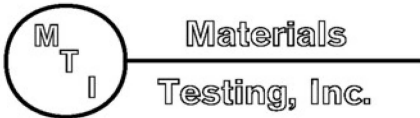
**Remarks**

Material tested in accordance with ASTM D6913.

\* (no specification provided)

**Location:** 2-4  
**Sample Number:** 10      **Depth:** 14.5'

**Date:** 06/02/15



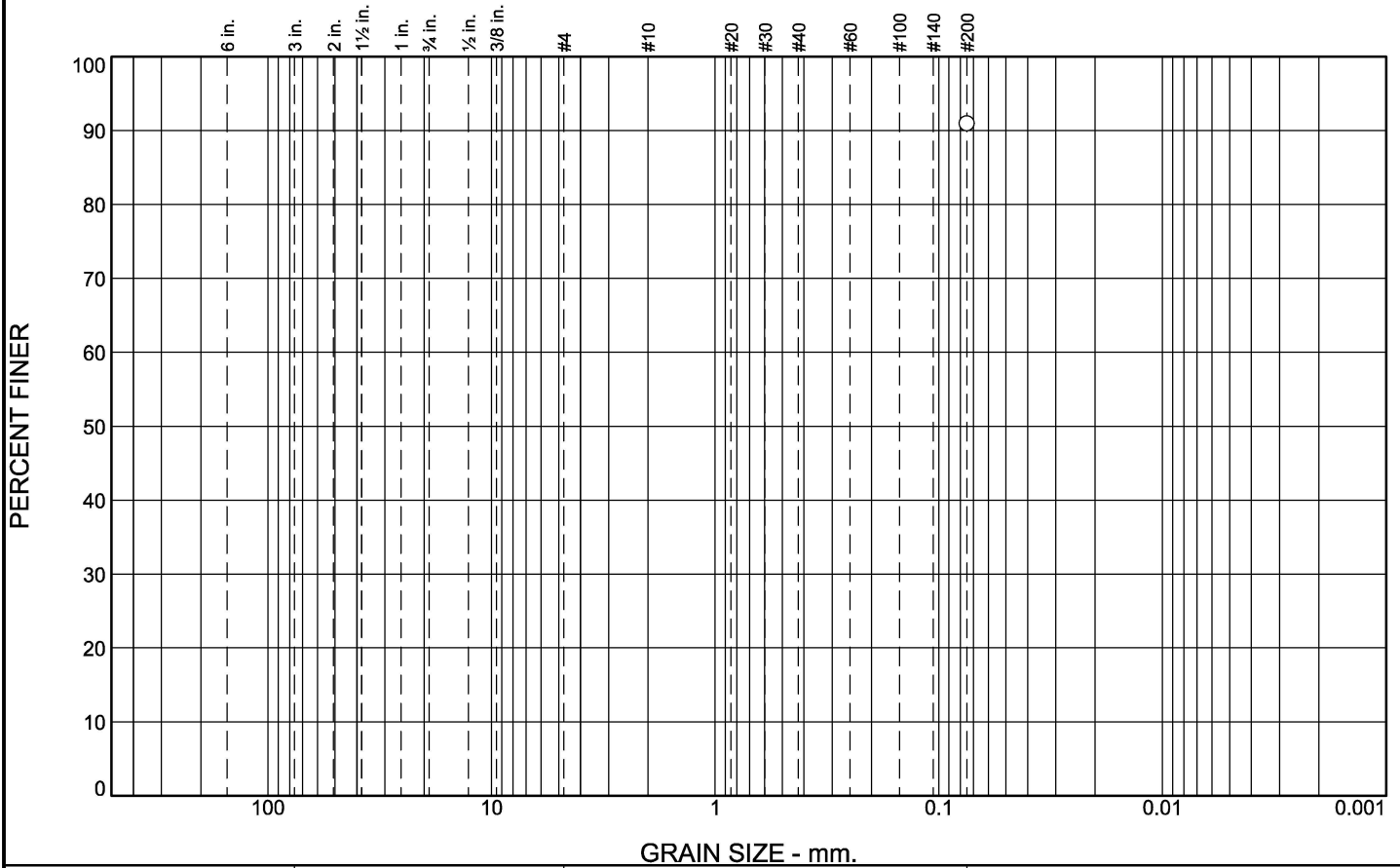
**Client:** Demmon Partners  
**Project:** Proposed Natomas Park Drive Apartments  
Sacramento, CA

**Project No:** VV3853-001

**Figure** 0300-004



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						91	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	91		

**Material Description**

Dark Brown Silty Clay (visual)

**Atterberg Limits**

PL= ---      LL= ---      PI= ---

**Coefficients**

D<sub>90</sub>=      D<sub>85</sub>=      D<sub>60</sub>=  
D<sub>50</sub>=      D<sub>30</sub>=      D<sub>15</sub>=  
D<sub>10</sub>=      C<sub>u</sub>=      C<sub>c</sub>=

**Classification**

USCS= CL-ML      AASHTO=

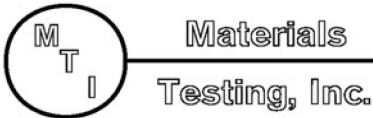
**Remarks**

Material tested in accordance with ASTM D6913.

\* (no specification provided)

**Location:** 2-5  
**Sample Number:** 11      **Depth:** 24.5'

**Date:** 06/02/15

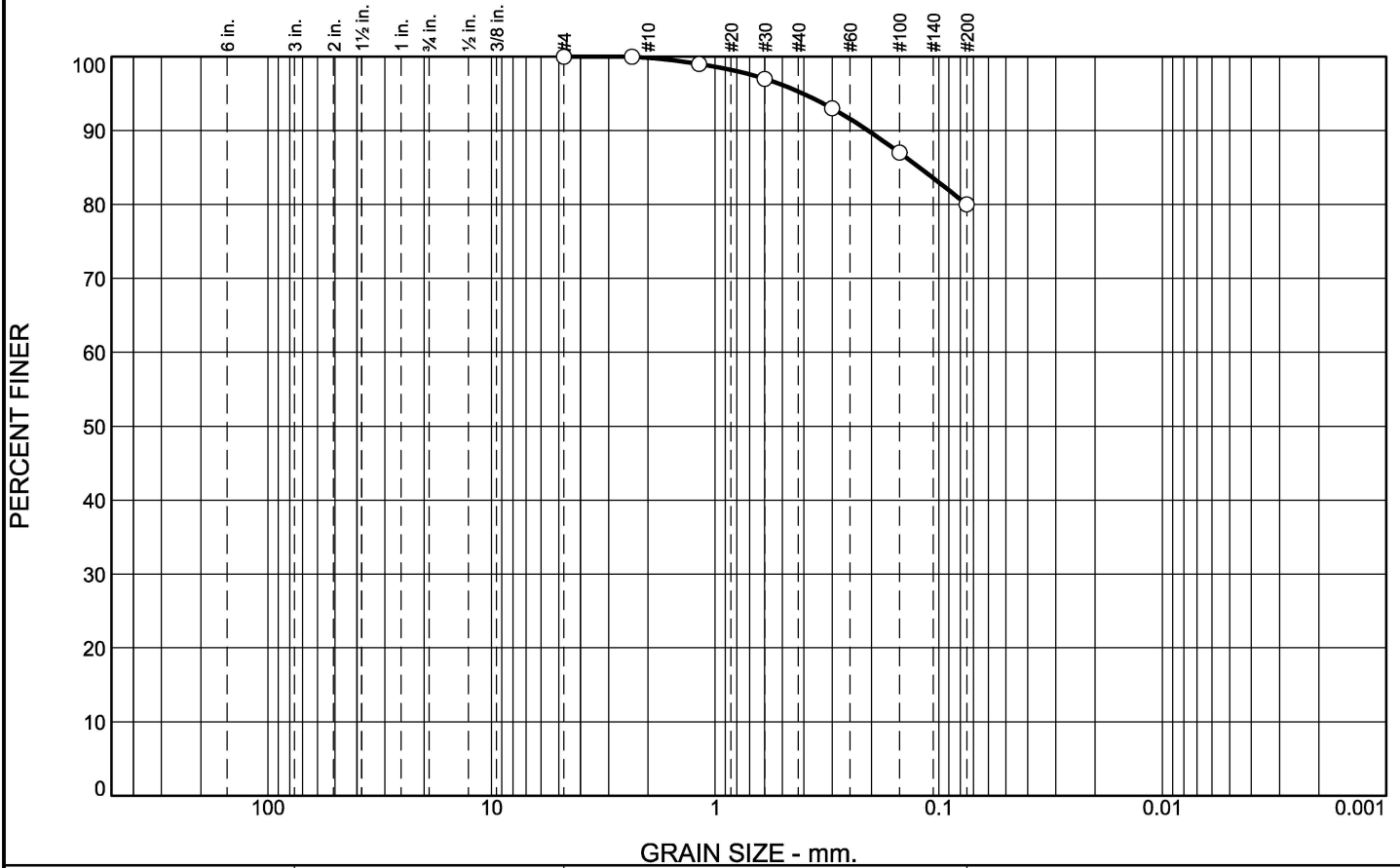


**Client:** Demmon Partners  
**Project:** Proposed Natomas Park Drive Apartments  
 Sacramento, CA

**Project No:** VV3853-001

**Figure** 0300-005

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	0	0	5	15	80	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100		
#8	100		
#16	99		
#30	97		
#50	93		
#100	87		
#200	80		

**Material Description**

Brown Silty Clay (visual)

**Atterberg Limits**

PL= ---      LL= ---      PI= ---

**Coefficients**

D<sub>90</sub>= 0.2074      D<sub>85</sub>= 0.1224      D<sub>60</sub>=  
 D<sub>50</sub>=              D<sub>30</sub>=              D<sub>15</sub>=  
 D<sub>10</sub>=              C<sub>u</sub>=              C<sub>c</sub>=

**Classification**

USCS= CL-ML      AASHTO=

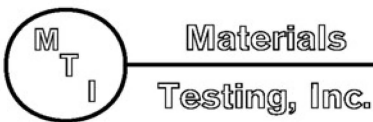
**Remarks**

Material tested in accordance with ASTM D6913.

\* (no specification provided)

**Location:** 3-3      **Sample Number:** 15      **Depth:** 13.0'

**Date:** 06/02/15

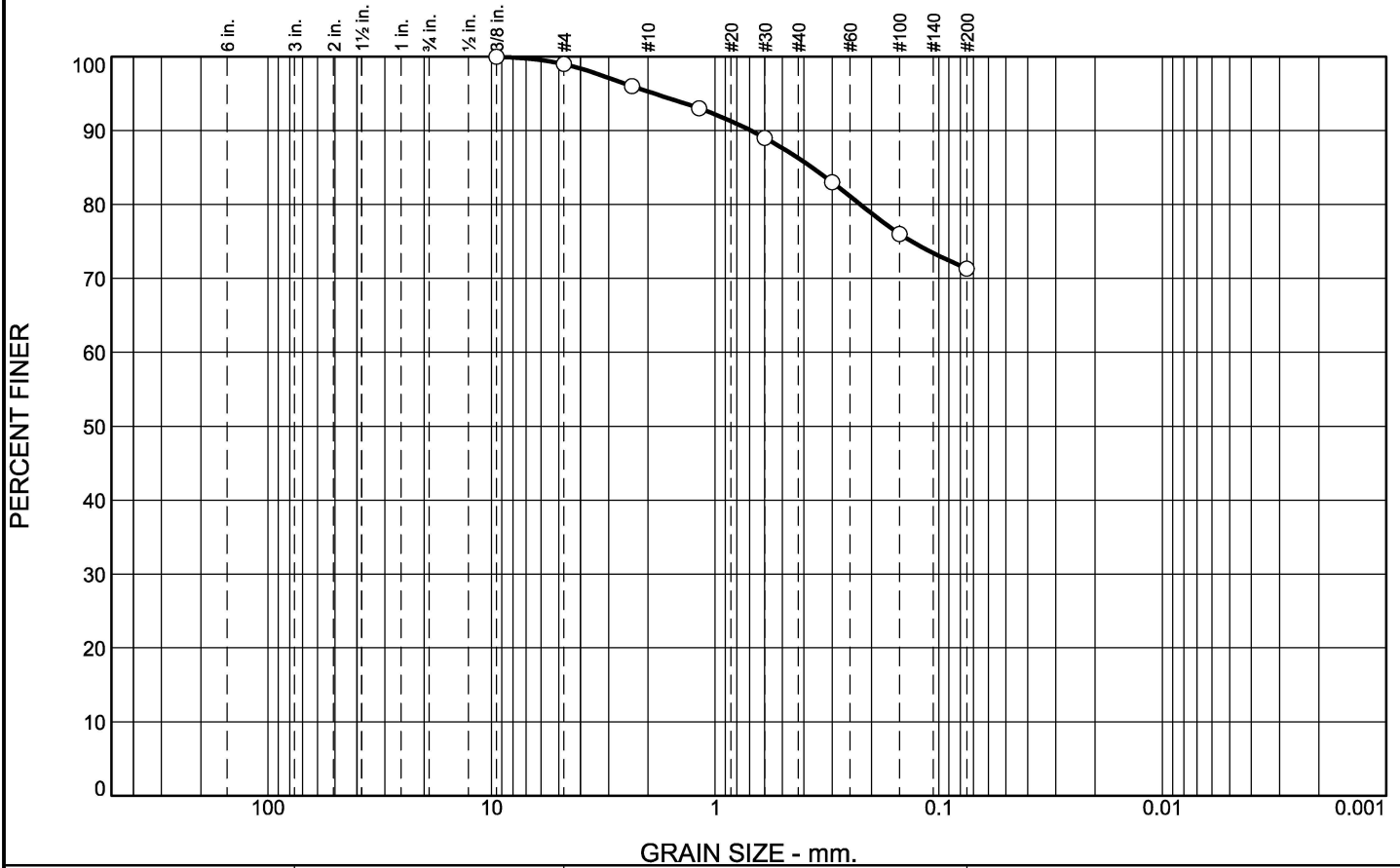


**Client:** Demmon Partners  
**Project:** Proposed Natomas Park Drive Apartments  
 Sacramento, CA

**Project No:** VV3853-001

**Figure** 0300-006

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	1	4	9	15	71	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8"	100		
#4	99		
#8	96		
#16	93		
#30	89		
#50	83		
#100	76		
#200	71		

**Material Description**

Brown Sandy Clay (visual)

**Atterberg Limits**

PL= ---      LL= ---      PI= ---

**Coefficients**

D<sub>90</sub>= 0.6935      D<sub>85</sub>= 0.3689      D<sub>60</sub>=  
D<sub>50</sub>=              D<sub>30</sub>=              D<sub>15</sub>=  
D<sub>10</sub>=              C<sub>u</sub>=              C<sub>c</sub>=

**Classification**

USCS= CL              AASHTO=

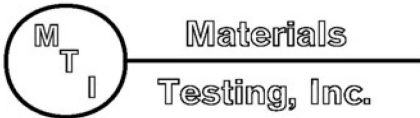
**Remarks**

Material tested in accordance with ASTM D6913.

\* (no specification provided)

**Location:** 4-1  
**Sample Number:** 17      **Depth:** 2.0'

**Date:** 06/02/15

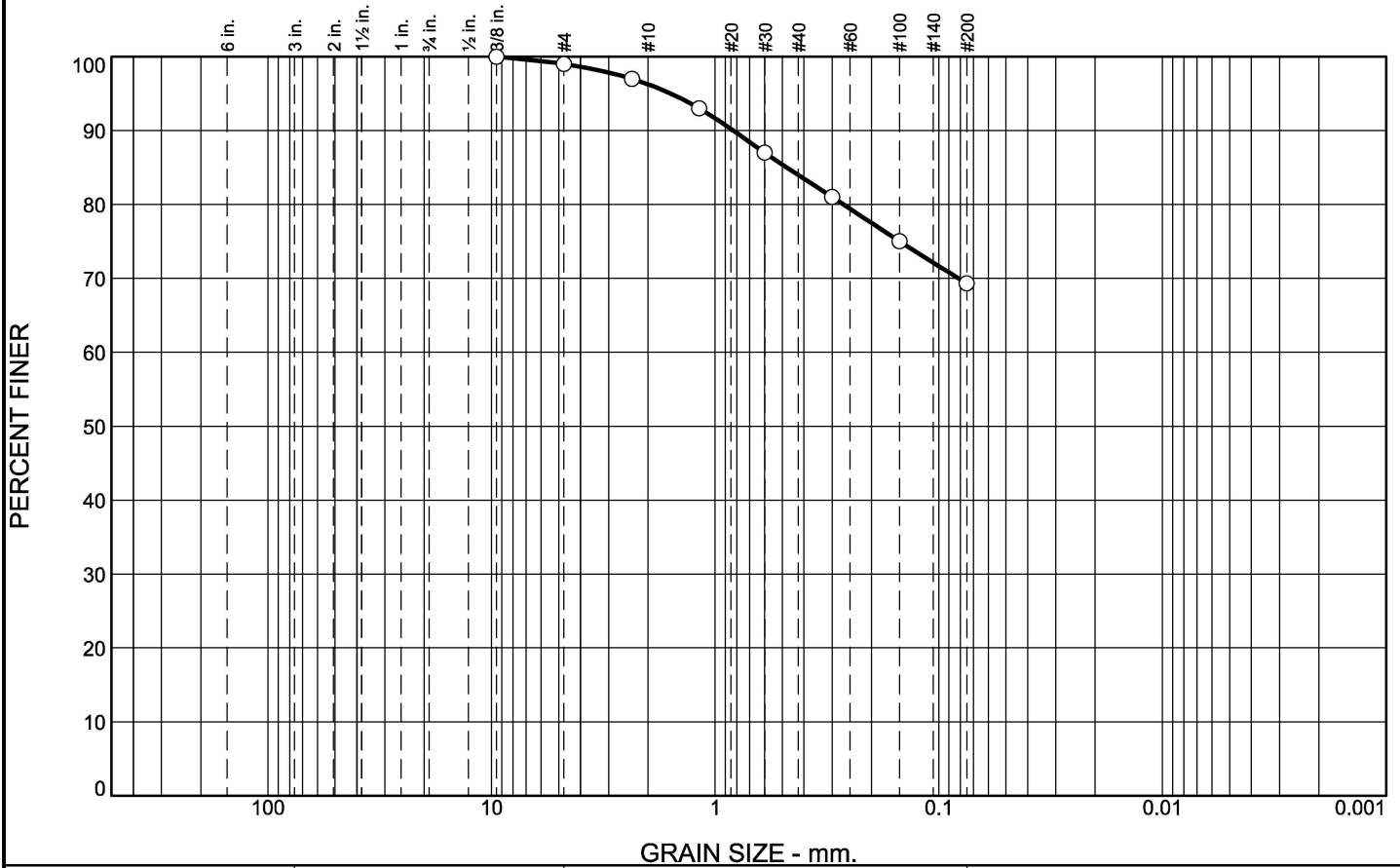


**Client:** Demmon Partners  
**Project:** Proposed Natomas Park Drive Apartments  
Sacramento, CA

**Project No:** VV3853-001

**Figure** 0300-007

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	1	3	12	15	69	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8"	100		
#4	99		
#8	97		
#16	93		
#30	87		
#50	81		
#100	75		
#200	69		

**Material Description**

Brown Sandy Clay (visual)

**Atterberg Limits**

PL= ---      LL= ---      PI= ---

**Coefficients**

D<sub>90</sub>= 0.8308      D<sub>85</sub>= 0.4788      D<sub>60</sub>=  
D<sub>50</sub>=                      D<sub>30</sub>=                      D<sub>15</sub>=  
D<sub>10</sub>=                      C<sub>u</sub>=                      C<sub>c</sub>=

**Classification**

USCS= CL                      AASHTO=

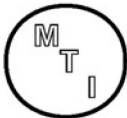
**Remarks**

Material tested in accordance with ASTM D6913.

\* (no specification provided)

**Location:** 4-4      **Sample Number:** 20      **Depth:** 29.0'

**Date:** 06/02/15



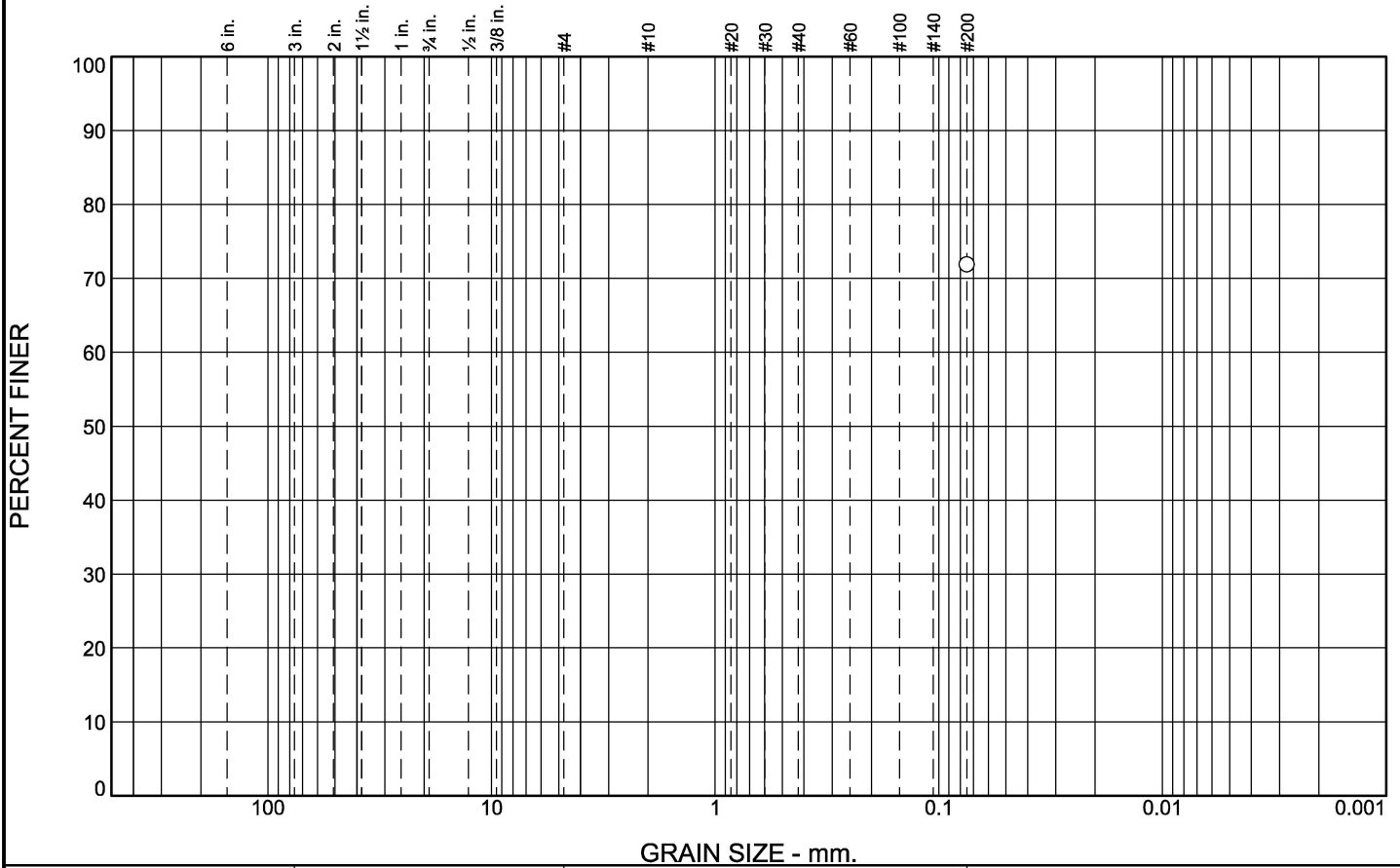
**Materials Testing, Inc.**

**Client:** Demmon Partners  
**Project:** Proposed Natomas Park Drive Apartments  
Sacramento, CA

**Project No:** VV3853-001

**Figure** 0300-008

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
						72	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	72		

\* (no specification provided)

**Material Description**

Brown Silty Clay (visual)

**Atterberg Limits**

PL= ---      LL= ---      PI= ---

**Coefficients**

D<sub>90</sub>=      D<sub>85</sub>=      D<sub>60</sub>=  
D<sub>50</sub>=      D<sub>30</sub>=      D<sub>15</sub>=  
D<sub>10</sub>=      C<sub>u</sub>=      C<sub>c</sub>=

**Classification**

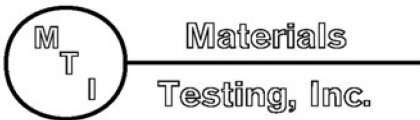
USCS= CL-ML      AASHTO=

**Remarks**

Material tested in accordance with ASTM D6913.

**Location:** 5-5  
**Sample Number:** 25      **Depth:** 34.0'

**Date:** 06/02/15

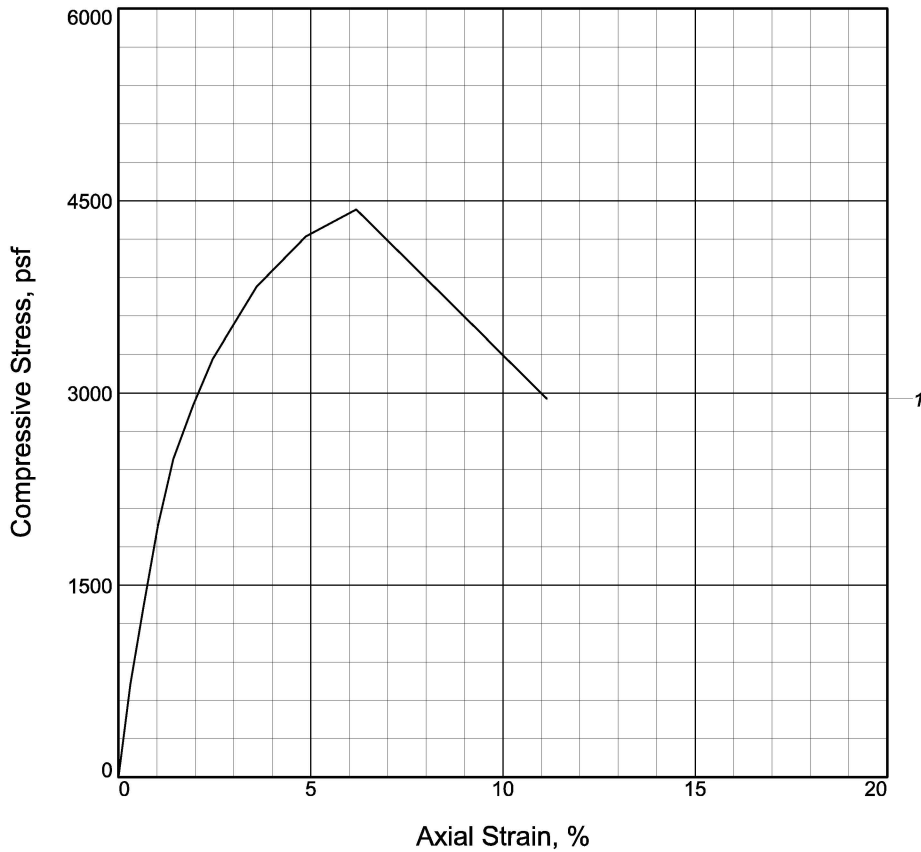


**Client:** Demmon Partners  
**Project:** Proposed Natomas Park Drive Apartments  
Sacramento, CA

**Project No:** VV3853-001

**Figure** 0300-009

# UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	4430			
Undrained shear strength, psf	2215			
Failure strain, %	6.2			
Strain rate, in./min.	N/A			
Water content, %	23.7			
Wet density, pcf	115.8			
Dry density, pcf	93.7			
Saturation, %	79.5			
Void ratio	0.8065			
Specimen diameter, in.	2.41			
Specimen height, in.	4.90			
Height/diameter ratio	2.03			

**Description:** Brown Silty Clay (visual)

**LL =**      **PL =**      **PI =**      **GS= 2.71**      **Type:** tube

**Project No.:** VV3853-001

**Date Sampled:** 05/12/15

**Remarks:**

Material tested in accordance with ASTM D2166.

Type of Failure: Shear

**Client:** Demmon Partners

**Project:** Proposed Natomas Park Drive Apartments  
Sacramento, CA

**Location:** 2-2

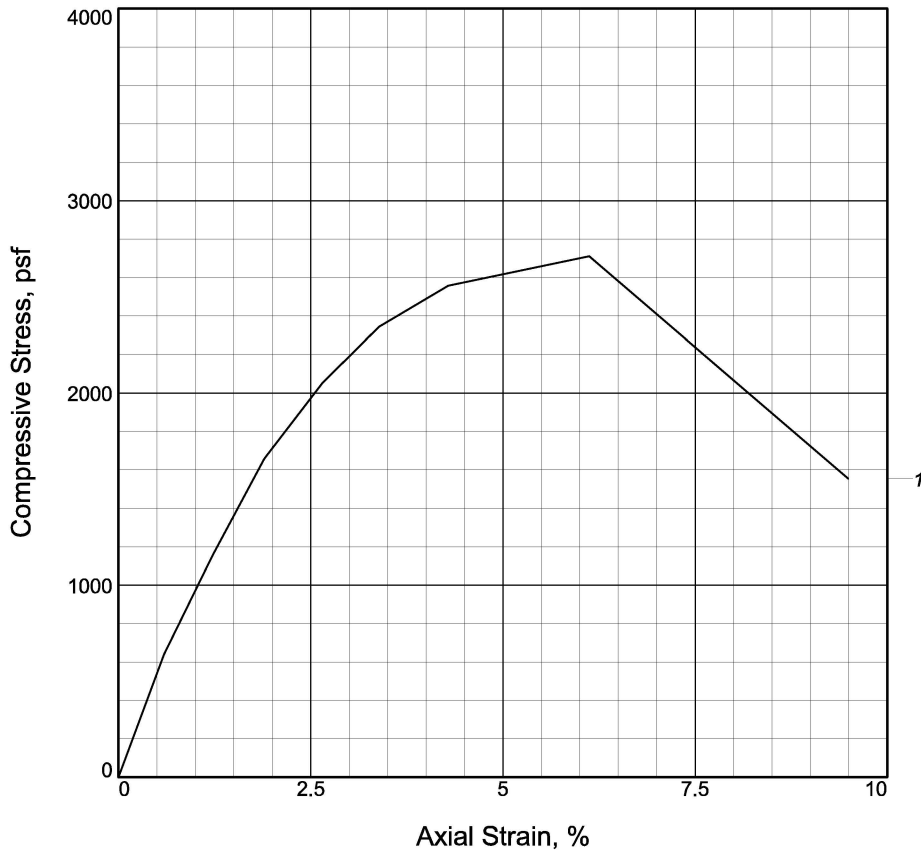
**Sample Number:** 8

**Depth:** 4.5'

**Figure** 0300-010



# UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	2710			
Undrained shear strength, psf	1355			
Failure strain, %	6.1			
Strain rate, in./min.	N/A			
Water content, %	35.2			
Wet density, pcf	110.4			
Dry density, pcf	81.7			
Saturation, %	86.9			
Void ratio	1.1250			
Specimen diameter, in.	2.41			
Specimen height, in.	4.90			
Height/diameter ratio	2.03			

**Description:** Brown Silty Clay (visual)

<b>LL =</b>	<b>PL =</b>	<b>PI =</b>	<b>GS= 2.78</b>	<b>Type:</b> tube
-------------	-------------	-------------	-----------------	-------------------

**Project No.:** VV3853-001

**Date Sampled:** 05/12/15

**Remarks:**

Material tested in accordance with ASTM D2166.

Type of Failure: Cone & Shear

**Client:** Demmon Partners

**Project:** Proposed Natomas Park Drive Apartments  
Sacramento, CA

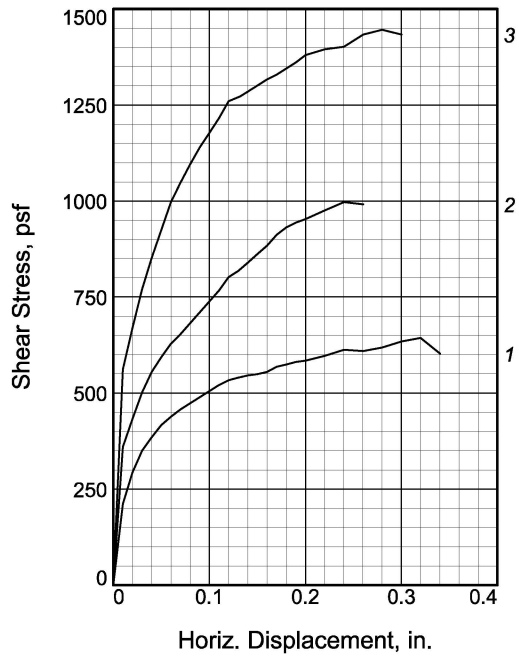
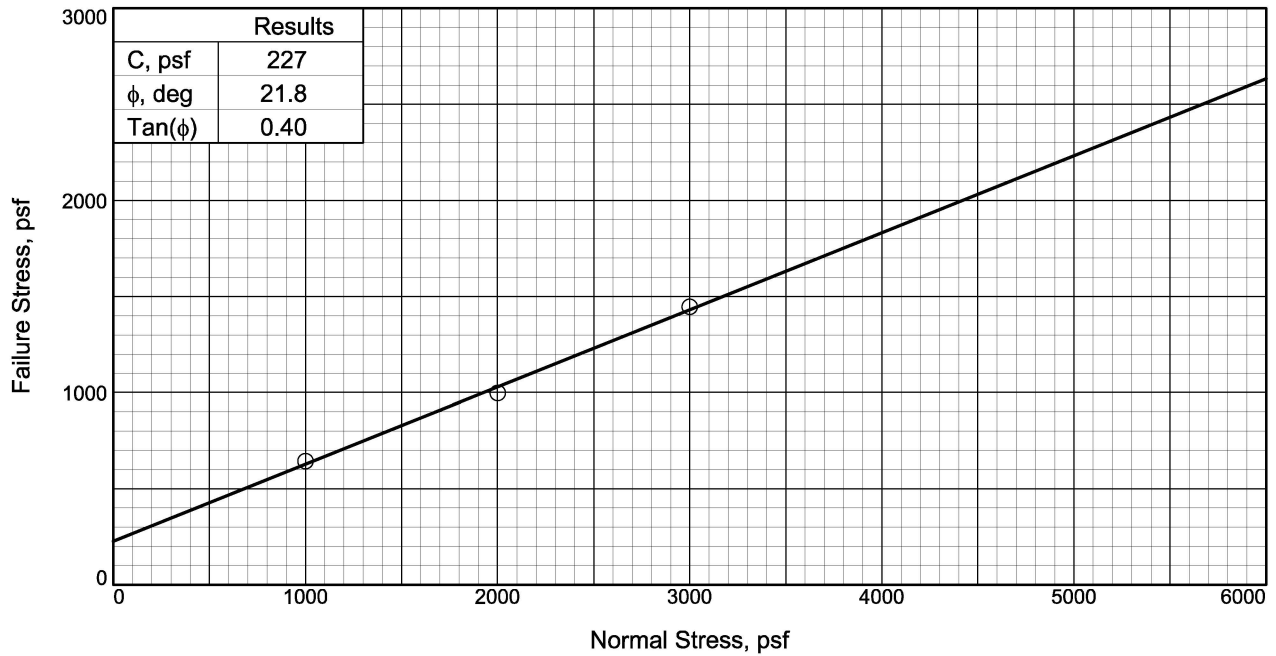
**Location:** 4-2

**Sample Number:** 18

**Depth:** 8.0'

**Figure** 0300-011





Sample No.	1	2	3	
Initial	Water Content, %	38.9	38.9	38.9
	Dry Density, pcf	76.1	76.4	75.8
	Saturation, %	93.6	94.3	92.9
	Void Ratio	1.0266	1.0194	1.0339
	Diameter, in.	2.41	2.41	2.41
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	53.8	48.5	43.4
	Dry Density, pcf	85.4	82.7	86.4
	Saturation, %	164.7	138.7	136.5
	Void Ratio	0.8065	0.8641	0.7854
	Diameter, in.	2.41	2.41	2.41
	Height, in.	0.89	0.92	0.88
Normal Stress, psf	1000	2000	3000	
Failure Stress, psf	644	998	1446	
Displacement, in.	0.32	0.24	0.28	
Ultimate Stress, psf				
Displacement, in.				
Strain rate, in./min.	0.00	0.00	0.00	

**Sample Type:** tube  
**Description:** Brown Silty Clay (visual)  
**Specific Gravity=** 2.47  
**Remarks:** DIRECT SHEAR TEST REPORT  
 Material tested in accordance with ASTM D3080.

**Client:** Demmon Partners  
**Project:** Proposed Natomas Park Drive Apartments  
 Sacramento, CA  
**Location:** 3-1  
**Sample Number:** 13      **Depth:** 3.0'  
**Proj. No.:** VV3853-001      **Date Sampled:** 05/12/15

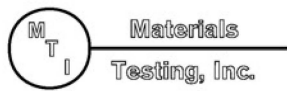
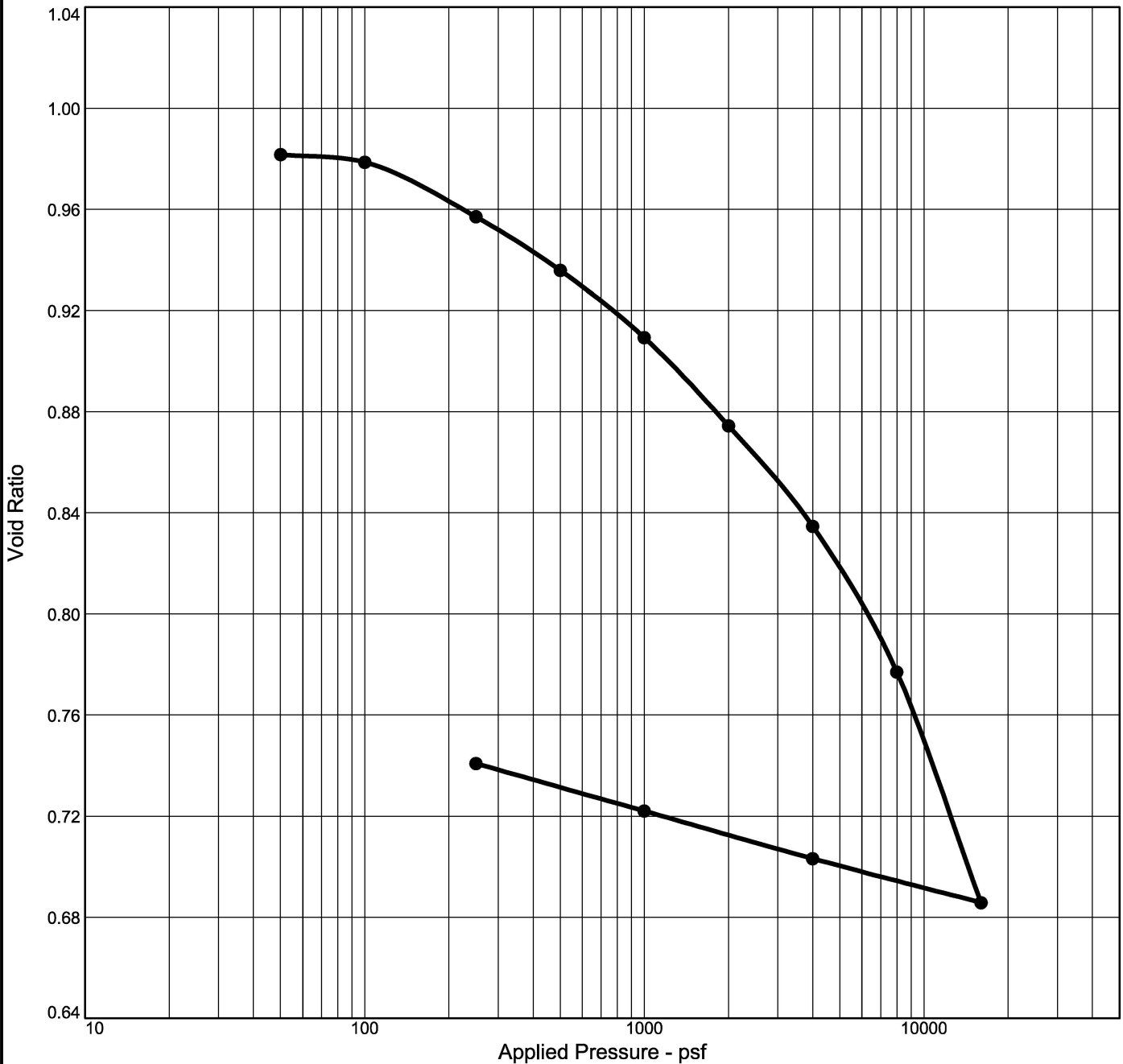


Figure 0300-012




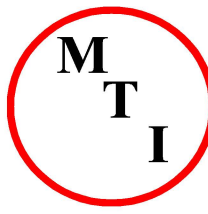
# CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (psf)	P <sub>c</sub> (psf)	C <sub>c</sub>	C <sub>r</sub>	Initial Void Ratio
Saturation	Moisture									
82.1 %	29.0 %	87.6			2.78	2250	3095	0.07	0.03	0.980

<b>MATERIAL DESCRIPTION</b>	<b>USCS</b>	<b>AASHTO</b>
Olive Clay	CL	

<p><b>Project No.</b> VV3853-      <b>Client:</b> Demmon Partners</p> <p><b>Project:</b> Proposed Natomas Park Drive Apartments Sacramento, CA</p> <p><b>Location:</b> 3-4      <b>Depth:</b> 24.5      <b>Sample Number:</b> 16</p>	<p><b>Remarks:</b> Material tested in accordance with ASTM D2435.</p>
 <p style="margin-left: 20px;">Materials Testing, Inc.</p>	<p><b>Figure 0300-013</b></p>



# Materials Testing, Inc.

8798 Airport Road  
 Redding, California 96002  
 (530) 222-1116, fax 222-1611

865 Cotting Lane, Suite A  
 Vacaville, California 95688  
 (707) 447-4025, fax 447-4143

**Client:** Demmon Partners  
 1451 River Park Drive, Suite 121  
 Sacramento, CA 95815

**Client No:** VV3853-001  
**Report No:** 0300-014  
**Date:** 06/02/15

**Project:** Proposed Natomas Park Drive Apartments  
 Sacramento, California

**Submitted by:** KC Engineering

## “R” VALUE TEST REPORT (ASTM D2844)

Sample:	R-1
Description:	Brown Sandy Clay with Gravel
Location:	South Half of Site

### SIEVE ANALYSIS

Sieve Size	1-1/2”	1”	3/4”	1/2”	3/8”	#4
“As Received” (Percent Pass)	100	98	96	90	89	86
“As Used” (Percent Pass)			100	94	93	90

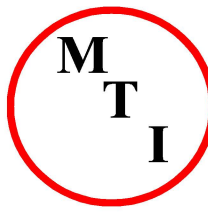
### RESISTANCE VALUE

Specimen Number	Dry Unit Weight, PCF	Moisture (%)	Exudation Pressure (PSI)	Expansion Pressure Dial Reading & PSF		R-Value
1	102.7	19.7	306	33	143	20
2	99.5	21.4	190	23	100	9
3	94.7	26.1	89	12	52	5

R-Value @ 300 PSI Exudation Pressure = 19

R-Value @ Expansion = ---

Construction Materials Testing and Quality Control Services  
 Soil - Concrete - Asphalt - Steel - Masonry



# Materials Testing, Inc.

8798 Airport Road  
Redding, California 96002  
(530) 222-1116, fax 222-1611

865 Cotting Lane, Suite A  
Vacaville, California 95688  
(707) 447-4025, fax 447-4143

**Client:** Demmon Partners  
1451 River Park Drive, Suite 121  
Sacramento, CA 95815

**Client No:** VV3853-001  
**Report No:** 0300-015  
**Date:** 06/02/15

**Project:** Proposed Natomas Park Drive Apartments  
Sacramento, California

**Submitted by:** KC Engineering

## “R” VALUE TEST REPORT (ASTM D2844)

Sample:	R-2
Description:	Brown Sandy Silt with Gravel
Location:	North Side of Site

### SIEVE ANALYSIS

Sieve Size	1-1/2”	1”	3/4”	1/2”	3/8”	#4
“As Received” (Percent Pass)		100	99	98	97	93
“As Used” (Percent Pass)			100	99	98	94

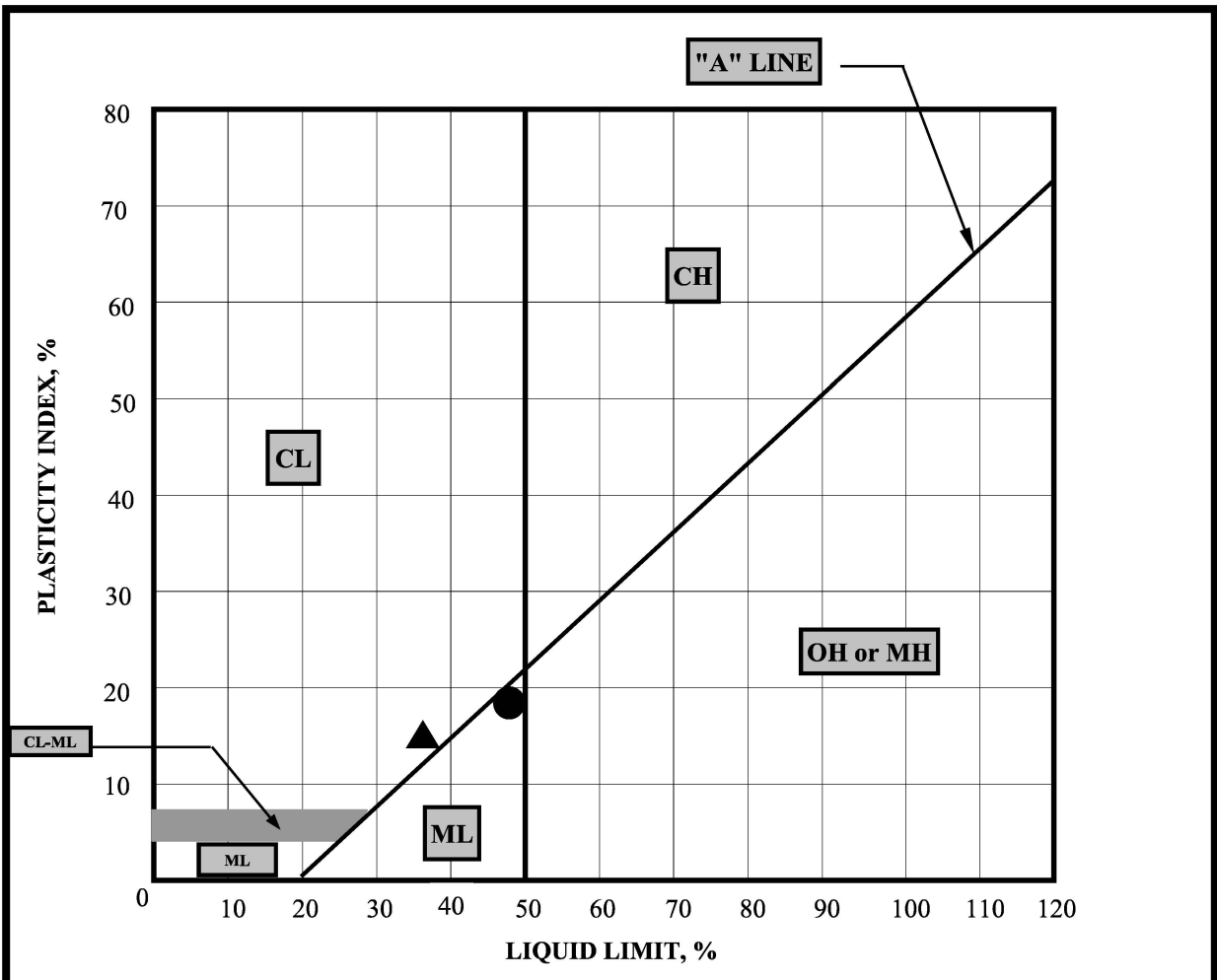
### RESISTANCE VALUE

Specimen Number	Dry Unit Weight, PCF	Moisture (%)	Exudation Pressure (PSI)	Expansion Pressure Dial Reading & PSF		R-Value
1	92.3	24.4	304	48	208	22
2	90.1	26.8	177	34	147	16
3	89.7	29.2	100	25	108	9

R-Value @ 300 PSI Exudation Pressure = 21

R-Value @ Expansion = ---

<p align="center"><b>Construction Materials Testing and Quality Control Services</b> Soil - Concrete - Asphalt - Steel - Masonry</p>
--



KEY SYMBOL	SAMPLE NUMBER	DEPTH	NATURAL MOISTURE CONTENT, %	LIQUID LIMIT, LL, %	PLASTIC LIMIT, PL, %	PLASTICITY INDEX, PI, %	LIQUIDITY INDEX	UNIFIED SOIL CLASSIFICATION SYMBOL
●	1-1	2.0'	N/A	48	30	18	N/A	ML
▲	5-1	2.0'	N/A	36	21	15	N/A	CL



**Materials Testing, Inc.**

**PLASTICITY CHART AND DATA**

**Proposed Natomas Park Drive Apartments  
Sacramento, California**

**Client No:**

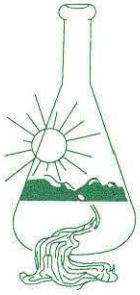
**Date:**

**Report No:**

VV3853

6/2/2015

0300-016




# Sunland Analytical

11419 Sunrise Gold Circle, #10  
Rancho Cordova, CA 95742  
(916) 852-8557

Date Reported 05/20/2015  
Date Submitted 05/15/2015

To: David Cymanski  
K.C. Engineering  
865 Cotting Lane Suite A  
Vacaville, CA 95688

From: Gene Oliphant, Ph.D.   
General Manager

The following is the report of analysis requested on SUN Order 69519.  
Your purchase order number is .  
Thank you for your business.

---

SUN #	Sample Describ	Sample #	Chloride as ppm Cl /Dry Wt.	Sulfate as ppm SO4 /Dry Wt.
144728	VV3853-NORTH	SULFATE 0-2 FT	No Test	34.31
144729	VV3853-SOUTH	SULFATE 0-2 FT	No Test	27.28

Methods: Sulfate-Cal Trans #417, Chloride-Cal Trans #422

# USGS Design Maps Summary Report

## User-Specified Input

**Report Title** Prop. Natomas Park Drive, Demmon Partners

Mon June 1, 2015 16:30:53 UTC

**Building Code Reference Document** ASCE 7-10 Standard  
(which utilizes USGS hazard data available in 2008)

**Site Coordinates** 38.6086°N, 121.5038°W

**Site Soil Classification** Site Class D – “Stiff Soil”

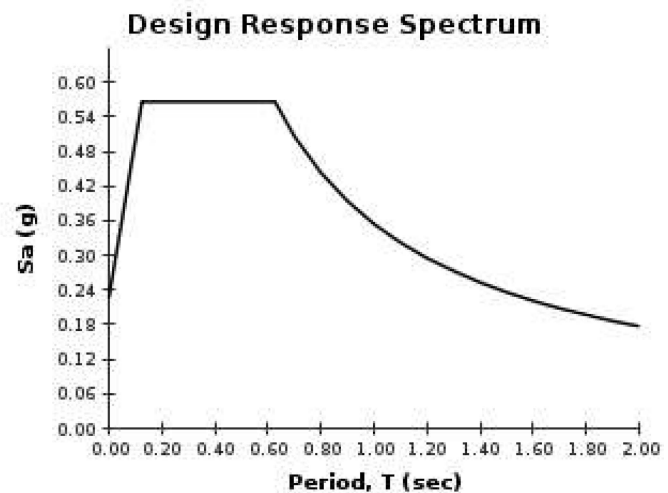
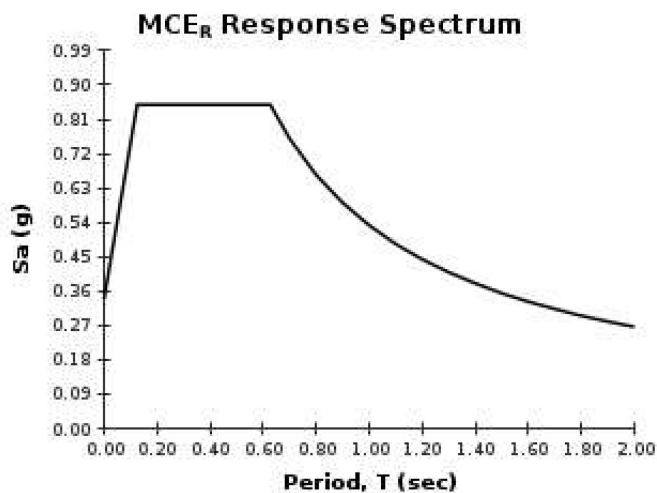
**Risk Category** I/II/III



## USGS-Provided Output

$S_s = 0.672 \text{ g}$	$S_{MS} = 0.848 \text{ g}$	$S_{DS} = 0.566 \text{ g}$
$S_1 = 0.293 \text{ g}$	$S_{M1} = 0.532 \text{ g}$	$S_{D1} = 0.354 \text{ g}$

For information on how the  $S_s$  and  $S_1$  values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the “2009 NEHRP” building code reference document.



For  $PGA_M$ ,  $T_L$ ,  $C_{RS}$ , and  $C_{R1}$  values, please [view the detailed report](#).


**Design Maps Detailed Report**

ASCE 7-10 Standard (38.6086°N, 121.5038°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>**

$S_s = 0.672 \text{ g}$

**From [Figure 22-2](#) <sup>[2]</sup>**

$S_1 = 0.293 \text{ g}$

**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</math> psf</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  $S_s = 0.672$  g,  $F_a = 1.262$**

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  $S_1 = 0.293$  g,  $F_v = 1.814$**



---

**Equation (11.4-1):**  $S_{MS} = F_a S_s = 1.262 \times 0.672 = 0.848 \text{ g}$

---

**Equation (11.4-2):**  $S_{M1} = F_v S_1 = 1.814 \times 0.293 = 0.532 \text{ g}$

---

#### Section 11.4.4 — Design Spectral Acceleration Parameters

**Equation (11.4-3):**  $S_{DS} = \frac{2}{3} S_{MS} = \frac{2}{3} \times 0.848 = 0.566 \text{ g}$

---

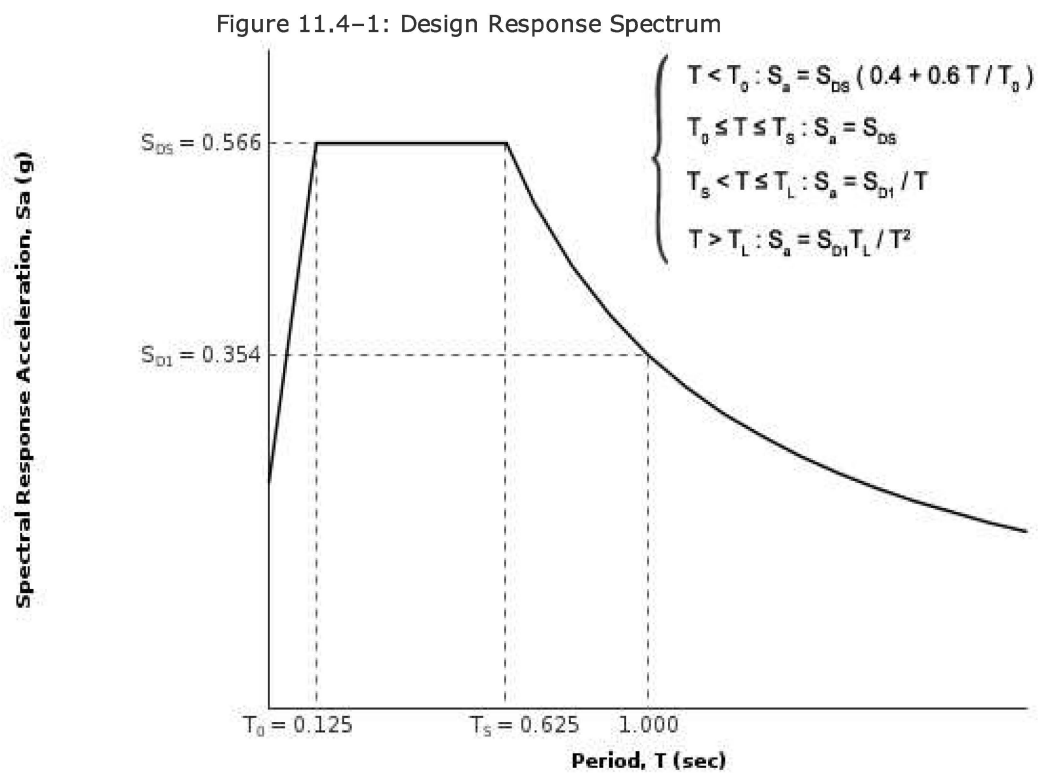
**Equation (11.4-4):**  $S_{D1} = \frac{2}{3} S_{M1} = \frac{2}{3} \times 0.532 = 0.354 \text{ g}$

---

#### Section 11.4.5 — Design Response Spectrum

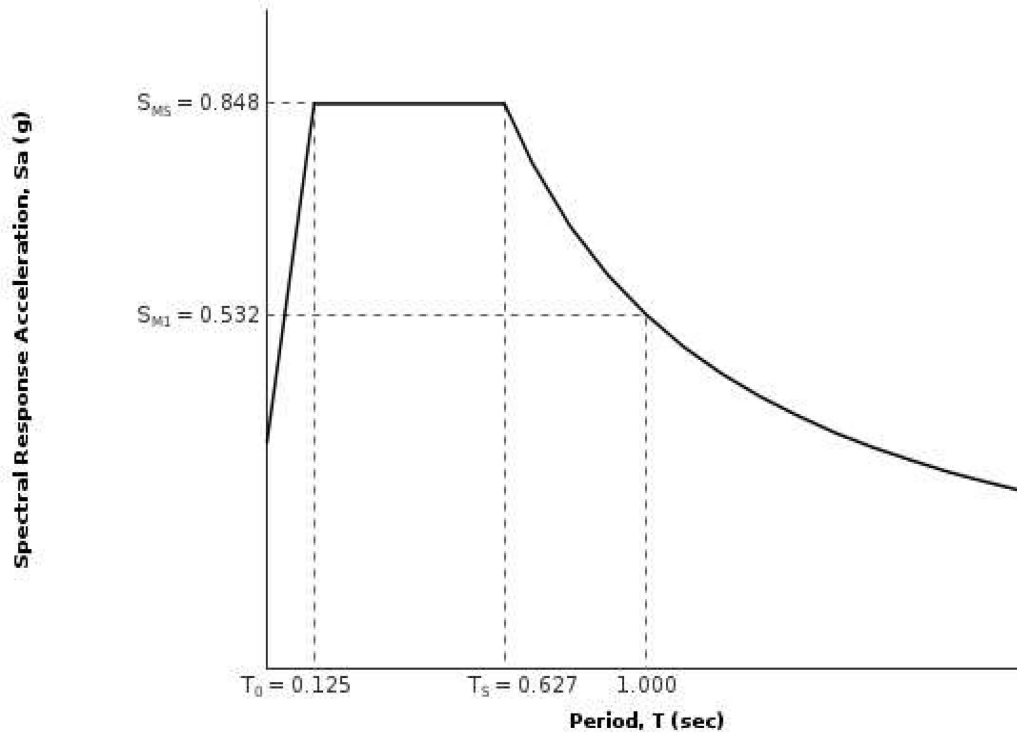
From [Figure 22-12](#) <sup>[3]</sup>

$T_L = 12 \text{ seconds}$



### 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>

$$PGA = 0.229$$

**Equation (11.8-1):**

$$PGA_M = F_{PGA}PGA = 1.341 \times 0.229 = 0.308 \text{ g}$$

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 = 0.229 g,  $F_{PGA} = 1.341$**

### 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>

$$C_{RS} = 1.107$$

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

$$C_{R1} = 1.123$$

## 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  $S_{DS} = 0.566 g$ , 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  $S_{D1} = 0.354 g$ , 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*: [http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-1.pdf](http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-1.pdf)
2. *Figure 22-2*: [http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-2.pdf](http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-2.pdf)
3. *Figure 22-12*: [http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-12.pdf](http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-12.pdf)
4. *Figure 22-7*: [http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-7.pdf](http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-7.pdf)
5. *Figure 22-17*: [http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-17.pdf](http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-17.pdf)
6. *Figure 22-18*: [http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-18.pdf](http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-18.pdf)



PHASE I  
ENVIRONMENTAL SITE ASSESSMENT

**DEMMON PARTNERS**  
2450 NATOMAS PARK DR

**JANUARY 2021**

PREPARED FOR:

Demmon Partners  
601 University Ave, Suite 110  
Sacramento, CA 95835

PREPARED BY:

Analytical Environmental Services  
1801 7th Street, Suite 100  
Sacramento, CA 95811  
(916) 447-3479  
[www.analyticalcorp.com](http://www.analyticalcorp.com)



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## APPENDICES

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Appendix A	Historical Aerial Photographs
Appendix B	Historical Topographic Maps
Appendix C	Sanborn No Coverage Document
Appendix D	City Directory Image Report
Appendix E	Environmental Data Resources (EDR) Database Report
Appendix F	FEMA Floodplain Map
Appendix G	Questionnaires
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# SECTION 1.0

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## INTRODUCTION

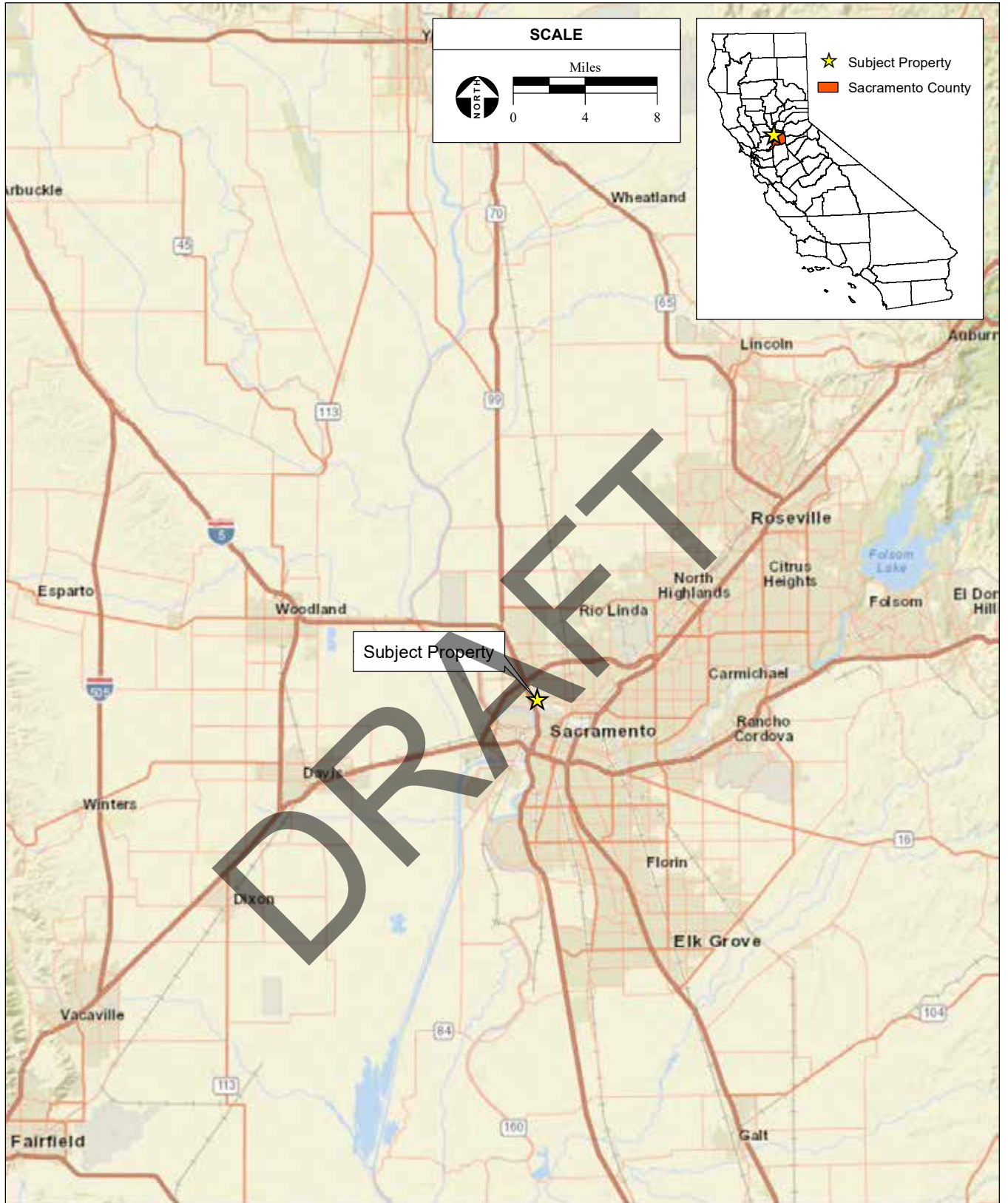
### 1.1 PURPOSE

This Phase I Environmental Site Assessment (Phase I ESA) has been prepared in conformance with the American Society for Testing and Materials (ASTM) Standard Practice E 1527-13, which specifies the appropriate inquiry requirement for the innocent landowner defense under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This Phase I ESA encompasses Sacramento County Assessor's Parcel Number (APN) 274-0410-016 totaling approximately 9 acres, located on Natomas Park Drive within the City of Sacramento, California (**Figure 1**). As such, the use of the term "Subject Property" refers to the entire property, unless otherwise stated. The purpose of this assessment is to identify Recognized Environmental Conditions (RECs) that may affect future uses of the Subject Property.

This Phase I ESA covers the Subject Property and surrounding known sources of contamination, up to a 1.0-mile radius from the Subject Property. A site reconnaissance inspection of the Subject Property and adjacent properties was conducted and relevant database listings of hazardous material sites, waste generators, and underground storage tanks (USTs) were reviewed for this update (**Appendices A - E**). Additionally, historical topographic maps and aerial photographs of the Subject Property were also reviewed for this update.

### 1.2 RECOGNIZED ENVIRONMENTAL CONDITIONS

The term REC refers to the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with relevant laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. The term Historical Recognized Environmental Conditions (HREC) refers to environmental conditions associated with the Subject Property, including a past release of any hazardous substance or petroleum product that have since been remediated, which in the past would have been considered a REC. Furthermore, a Controlled Recognized Environmental Condition (CREC) refers to 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.



### 1.3 LIMITATIONS AND EXCEPTIONS

No Phase I ESA can completely eliminate uncertainty regarding the potential for RECs in connection with a property. Conformance of this assessment with ASTM Standard Practice E 1527-13 will reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with the Subject Property. While every effort has been made to discover and interpret available historical and current information on the property within the time available, the possibility of undiscovered contamination remains. This report produced by Analytical Environmental Services (AES) is a best-effort collection and interpretation of available information consistent with industry standards for the completion of Phase I ESAs.

This Phase I ESA is based on a site reconnaissance of the Subject Property, a visual reconnaissance of adjacent properties, searches of government hazardous materials databases, and interviews with individuals familiar with current and historical uses of the Subject Property. Physical testing of soil or groundwater was not within the scope of this assessment. Asbestos containing building materials (ACM) and lead-based paint surveys were not included. Information was obtained for this Phase I ESA to comply with current ASTM guidelines.

### 1.4 METHODOLOGY

A variety of data sources were consulted in completing this Phase I ESA. The following sub-sections describe the methods used and the data sources consulted to accomplish each task.

#### HISTORICAL REVIEW

Previous land uses and history of the Subject Property were researched in an effort to identify RECs at or near the Subject Property. Historical aerial photographs (**Appendix A**) and topographic maps (**Appendix B**) from different decades were examined for the presence of aboveground storage tanks, industrial buildings, gas station canopies and/or pump islands, as well as other indications of bulk hazardous material storage within the study area. Sanborn Fire Insurance Maps document historical property use through abbreviations and map symbols that identify commercial, residential, industrial, residential and other land uses. The Subject Property is unmapped in the Sanborn Library; thus, no records were available for review (**Appendix C**). The City Database Directory was consulted to ascertain previous land uses of the Subject Property (**Appendix D**).

#### DATABASE SEARCHES

Database searches were conducted for records of known storage tank sites and known sites of hazardous materials generation, storage, and/or release. Available information from federal, state, and local agency lists consists of: (a) known or potential hazardous waste sites and landfills; (b) sites currently under investigation for environmental violations; (c) sites which manufacture, generate, use, store, and/or dispose of hazardous materials or hazardous wastes; (d) sites which have USTs and/or above-ground storage tanks (ASTs); and (e) sites with recorded violations of regulations concerning USTs and

hazardous materials/hazardous wastes. The database search is intended to identify facilities that may have the potential to impact surface and subsurface conditions on the Subject Property. A full listing of sites within the vicinity of the Subject Property is provided in **Appendix E**.

## **SITE RECONNAISSANCE**

Charlane Gross of AES conducted a reconnaissance inspection of the Subject Property and adjacent properties on December 22, 2020. The purpose of the site reconnaissance was to examine the Subject Property for obvious physical indications of improper hazardous substance or evidence of petrochemical disposal, such as stained soil, stressed vegetation, sumps, partially buried drums, bulk underground and above-ground fuel storage tanks, and other obvious signs of hazardous materials involvement. In addition, adjacent properties were visually inspected to the extent possible without trespassing on private property to determine if current land uses would affect the planned uses of Subject Property.

### **1.5 DEVIATIONS AND DATA GAPS**

ASTM Standard E 1527-13 requires any significant data gaps, deviations, and deletions from the ASTM Standard to be identified and addressed in the Phase I ESA. A significant data gap would be one that affected the ability to identify a REC on the Subject Property or adjacent properties. Due to the location of the Subject Property, Sanborn Fire Insurance Maps were not available. However, aerial photographs and historic topographic maps were available for review of past uses of the Subject Property. Thus, the lack of Sanborn Fire Insurance Maps is not considered a significant data gap for this Phase I ESA.

### **1.6 CREDENTIALS**

Charlane Gross prepared this report under the professional supervision of Trenton Wilson, who qualifies as an environmental professional (EP) as defined in the ASTM Standard E 1527-13 [40 CFR §312.10(b)]. Resumes for Charlane Gross and Trenton Wilson are included as **Appendix H**.

# SECTION 2.0

## SITE DESCRIPTION

---

### 2.1 LOCATION AND LEGAL DESCRIPTION

The Subject Property is located in the City of Sacramento (City) in northwestern Sacramento County (County), California (**Figures 2 and 3**). The Subject Property is located north of Garden Highway and east of California State Route 99 (Highway 99)/Interstate 5 (I-5), north of the American River.

### 2.2 SITE AND VICINITY CHARACTERISTICS

The Subject Property is fully developed with facilities related to the Natomas Racquet Club, including a building, swimming pool, tennis and volleyball courts, and paved parking. Trees are located around the perimeter of the Subject Property. The topography of the Subject Property is level, at an elevation of 15 feet above mean sea level. The Subject Property receives water and wastewater services from the City of Sacramento Department of Utilities.

Regional access is provided by Highway 99/I-5, located 0.25 miles west of the Subject Property, which runs in a north-south direction through the center of California. Local access to the Subject Property from Highway 99/I-5 is provided by Garden Highway, a two-lane highway that runs in an east-west direction just south of the Subject Property; and Natomas Park Drive, a two-lane road that provides direct access to the Subject Property.

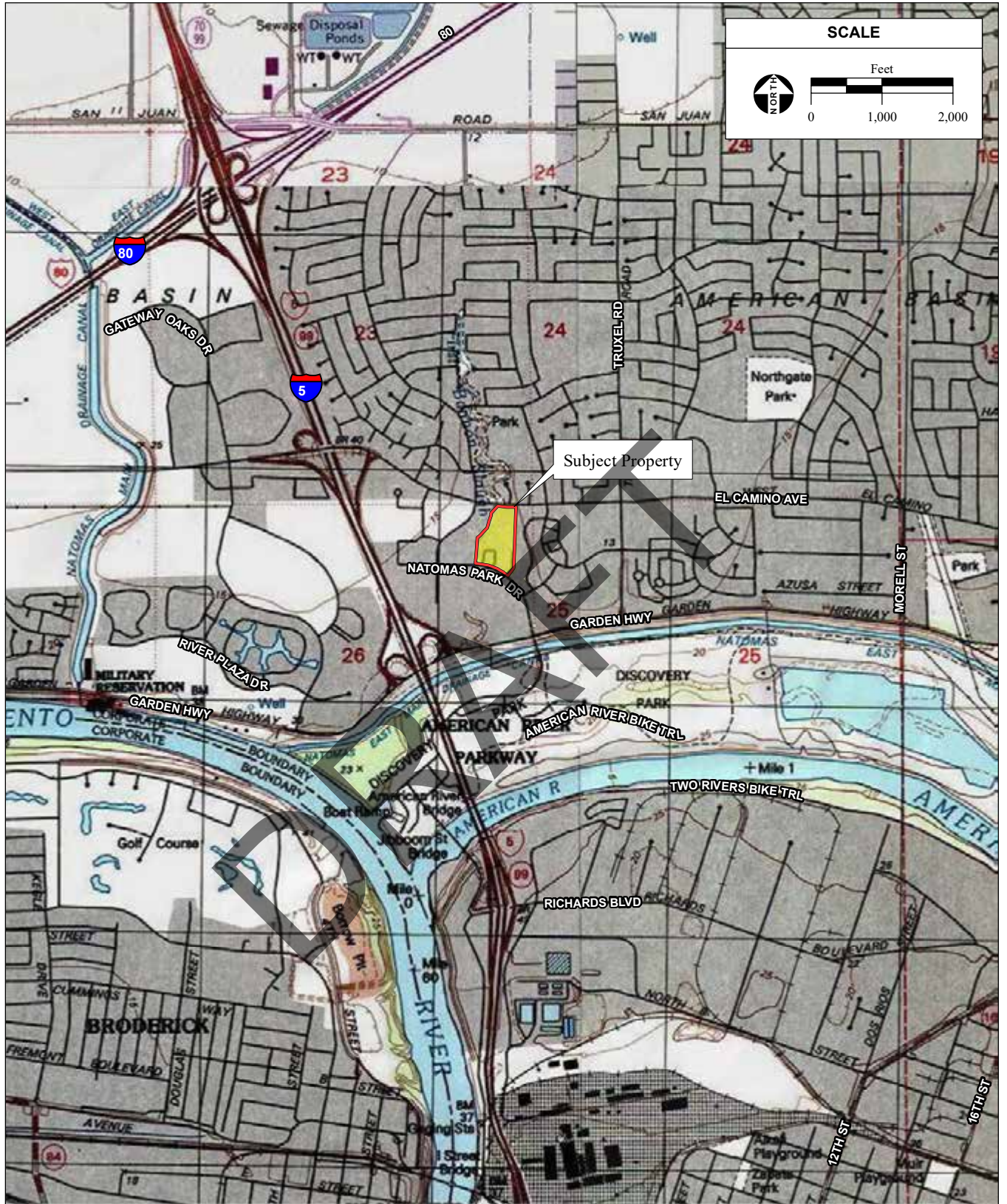
### 2.3 LOCAL ENVIRONMENTAL RECORDS SOURCES

#### 2.3.1 LOCAL ENVIRONMENTAL AGENCY

The Environmental Data Resources (EDR) database report and the State Water Resources Control Board (SWRCB) Geotracker website (SWRCB, 2020) included a search of the Sacramento County hazardous materials data (**Appendix E**).

#### 2.3.2 DEPARTMENT OF PLANNING AND ZONING

Zoning designations on the Subject Property were reviewed through information provided by the City of Sacramento (City of Sacramento, 2019). The Subject Property is zoned OB (Office Building) and C-2 (General Commercial). Current land use on the Subject Property is consistent with this zoning designation.



SOURCE: "Sacramento West, CA" USGS 7.5 Minute Topographic Quadrangle, T9N R4E, Section 26, Mt. Diablo Baseline & Meridian; ESRI, 2020; AES, 12/17/2020

2450 Natomas Park Drive Phase I ESA / 220554 ■

**Figure 2**  
Site and Vicinity



SOURCE: Sacramento County GIS, 2020; Maxar aerial photograph, 6/17/2020; ESRI, 2020; AES, 12/17/2020

2450 Natomas Park Drive Phase I ESA / 220554 ■

**Figure 3**  
Aerial Photograph

### 2.3.3 ELECTRICAL UTILITY COMPANY

The Sacramento Municipal Utility District (SMUD) provides electrical service to the Subject Property. An overhead transmission line crosses from north to south over the center of the Subject Property. There is an underground gas line running along the eastern border of the Subject Property from Natomas Park Drive to the pool.

### 2.3.4 OTHER LOCAL ENVIRONMENTAL RECORDS SOURCES

The SWRCB Geotracker website was reviewed for listings of USTs, leaking underground storage tanks (LUSTs), or spill cases in association with petroleum chemicals at the Subject Property (SWRCB, 2020). The Geotracker website had no listing of USTs, LUSTs, or spill cases on the Subject Property.

## 2.4 HYDROLOGY

The Subject Property is level, but has been placed on a slightly elevated land surface; surface water within the Subject Property drains as sheet flow towards lower areas to the north, south and west. Bannon Slough formerly ran along the western border of the Subject Property.

## 2.5 GEOLOGY AND SOIL

The rock stratigraphic unit at the Subject Property is of the Cenozoic era, Quaternary system, and Quaternary series (**Appendix E**). The San Andreas Fault lies approximately 80 miles west of the Subject Property. Sailboat soil is the most abundant formation on the Subject Property. This soil type is somewhat poorly drained with a slow infiltration rate.

## 2.6 CURRENT USES OF THE SUBJECT PROPERTY

The Subject Property is fully developed with the facilities of the Natomas Racquet Club and appurtenant facilities including parking lots, landscape medians, a pool, spa, tennis courts, and main sports complex and maintenance buildings. Site photos showing conditions of the Subject Property during the site visit are included on **Figures 4a** and **4b**.

## 2.7 HISTORIC USES OF THE SUBJECT PROPERTY

### 2.7.1 AERIAL PHOTOGRAPHS

Available historic aerial photographs (**Appendix A**) were reviewed for information regarding past uses of the Subject Property and surrounding areas. The following aerial photographs were available for review at a scale of 1 inch to 500 feet: 1937, 1947, 1953, 1957, 1964, 1966, 1972, 1984, 1993, 1998, 2006, 2009, 2012, and 2016. Aerial photographs were of varying clarity. Historical aerial images offer detailed review of previous land uses on the Subject Property and adjacent properties. The Subject Property appears to have been used for agriculture through the 1984 aerial photographs. Because the last agricultural use was over 30 years ago, any residual pesticide could constitute a HREC or CREC,



however there is no indication of a REC that would limit land use for residential development. The structures depicted in 1993 do not match with those of the Natomas Racquet Club, which is clearly visible by 1998.

### 2.7.2 HISTORIC TOPOGRAPHIC MAPS

Available historic USGS Topographic Quadrangles (**Appendix B**) were reviewed for information regarding past uses of the Subject Property. Maps available included 1892 and 1893 Sacramento 30' maps, 1902 and 1907 Fair Oaks and Davisville 15' maps, 1911, 1915, and 1916 Arcade, Brighton, Elkhorn Weir, and Lovdal 7.5' maps, 1948 Sacramento West 7.5' map, 1949-1950 Sacramento East, Sacramento West, Taylor Monument, and Rio Linda 7.5' maps, 1954 Sacramento East 7.5' maps, 1967, 1975, 1980 Sacramento East, Sacramento West, Taylor Monument, and Rio Linda 7.5' maps, 1992 Sacramento East, Sacramento West, and Rio Linda 7.5' maps, 1954 Sacramento East 7.5' maps, and 2012 Sacramento East, Sacramento West, Taylor Monument, and Rio Linda 7.5' maps, 1954 Sacramento East 7.5' maps.

## 2.8 SANBORN FIRE INSURANCE MAPS

Due to its rural nature, the Subject Property is not mapped through the Sanborn database. A certified complete database search was completed and is attached as **Appendix C**.

## 2.9 OTHER PHYSICAL SETTING SOURCES

### 2.9.1 WETLANDS MAP

According to the National Wetlands Inventory, freshwater forested/Shrub Wetlands are located in the very southwestern-most corner of the Subject Property (USFWS, 2020). A slough corridor currently lies immediately to the west of the Subject Property (USFWS, 2020), however portions may have meandered across the boundary of the Subject Property prior to development.

### 2.9.2 FLOODPLAIN MAP

The Federal Emergency Management Agency (FEMA) designates flood risk areas based on a parcel's location with respect to 100-year and 500-year floodplains. A 100-year flood is the flood elevation that has a 1 percent chance of being equaled or exceeded each year and a 500-year flood is the flood elevation that has a 0.2 percent chance of being equaled or exceeded each year. FEMA prepares Flood Insurance Rate Maps (FIRMs) that show the flood risk designations of lands throughout the U.S.

Map number 06067C0157J (effective June 16, 2015) shows that the Subject Property is located in Flood Zone A99 (FEMA, 2015; **Appendix F**). Zone A99 indicates property on the landward (and therefore protected) side of a levee. A copy of the floodplain map is included in **Appendix F**.

# SECTION 3.0

## SITE RECONNAISSANCE AND INTERVIEWS

---

### 3.1 OBJECTIVE

The objective of the site reconnaissance is to identify current or historic hazardous materials involvement on the Subject Property or in the vicinity of the Subject Property. Hazardous materials involvement or signature environmental conditions include the presence or likely presence of any hazardous materials or petroleum products that indicate an existing release, past release, or a threat of release into any structure on the property, soil, or groundwater. Signs of possible hazardous materials involvement would include any indications of USTs existing on the Subject Property; stained soils and/or unusual odors originating from the Subject Property; indications of any excavation or removal of soils, including patched asphalt and large debris piles; and other obvious signs of hazardous materials involvement.

### 3.2 SITE RECONNAISSANCE FINDINGS

A site reconnaissance of the Subject Property was performed by Charlane Gross of AES on December 22, 2020. Adjacent properties were observed to the extent possible without trespassing. **Figures 4a** and **4b** provides photographs that show the site conditions at the time of the site visit. Notable features and environmental conditions are summarized below and in **Table 3-1**:

- A transmission line bisects the Subject Property; cell tower infrastructure is located on top of the transmission line towers (**Photo 1**). The Subject Property contains two principal structures, the main sports complex (**Photo 2**) as well as a maintenance building. The outdoor portion of the facility features tennis courts, volleyball courts, a spa, and a pool as well as parking for the facility. Oil stains were visible at some parking spaces (**Photo 3**).
- There was a pump room for the pool and spa located inside the main building (**Photo 4**), as well as a laundry room (**Photo 5**) and pool chemical storage (**Photo 6**) in the maintenance building, including larger plastic barrels for mixing chemicals (**Photo 7**).
- There were electrical junction boxes on the north, south, and east, and a dumpster in the parking lot at the time of the site visit (**Photo 8**).

A survey of adjacent properties was performed to the extent possible without trespassing during the December 22, 2020 site visit. The purpose was to identify adjacent businesses and determine if current land uses would affect the planned use of the Subject Property.



**Photo 1:** Transmission Line with Cell Tower Infrastructure Facing North



**Photo 2:** Main Sports Complex Facing Northeast



**Photo 3:** Oil Stains in Parking Lot



**Photo 4:** Pump Room



**Photo 5:** Laundry Room Drain



**Photo 6:** Pool Chemical Storage



**Photo 7:** Pool Chemical Mixing Barrels



**Photo 8:** Dumpster

**TABLE 3-1**  
SUMMARY OF SITE OBSERVATIONS

<b>Site Setting</b>	<b>Observations</b>
Current Uses of Property	The Subject Property consists of the Natomas Racquet Club complex.
Past Uses of Property	Agricultural and undeveloped.
Current Uses of Adjoining Property	North: West El Camino Avenue lies directly north, with Bannon Creek Park and residential development beyond.
	South: Natomas Park Drive is directly south. There is an apartment complex beyond Natomas Park Drive, with Garden Highway beyond.
	East: River Terrace Apartments lie directly to the east.
	West: There is commercial development, including a bank and restaurant to the west.
Current or Past Uses in the Surrounding Area	Rural and agriculture
Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions	The Subject Property is level, and drains as sheet flow to the north, south and west. Bannon Slough formerly ran along the western portion of the Subject Property.
General Description of Structures	There are the main sports complex building, the maintenance building, tennis courts, a pool, and a spa.
Roads	There are two entrances off of Natomas Park Drive.
Potable Water Supply	A water line runs along Natomas Park Drive, south of the Subject Property.
Sewage Disposal System	There are no septic systems or cesspools on the Subject Property. Sewage disposal is provided by the City of Sacramento
Waste Removal Services	Waste removal is provided by Atlas Disposal Industries.
Hazardous Substances and Petroleum Products in Connection with Identified Uses	No hazardous substances or petroleum products were observed.
Storage Tanks and Associated Piping	No storage tanks were observed.
Odors	No strong, pungent, or noxious odors were observed.
Pools of Liquid	No pools of liquid were observed.
Drums (5 gal to 55 gal containers should be described)	Drums and containers for storage and mixing of pool chemicals were observed, all appeared to be properly stored and in good condition.
Hazardous Substances and Petroleum Products Containers	Pool chemicals may constitute hazardous substances; all chemicals observed appeared to be properly stored and in good condition.
Unidentified Substance Containers	No unidentified substance containers were observed.

Polychlorinated Biphenyls (PCBs)	No transformers were observed on the property and no other potential PCB-containing structures were observed.
Pits, Ponds, or Lagoons	No pits, ponds, or lagoons were observed.
Stained Soil or Pavement	Stained pavement was observed in the parking lot.
Stressed Vegetation	No stressed vegetation was observed.
Solid Waste	Debris, including office furniture and goods were observed within a dumpster.
Waste Water	No waste water or other liquids were observed being discharged into a drain, ditch, underground injection system, or stream on or adjacent to the property.
Wells	No wells were observed on or adjacent to the Subject Property, and there is no record of wells on the Subject Property.
Septic System	No septic systems or cesspools are located on the Subject Property.
Heating and Cooling Systems	Heating and cooling systems were internal and located within the main sports complex building.

### 3.3 INTERVIEWS AND QUESTIONNAIRES

Standard owner and user questionnaires were distributed by AES and are included in **Appendix G**.

#### OWNER/USER QUESTIONNAIRE AND OWNER PROVIDED INFORMATION

In a questionnaire dated December 29, 2020, Larry Gilzean, the property owner, reported no knowledge of any RECs on the Subject Property (**Appendix G**).

#### *Commonly Known or Reasonably Ascertainable Information, and Actual Knowledge of the User*

Question 5 of the Owner/User Questionnaire asks if the owner is 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 of hazardous materials.” Mr. Gilzean checked the “yes” box to confirm he had knowledge of the past/present uses of the property, as he is the President of the company (Spare Time Sports Clubs) that owns and operates the Natomas Racquet Club.

The Owner of the Subject Property does not know of any spills or other chemical releases that have taken place at the property. In addition, the Owner does not know of any environmental cleanups that have taken place at the property, does not have any reason to believe contamination is present at the property (**Appendix G**).

#### *Environmental Liens, Activity and Use Limitations, and Valuation Reductions*

The EDR report (EDR, 2020), reported that there are no environmental liens against the Subject Property that are filed or recorded under federal, tribal state or local law. The owner confirmed that the purchase

price reasonably reflects the fair market value of the property, that he does not have specialized knowledge regarding a reduction in value of the Subject Property due to environment issues, and that he is not aware of any Recorded Activity and Use Limitations (AULs) (**Appendix G**).

***Degree of Obviousness***

The owner confirmed that based on his knowledge and experience related to the property, there are no obvious indicators that point to the presence or likely presence of hazardous materials products or petroleum product releases at the Subject Property.

***Specialized Knowledge***

The Owner/User Questionnaire confirms that the owner does not have specialized knowledge or experience related to the Subject Property or nearby properties.

**ADJACENT PROPERTY OWNER AND AGENCY INTERVIEWS**

Mr. David Von Aspern, an Environmental Specialist III with the City of Sacramento Environmental Department was interviewed over the telephone on January 5, 2021. Mr. Von Aspern stated that he is very familiar with the Subject Property as he completed Phase I assessments of two properties immediately to the west of the Subject Property and is, in addition, a long-time resident of the area. In the interview, Mr. Von Aspern mentioned that there was allegedly a dump west of the Subject Property, within Bannon Slough, however he had never been able to confirm that fact, and Mr. Von Aspern stated that he had no knowledge of hazardous materials anywhere within the Subject Property (**Appendix G**).

In a questionnaire dated January 5, 2021, Mr. Scott Walsh, a neighbor of the Subject Property, completed an interview. Mr. Walsh has been a neighbor for over 5 years and stated that he was unaware of any hazardous materials deposited on the Subject Property (**Appendix G**).

# SECTION 4.0

## RECORDS REVIEW

### 4.1 DATABASE SEARCH

Database searches were conducted for records of known storage tank sites and known sites of hazardous materials generation, storage, and/or contamination. Databases were searched for sites and listings up to 1.0 mile from a point roughly equivalent to the center of the Subject Property. The environmental database review was accomplished by using the services of a computerized search firm, EDR. EDR uses a geographic information system to plot locations of past or current hazardous materials involvement. The EDR report was reviewed to determine if the Subject Property and adjacent sites are listed on regulatory agency databases. The purpose is to determine if adjacent sites contain REC that would impact surface and/or subsurface conditions on the Subject Property. Included in the EDR database report is a list of “unmapped sites.” Two unmapped sites may be located within the applicable search radius of the Subject Property. The complete list of reviewed databases is provided in the EDR report, included in **Appendix E**, and is summarized in **Table 4-1**. In addition, the information on past and/or current hazardous material involvement relating to adjacent properties is summarized in **Section 4.2.2**.

**TABLE 4-1**  
ENVIRONMENTAL DATA RESOURCES (EDR) SUMMARY OF AGENCY DATABASES

REGULATORY AGENCY DATABASE	MINIMUM SEARCH DISTANCE	PROPERTY LISTED	SITES LISTED
United States Environmental Protection Agency (USEPA) National Priorities List (NPL)	1.00 mile	No	0
USEPA Proposed NPL	1.00 mile	No	0
USEPA NPL Liens	TP	No	0
USEPA Delisted NPL	1.00 mile	No	0
USEPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Federal Facility	0.50 mile	No	0
USEPA CERCLIS Superfund Enterprise Management System (SEMS)	0.50 mile	No	0
USEPA CERCLIS No Further Remedial Action Planned (NFRAP) SEMS – Archive	0.50 mile	No	0
USEPA Resource Conservation and Recovery Act (RCRA) Corrective Action Reports (CORRACTS)	1.00 mile	No	0
USEPA RCRA non-CORRACTS Treatment, Storage, and Disposal Facilities (TSDF)	0.50 mile	No	0
USEPA RCRA Large Quantity Generators (LQG)	0.25 mile	No	0
USEPA RCRA Small Quantity Generators (SQG)	0.25 mile	No	0
USEPA RCRA Very Small Quantity Generators (VSQG)	0.25 mile	No	0
USEPA Land Use Control Information System (LUCIS)	0.50 mile	No	0
USEPA Engineering Controls Sites List (US ENG CONTROLS)	0.50 mile	No	0
USEPA Institutional Controls Sites List (US INST CONTROL)	0.50 mile	No	0
United States Coast Guard (USCG) Emergency Response Notification	TP	No	0



REGULATORY AGENCY DATABASE	MINIMUM SEARCH DISTANCE	PROPERTY LISTED	SITES LISTED
System (ERNS)			
California Department of Toxic Substance and Control (DTSC) Response Sites (RESPONSE)	1.00 mile	No	0
EnviroStor (ENVIROSTOR)	1.00 mile	No	2
CA State Waste Facility/Landfill (SWF/LF)	0.50 mile	No	0
CA Leaking Underground Storage Tanks (LUST)	0.50 mile	No	2
Indian LUST	0.50 mile	No	0
CA SLIC	0.50 mile	No	2
Sacramento Co. CS	0.05 mile	No	1
Federal Emergency Management Agency (FEMA) Underground Storage Tank (UST)	0.25 mile	No	0
CA UST	0.25 mile	No	0
CA Aboveground Storage Tank (AST)	0.25 mile	No	0
Indian UST	0.25 mile	No	0
Indian Voluntary Cleanup Program (VCP)	0.50 mile	No	0
CA VCP	0.50 mile	No	0
CA Brownfields	0.50 mile	No	0
USEPA Brownfields	0.50 mile	No	0
CA Waste Management Unit Database (WMUDS/SWAT)	0.50 mile	No	0
CA State Recycling Facilities (SWRCY)	0.50 mile	No	0
CA Registered Waste Tire Haulers Listing (HAULERS)	TP	No	0
Indian Open Dump Inventory (ODI)	0.50 mile	No	0
USEPA Debris Region 9	0.50 mile	No	0
USEPA ODI	0.50 mile	No	0
IHS Open Dumps	0.50 mile	No	0
US Historic Clandestine Laboratory (US HIST CDL)	TP	No	0
CA Historical Calsites Database (HIST Cal-Sites)	1.00 mile	No	0
CA School Property Evaluation Program (SCH)	0.25 mile	No	0
CA CDL	TP	No	0
Toxic Pit Cleanup Act Sites (Toxic Pits)	1.00 mile	No	0
CERS HAZ WASTE	0.25 mile	No	0
US CDL	TP	No	0
PFAS	0.5 mile	No	0
CA State Water Resources Control Board (SWRCB) Underground Storage Tank Division Registered UST List (SWEEPS UST)	0.25 mile	No	0
CA Historical Registered UST (HIST UST)	0.25 mile	No	0
CERS Tanks	0.25 mile	No	0
CA Facility Inventory Database (FID UST)	0.25 mile	No	0
CERCLA LIENS	TP	No	0
CERCLA LIENS 2	TP	No	0
California Deed Restriction Listing (DEED)	0.50 mile	No	0
Hazardous Material Information Reporting System (HMIRS)	TP	No	0
CA HMIRS (CHMIRS)	TP	No	0

<b>REGULATORY AGENCY DATABASE</b>	<b>MINIMUM SEARCH DISTANCE</b>	<b>PROPERTY LISTED</b>	<b>SITES LISTED</b>
CA Land Disposal Sites Listing (LDS)	TP	No	0
CA Military Cleanup Sites Listing (MCS)	TP	No	0
CA SPILLS 90	TP	No	0
USEPA RCRA Non-Generators (NonGen) / No Longer Regulated (NLR)	0.25 mile	No	0
Formerly Used Defense Sites (FUDS)	1.00 mile	No	1
Department of Defense (DOD)	1.00 mile	No	0
State Coalition for Remediation of Drycleaners (SCRD DRYCLEANERS)	0.50 mile	No	0
US Financial Assurance Data (US FIN ASSUR)	TP	No	0
USEPA Watch List	TP	No	0
2020 Corrective Action (2020 COR ACTION)	0.25 mile	No	0
Toxic Substances Control Act (TSCA)	TP	No	0
Toxic Chemical Release Index System (TRIS)	TP	No	0
Section 7 Tracking System (SSTS)	TP	No	0
Records of Decision (ROD)	1.00 mile	No	0
Risk Management Plans (RMP)	TP	No	0
RCRA Administrative Action Tracking System (RAATS)	TP	No	0
Potentially Responsible Parties (PRP)	TP	No	0
Polychlorinated Biphenyl (PCB) Activity Database System (PADS)	TP	No	0
Integrated Compliance Information System (ICIS)	TP	No	0
Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) / TSCA Tracking System (FTTS)	TP	No	0
Material Licensing Tracking System (MLTS)	TP	No	0
Steam-Electric Plant Operation Data (COAL ASH DOE)	TP	No	0
Coal Combustion Residues Surface Impoundments (COAL ASH USEPA)	0.50 mile	No	0
PCB Transformer Registration Database (PCB TRANSFORMER)	TP	No	0
Radiation Information Database (RADINFO)	TP	No	0
FTTS Administrative Case Listing (HIST FTTS)	TP	No	0
Incident and Accident Data (DOT OPS)	TP	No	0
Superfund (CERCLA) Consent Decrees (CONSENT)	1.00 mile	No	0
Indian Reservations (INDIAN RESERV)	TP	No	0
Formerly Utilized Sites Remedial Action Program (FUSRAP)	1.00 mile	No	0
Uranium Mill Tailings Sites (UMTRA)	0.50 mile	No	0
Lead Smelters	TP	No	0
Aerometric Information Retrieval System Facility Subsystem (US AIRS)	TP	No	0
Mines Master Index File (US MINES)	0.25 mile	No	0
Abandoned Mines	TP	No	0
USEPA Facility Index System (FINDS)	TP	Yes	1
Unexploded Ordnance Sites (UXO)	1.00 mile	No	0
Docket Hazardous Waste Compliance (DOCKET HWC)	TP	No	0

REGULATORY AGENCY DATABASE	MINIMUM SEARCH DISTANCE	PROPERTY LISTED	SITES LISTED
Enforcement and Compliance History Online (ECHO)	TP	No	0
USEPA Fuels Program (FUELS PROGRAM)	0.25 mile	No	0
CA Department of Health Services (DHS) Bond Expenditure Plan (CA BOND EXP. PLAN)	1.00 mile	No	0
CA Cortese Hazardous Waste and Substances List (Cortese)	0.50 mile	No	2
CA Certified Unified Program Agency (CUPA) Listings	0.25 mile	No	0
CA Dry Cleaners	0.25 mile	No	0
California Integrated Water Quality System (CIWQS)	TP	No	0
CA Emissions Inventory Data (EMI)	TP	No	0
CA Enforcement Action Listing (ENF)	TP	No	0
CA FIN ASSUR	TP	No	0
CA Facility and Manifest Data (HAZNET)	TP	No	0
ICE	TP	No	0
HIST CORTESE	0.50 mile	No	1
CA EnviroStor Permitted Facilities Listing (HWP)	1.00 mile	No	0
CA Registered Hazardous Waste Transporter Database (HWT)	0.25 mile	No	0
CA Mines Site Location Listing (MINES)	TP	No	0
Sacramento Co. ML	0.25 mile	No	9
CA Medical Waste Management Program Listing (MMWP)	0.25 mile	No	0
CA NPDES Permits Listing (NPDES)	TP	No	0
CA Pesticide Regulation Licenses Listing (PEST LIC)	TP	No	0
CA Certified Processors Database (PROC)	0.50 mile	No	0
CA SWRCB Proposition 65 Records (Notify 65)	1.00 mile	No	2
CERS	TP	Yes	1
CA UIC Listing (UIC)	TP	No	0
CA Oil Wastewater Pits Listing (WASTEWATER PITS)	0.50 mile	No	0
CA Waste Discharge System (WDS)	TP	No	0
CA Well Investigation Program Case List (WIP)	0.25 mile	No	0
EDR Proprietary Manufactured Gas Plants (EDR MGP)	1.00 mile	No	0
EDR Hist Auto	0.125 mile	No	0
EDR Exclusive Historical Cleaners (EDR Hist Cleaner)	0.125 mile	No	0
Recovered Government Archive Solid Waste Facilities List (RGA LF)	TP	No	0
RGA LUST	TP	No	0
<b>TOTAL</b>			0
Source: EDR, 2020 ( <b>Appendix A</b> )			
TP = Target Property			
Sites may be listed in more than one database			

## 4.2 HAZARDOUS MATERIALS INVOLVEMENT

A regulatory agency database search was performed to identify locations of past and/or current hazardous materials involvement. Regulatory agency databases were searched for records of known storage tank sites and known sites of hazardous materials generation, storage, or contamination, or where violations

pertaining to storage, use, or disposal of hazardous materials have occurred. Databases were searched for sites and listings up to 1.0 mile from a point roughly equivalent to the center of Subject Property.

Although a site may be listed within the database report, this does not mean the site is currently contaminated or will impact the environmental quality of the Subject Property and would be considered a REC. It should be noted that the database search is only as accurate as the data entered into the government agency-maintained databases and the date on which those databases were last updated. Installation of USTs or hazardous material releases, if not reported to the appropriate agency, would not be listed on any of the databases searched.

#### 4.2.1 SUBJECT PROPERTY

The Subject Property is listed on the USEPA Facility Index System (FINDS) and California Environmental Reporting System (CERS) because pool and spa chemicals were stored on site (**Appendix E**). The facility was inspected in 2015 and 2018; no violations were reported. The Subject Property is also listed in a Sacramento County database as there is a T-Mobile West Corp cell tower.

#### 4.2.2 ADJACENT PROPERTIES

Due to the urban location of the Subject Property, a large number of listed properties are within a 1.0-mile radius (**Appendix E**).

These database search radius found sites listed on the following databases: California Department of Toxic Substance and Control (DTSC), Site Mitigation and Brownfields Reuse Program's ENVIROSTOR List (2 sites); SWRCB and Tribal, Leaking Underground Storage Tank (LUST) List (3 sites); Cleanup Program Sites-Spills, Leaks, Investigations, and Cleanups (CPS-SLIC) (2 sites), Sacramento Co. CS List (1 site); Formerly Used Defense Sites (FUDS) (1 site); CalEPA Cortese (CORTESE) (2 sites); CalEPA Historic Cortese (HIST CORTESE) (1 site); Sacramento County Environmental Health Department – Master List SAC CO. ML (9 sites); and Proposition 65 Records (Notify 65) list (1 site). There were also two unmapped sites, one on the CPS-CLIC list and one on the Sacramento Co. CS list. However, a listing within a database does not necessarily mean a hazardous materials release occurred within the listed property.

The Christofer Oaks One site is located approximately 0.4 miles northwest of the Subject Property. The Christofer Oaks One site is listed on the LUST, Sacramento County CS, and HIST CORTESE databases for a spill with the following potential contaminants of concern: waste oil/motor/hydraulic/lubricating oil. According to the GeoTracker website, the contamination was limited to the soil. The site received closure status on July 29, 1994 (SWRCB, 2016). Given that the affected media was soil only and the closure status of the site, the Christofer Oaks One site constitutes an HREC that is not likely to pose a risk to the environmental quality of the Subject Property.

The Shell Service Station site is located approximately 0.3 miles east of the Subject Property, downgradient from the Subject Property. The Shell site is listed on the RCRA-SQG database for generating small quantities of ignitable hazardous waste, the LUST database for a gasoline spill, the UST database for a permitted underground storage tank, and several other databases. The LUST incident occurred in 2002 and remedial activities, including pumping of impacted groundwater and monitoring activities, began in 2003. Methyl tertiary butyl ether (MTBE) was detected in the onsite soils and groundwater, but more recent data indicates that impacts in soil were present as isolated occurrences and were limited in extent (Wayne Perry, 2009). Additionally, 2009 data indicated that MBTE concentrations in groundwater were below maximum contaminant levels at all monitoring wells (Wayne Perry, 2009). This LUST case was closed in April 2011. Due to the continued attenuation of contaminants, the limited extent of contaminants, and elevation lower than the Subject Property, this site does not pose a risk to human health or the environment at the Subject Property, and does not constitute a HREC.

The Calvada Food Sales Company is located approximately 1 mile southeast and is listed on the LUST, Sacramento County CS and ML, CERS, UST, Cortese, and Notify 65 databases for a solvent or non-petroleum hydrocarbon leak. The leak was reported in 1998, cleaned up in 2004 and the case was closed in 2007. Due to the completion of remedial actions that occurred on the site, the site's closure status, and the distance from the Subject Property, this site does not pose a risk to human health or the environment at the Subject Property and does not constitute a HREC.

The Discovery Plaza Shopping Center Site is located approximately 0.44 miles northeast of the Subject property, downgradient from the Subject Property and is listed on SWRCB's GeoTracker website as a closed spill case. According to the GeoTracker website, the leak was reported in January 1995. The potential contaminants of concern included tetrachloroethylene and trichloroethylene in groundwater at the site. Corrective actions, including groundwater monitoring, occurred on the site until a Certificate of Completion for remedial action and No Further Action (NFA) letter was issued by the County of Sacramento on March 31, 2011 (SWRCB, 2020). Due to the completion of remedial actions that occurred on the site, the site's closure status, and the location downgradient from the Subject Property, this site does not pose a risk to human health or the environment at the Subject Property and does not constitute a HREC.

Other sites consist of cellular towers, or businesses that store chemicals in compliance with applicable local, state, or federal regulations and are not likely to pose a risk to the environmental quality of the Subject Property. Additional sites in the vicinity of the Subject Property, as described in the EDR Report (**Appendix E**) and the SWRCB GeoTracker website, are located at distances greater than 0.6 miles from the Subject Property and have either been remediated and closed or do not have reported violations.

# SECTION 5.0

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## FINDINGS AND CONCLUSIONS

This Phase I ESA was performed in conformance with the scope and limitations of ASTM Standard Practice E1527-13.

### 5.1 FINDINGS

Based on information gathered while conducting this Phase I ESA, the following environmental findings are provided:

- Chemicals are stored on site, as stated in the EDR report (**Appendix E**). The chemicals were properly stored and no chemical spills were observed, therefore these chemicals do not constitute a REC. There was some staining on the floors of the chemical storage room and laundry room.
- Additional staining, engine coolant or oil, was observed on the asphalt paved area consistent with use as a parking lot.

### 5.2 CONCLUSION

This Phase I ESA was prepared in conformance with the scope and limitations of ASTM Practice E 1527-13. Any exceptions to, or deletions from, this practice are described in **Section 1.0** of this report. Based on the site conditions during the December 22, 2020 site reconnaissance, owner and user questionnaires (**Appendix G**), and information in the EDR report (**Appendix E**), no RECs were identified on or in the immediate vicinity of the Subject Property that would likely pose a significant impact to the environmental integrity of the Subject Property. It is not likely that documented off-site listed hazardous materials sites pose a material risk to human health or the environment on the Subject Property, due to the defined nature of the contamination, previous remediation activities, and associated closed cases, and/or the distance involved. No additional subsurface hazardous materials investigations of the property are recommended at this time.



## REFERENCES

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# ***APPENDICES***

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**DRAFT**

# **APPENDIX A**

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## *HISTORICAL AERIAL PHOTOGRAPHS*

DRAFT



**2450 Natomas Park**

2450 Natomas Park

Sacramento, CA 95833

Inquiry Number: 6302266.8

December 15, 2020



**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

12/15/20

**Site Name:**

2450 Natomas Park  
2450 Natomas Park  
Sacramento, CA 95833  
EDR Inquiry # 6302266.8

**Client Name:**

ANALYTICAL ENVIRONMENTAL SERV  
1801 7th Street  
Sacramento, CA 95811  
Contact: Charlane Gross



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
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1998	1"=500'	Acquisition Date: January 01, 1998	USGS/DOQQ
1993	1"=500'	Acquisition Date: June 15, 1993	USGS/DOQQ
1984	1"=500'	Flight Date: June 08, 1984	USDA
1972	1"=500'	Flight Date: August 11, 1972	USDA
1966	1"=500'	Flight Date: August 04, 1966	USGS
1964	1"=500'	Flight Date: May 11, 1964	USDA
1957	1"=500'	Flight Date: September 12, 1957	USDA
1953	1"=500'	Flight Date: April 23, 1953	USDA
1947	1"=500'	Flight Date: July 28, 1947	USGS
1937	1"=500'	Flight Date: August 18, 1937	USDA

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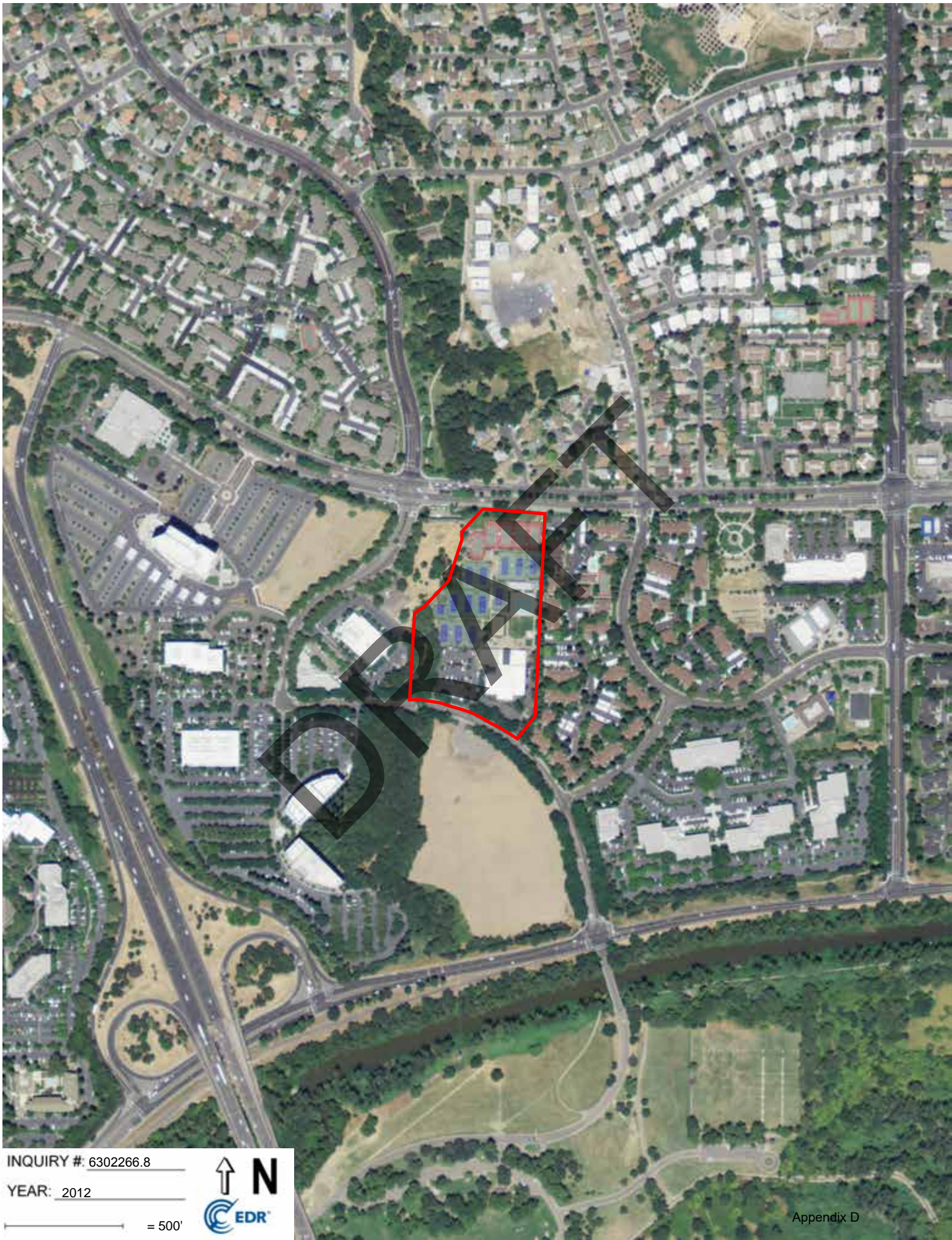


INQUIRY #: 6302266.8

YEAR: 2016

— = 500'





INQUIRY #: 6302266.8

YEAR: 2012

— = 500'





INQUIRY #: 6302266.8

YEAR: 2009

— = 500'





INQUIRY #: 6302266.8

YEAR: 2006

— = 500'







INQUIRY #: 6302266.8

YEAR: 1998

— = 500'





INQUIRY #: 6302266.8

YEAR: 1993

— = 500'



Subject boundary not shown because it exceeds image extent or image is not georeferenced.



DRAFT

INQUIRY #: 6302266.8

YEAR: 1984

— = 500'



DRAFT

INQUIRY #: 6302266.8

YEAR: 1972

— = 500'



DRAFT

INQUIRY #: 6302266.8

YEAR: 1966

— = 500'



DRAFT

INQUIRY #: 6302266.8

YEAR: 1964

— = 500'



DRAFT

INQUIRY #: 6302266.8

YEAR: 1957

— = 500'



DRAFT

INQUIRY #: 6302266.8

YEAR: 1953

— = 500'





DRAFT

INQUIRY #: 6302266.8

YEAR: 1947

— = 500'



DRAFT

INQUIRY #: 6302266.8

YEAR: 1937

— = 500'



# ***APPENDIX B***

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## *HISTORICAL TOPOGRAPHIC MAPS*

DRAFT

2450 Natomas Park  
2450 Natomas Park  
Sacramento, CA 95833

Inquiry Number: 6302266.4

December 15, 2020

# EDR Historical Topo Map Report with QuadMatch™

DRAFT



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Historical Topo Map Report

12/15/20

**Site Name:**

2450 Natomas Park  
2450 Natomas Park  
Sacramento, CA 95833  
EDR Inquiry # 6302266.4

**Client Name:**

ANALYTICAL ENVIRONMENTAL SERVI  
1801 7th Street  
Sacramento, CA 95811  
Contact: Charlane Gross



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by ANALYTICAL ENVIRONMENTAL SERVICES 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. EDRs 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>	NA	<b>Latitude:</b>	38.61126 38° 36' 41" North
<b>Project:</b>	2450 Natomas Park - 220554	<b>Longitude:</b>	-121.503939 -121° 30' 14" West
		<b>UTM Zone:</b>	Zone 10 North
		<b>UTM X Meters:</b>	630255.73
		<b>UTM Y Meters:</b>	4274700.47
		<b>Elevation:</b>	18.00' above sea level

**Maps Provided:**

2012	1911, 1915, 1916
1992	1902, 1907
1980	1893
1975	1892
1967	1891
1954	
1949, 1950	
1948	

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## Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 2012 Source Sheets



Sacramento West  
2012  
7.5-minute, 24000



Rio Linda  
2012  
7.5-minute, 24000



Sacramento East  
2012  
7.5-minute, 24000



Taylor Monument  
2012  
7.5-minute, 24000

### 1992 Source Sheets



Sacramento West  
1992  
7.5-minute, 24000  
Aerial Photo Revised 1992



Rio Linda  
1992  
7.5-minute, 24000  
Aerial Photo Revised 1992



Sacramento East  
1992  
7.5-minute, 24000  
Aerial Photo Revised 1992

### 1980 Source Sheets



Taylor Monument  
1980  
7.5-minute, 24000  
Aerial Photo Revised 1978



Sacramento East  
1980  
7.5-minute, 24000  
Aerial Photo Revised 1978



Rio Linda  
1980  
7.5-minute, 24000  
Aerial Photo Revised 1978



Sacramento West  
1980  
7.5-minute, 24000  
Aerial Photo Revised 1978

### 1975 Source Sheets



Taylor Monument  
1975  
7.5-minute, 24000  
Aerial Photo Revised 1975



Sacramento East  
1975  
7.5-minute, 24000  
Aerial Photo Revised 1975



Rio Linda  
1975  
7.5-minute, 24000  
Aerial Photo Revised 1975



Sacramento West  
1975  
7.5-minute, 24000  
Aerial Photo Revised 1975

## Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1967 Source Sheets



Taylor Monument  
1967  
7.5-minute, 24000  
Aerial Photo Revised 1966



Sacramento West  
1967  
7.5-minute, 24000  
Aerial Photo Revised 1966



Sacramento East  
1967  
7.5-minute, 24000  
Aerial Photo Revised 1966



Rio Linda  
1967  
7.5-minute, 24000  
Aerial Photo Revised 1966

### 1954 Source Sheets



Sacramento East  
1954  
7.5-minute, 24000  
Aerial Photo Revised 1947

### 1949, 1950 Source Sheets



Sacramento East  
1949  
7.5-minute, 24000  
Aerial Photo Revised 1947



Sacramento West  
1949  
7.5-minute, 24000  
Aerial Photo Revised 1947



Taylor Monument  
1950  
7.5-minute, 24000  
Aerial Photo Revised 1947



Rio Linda  
1950  
7.5-minute, 24000  
Aerial Photo Revised 1947

### 1948 Source Sheets



Sacramento West  
1948  
7.5-minute, 24000  
Aerial Photo Revised 1947

**Topo Sheet Key**

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

**1911, 1915, 1916 Source Sheets**



Arcade  
1911  
7.5-minute, 31680



Brighton  
1911  
7.5-minute, 31680



Elkhorn Weir  
1915  
7.5-minute, 31680



Lovdal  
1916  
7.5-minute, 31680

**1902, 1907 Source Sheets**



Fairoaks  
1902  
15-minute, 62500



Davisville  
1907  
15-minute, 62500

**1893 Source Sheets**



Sacramento  
1893  
30-minute, 125000

**1892 Source Sheets**



Sacramento  
1892  
30-minute, 125000

DRAFT



## **Topo Sheet Key**

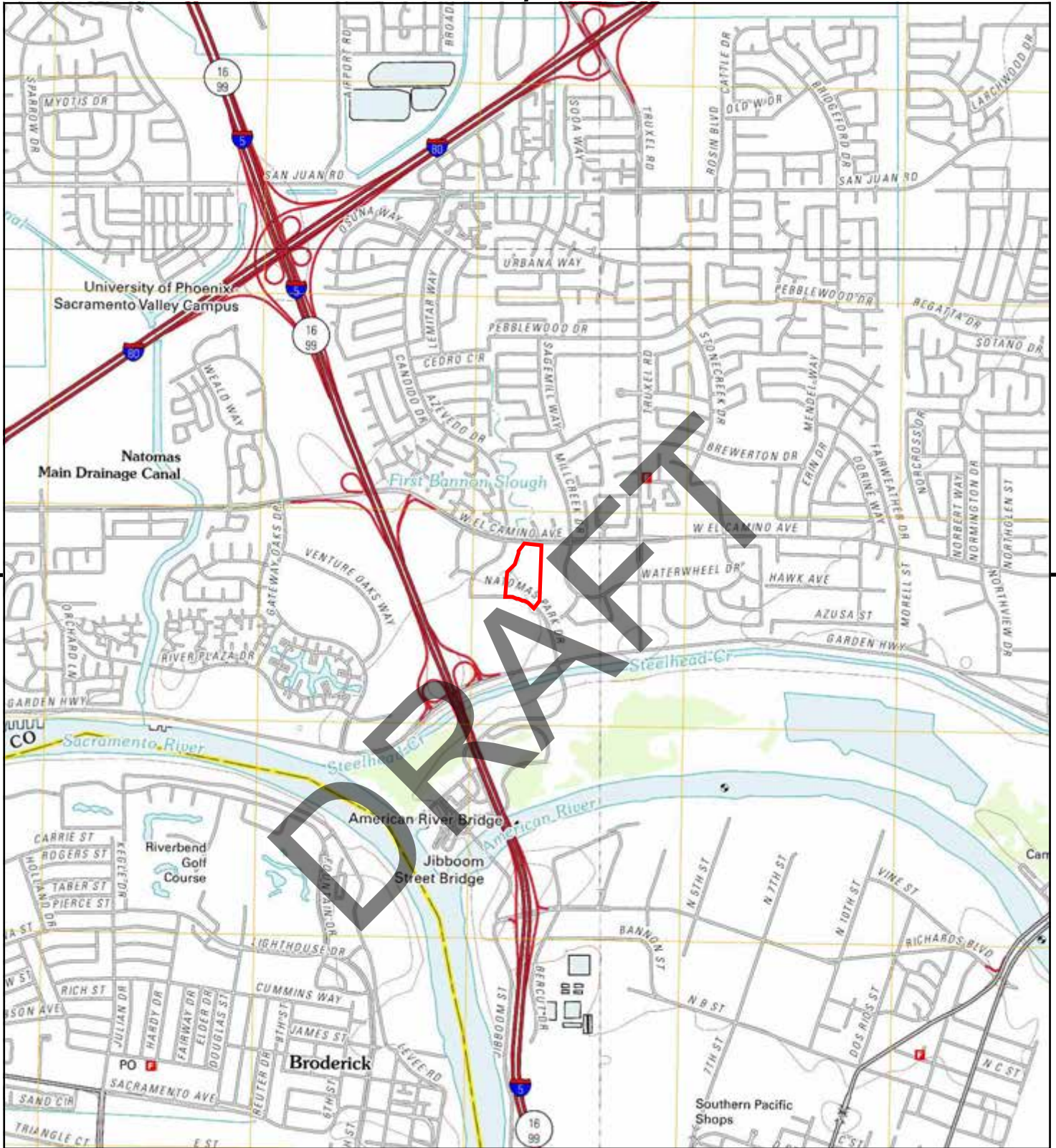
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### **1891 Source Sheets**

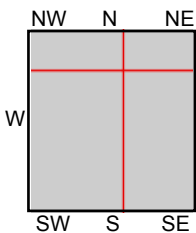


Sacramento  
1891  
30-minute, 125000

DRAFT

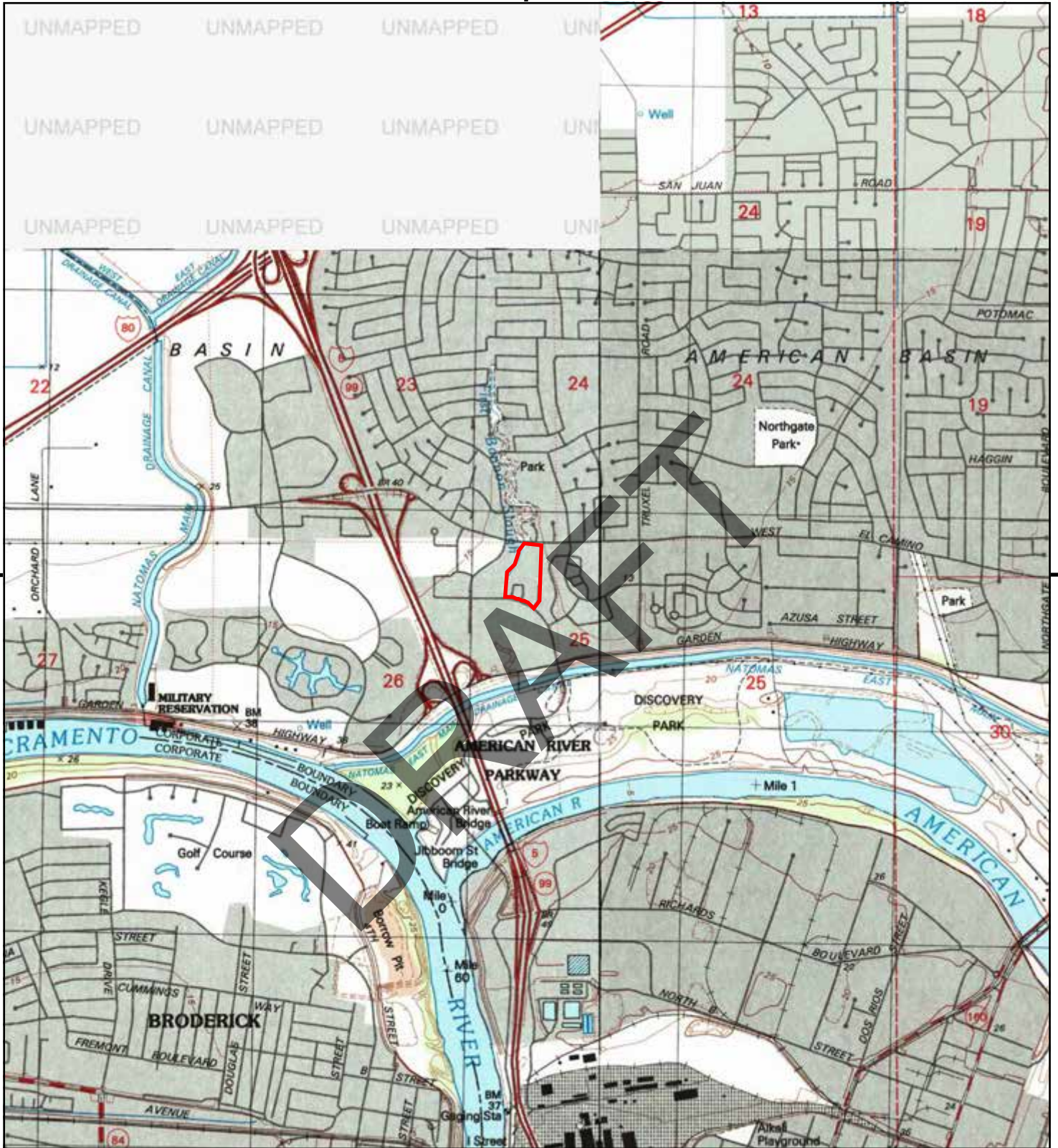


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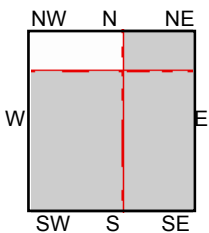
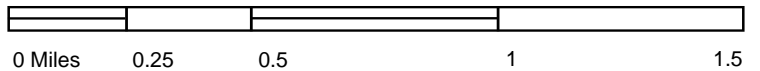


TP, Sacramento West, 2012, 7.5-minute  
 NE, Rio Linda, 2012, 7.5-minute  
 SE, Sacramento East, 2012, 7.5-minute  
 NW, Taylor Monument, 2012, 7.5-minute

SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento, CA 95833  
 CLIENT: ANALYTICAL ENVIRONMENTAL SERVI



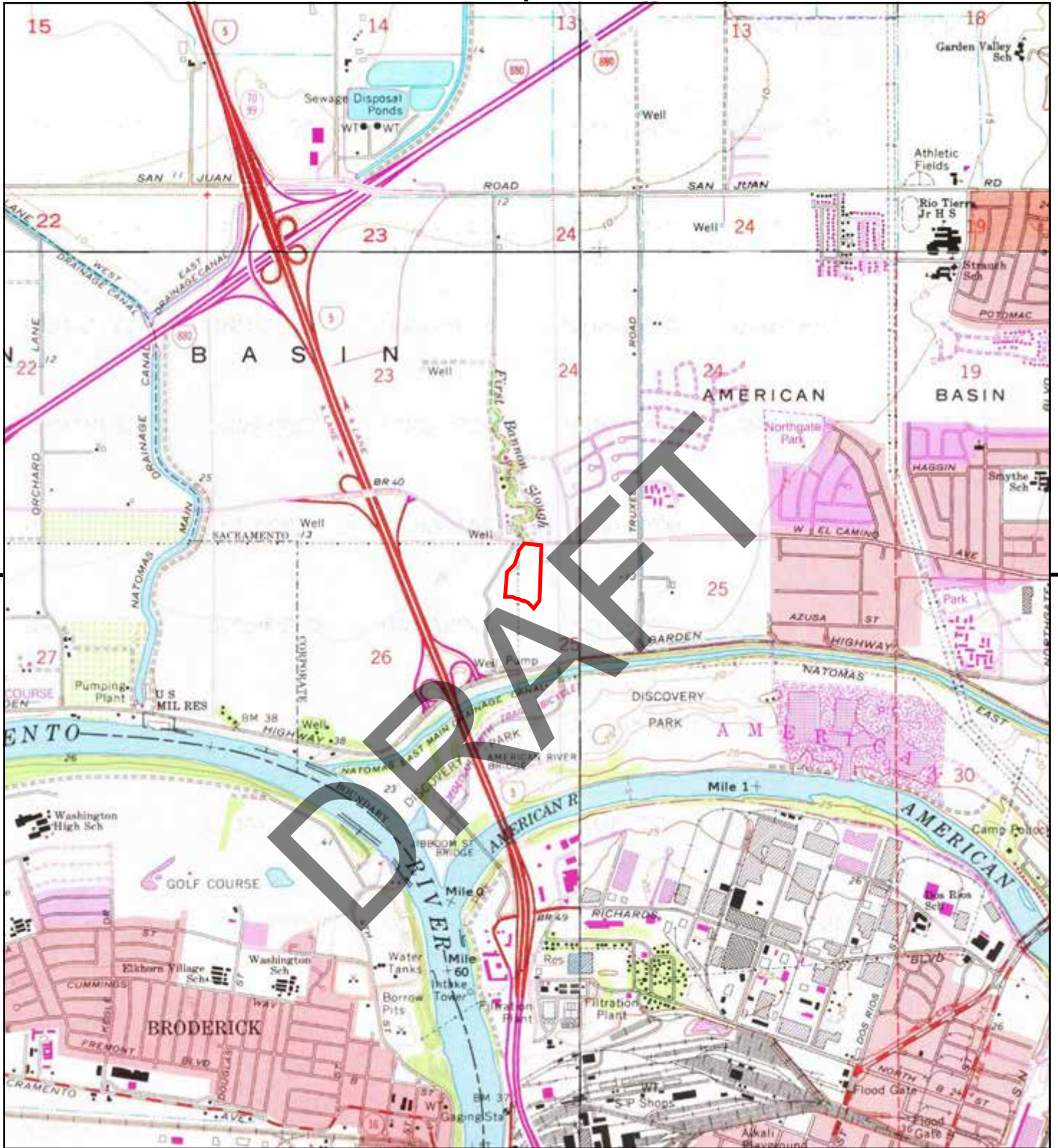
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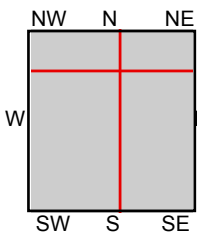
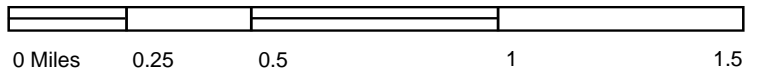
TP, Sacramento West, 1992, 7.5-minute  
 NE, Rio Linda, 1992, 7.5-minute  
 SE, Sacramento East, 1992, 7.5-minute

SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento, CA 95833  
 CLIENT: ANALYTICAL ENVIRONMENTAL SERVI



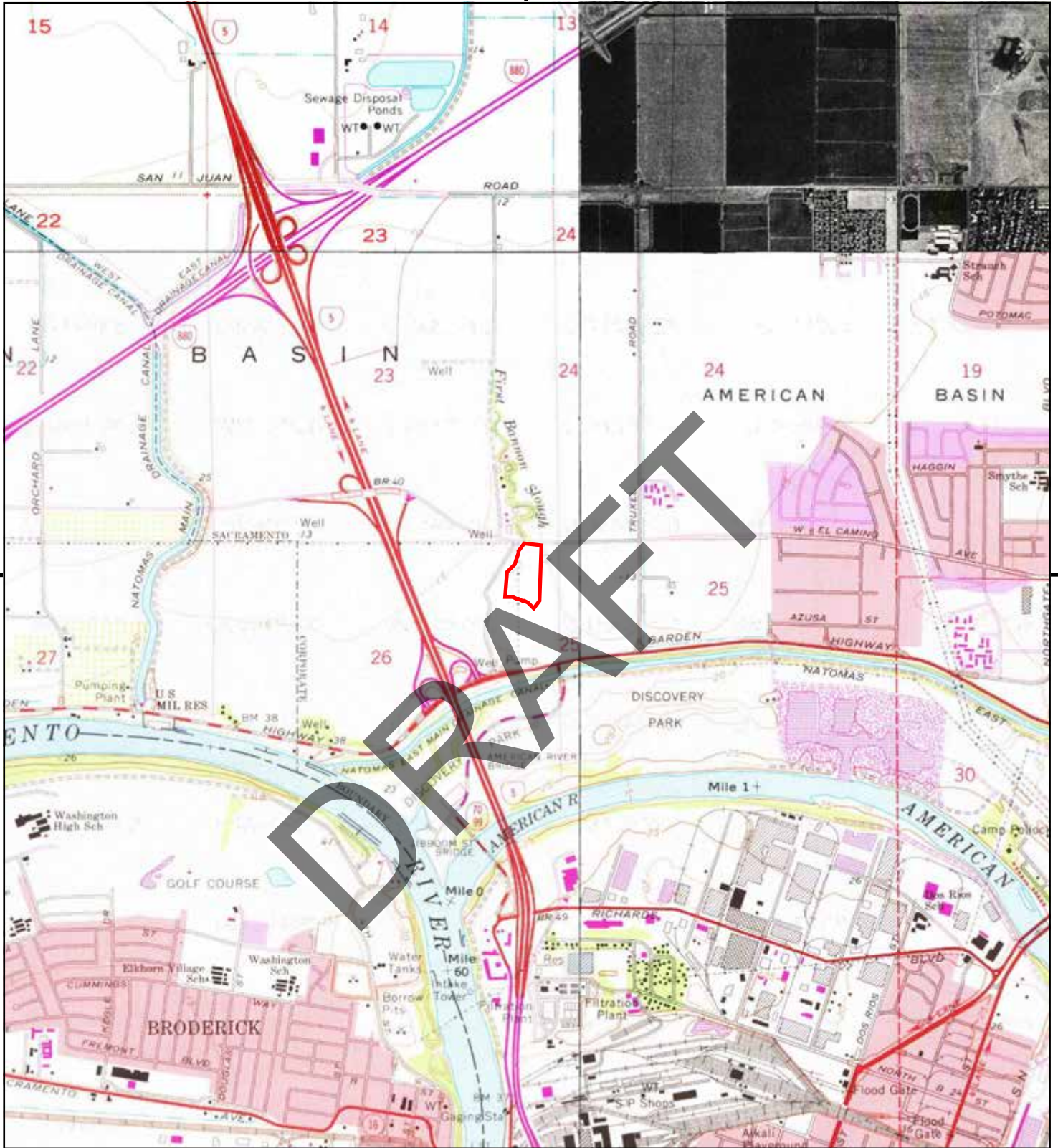


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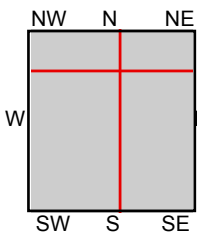


TP, Sacramento West, 1980, 7.5-minute  
 NE, Rio Linda, 1980, 7.5-minute  
 SE, Sacramento East, 1980, 7.5-minute  
 NW, Taylor Monument, 1980, 7.5-minute

SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento, CA 95833  
 CLIENT: ANALYTICAL ENVIRONMENTAL SERVI



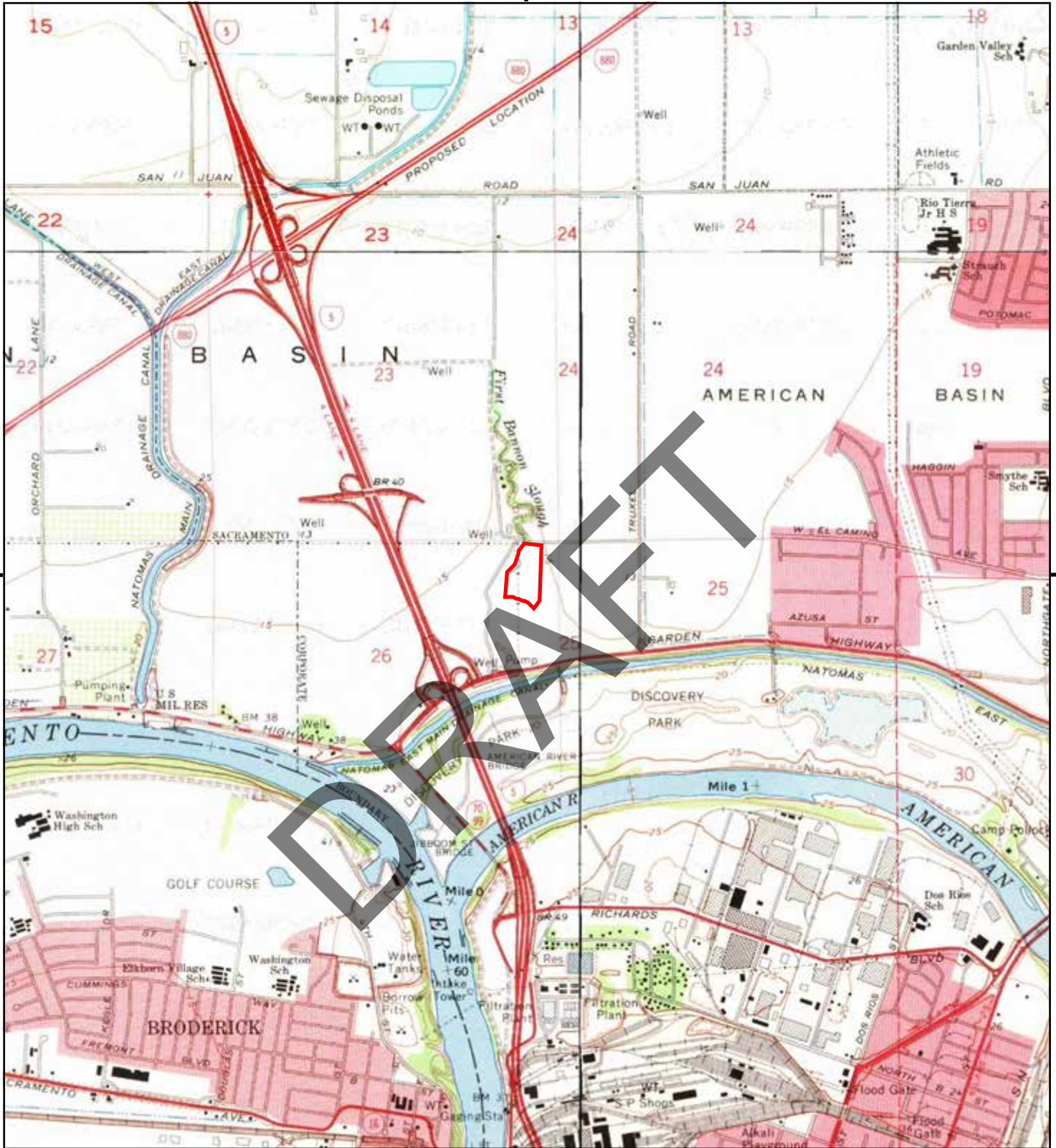
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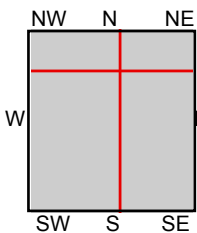
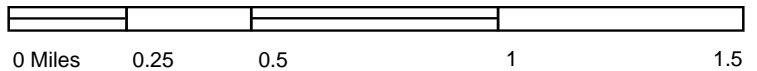
TP, Sacramento West, 1975, 7.5-minute  
 NE, Rio Linda, 1975, 7.5-minute  
 SE, Sacramento East, 1975, 7.5-minute  
 NW, Taylor Monument, 1975, 7.5-minute

SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento, CA 95833  
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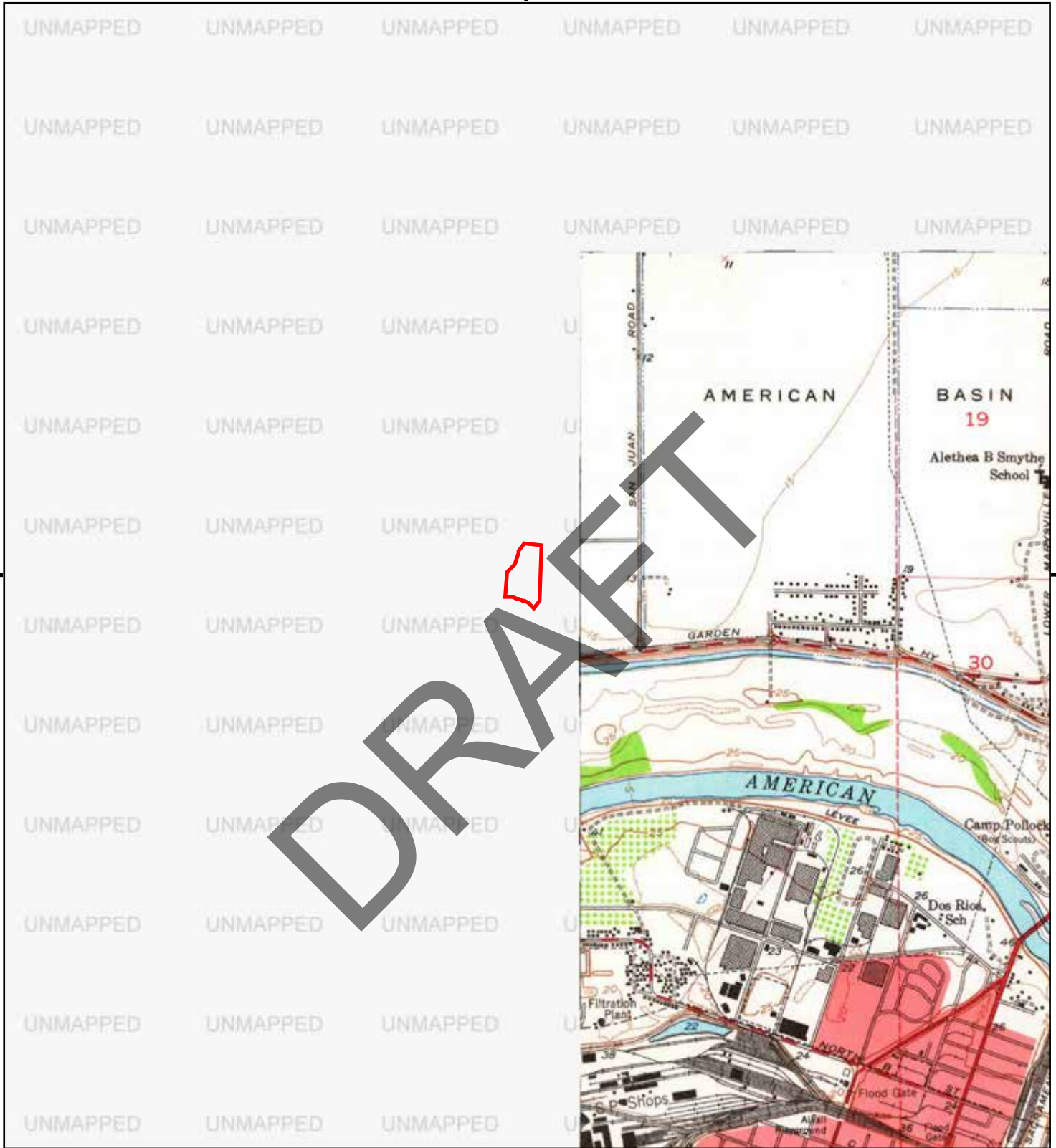


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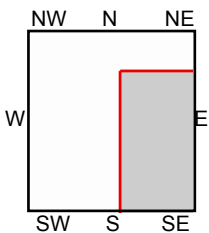


TP, Sacramento West, 1967, 7.5-minute  
 NE, Rio Linda, 1967, 7.5-minute  
 SE, Sacramento East, 1967, 7.5-minute  
 NW, Taylor Monument, 1967, 7.5-minute

SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento, CA 95833  
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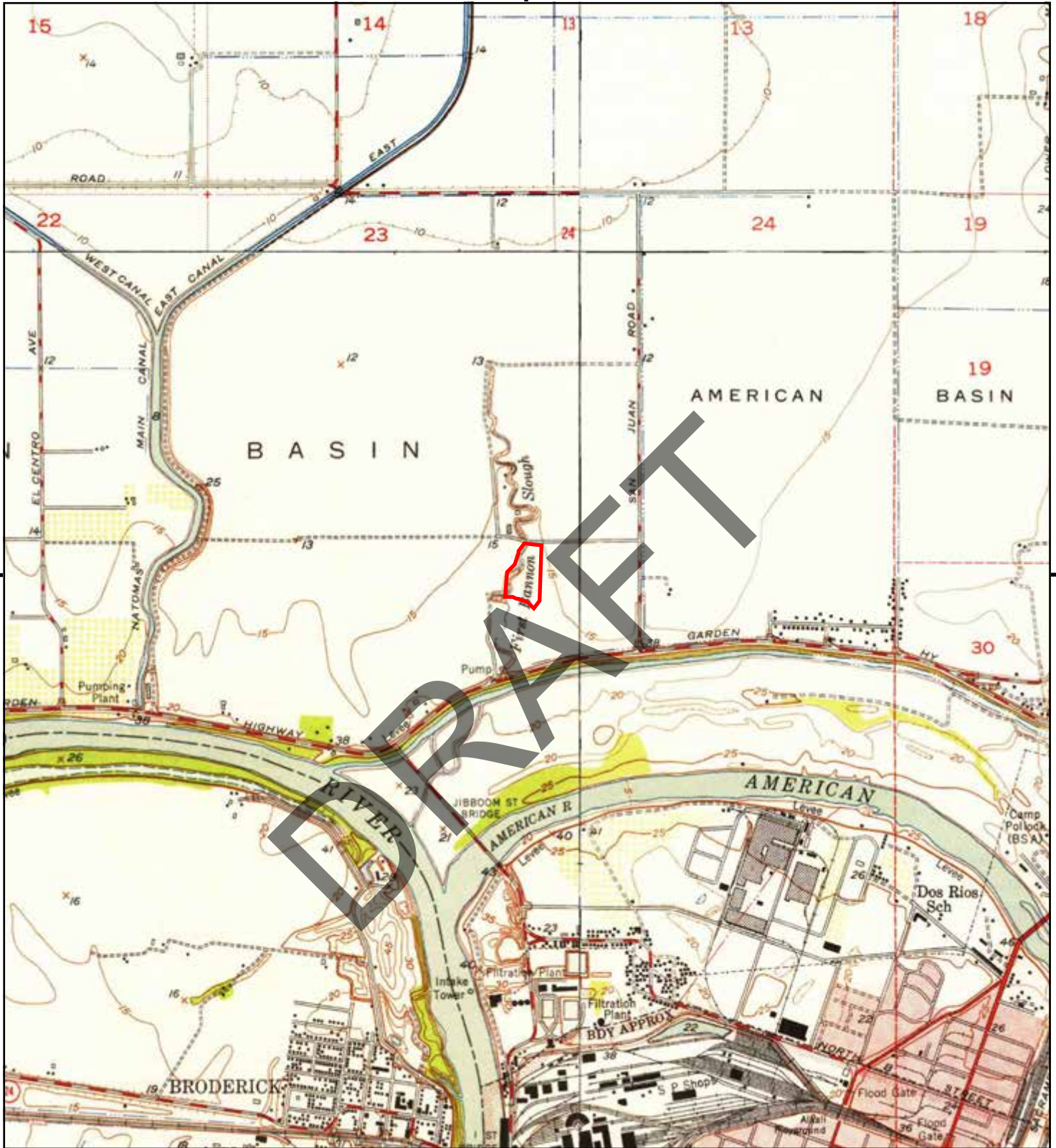
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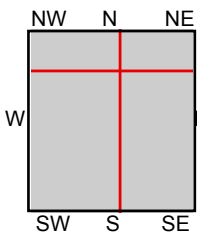
SE, Sacramento East, 1954, 7.5-minute

SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento, CA 95833  
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This report includes information from the following map sheet(s).

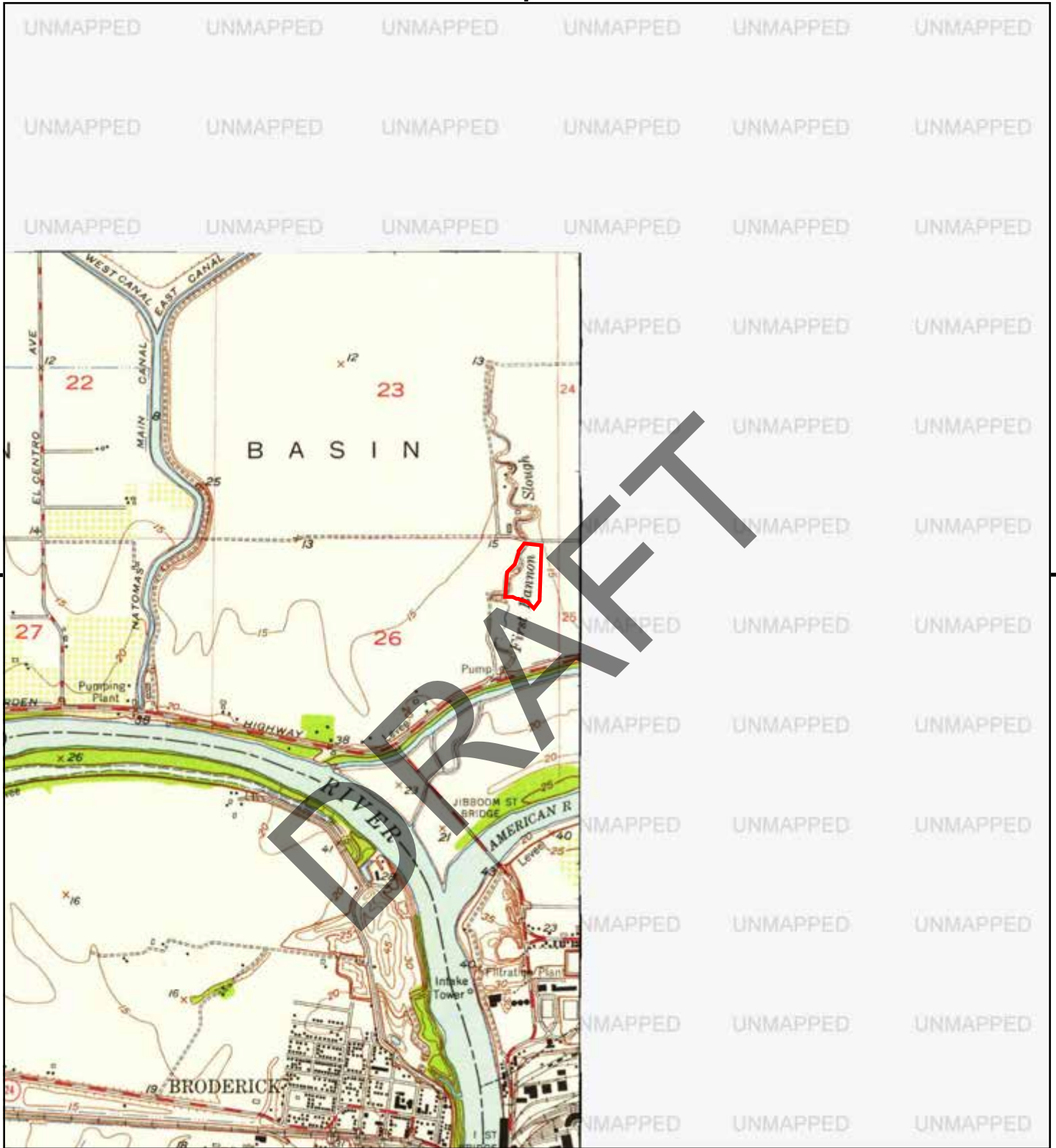


TP, Sacramento West, 1949, 7.5-minute  
 NE, Rio Linda, 1950, 7.5-minute  
 SE, Sacramento East, 1949, 7.5-minute  
 NW, Taylor Monument, 1950, 7.5-minute

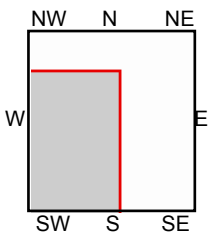
SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento, CA 95833  
 CLIENT: ANALYTICAL ENVIRONMENTAL SERVI







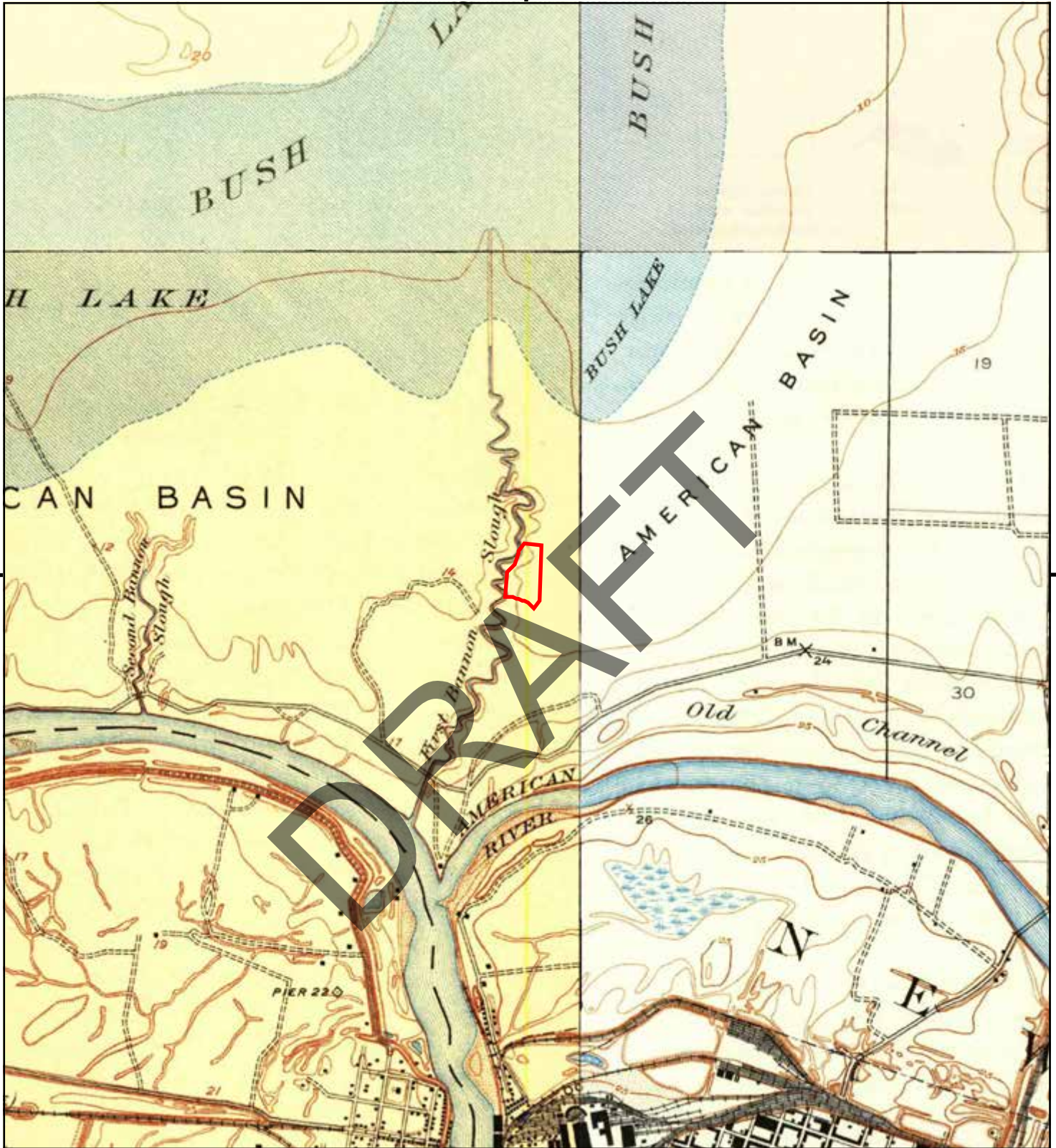
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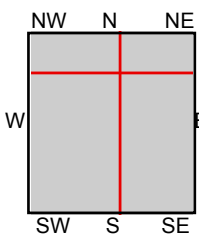
TP, Sacramento West, 1948, 7.5-minute

SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento, CA 95833  
 CLIENT: ANALYTICAL ENVIRONMENTAL SERVI





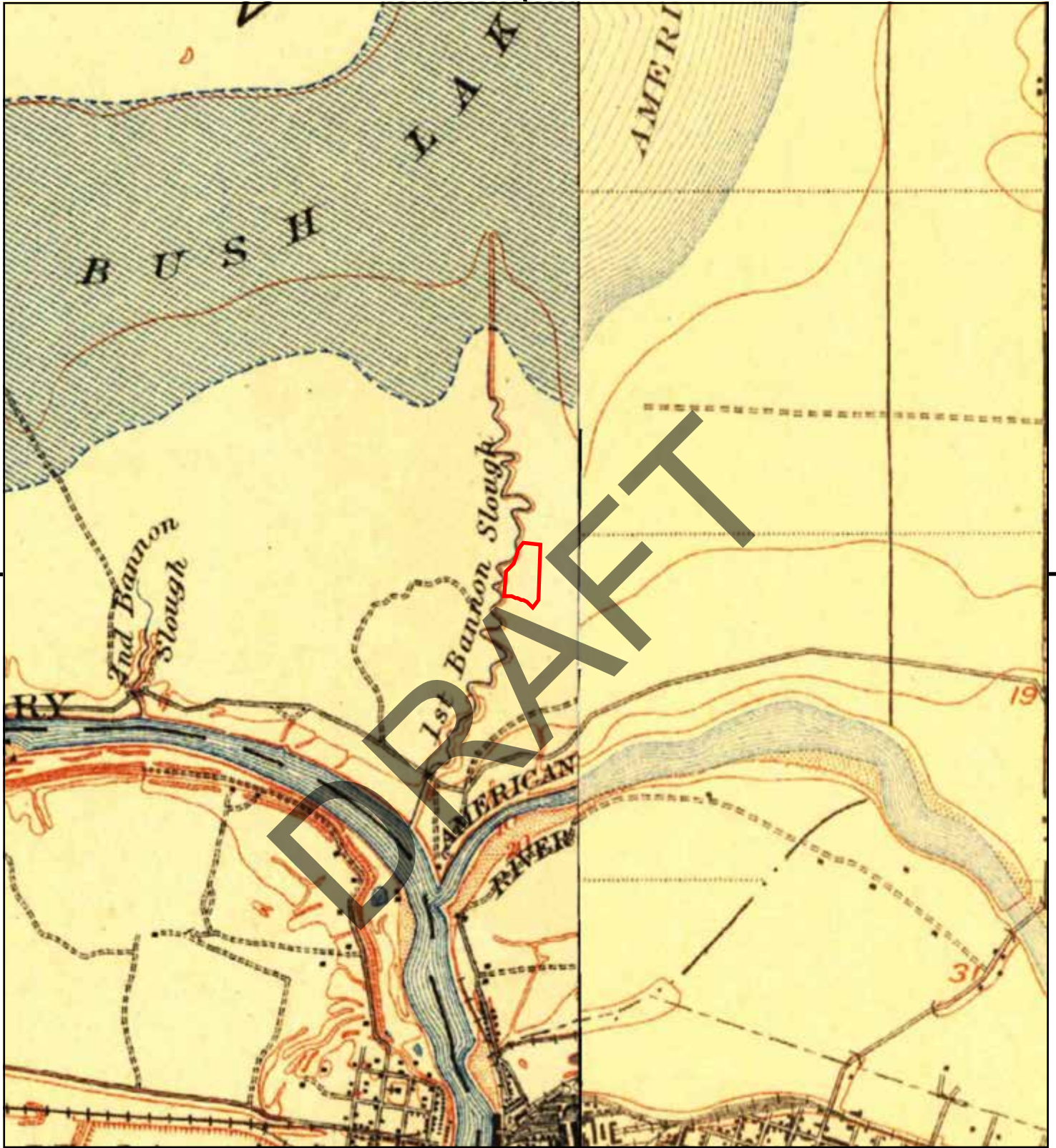
This report includes information from the following map sheet(s).



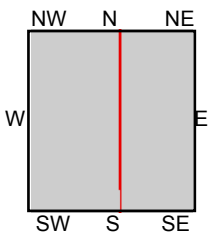
TP, Lovdal, 1916, 7.5-minute  
 NE, Arcade, 1911, 7.5-minute  
 SE, Brighton, 1911, 7.5-minute  
 NW, Elkhorn Weir, 1915, 7.5-minute

SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento, CA 95833  
 CLIENT: ANALYTICAL ENVIRONMENTAL SERVI





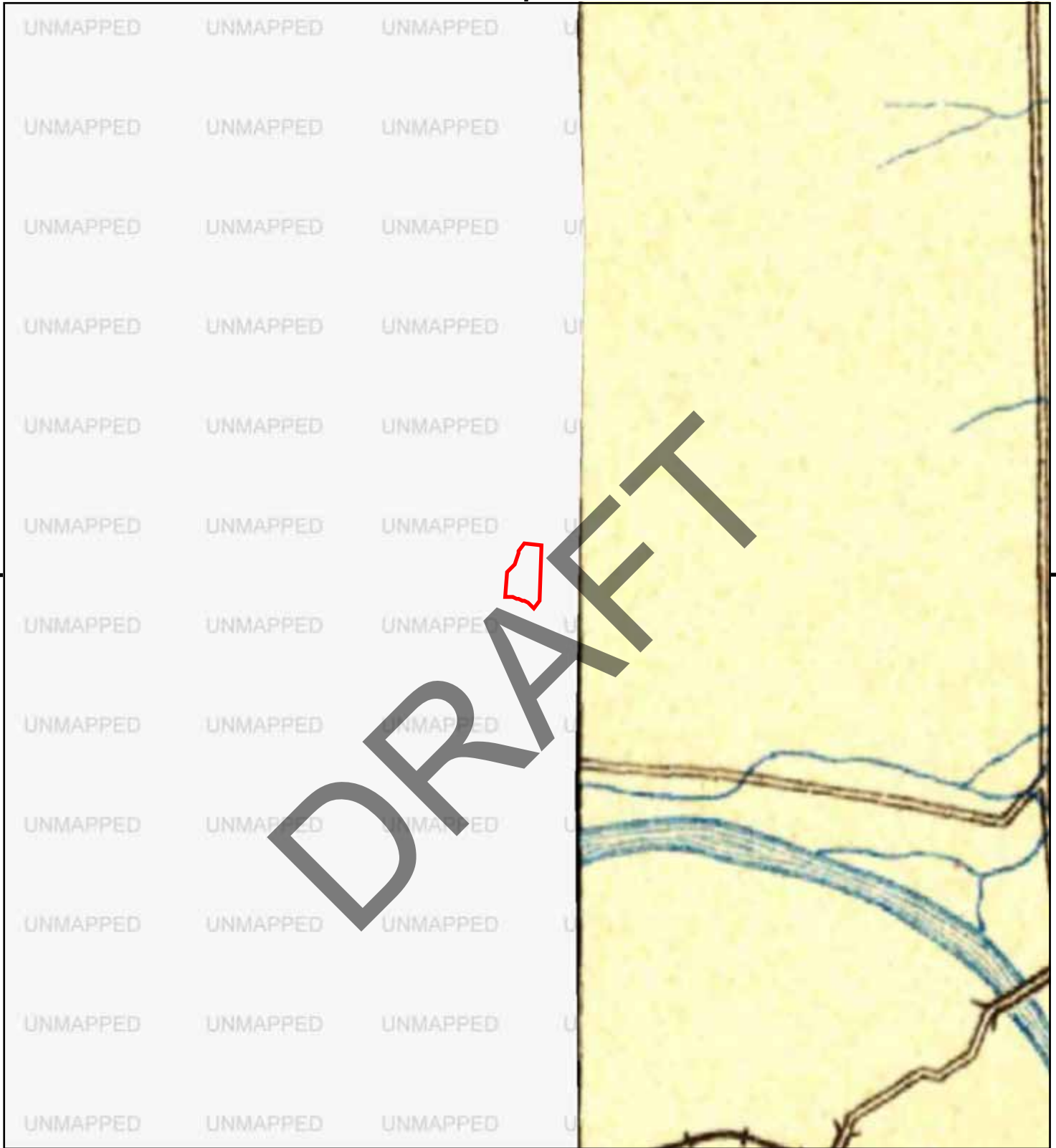
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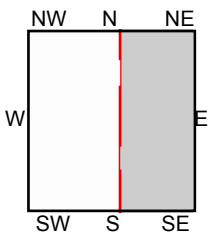
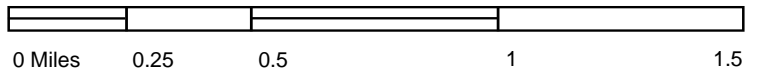
TP, Davisville, 1907, 15-minute  
E, Fair Oaks, 1902, 15-minute

SITE NAME: 2450 Natomas Park  
ADDRESS: 2450 Natomas Park  
Sacramento, CA 95833  
CLIENT: ANALYTICAL ENVIRONMENTAL SERVI





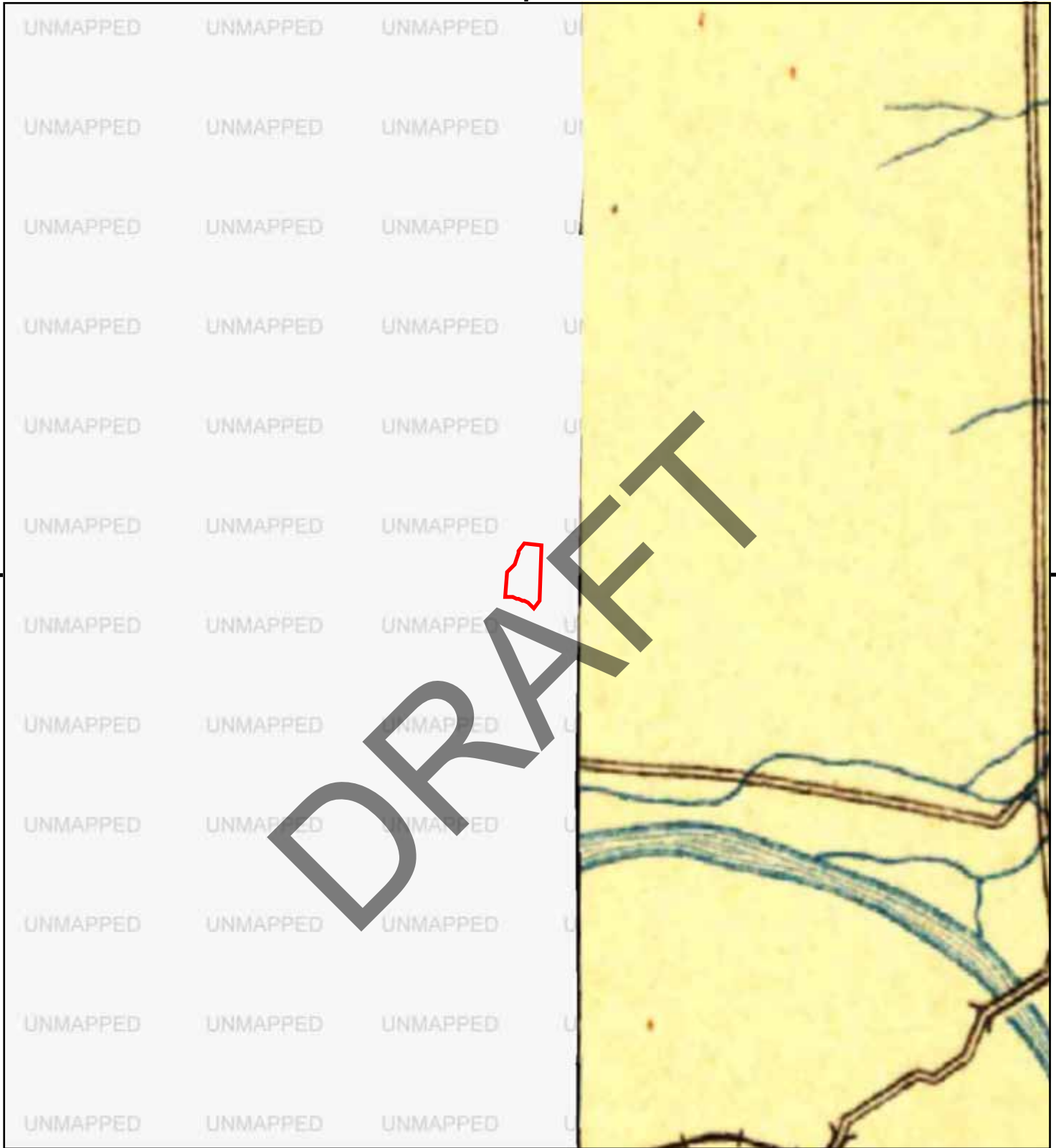
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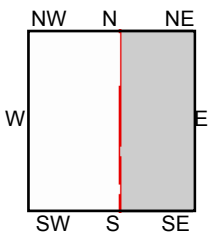
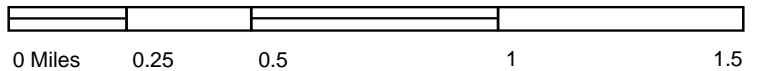
NE, Sacramento, 1893, 30-minute

SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento, CA 95833  
 CLIENT: ANALYTICAL ENVIRONMENTAL SERVI





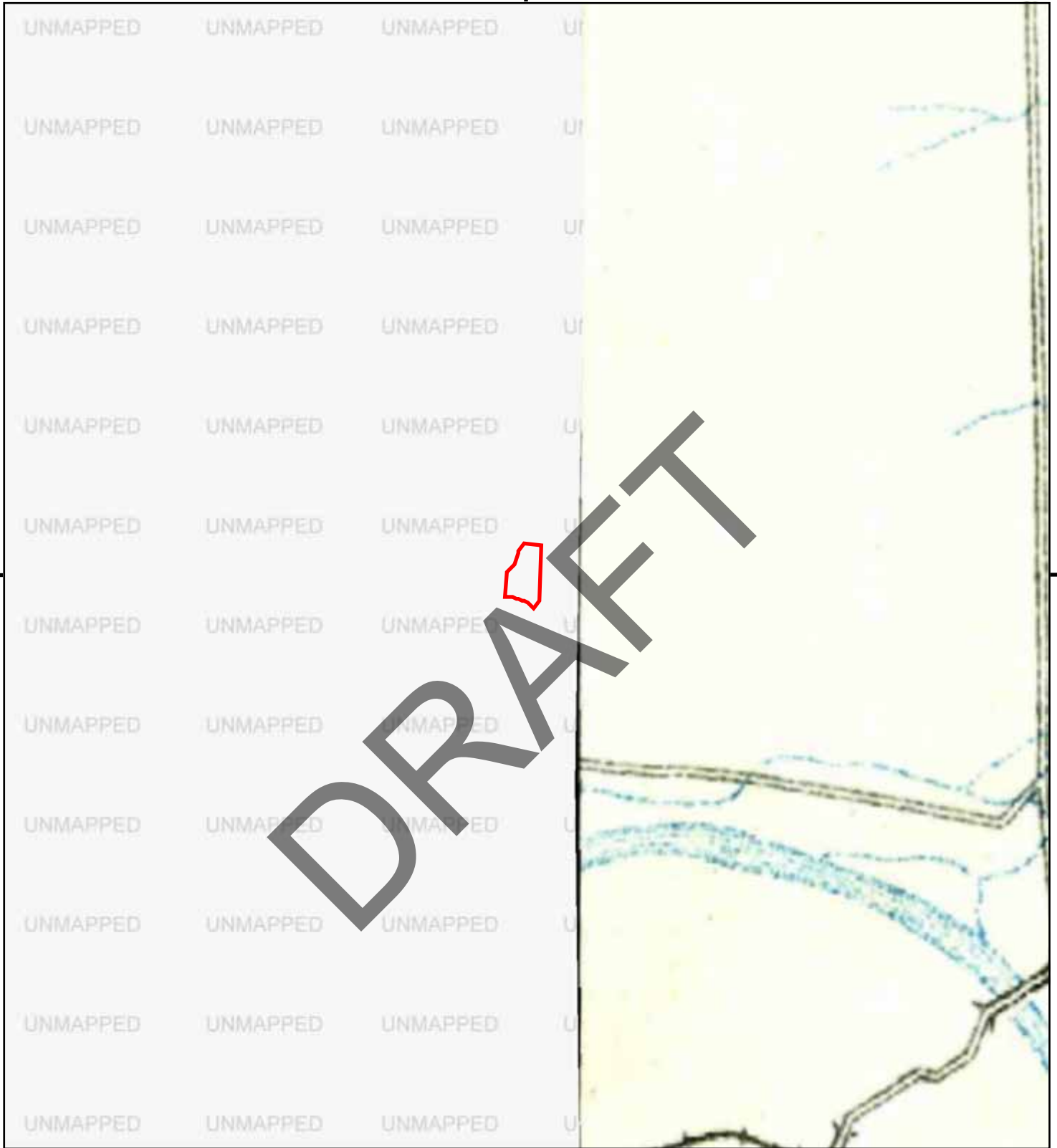
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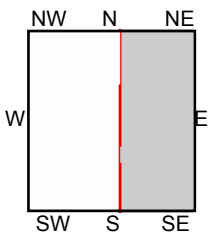
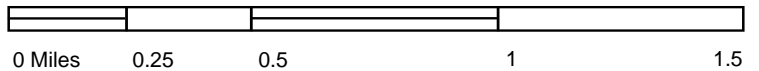
NE, Sacramento, 1892, 30-minute

SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento, CA 95833  
 CLIENT: ANALYTICAL ENVIRONMENTAL SERVI





This report includes information from the following map sheet(s).



NE, Sacramento, 1891, 30-minute

SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento, CA 95833  
 CLIENT: ANALYTICAL ENVIRONMENTAL SERVI



# ***APPENDIX C***

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*SANBORN NO COVERAGE DOCUMENT*

DRAFT

2450 Natomas Park  
2450 Natomas Park  
Sacramento, CA 95833

Inquiry Number: 6302266.3

December 15, 2020

# Certified Sanborn® Map Report

DRAFT



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)



# Certified Sanborn® Map Report

12/15/20

**Site Name:**

2450 Natomas Park  
2450 Natomas Park  
Sacramento, CA 95833  
EDR Inquiry # 6302266.3

**Client Name:**

ANALYTICAL ENVIRONMENTAL SERVICES  
1801 7th Street  
Sacramento, CA 95811  
Contact: Charlane Gross



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by ANALYTICAL ENVIRONMENTAL SERVICES were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn).

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

### Certified Sanborn Results:

**Certification #** 175E-4CFA-ADBE  
**PO #** NA  
**Project** 2450 Natomas Park - 220554



Sanborn® Library search results

Certification #: 175E-4CFA-ADBE

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

*The Sanborn Library LLC Since 1866™*

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**APPENDIX D**

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*CITY DIRECTORY IMAGE REPORT*

**2450 Natomas Park**

2450 Natomas Park  
Sacramento, CA 95833

Inquiry Number: 6302266.5  
December 15, 2020

**The EDR-City Directory Abstract**

DRAFT

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### SECTION

Executive Summary

Findings

City Directory Images

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

### DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1920 through 2017. 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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Data by

**infoUSA**<sup>®</sup>

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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>
2017	Cole Information Services	X	X	X	-
2014	Cole Information Services	X	X	X	-
2009	Cole Information Services	X	X	X	-
2005	Haines Company, Inc.	X	X	X	-
2004	Cole Information Services	X	X	X	-
2002	SBC PACIFIC BELL	-	-	-	-
1999	Cole Information Services	X	X	X	-
	Haines & Company	X	X	X	-
1995	Pacific Bell	X	X	X	-
1994	Cole Information Services	X	X	X	-
1991	Pacific Bell	-	X	X	-
1982	R. L. Polk & Co.	-	-	-	-

## EXECUTIVE SUMMARY

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
1980	R. L. Polk & Co.	-	-	-	-
1975	R. L. Polk Co.	-	-	-	-
1970	Sacramento Directory Co.	-	-	-	-
1966	Sacramento Directory Co.	-	-	-	-
1965	Sacramento Directory Co. Publishers	-	-	-	-
1961	Sacramento Directory Co.	-	-	-	-
1957	Sacramento Directory Co.	-	-	-	-
1956	Sacramento Directory Co.	-	-	-	-
1952	Sacramento Directory Co.	-	-	-	-
1947	Sacramento Directory Co.	-	-	-	-
1942	Sacramento Directory Co.	-	-	-	-
1937	Sacramento Directory Co.	-	-	-	-
1933	Sacramento Directory Co.	-	-	-	-
1928	Sacramento Directory Co.	-	-	-	-
1923	Sacramento Directory Co.	-	-	-	-
1920	Sacramento Directory Co.	-	-	-	-

DRAFT

# FINDINGS

## TARGET PROPERTY INFORMATION

### ADDRESS

2450 Natomas Park  
Sacramento, CA 95833

### FINDINGS DETAIL

Target Property research detail.

## NATOMAS PARK DR

### 2450 NATOMAS PARK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	NATOMAS RACQUET CLUB	Cole Information Services
2014	NATOMAS RACQUET CLUB	Cole Information Services
2009	NATOMAS ROCKET CLUB	Cole Information Services
	SPARE TIME INC	Cole Information Services
2005	NATOMAS RACQUET	Haines Company, Inc.
2004	NATOMAS CAF	Cole Information Services
	TOPAZ DELONG	Cole Information Services
1999	NATOMAS RACQUET CLUB	Cole Information Services
	NATOMAS RACQUET CLB	Haines & Company
1995	NATOMAS RACQUET CLUB	Pacific Bell
1994	NATOMAS RACQUET CLUB	Cole Information Services
	SACRAMENTO TAEKWONDO CLUB	Cole Information Services

## FINDINGS

### ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

#### CAPITAL PARK DR

##### 1733 CAPITAL PARK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1994	RODRIGUEZ, JUAN F	Cole Information Services

##### 1765 CAPITAL PARK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	GILMER PRUITT	Cole Information Services
	ROCHELLE WILSON	Cole Information Services
	CIAMACK AZIMPOUR	Cole Information Services
	BONNIE BOYDSTUN	Cole Information Services
	TERESA TUITLE	Cole Information Services
	LAWRENCE LACEY	Cole Information Services
	FRANKLIN BAKER	Cole Information Services
	LUCAS HOBBS	Cole Information Services
2014	GEORGE HILLMAN	Cole Information Services
	GILMER PRUITT	Cole Information Services
	ROCHELLE WILSON	Cole Information Services
	ANGIE MARTIN	Cole Information Services
	LAWRENCE LACEY	Cole Information Services
	TERESA TUITLE	Cole Information Services
	PHILLIP CADE	Cole Information Services
	ROBERT VEGA	Cole Information Services
	ENRIQUE TOBOLA	Cole Information Services
2009	LAWRENCE LACEY	Cole Information Services
	SATI BOWMAN	Cole Information Services
	ALEXANDRIA KLEMM-GREEN	Cole Information Services
	KAVITA SHAH	Cole Information Services
	KHALEEL UMAR	Cole Information Services
	MATIAS CISNEROS	Cole Information Services
2005	APARTMENTS HERNANDEZAlejandro	Haines Company, Inc.
	HICKMAN Failh	Haines Company, Inc.
	JAEGER Grechen	Haines Company, Inc.
	LACEY Lawrnce E	Haines Company, Inc.



## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2005	WLEYWm	Haines Company, Inc.	
	ELMENDORF Kevin	Haines Company, Inc.	
	HULVER Robin	Haines Company, Inc.	
2004	FAITH HICKMAN	Cole Information Services	
	PRISCILL HUTCHINSON	Cole Information Services	
	MARK SCHNELL	Cole Information Services	
	A RATHORE	Cole Information Services	
	GREG WALKER	Cole Information Services	
	LAWRENCE LACEY	Cole Information Services	
	BLANCA GONZALEZ	Cole Information Services	
	JOSE GONZALEZ	Cole Information Services	
	ISAAC WOODALL	Cole Information Services	
	SUSAN BORING	Cole Information Services	
	1999	KHALEEL UMAR	Cole Information Services
		LAWRENCE LACEY	Cole Information Services
		SATI BOWMAN	Cole Information Services
KAVITA SHAH		Cole Information Services	
MATIAS CISNEROS		Cole Information Services	
ALEXANDRIA KLEMM-GREEN		Cole Information Services	
JAMES Galen		Haines & Company	
SCHNELL Mark		Haines & Company	
WOODALL Isaac		Haines & Company	
1995		WHITE Patti & Norm	Pacific Bell
	1991	Leppert Rob	Pacific Bell
Martinez R		Pacific Bell	

### 1767 CAPITAL PARK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	HUGO ALFARO	Cole Information Services
	MIKAYLA HARWIG	Cole Information Services
	STACY ABAD	Cole Information Services
	ANGELISHA JOHNSON	Cole Information Services
	ANTHONY MAHONE	Cole Information Services
	RUTH LARM	Cole Information Services
2014	MIRIAH BLACK	Cole Information Services
	MATTYE MCCONAUGHEAD	Cole Information Services
	HUGO ALFARO	Cole Information Services
2009	EVANGELINE WILLIAMS	Cole Information Services
	ROBIN HULVER	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2009	ORIANNA BRADLEY	Cole Information Services	
	KENNETH POWELL	Cole Information Services	
	BARB SCHULZ	Cole Information Services	
2004	KEVIN ELMENDORF	Cole Information Services	
	ROY LOBO	Cole Information Services	
	MICHAELLE DAVIS	Cole Information Services	
	RENE CARRILLO	Cole Information Services	
	JARED ELMENDORF	Cole Information Services	
	1999	KENNETH POWELL	Cole Information Services
		ORIANNA BRADLEY	Cole Information Services
BARB SCHULZ		Cole Information Services	
EVANGELINE WILLIAMS		Cole Information Services	
WILLIAM COBB		Cole Information Services	
ROBIN HULVER		Cole Information Services	
DOOLITTLE John		Haines & Company	
1995	HICKMAN Mark & Kim	Pacific Bell	
	HARRIS Blanche	Pacific Bell	
	BRADLEY J B	Pacific Bell	

### 1769 CAPITAL PARK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	J PRASAD	Cole Information Services
	DASIA DAVIS	Cole Information Services
	SHARON LUCERO	Cole Information Services
	STACY MAY	Cole Information Services
	CAMERON MOHRMANN	Cole Information Services
	JEFFREY RAGER	Cole Information Services
	JOY PEREZ	Cole Information Services
	DANIEL ARCHULETA	Cole Information Services
	BARBARA CLARKE	Cole Information Services
	EDITH ALLEN	Cole Information Services
	AJ MARTIN	Cole Information Services
	PATRICIA MOORE	Cole Information Services
	2014	FREDRICK RATHBUN
BARBARA CLARKE		Cole Information Services
DANIEL ARCHULETA		Cole Information Services
SANDRA HERNANDEZ		Cole Information Services
JACQUELYN SOREMAN		Cole Information Services
	SARAH JACOBS	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2014	JULIANA CABELLO	Cole Information Services	
	DONTESIA PERKINS	Cole Information Services	
	ISHMAEL TORRES	Cole Information Services	
2009	DAISY MALDONADO	Cole Information Services	
	REGINA GADLIN	Cole Information Services	
	SHARON LUCERO	Cole Information Services	
	TRICIA TAYLOR	Cole Information Services	
	THE RIVER CITY GRILL	Cole Information Services	
	CHRISTINA DEANGELO	Cole Information Services	
	EUGENE GARCIA	Cole Information Services	
	KATHLEEN FEULING	Cole Information Services	
	JOY TORRES	Cole Information Services	
2005	DEMSKEAimee	Haines Company, Inc.	
	CLARKE CLARKEBarbar	Haines Company, Inc.	
	APARTMENTS	Haines Company, Inc.	
	FEUUNG Kathleen	Haines Company, Inc.	
2004	PAGEGurpreet SADYJessic	Haines Company, Inc.	
	DONNETT SCOTT	Cole Information Services	
	SUSAN JENSON	Cole Information Services	
	ANDREW QURESHI	Cole Information Services	
	KATHLEEN FEULING	Cole Information Services	
	THOMAS CRUZ	Cole Information Services	
	JOHN LUCERO	Cole Information Services	
	JENEE MITCHELL	Cole Information Services	
	BARBARA CLARKE	Cole Information Services	
	1999	KATHLEEN FEULING	Cole Information Services
		EUGENE GARCIA	Cole Information Services
CHRISTINA DEANGELO		Cole Information Services	
VIVIAN MARTINEZ		Cole Information Services	
TRICIA TAYLOR		Cole Information Services	
JOY TORRES		Cole Information Services	
SHARON LUCERO		Cole Information Services	
REGINA GADLIN		Cole Information Services	
MEFFERD Scott A		Haines & Company	
1995		VEGA Francisco	Pacific Bell
	KINYON Scott L	Pacific Bell	
1991	Guerra Sylvia	Pacific Bell	
	Henry Orlando & Marcia	Pacific Bell	

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1991	Jemmott Tim	Pacific Bell
	Knox Ken	Pacific Bell
	Powe J L	Pacific Bell
	Rhodes Jessie	Pacific Bell
	Rhodes Lee & Myra P O Box	Pacific Bell
	Temple Creation	Pacific Bell
	Arellano Hector & Donna	Pacific Bell

### 1771 CAPITAL PARK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	MELISSA JAMISON	Cole Information Services
2014	LOUIS BUFFINGTON	Cole Information Services
	CHARLES ALLISON	Cole Information Services
2009	EVELYN MOORE	Cole Information Services
2005	FERNANDEZGor	Haines Company, Inc.
	MAUKS	Haines Company, Inc.
	MAUKD	Haines Company, Inc.
2004	GLORIA FERNANDEZ	Cole Information Services
	GEORGIA RUISENOR	Cole Information Services
1999	EVELYN MOORE	Cole Information Services
	XXXX	Haines & Company
1995	STEM Wayne E	Pacific Bell
1991	Flonoy Carol	Pacific Bell

### 1773 CAPITAL PARK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	JANICE MORRIS	Cole Information Services
	JAMAR JONES	Cole Information Services
	DAISIE BELITSIS	Cole Information Services
	HENRY HAMILTON	Cole Information Services
	THOMAS WILLIAMS	Cole Information Services
	ALAN JOHNSON	Cole Information Services
2014	DAISIE BELITSIS	Cole Information Services
	MICHAEL WESSON	Cole Information Services
	EDWARD BRACY	Cole Information Services
	DRASHTI PUNJABI	Cole Information Services
	JEWAN CAESAR	Cole Information Services
	JONI GOMEZ	Cole Information Services
	JAMES KROEKER	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	BRENDA ARMSTEAD	Cole Information Services
2009	EDUARDO PEREZ	Cole Information Services
	S SNELL	Cole Information Services
	LAZERIC SANDERS	Cole Information Services
	MICHAEL WHITE	Cole Information Services
2005	MASSENGALE Dave	Haines Company, Inc.
	NORBIGA Matthew	Haines Company, Inc.
	LOPEZJ	Haines Company, Inc.
2004	SARINA LISH	Cole Information Services
	CAROL TROUSDALE	Cole Information Services
	JONATHAN EDWARDS	Cole Information Services
	MOISES ACEVES	Cole Information Services
	JEANETTE LOPEZ	Cole Information Services
1999	EDUARDO PEREZ	Cole Information Services
	S SNELL	Cole Information Services
	LAZERIC SANDERS	Cole Information Services
	MICHAEL WHITE	Cole Information Services
1995	GIBSON R A	Pacific Bell
1994	TUNSTALL, JAMES	Cole Information Services
1991	Martin Carlos	Pacific Bell
	Szutowicz Jamie	Pacific Bell
	Tayag B	Pacific Bell
	Tunstall James	Pacific Bell
<b>1775 CAPITAL PARK DR</b>		
<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	JOHNNY TURNER	Cole Information Services
	KIM JEFFERSON	Cole Information Services
	KRISTINA GARRISON	Cole Information Services
	RAYMOND SMITH	Cole Information Services
	MARTY KAYLER	Cole Information Services
	DARRELL PETERS	Cole Information Services
	CHELSEA HARKEY	Cole Information Services
2014	NISHA ELDER	Cole Information Services
	MICHELLE STANDRIDGE	Cole Information Services
	LEILANI EMELIO	Cole Information Services
	KIM FOSTER	Cole Information Services
	YANGLEE VANG	Cole Information Services
	DAVID STONES	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2014	KRISTA WILSON	Cole Information Services	
	URMI BARMAN	Cole Information Services	
	RAYMOND SMITH	Cole Information Services	
2009	B MITCHELL	Cole Information Services	
	RAYMOND SMITH	Cole Information Services	
	MORGAN DEISSROTH	Cole Information Services	
	NICOLAS DAMUTH	Cole Information Services	
	BONNIE BLADES	Cole Information Services	
	SALVADOR DUENAS	Cole Information Services	
	ANDERSEN Pa 2y	Haines Company, Inc.	
2005	DAMUTH Ncolas	Haines Company, Inc.	
	TRWUJILLOCrist Ma	Haines Company, Inc.	
	BERTA ANAYA	Cole Information Services	
2004	JEFFREY LEWIS	Cole Information Services	
	H GOLD	Cole Information Services	
	MARIA PAMBID	Cole Information Services	
	ABHIJIT ROYBARMAN	Cole Information Services	
	NICOLAS DAMUTH	Cole Information Services	
	1999	B MITCHELL	Cole Information Services
		RAYMOND SMITH	Cole Information Services
MORGAN DEISSROTH		Cole Information Services	
NICOLAS DAMUTH		Cole Information Services	
BONNIE BLADES		Cole Information Services	
SALVADOR DUENAS		Cole Information Services	
OZGUL Sener		Haines & Company	
HULTBERG James D		Haines & Company	
1995	HULTBERG James D	Pacific Bell	
1991	Ferrell Karen	Pacific Bell	
	Cooper Ron	Pacific Bell	

### 1777 CAPITAL PARK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	CHARLES BLACKMON	Cole Information Services
	CHRISTOPHER BROOKS	Cole Information Services
	BENJAMIN MARSHALL	Cole Information Services
	DARION MILLHOUSE	Cole Information Services
	LINETTE PORTER	Cole Information Services
	HOLLY HICKEY	Cole Information Services
	QUENTIN STRICKNER	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	NATALIYA ANDRUSYAK	Cole Information Services
	VANICE COLBERT	Cole Information Services
	KAREN METCALF	Cole Information Services
2014	LEILA MENDEZ	Cole Information Services
	LINETTE PORTER	Cole Information Services
	DARION MILLHOUSE	Cole Information Services
	NIKKI CORNETT	Cole Information Services
	SANTANA CHRISTINA	Cole Information Services
	JEVON PENNANT	Cole Information Services
	KAREN METCALF	Cole Information Services
	BRIAN HEINZ	Cole Information Services
	ROSEMARIE TRIPP	Cole Information Services
	BUTLER ERICA	Cole Information Services
	ERICKA BUTLER	Cole Information Services
	CAROLYN SORIA	Cole Information Services
2009	GONZALO DIAZ	Cole Information Services
	GREG COLVER	Cole Information Services
	KAREN EASTBURN	Cole Information Services
	DANIELLE EATON	Cole Information Services
	EDWARD METCALF	Cole Information Services
	CHRIS GLADIN	Cole Information Services
	CHRIS LUNA	Cole Information Services
	RACHEL CHAMBERS	Cole Information Services
	CLARA GRAY	Cole Information Services
2005	XXXX	Haines Company, Inc.
2004	JASON HALL	Cole Information Services
	THOMAS SEITH	Cole Information Services
	LEONARD THOMAS	Cole Information Services
	NATE KNIGHT	Cole Information Services
	TRACY STRINGER	Cole Information Services
	PENNI DAVILA	Cole Information Services
	ERIN BENMETT	Cole Information Services
	RICHARD HAWKINS	Cole Information Services
	DAVID STANLEY	Cole Information Services
	DUSTIN LIPPINCOTT	Cole Information Services
	DUSTY FORDE	Cole Information Services
	RUBEN SALAZAR	Cole Information Services
	JOHN SMILEY	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2004	CRAIG QUEZADA	Cole Information Services
	EMMANUEL MCCOMBS	Cole Information Services
	GEORGE GONZALEZ	Cole Information Services
	SHANT APEKIAN	Cole Information Services
	JUAN GUTTIERREZ	Cole Information Services
1999	DANIELLE EATON	Cole Information Services
	KAREN EASTBURN	Cole Information Services
	GREG COLVER	Cole Information Services
	GONZALO DIAZ	Cole Information Services
	CLARA GRAY	Cole Information Services
	CHRIS GLADIN	Cole Information Services
	CHRIS LUNA	Cole Information Services
	EDWARD METCALF	Cole Information Services
	VARADARAJAN S	Haines & Company
	MCCOMBS Lilly B	Haines & Company
GYANMOTE Surender	Haines & Company	
1995	PASCUAL Remigio T	Pacific Bell
	KANG Jung Soo	Pacific Bell
	HECKENBERG Bret & Julie	Pacific Bell
	CHAPA Art	Pacific Bell
1994	CHAPA, ART	Cole Information Services
	LINVILLE, HEATHER	Cole Information Services
	PASCUAL, REMIGIO T	Cole Information Services
	MERCADO, LUIS	Cole Information Services
1991	Allen I	Pacific Bell
	Khaira Ravindar S	Pacific Bell

### 1779 CAPITAL PARK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	MICHELLE SNELLING	Cole Information Services
	GLORY HILES	Cole Information Services
	JEREMY DYKSTRA	Cole Information Services
	RONALDO MONCADA	Cole Information Services
	JAYSON TRINIDAD	Cole Information Services
	DANIELLE WOLDRIDGE	Cole Information Services
	SAMUEL PETERSON	Cole Information Services
	CANDAI BULLARD	Cole Information Services
2014	DANIELLE WOLDRIDGE	Cole Information Services
	ALFRED SMYTHE	Cole Information Services



## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	MICHAEL WALLACE	Cole Information Services
	JOHN MCALLISTER	Cole Information Services
	KAREN FOSTER	Cole Information Services
	THEP PHOMSOPHA	Cole Information Services
	ANGELA SMITH	Cole Information Services
	CANDAI BULLARD	Cole Information Services
	THANH HOANG	Cole Information Services
	2009	LASHAWN BOYKINS
DAVID WALLACE		Cole Information Services
ANGELA CASIMIRO		Cole Information Services
VERONICA SALGADO		Cole Information Services
LORA SANAME		Cole Information Services
THOMAS FROBERG		Cole Information Services
KAREN FOSTER		Cole Information Services
2005	GRESHAMChri SALGADO Veronica	Haines Company, Inc.
	CARROLLRichard	Haines Company, Inc.
2004	RICH CARROLL	Cole Information Services
	VERONICA SALGADO	Cole Information Services
	JOHN HENNECKE	Cole Information Services
	JEREMY DYKSTRA	Cole Information Services
	MARCELLA STONE	Cole Information Services
	MICHAEL KEY	Cole Information Services
	VERLAN PARKS	Cole Information Services
	JOSHUA STEVENS	Cole Information Services
	ROBERT HALL	Cole Information Services
	PAUL NETHERCULS	Cole Information Services
	1999	LORA SANAME
THOMAS FROBERG		Cole Information Services
KAREN FOSTER		Cole Information Services
VERONICA SALGADO		Cole Information Services
DAVID WALLACE		Cole Information Services
LASHAWN BOYKINS		Cole Information Services
NEZHURA Sergey		Haines & Company
1991		Wright Donald & Joanne
	Reyes Idiana	Pacific Bell
	ONeal Patricia & Dennis	Pacific Bell
	Burdick Michael	Pacific Bell

## FINDINGS

### 1781 CAPITAL PARK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	SONDRA LEE	Cole Information Services
	CLIFTON BLOCK	Cole Information Services
	MASON PAINTER	Cole Information Services
	GABRIELA MACIEL	Cole Information Services
	TANYA GARBOUSHIAN	Cole Information Services
	DONALD HATCH	Cole Information Services
	TARYN SAVAGE	Cole Information Services
2014	ECHO WALLACE	Cole Information Services
	CLIFTON BLOCK	Cole Information Services
	BARBARA TOURDOT	Cole Information Services
	SAMIRA TAYLOR	Cole Information Services
	SONDRA LEE	Cole Information Services
2009	DOUGLASS THORNE	Cole Information Services
	ERIC CLOVER	Cole Information Services
	TERESA JOHNSON	Cole Information Services
2005	SOMAN Kadar	Haines Company, Inc.
	PONZI Apl	Haines Company, Inc.
2004	D JONES	Cole Information Services
	ALVIN VALENTINE	Cole Information Services
	DOTTIE TARLETON-RUSH	Cole Information Services
	MAYA JOHNSON	Cole Information Services
	ERIC CLOVER	Cole Information Services
1999	DOUGLASS THORNE	Cole Information Services
	TERESA JOHNSON	Cole Information Services
	SCHMIDT Terry L	Haines & Company
	MALHOTRA Braveen & Romee	Pacific Bell
1995	MALHOTRA Braveen & Romee	Pacific Bell
	KERR, ROBERT	Cole Information Services
1994	CASTILLO, SYLVIA	Cole Information Services
	Abukhalil Hashem	Pacific Bell
1991	Castillo Sylvia	Pacific Bell

### 1783 CAPITAL PARK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	SAFET PIZOVIC	Cole Information Services
	COLLEEN BODU	Cole Information Services
	DATRA BENJAMIN	Cole Information Services
	JEANETTE JACKSON	Cole Information Services
	ANTHONY HAMPTON	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2014	MANUEL COBIAN	Cole Information Services	
	DWAN DANSBY	Cole Information Services	
	JEANETTE JACKSON	Cole Information Services	
	CASSANDRA CARLS	Cole Information Services	
	DESTINY RICH	Cole Information Services	
	PATRICK FRETLOW	Cole Information Services	
2009	GAYE ALEXANDER	Cole Information Services	
	JACKSON MJJ ENTERPRISE	Cole Information Services	
	PATRICK FRETWELL	Cole Information Services	
	FAHIMA HESSABI	Cole Information Services	
	OBDULIA ALVAREZ	Cole Information Services	
	ANDREA BAZEMORE	Cole Information Services	
2005	SHARON PRESSBURG	Cole Information Services	
	ALVAREZObdofla	Haines Company, Inc.	
2004	JOSE ESPINOSA	Cole Information Services	
	ROBIN CARR	Cole Information Services	
	VIKTIN RASP	Cole Information Services	
	PATRICK FRETWELL	Cole Information Services	
	SCOTT HEARLD	Cole Information Services	
	KIM SMITH	Cole Information Services	
	KIM HASENMEYER	Cole Information Services	
	LOUIS ARCHULETA	Cole Information Services	
	JENNIFER CASIAS	Cole Information Services	
	B STAPLES	Cole Information Services	
	TERESA ALVARADO	Cole Information Services	
	OBDULIA ALVAREZ	Cole Information Services	
	1999	FAHIMA HESSABI	Cole Information Services
		SHARON PRESSBURG	Cole Information Services
OBDULIA ALVAREZ		Cole Information Services	
GAYE ALEXANDER		Cole Information Services	
PATRICK FRETWELL		Cole Information Services	
ANDREA BAZEMORE		Cole Information Services	
APARTMENTS		Haines & Company	
LILLEDA Miguel Angel		Haines & Company	
FORTENBERRY J		Haines & Company	
HOWE Kelley		Haines & Company	
LEACH Jennifer		Haines & Company	
LEACH Robert		Haines & Company	

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	WALES Michelle	Haines & Company
1995	COOK Lyle W	Pacific Bell
1994	CRUZ, S	Cole Information Services

### 1785 CAPITAL PARK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	KERI BARONI	Cole Information Services
	LUIS CASTREJON	Cole Information Services
	RITA DEROUACEAU	Cole Information Services
	TODD SURBER	Cole Information Services
	LORNA COON	Cole Information Services
	DONNA JOHNSON	Cole Information Services
2014	RITA DEROUACEAU	Cole Information Services
	KERI BARONI	Cole Information Services
	CYNTHIA GUTIERREZ	Cole Information Services
	E JAM	Cole Information Services
	LORNA COON	Cole Information Services
	JEFFREY HOBBS	Cole Information Services
	ROESHAN PRICHARD	Cole Information Services
	FREDERICK MARTIN	Cole Information Services
2009	KENNETH MCFADDEN	Cole Information Services
	SHARAYA HOPKINS	Cole Information Services
	LOUIE MORENO	Cole Information Services
	NICOLE TRAVIS	Cole Information Services
	SEGUNDO CONCEPCION	Cole Information Services
	LUIS PORRAS	Cole Information Services
	RAUL ORTIZ	Cole Information Services
	M PERRY	Cole Information Services
	JACQUELINE GOOCH	Cole Information Services
	MIRANDA AUTREY	Cole Information Services
	RITA DEROUACEAU	Cole Information Services
	ALMON COON	Cole Information Services
2005	AUTREY Miranda	Haines Company, Inc.
	APARTMENTS	Haines Company, Inc.
2004	EVERGREEN CRAFTS & FLRL IMPRT	Cole Information Services
	KENNETH MCFADDEN	Cole Information Services
	FRANCISCO RODRIGUEZ	Cole Information Services
	OLGA DAVEN	Cole Information Services
	DIANA WHITE	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2004	LORNA COON	Cole Information Services
	RITA DEROUACEAU	Cole Information Services
	ANDY HARMON	Cole Information Services
	MARCUS FARROW	Cole Information Services
	MIRANDA AUTREY	Cole Information Services
	ROBERT MCARTHUR	Cole Information Services
	RICHARD HOFFMAN	Cole Information Services
	LINDA BLANKENSHIP	Cole Information Services
1999	SEGUNDO CONCEPCION	Cole Information Services
	NICOLE TRAVIS	Cole Information Services
	LOUIE MORENO	Cole Information Services
	SHARAYA HOPKINS	Cole Information Services
	MARK COVERT	Cole Information Services
	LUIS PORRAS	Cole Information Services
	RITA DEROUACEAU	Cole Information Services
	MIRANDA AUTREY	Cole Information Services
	JACQUELINE GOOCH	Cole Information Services
	M PERRY	Cole Information Services
	ALMON COON	Cole Information Services
	KENNETH MCFADDEN	Cole Information Services
	JAMES MAYFIELD	Cole Information Services
	RAUL ORTIZ	Cole Information Services
	BAKER Patrick	Haines & Company
	WILLIAMS Larry	Haines & Company
	WILLIAMS Larry	Haines & Company
EVANS Randy A	Haines & Company	
1995	EVANS Randy A	Pacific Bell
	RAPP Ron G	Pacific Bell
	MASSIRIAN Lisa A	Pacific Bell
1991	Consulo Mike	Pacific Bell
	Hill Conway	Pacific Bell

### **CREEKSIDE OAKS DR**

#### **1750 CREEKSIDE OAKS DR**

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	MEDSTAT	Cole Information Services
	NETBRAIN TECHNOLOGIES INC	Cole Information Services
	IMAGE SOURCE	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	NET BRAIN TECHNOLOGIES	Cole Information Services
	BICKMORE RISK SERVICES	Cole Information Services
	A EMERGENCY LOCKSMITH	Cole Information Services
	ANIXTER	Cole Information Services
	NEW HORIZONS	Cole Information Services
2014	CREEKSIDE CAFE	Cole Information Services
	BRANDYWINE REALTY TRUST	Cole Information Services
	MEDSTAT	Cole Information Services
	NET BRAIN TECHNOLOGIES	Cole Information Services
	BICKMORE RISK SERVICES	Cole Information Services
	REACHLOCAL	Cole Information Services
	NEW HORIZONS	Cole Information Services
2009	MEDSTAT	Cole Information Services
	NEW HORIZONS COMPUTER LEARNING CENTE	Cole Information Services
	CREEKSIDE CAFE	Cole Information Services
2005	ECONOMICAND	Haines Company, Inc.
	PLANNING SYSTEMS MEDSTAT	Haines Company, Inc.
	NATOMAS BASIN	Haines Company, Inc.
	CONSERVANCY NOLTEASSOCIATES	Haines Company, Inc.
	BASIN CNSRVNCY	Haines Company, Inc.
	INC SA CTYNATOMAS	Haines Company, Inc.
	CREEKSIDE CAFE	Haines Company, Inc.
2004	CREEKSIDE CAFE	Cole Information Services
	ECONOMIC & PLANNING SYSTEMS INC	Cole Information Services
	THE MEDSTAT GROUP D K D CO	Cole Information Services
	NOLTE ASSOCS INC	Cole Information Services
	C YEUNG	Cole Information Services
1999	ANTHEM HEALTH SACRAMENTO	Cole Information Services
	ACORDIA BENEFIT SERVICES OF NORTHERN CALIFORNIA	Cole Information Services
	RUDOLPH & SLETTEN INCORPORATED	Cole Information Services
	ECONOMIC & PLANNING SYSTEMS	Cole Information Services
	NOLTE & ASSOCIATES	Cole Information Services
	CREEKSIDE CAFE	Cole Information Services
	NOLTE AND ASSOCIATES INCORPORATED	Cole Information Services
	ACCORDIA REEVES	Cole Information Services
	ACORDIA THE REEVES COMPANY	Haines & Company
	CREEKSIDE CAFE	Haines & Company

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	ECONOMIC & PLANNING SYSTEMS	Haines & Company
	NOLTE AND ASSOCTS	Haines & Company
	NOLTE & ASSOCIATES	Haines & Company
	RUDOLPH & SLETTEN INC	Haines & Company
	ACCORDIA REEVES	Haines & Company
1994	RUDOLPH & SLETTEN INC	Cole Information Services
	ECONOMIC & PLANNING SYSTEMS	Cole Information Services
	NOVA CARE	Cole Information Services
	CUMAC SERVICE CORP	Cole Information Services

### 1755 CREEKSIDE OAKS DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2017	DONOHUE & COMPANY	Cole Information Services	
	CHARTER BRIAN LAW OFFICE	Cole Information Services	
	TMOBILE	Cole Information Services	
	CALFARM INSURANCE AGENCY	Cole Information Services	
	HARDER & COMPANY COMMUNITY RESEARCH	Cole Information Services	
	STATE OF CALIFORNIA	Cole Information Services	
	LAURIA TOKUNAGA GATES & LINN LLP	Cole Information Services	
	LAURIA TOKUNAGA GATES & LINN LLP	Cole Information Services	
	2014	HEALTHONE STAFFING	Cole Information Services
		CALIFORNIA LEAGUE OF FOOD PROCESSORS	Cole Information Services
DONOHUE & COMPANY		Cole Information Services	
CHARTER BRIAN LAW OFFICE OF		Cole Information Services	
THOMPSON NOBLE CO LLP		Cole Information Services	
CALFARM INSURANCE AGENCY		Cole Information Services	
STATE OF CALIFORNIA		Cole Information Services	
LAURIA TOKUNAGA GATES & LINN		Cole Information Services	
2009		T MOBILE SACRAMENTO RBO	Cole Information Services
		LONDON PACIFIC LF & ANNUITY CO	Cole Information Services
	SELECT ADVISORS INC	Cole Information Services	
	KADOYA RICHARD S	Cole Information Services	
	EVERGREEN MANAGEMENT CO	Cole Information Services	
	NOBLE WILLIAM P JR	Cole Information Services	
	KERZE DAVID P	Cole Information Services	
	LAURIA TOKUNAGA GATES & LINN LLP	Cole Information Services	
	CIT GROUP SALES FINANCING	Cole Information Services	

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2009	MARCH DIMES BIRTH DEFECTS FOUNDATION	Cole Information Services
	THOMPSON NOBLE CO LLP	Cole Information Services
	CALIFORNIA SEISMIC SAFETY COMM	Cole Information Services
2005	THE KADOYA RICHARDS	Haines Company, Inc.
	MERIDIAN PACIFIC	Haines Company, Inc.
	ROSS CONSULTING	Haines Company, Inc.
	FOUNDATION INC EVERGREEN COMPANY	Haines Company, Inc.
	GROUP TAXPAYERS FOR DAVE	Haines Company, Inc.
	CASTSEISMICSAFETY	Haines Company, Inc.
	COMMSN	Haines Company, Inc.
	CALFARMINSURANCE AGENCY DELMARVA	Haines Company, Inc.
2004	EVERGREEN XVI	Cole Information Services
	DELMARVA FOUNDATION INC	Cole Information Services
	WM P NOBLE	Cole Information Services
	CALIFORNIA SEISMIC SAFETY CMSN	Cole Information Services
	CIT GROUP	Cole Information Services
	EVERGREEN/ZINFANDEL 44	Cole Information Services
1999	BOX DAVIC MILLER & PADGETT ATTORNEYS	Cole Information Services
	LONDON PACIFIC LIFE & ANNUITY COMPANY	Cole Information Services
	NOBLE WILLIAM P JR THOMPSON NOBLE COMPANY LLP	Cole Information Services
	KERZE DAVID P THOMPSON NOBLE COMPANY LLP	Cole Information Services
	PENSYS	Cole Information Services
	SUNADA DAVID N PURSLEY & GLAESER ATTORNEYS AT LAW	Cole Information Services
	CALFARM INSURANCE AGENCY REGIONAL CLAIMS OFFICE	Cole Information Services
	CIT GROUP SALES FINANCING THE	Cole Information Services
	DEAN JEFFREY T	Cole Information Services
	PURSLEY WILLIAM J PURSLEY & GLAESER ATTORNEYS AT	Cole Information Services
	THOMPSON NOBLE COMPANY LLP	Cole Information Services
	CHRISTENSEN DARRELL G THOMPSON NOBLE COMPANY LLP	Cole Information Services
	CAL FARM INSURANCE COMPANY SUBROGATION DEPARTMENT	Cole Information Services



## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	GLAESER DEBORAH I PURSLEY & GLAESER ATTORNEYS AT	Cole Information Services
	CHAPMAN BENJAMIN G THOMPSON NOBLE COMPANY LLP	Cole Information Services
	KADOYA RICHARD S THOMPSON NOBLE COMPANY LLP	Cole Information Services
	KADOYA RICHARD S	Haines & Company
	KERZE DAVID P CPA	Haines & Company
	LONDON PACIFIC LIFE	Haines & Company
	NOBLE WM P JR CPA	Haines & Company
	PENSYS	Haines & Company
	SELECT ADVISORS INC	Haines & Company
	THOMPSON NOBLE CO	Haines & Company
	C I T GRP SLS FNCNG	Haines & Company
	CHRISTENSEN D G CPA	Haines & Company
	CIT GROUP SLS FNCNG	Haines & Company
	DEAN JEFFREY T	Haines & Company
1994	LONDON PACIFIC ASSURANCE GROUP	Cole Information Services
	BOX DAVIC MILLER	Cole Information Services
	INTERNATIONAL COMPUTERS LTD	Cole Information Services
	AMERICAN EXPRESS MONEYGRAM	Cole Information Services
	LONDON PACIFIC LIFE	Cole Information Services
	DECUIR, DENNIS	Cole Information Services

### 1760 CREEKSIDE OAKS DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	BARRETT BUSINESS SERVICES INC	Cole Information Services
	CALIF MINICORPS	Cole Information Services
	VALI COOPER & ASSOCIATES INC VC&A	Cole Information Services
	ANIXTER	Cole Information Services
	ECI TWO CREEKSIDE OAKS LLC	Cole Information Services
	CHEW STEPHEN R LAW OFFICE	Cole Information Services
	EXPRESS SEWER & DRAIN	Cole Information Services
	CYS STRUCTURAL ENGINEERS INC	Cole Information Services
	PURSLEY & GLAESER	Cole Information Services
	FARMERS RICE	Cole Information Services
	JATOFT FOTI	Cole Information Services
	M O A DEPOSITION REPORTERS	Cole Information Services
	COMPASS CAR SHIPPING EXPRESS	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	GOLDEN STATE DONOR SERVICES	Cole Information Services
	JATOFT FOTI	Cole Information Services
	SIERRA EYE & TISSUE DONOR SERVICE	Cole Information Services
	CHEW STEPHEN R LAW OFFICE OF MOA DEPOSITION REPORTERS	Cole Information Services
	PURSLEY & GLAESER ATTORNEY	Cole Information Services
	COMPASS CAR SHIPPING EXPRESS	Cole Information Services
	FARMERS RICE	Cole Information Services
	BBSI	Cole Information Services
	VALI COOPER & ASSOCIATES INC VC&A	Cole Information Services
	ANIXTER	Cole Information Services
2009	PURSLEY LAW FIRM	Cole Information Services
	UNIVERSITY OF PHOENIX	Cole Information Services
	BARRETT BUSINESS SERVICES INC	Cole Information Services
	D C I DONOR SERVICES INC	Cole Information Services
	CONFIDENTIAL BUSINESS RESOURCE	Cole Information Services
	PURSLEY RUSH & WELSLEY LLP	Cole Information Services
	GOLDEN STATE DONOR SERVICES	Cole Information Services
	ADR ENVIRONMENTAL GROUP INC	Cole Information Services
	DALRA A COLSON CPA	Cole Information Services
	PURSLEY GLAESER & SUNADA	Cole Information Services
2004	NADEL ARCHITECTS INC	Cole Information Services
	THE WELLMADE	Cole Information Services
	GOLDEN STATE HONOR SERVICE	Cole Information Services
	PURSLEY & GLAESER ATTYS AT LAW	Cole Information Services
1999	NADEL PARTNERSHIP INCORPORATED	Cole Information Services
	GILLETTE ASSOCIATES	Cole Information Services
	MEDSTATE GROUP THE	Cole Information Services
	CONTACT MANAGEMENT SYSTEMS	Cole Information Services
	TELOS CONSULTING SERVICES	Cole Information Services
	COLSON DARLA A CPA GILBERT ACCOUNTANCY CORPORATION	Cole Information Services
	KEENAN & ASSOCIATES	Cole Information Services
	GILBERT THOMAS M CPA GILBERT ACCTNCY CORPORATION	Cole Information Services
	UNIVERSITY OF PHOENIX SACRAMENTO CAMPUS	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	CHAQUICA JOHN E CPA GILBERT ACCTNCY CORPORATION	Cole Information Services
	STRAINE EDWARD E CPA GILBERT ACCTNCY CORPORATION	Cole Information Services
	WONG KEVIN S CPA GILBERT ACCOUNTANCY CORPORATION	Cole Information Services
	SANTIN KIMBERLY J CPA	Cole Information Services
	ZAVADA JAMIE L CPA	Cole Information Services
	GOLDEN STATE TRANSPLANT	Cole Information Services
	PECK SANDRA A CPA	Haines & Company
	NADEL PARTNERSHIP INC	Haines & Company
	NADEL ARCHITECTS	Haines & Company
	MEDSTATE GROUP THE	Haines & Company
	MAININI PAMELA A CPA	Haines & Company
	LJUNG DAVID E CPA	Haines & Company
	KEENAN & ASSOCIATES	Haines & Company
	KAN LISA A ATTY	Haines & Company
	GOLDEN STATE DONOR SERVICES	Haines & Company
	GOLDEN ST TRANSPLNT	Haines & Company
	GLAESER DEBORAH I ATTY	Haines & Company
	GILLETTE ASSOCIATES	Haines & Company
	GILBERT THOMAS CPA	Haines & Company
	GILBERT ACCOUNTANCY	Haines & Company
	DODGE MICHELE A CPA	Haines & Company
	DALE JEFF J CPA	Haines & Company
	COLSON DARLA A CPA	Haines & Company
	C A L LIGHTING BUILDING	Haines & Company
	WONG KEVIN S CPA	Haines & Company
	VANDEVOOREN PEGGY A CPA	Haines & Company
	UNIV PHOENIX SAC CAMPUS	Haines & Company
	SUNADA DAVID N ATTY	Haines & Company
	STRAINE EDWARD CPA	Haines & Company
	RUSH CHARLES C ATTY	Haines & Company
	PURSLEY WILLIAM J ATTY	Haines & Company
	PURSLEY & GLAESER ATTORNEYS LAW	Haines & Company
1994	NASH, BARBARA	Cole Information Services
	TRANSAMERICA FINANCIAL SVC	Cole Information Services
	SAGE CENTER STRATEGIC	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1994	RHD ASSOC INC	Cole Information Services
	WESTERN MOBILE HOME ASSN	Cole Information Services

### 1770 CREEKSIDE OAKS DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	XXXX	Haines & Company

### 1780 CREEKSIDE OAKS DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	PAULA DULA	Cole Information Services
2009	FIREFIGHTERS PUBLICATIONS	Cole Information Services
	CALIFORNIA FATHER FGHTRS APPRNT	Cole Information Services
	FIRESTAR PRODUCTIONS	Cole Information Services
	CALIFORNIA PROFESSIONAL FIREFIGHTERS	Cole Information Services
2005	PRODUCTIONS	Haines Company, Inc.
	FIREFIGHTER PUBLICATIONS FIRESTAR	Haines Company, Inc.
	APPRNTCSHP FIREFIGHTER PBLCTNS	Haines Company, Inc.
	APPRNTCSHP CALIF FRE FGHTR JNT	Haines Company, Inc.
	APPRNTCSHP CALIF FRE FGHTR JNT	Haines Company, Inc.
	FIREF 1 GHTRS CALIF FRE FGHTR JNT	Haines Company, Inc.
	FOUNDATION CA PROFESSIONAL CA FIREFIGHTERS	Haines Company, Inc.
	SUNADA DAVID N ATTY	Haines Company, Inc.
	RUSH CHARLES C 916 922 880 M ATTY SAWYER KERRY L	Haines Company, Inc.
	OLAESER ATTORNE PURSLEYWILUAMJ	Haines Company, Inc.
	PURSLEYAND 91gi 622 106	Haines Company, Inc.
	ATTRNYSATLAW	Haines Company, Inc.
	PURSLEY I GLSR	Haines Company, Inc.
	ATr Y NADEL ARCHITECTS	Haines Company, Inc.
	ATTYATLAW MORRISONCRAIQE	Haines Company, Inc.
	MPRSLY&OLS KNAPP CHRISTIAN J	Haines Company, Inc.
	GOLDENSTATE DONOR SERVICES KLIMASZEWSKI SNDRA	Haines Company, Inc.
	ATTYATLAW	Haines Company, Inc.
	ENGINEERS INC GLAESER DEBORAH I	Haines Company, Inc.
	CYS STRUCTURAL	Haines Company, Inc.

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	ADR ENVIRONMENTAL GROUP INC CALUGHTING	Haines Company, Inc.
2004	CALIFORNIA FIRE FOUNDATION	Cole Information Services
	FIRE STAR PRODUCTIONS	Cole Information Services
1999	FIRE STAR PRODUCTIONS	Cole Information Services
	CALIFORNIA PROFESSIONAL FIREFIEGHTERS	Cole Information Services
	FIREFIGHTER PUBLICATIONS	Cole Information Services
	CALIF FIRE FIGHTER JOINT APPRENTICESHIP COMMITTEE	Cole Information Services
	FIRESTAR PRODUCTIONS	Haines & Company
	FIREFIGHTER PBLCTNS	Haines & Company
	CA PROFESSIONAL FIREFIGHTERS	Haines & Company
	CA FIRE FIGHTR CMTE	Haines & Company
	CA FIREFIGHTR FNDTN	Haines & Company
1994	CALIFORNIA FIRE FIGHTERS	Cole Information Services
	ANCHOR GROUP THE	Cole Information Services
	ANCHOR GROUP	Cole Information Services
	FIREFIGHTER PBLCTNS	Cole Information Services

### MILLCREEK DR

#### 2574 MILLCREEK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	GABRIEL MARTINEZ	Cole Information Services
	SILVIA TREVINO	Cole Information Services
	ROBERTO SANCHEZ	Cole Information Services
	JEREMY BELL	Cole Information Services
	LEBELLA GUILLORY	Cole Information Services
2014	MICHAEL HOUSE	Cole Information Services
	ROBERTO SANCHEZ	Cole Information Services
	RAUL MARTINEZ	Cole Information Services
	JULI INIGUEZ	Cole Information Services
	DANIELLE ORROCK	Cole Information Services
	YVONNE DEROUSSEAU	Cole Information Services
2009	EHAB HASSAN	Cole Information Services
	LARRY VENTERESS	Cole Information Services
	STEVE FOX	Cole Information Services
	VERONICA YADAO	Cole Information Services
	JACARE HUNTER	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2009	ANGELINA MARTINEZ	Cole Information Services
	MONTRELL HARRIS	Cole Information Services
	GREGORY ANTHONY	Cole Information Services
2004	TAMER DOUARA	Cole Information Services
	JASON VALLNER	Cole Information Services
	HILDA HASSAN	Cole Information Services
	RAJKUMAR CHILAMULA	Cole Information Services
	I BADRU	Cole Information Services
	D ROSS	Cole Information Services
	PAUL GROJEAN	Cole Information Services
	KEITH CRUZ	Cole Information Services
	ISIAHKA BADRUE	Cole Information Services
	WILLIAM VALCHECK	Cole Information Services
	DONNA WITHAM	Cole Information Services
1999	LARRY VENTERESS	Cole Information Services
	STEVE FOX	Cole Information Services
	JACARE HUNTER	Cole Information Services
	VERONICA YADAO	Cole Information Services
	GREGORY ANTHONY	Cole Information Services
	GARBACK S G	Haines & Company
	MILLER Jeffery	Haines & Company
	THOMPSON Paul G	Haines & Company
	THAOCHUETOUA Lawson	Haines & Company
	1995	LUCERO Raymond A
CHERUKURI Ravi		Pacific Bell
1994	HILT, CRAIG	Cole Information Services
1991	Delgado C M	Pacific Bell
	Mc New Marshall	Pacific Bell
	Mueller Rusty W	Pacific Bell
	Rios Rafael N	Pacific Bell

### 2576 MILLCREEK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	CHRISTINA GOMEZ	Cole Information Services
	ERIN GRAVES	Cole Information Services
	JOSEPH HOLLAK	Cole Information Services
	CARMEN LAZO	Cole Information Services
	SIMMIE HOLLAND	Cole Information Services
	LESLIE ALATORRE	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	DEAN BALLESTEROS	Cole Information Services
	CYNTHIA DIAZ	Cole Information Services
	MARIA GOMEZ	Cole Information Services
	FELICITAS GUTIERREZ	Cole Information Services
	ED HANKS	Cole Information Services
	DANIEL SHAW	Cole Information Services
2009	CHRISTIN SPRING	Cole Information Services
	R KOTESWARARAO	Cole Information Services
	LOVE JONES	Cole Information Services
	JHSHEN CHAO	Cole Information Services
	SAM MEANS	Cole Information Services
	DEAN BALLESTEROS	Cole Information Services
	GARY KINCHELOW	Cole Information Services
	GARY ARCHER	Cole Information Services
	TIM MCCABE	Cole Information Services
	CARMEN LAZO	Cole Information Services
	LORRI SYLVESTER	Cole Information Services
	2004	R KOTESWARARAO
MATTHEW WELTON		Cole Information Services
RICHARD RIVAS		Cole Information Services
CHARLES MCGEE		Cole Information Services
SAM MEANS		Cole Information Services
GARY KINCHELOW		Cole Information Services
ADAM BARNEY		Cole Information Services
JAMES BYRD		Cole Information Services
TIM MCCABE		Cole Information Services
FERNANDO ESTOLANO		Cole Information Services
RONETTA TURNER		Cole Information Services
JOSEPH HOLLAK		Cole Information Services
STEVEN BARCLIFT		Cole Information Services
1999		CARMEN LAZO
	TIM MCCABE	Cole Information Services
	GARY ARCHER	Cole Information Services
	GARY KINCHELOW	Cole Information Services
	DEAN BALLESTEROS	Cole Information Services
	SAM MEANS	Cole Information Services
	LOVE JONES	Cole Information Services
	R KOTESWARARAO	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	CHRISTIN SPRING	Cole Information Services
	LORRI SYLVESTER	Cole Information Services
	ROY Shoma	Haines & Company
	PAVAO Christina D	Haines & Company
	ORTH Martin R	Haines & Company
	SMITH Albert	Haines & Company
	RUPERT Nate	Haines & Company
	APARTMENTS	Haines & Company
1995	SHEPARDSON Wayne	Pacific Bell
	MARSHALL David	Pacific Bell
1994	MARSHALL, DAVID	Cole Information Services
1991	Sodders Robert	Pacific Bell

### 2578 MILLCREEK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2017	HILDA DESOUZA	Cole Information Services	
	MARIAH DAVIS	Cole Information Services	
	CHRISTINE WALLACE	Cole Information Services	
	DAVID WIGGINS	Cole Information Services	
	NAKISHA BAILEY	Cole Information Services	
	STARLETT LYONS	Cole Information Services	
	MARILYN HIGGS	Cole Information Services	
	MAYRA OREJEL	Cole Information Services	
	2014	STARLETT LYONS	Cole Information Services
		MARILYN HIGGS	Cole Information Services
HILDA DESOUZA		Cole Information Services	
DONALD BROWN		Cole Information Services	
AARON KING		Cole Information Services	
JAMES RANDAL		Cole Information Services	
2009		MARILYN HIGGS	Cole Information Services
	JESLYN JACKSON	Cole Information Services	
	BECKY BUURMA	Cole Information Services	
2004	JESLYN JACKSON	Cole Information Services	
	MARIAH DAVIS	Cole Information Services	
	MARILYN HIGGS	Cole Information Services	
	CHAD BARNES	Cole Information Services	
	NYKI BAILEY	Cole Information Services	
	GLENN CAINAP	Cole Information Services	
	YUGI SAKAI	Cole Information Services	



## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2004	MARCUS FARROW	Cole Information Services
	OPAL SIMMONS	Cole Information Services
1999	JESLYN JACKSON	Cole Information Services
	DOUG HAUBERT	Cole Information Services
	BECKY BUURMA	Cole Information Services
	MARILYN HIGGS	Cole Information Services
	YOKOUCHI Mirel	Haines & Company
	SAKAMAKI Stephen	Haines & Company
	SAKAMAKI Henri	Haines & Company
	ISOKE LABORATORY	Haines & Company
	HAUBERT Lisa	Haines & Company
	HAUBERT Doug	Haines & Company
	ANGELL Cat	Haines & Company
	APARTMENTS	Haines & Company
	PERYY Michael	Haines & Company
1995	MARTINEZ Daniel	Pacific Bell
	GERLT David	Pacific Bell
	ENGEL Michael A	Pacific Bell
1994	HODGE, LARRY D	Cole Information Services
	ENGEL, MICHAEL A	Cole Information Services
	SHULMAN, STACY	Cole Information Services
1991	Marion Robert L Jr	Pacific Bell
	Hill Herman L	Pacific Bell
	Engleman S A	Pacific Bell
	Britton Louis S	Pacific Bell
	Ashen Charles	Pacific Bell

### 2580 MILLCREEK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	ANDRE JOHNSON	Cole Information Services
	ROSIE GIBBS	Cole Information Services
2014	PHILLIP TOWLES	Cole Information Services
	ROCHELLE DAVIS	Cole Information Services
	EMMA FRANKLIN	Cole Information Services
	ANDRE JOHNSON	Cole Information Services
	JASMINE STALLWORTH	Cole Information Services
2009	SABRYNA JONES	Cole Information Services
2004	RAJENDRA SHARMA	Cole Information Services
	LORI FOX	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2004	ALAN JONES	Cole Information Services
	DOUG SKIPPS	Cole Information Services
	SANDRA MORALES	Cole Information Services
	GLENELLA MOORE	Cole Information Services
	RONALD STALCUP	Cole Information Services
	TOM MEADOWS	Cole Information Services
	SHANNON MCBEE	Cole Information Services
1999	SABRYNA JONES	Cole Information Services
	BUSH Randall D	Haines & Company
	HITE Tim	Haines & Company
1995	TURNER Bob	Haines & Company
	MAROSE Robin	Pacific Bell
	MAY Tim	Pacific Bell
1991	Turrell Tom N	Pacific Bell
	Marose Robin	Pacific Bell
	Kowall Donald C	Pacific Bell

### 2582 MILLCREEK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	SANDRA MUNIZ	Cole Information Services
	ROBERT PIEXOTO	Cole Information Services
	MARK KISSLER	Cole Information Services
	MAIJA BOROUGH	Cole Information Services
2014	FERMIN MONTOYA	Cole Information Services
	ANKIT KATHPALIA	Cole Information Services
	AVBENA AVEKOVA	Cole Information Services
	ELLIOT VARNADO	Cole Information Services
	MARK KISSLER	Cole Information Services
	TINA WRIGHT	Cole Information Services
	ASHLEY BARROW	Cole Information Services
2009	M MCCORVEY	Cole Information Services
	DAVID DUSTIN	Cole Information Services
	ALTON BROUSSARD	Cole Information Services
2004	RICK CODIGA	Cole Information Services
	E VARNADO	Cole Information Services
	ERIC SANCHEZ	Cole Information Services
	JOEL MORTIMORE	Cole Information Services
	JOSEPH WORLEY	Cole Information Services
DAVID DUSTIN	Cole Information Services	

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2004	CHRISTOPHER JOHNSON	Cole Information Services
	NAZARIO GUZMAN	Cole Information Services
	REGINA CHOPP	Cole Information Services
1999	DAVID DUSTIN	Cole Information Services
	CANDACE CODIGA	Cole Information Services
	M MCCORVEY	Cole Information Services
	ALTON BROUSSARD	Cole Information Services
	HOPKINS V	Haines & Company
	CODIGA Candace L	Haines & Company
	BYNON David W	Haines & Company
1995	CRISTAL David	Pacific Bell
1994	YWNDAMURI, M	Cole Information Services
1991	Condon William J	Pacific Bell
	Fairchild Katherine A	Pacific Bell
	Mejia Jesus	Pacific Bell

### 2584 MILLCREEK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2017	BRYAN XIONG	Cole Information Services	
	DANA DAMASK	Cole Information Services	
	ISAAC STROUD	Cole Information Services	
	MARILYN POWELL	Cole Information Services	
	KATRINA PARKER	Cole Information Services	
	LESHA POWELL	Cole Information Services	
	NICOLE NELSON	Cole Information Services	
	LINDSEY OLIVER	Cole Information Services	
	COREY WILSON	Cole Information Services	
	2014	LINDSEY OLIVER	Cole Information Services
MARVIN NOCEDA		Cole Information Services	
LESHA POWELL		Cole Information Services	
CAPUSIN BONDS		Cole Information Services	
MARILYN POWELL		Cole Information Services	
ISAAC STROUD		Cole Information Services	
MARY YOBST		Cole Information Services	
DANA DAMASK		Cole Information Services	
2009		LINDSEY OLIVER	Cole Information Services
		JONA TEJADA	Cole Information Services
	ARTEMIO RODRIGUEZ	Cole Information Services	
	LUIS AYALA	Cole Information Services	

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2009	PATRICIA JEFFERY	Cole Information Services	
	CLIFFORD WESTON	Cole Information Services	
	VISHNU POTLURI	Cole Information Services	
	RICHARD LEGGETT	Cole Information Services	
	JERI GANDARA	Cole Information Services	
	MONETTE MCFADDEN	Cole Information Services	
	ANNA GAMBOA	Cole Information Services	
	RAJI ABRAHAM	Cole Information Services	
2004	WWW EDUWEB CO	Cole Information Services	
	SID ALMANZA	Cole Information Services	
	LINDSEY OLIVER	Cole Information Services	
	MATTHEW HIRKALA	Cole Information Services	
	JENNIFER CARR	Cole Information Services	
	PATRICIA JEFFERY	Cole Information Services	
	BRUCE NIXON	Cole Information Services	
	VISHNU POTLURI	Cole Information Services	
	DANG TRAN	Cole Information Services	
	SHIRLEY HUTCHINSON	Cole Information Services	
	SARA QUEZADA	Cole Information Services	
	PRASANNA PADIHARI	Cole Information Services	
	KELLY HARMON	Cole Information Services	
	CLIFFORD WESTON	Cole Information Services	
	1999	ANNA GAMBOA	Cole Information Services
		RICHARD LEGGETT	Cole Information Services
JERI GANDARA		Cole Information Services	
CLIFFORD WESTON		Cole Information Services	
MONETTE MCFADDEN		Cole Information Services	
VISHNU POTLURI		Cole Information Services	
RAJI ABRAHAM		Cole Information Services	
PATRICIA JEFFERY		Cole Information Services	
LUIS AYALA		Cole Information Services	
ARTEMIO RODRIGUEZ		Cole Information Services	
JONA TEJADA		Cole Information Services	
LINDSEY OLIVER		Cole Information Services	
BEAL JEANETTE M		Haines & Company	
FITZGERALD Shaun		Haines & Company	
LEONARDSON Hubert	Haines & Company		
OLIVER Lindsey M	Haines & Company		

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	BENSON Tyrone	Pacific Bell
	HERR L	Pacific Bell
	LEE Jae	Pacific Bell
	LEONARDSON Hubert	Pacific Bell
	OLIVER Lindsey M	Pacific Bell
1994	AKIRA, MOMURA	Cole Information Services
	HERR, L	Cole Information Services
1991	Leonardson Hubert	Pacific Bell
	Robinson Gene	Pacific Bell
	Songer James M	Pacific Bell

### 2586 MILLCREEK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	LINDA CROLL	Cole Information Services
	DEXTER SIMMONS	Cole Information Services
	MARIA ALVAREZ	Cole Information Services
	CARTER VEST	Cole Information Services
	DARREL VENABLE	Cole Information Services
	ANTOINETTE BYRD	Cole Information Services
	ADISA DOUGLAS	Cole Information Services
	ABUBAKAR KHAN	Cole Information Services
	SATENIK HOVAKIMYAN	Cole Information Services
	2014	LINDA CROLL
DEXTER SIMMONS		Cole Information Services
CARTER VEST		Cole Information Services
JULIE VANETTEN		Cole Information Services
SATENIK HOVAKIMYAN		Cole Information Services
ANTOINETTE BYRD		Cole Information Services
DWIKEESHA JONES		Cole Information Services
ANTHONY PITTMAN		Cole Information Services
JOHN COOK		Cole Information Services
DARREL VENABLE		Cole Information Services
2009	MARCIA SOLBERG	Cole Information Services
	ADRIAN BOGDAN	Cole Information Services
	W LANE	Cole Information Services
	TRACY MARLOW	Cole Information Services
	JULIE VANETTEN	Cole Information Services
	PERRY FOSTER	Cole Information Services
	MILAGRO CRUZ	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2009	LINDA CROLL	Cole Information Services
2004	LINDA CROLL	Cole Information Services
	LORETTA STEELE	Cole Information Services
	CRISTINA WOJDAC	Cole Information Services
	PETER GROFF	Cole Information Services
	NILAJAY BALLARD	Cole Information Services
	SHAHRIAR TAVAKOLI	Cole Information Services
	SHERRI BRANDENBURG	Cole Information Services
	TIMOTHY LONG	Cole Information Services
	JULIE VANETTEN	Cole Information Services
	SARAH MORA	Cole Information Services
	KIRAN BAKSHI	Cole Information Services
	MILAGRO CRUZ	Cole Information Services
	MARCIA SOLBERG	Cole Information Services
1999	LINDA CROLL	Cole Information Services
	W LANE	Cole Information Services
	PERRY FOSTER	Cole Information Services
	JULIE VANETTEN	Cole Information Services
	LISA MAGRUDER	Cole Information Services
	MILAGRO CRUZ	Cole Information Services
	ADRIAN BOGDAN	Cole Information Services
	MARCIA SOLBERG	Cole Information Services
	WALSTON Valerie	Haines & Company
	STARRITT Christi	Haines & Company
	NUNO Becky	Haines & Company
	MAGRUDER Lisa R	Haines & Company
	FEIL Elizabeth	Haines & Company
	EASTERN Len	Haines & Company
	APARTMENTS	Haines & Company
1995	G & S International Trading	Pacific Bell
	SUI Yung	Pacific Bell
1994	SUI, YUNG	Cole Information Services
1991	Bass David Mr & Mrs	Pacific Bell
	Vega Francisco	Pacific Bell
	Willis J	Pacific Bell
	Wilson I	Pacific Bell

## FINDINGS

### 2587 MILLCREEK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	NOEL SMITH	Cole Information Services
	ALBERTINA GUTIERREZ	Cole Information Services
	JACKIE MINCEY	Cole Information Services
	JULIE AMES	Cole Information Services
	ASHLEY GRAY	Cole Information Services
	MARGARET THOMPSON	Cole Information Services
	TIFFANY HAYES	Cole Information Services
	WALTER EARNEST	Cole Information Services
	MICHELLE CHALMERS	Cole Information Services
	KYLE HUNDLEY	Cole Information Services
2014	PATRICK HACKETT	Cole Information Services
	JUSTIN SAUNDERS	Cole Information Services
	AMBER MONCRIEF	Cole Information Services
	ROBERT ASHBURN	Cole Information Services
	TINA JACKSON	Cole Information Services
	ROBIN CONOVER	Cole Information Services
	ANGELINA MARTINEZ	Cole Information Services
	HUNTS SMITH	Cole Information Services
	JULIE AMES	Cole Information Services
	LYNN ALBRECHT	Cole Information Services
2009	TERESA REID	Cole Information Services
	JAIME TREJOS	Cole Information Services
	AMBER SISEMORE	Cole Information Services
	SHARON QUINTANA	Cole Information Services
	CASSANDRA SMITH	Cole Information Services
	TIFFANY HAYES	Cole Information Services
	CRYSTAL DEVERA	Cole Information Services
	ADRIAN TORIBIO	Cole Information Services
2004	LERLENE HIGGS	Cole Information Services
	NEIL WARREN	Cole Information Services
	CASSANDRA SMITH	Cole Information Services
	CHRISTINA FOLTZ	Cole Information Services
	READELL GARDNER	Cole Information Services
	BENJAMIN MARGETTS	Cole Information Services
	DANIEL OFORLEA	Cole Information Services
	PAUL SOBER	Cole Information Services
GEORGE MARTINEZ	Cole Information Services	

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2004	ALAN ARMSTRONG	Cole Information Services
	EDGAR BORJA	Cole Information Services
	L ESPARZA	Cole Information Services
	WILLIAM MCKEE	Cole Information Services
	WAHEED MAROOF	Cole Information Services
1999	JAIME TREJOS	Cole Information Services
	AMBER SISEMORE	Cole Information Services
	CASSANDRA SMITH	Cole Information Services
	CRYSTAL DEVERA	Cole Information Services
	ADRIAN TORIBIO	Cole Information Services
	LERLENE HIGGS	Cole Information Services
	SHARON QUINTANA	Cole Information Services
	PRECIADO Gustavo	Haines & Company
	MESSINEO Vincent J	Haines & Company
	1995	TUMBALE Tom & Tracy
GREEN Becky		Pacific Bell
CONSTANTINIDES Tony		Pacific Bell
1994	GREEN, BECKY	Cole Information Services
1991	Steffenhagen Gail	Pacific Bell
	Hammond Vernon & Henney	Pacific Bell
	Estrada Ron	Pacific Bell

### 2589 MILLCREEK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	KEVOIJANAE THOMAS	Cole Information Services
	CHEDA HERNANDEZ	Cole Information Services
	KIMBERLY WRIGHT	Cole Information Services
	MARILYNN ARMSTRONG	Cole Information Services
2014	MASOOD DIN	Cole Information Services
	ELOISA MUNOZ	Cole Information Services
	MARILYNN ARMSTRONG	Cole Information Services
	JOHN ANGLEN	Cole Information Services
2009	MARILYNN ARMSTRONG	Cole Information Services
	RENE FRENCH	Cole Information Services
	JUAN MEDINA	Cole Information Services
	ELOISA MUNOZ	Cole Information Services
2004	JOE HILLS	Cole Information Services
	DERIC ISAACSON	Cole Information Services
	N ANDERSON	Cole Information Services



## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2004	THOMAS FIRTH	Cole Information Services
	TARYN ECKELS	Cole Information Services
	LISA PONCIA	Cole Information Services
	VINH VANLE	Cole Information Services
1999	MARILYNN ARMSTRONG	Cole Information Services
	JUAN MEDINA	Cole Information Services
	ELOISA MUNOZ	Cole Information Services
	RENE FRENCH	Cole Information Services
	XXXX	Haines & Company
1991	Trapse Lillian	Pacific Bell
	Scharn B	Pacific Bell

### 2591 MILLCREEK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	JASMINE LACEY	Cole Information Services
	ROSA MUNOZ	Cole Information Services
	NIKKITA PARKER	Cole Information Services
	ANGEL ALVAREZ	Cole Information Services
	DANNY CORDERO	Cole Information Services
	NICHELLE BRAODWAY	Cole Information Services
	BRYAN HAMPTON	Cole Information Services
	DAVID LARSON	Cole Information Services
	LERLENE HIGGS	Cole Information Services
	BIBEK GHIMIRE	Cole Information Services
SAMANTHA JOSEPH	Cole Information Services	
2014	LERLENE HIGGS	Cole Information Services
	RALPH DAVIS	Cole Information Services
	MARK KEHOE	Cole Information Services
	MICHAEL VANLANING	Cole Information Services
	DAVID SAETURN	Cole Information Services
	NAKIEA BLAKELY	Cole Information Services
	JASMINE LACEY	Cole Information Services
	NANCY BAZAN	Cole Information Services
SALLI CLARK	Cole Information Services	
2009	TIFFANY PETERSEN	Cole Information Services
	MELISSA VONLAHR	Cole Information Services
	LINDALEE HATCH	Cole Information Services
	RIGOBERTO SANCHEZ	Cole Information Services
	TINA JACKSON	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2009	MARIO LOPEZ	Cole Information Services
	WILLIE SMITH	Cole Information Services
2004	ELOISA MUNOZ	Cole Information Services
	JAVIER LEONEL	Cole Information Services
	ALICE BROMUND	Cole Information Services
	SAMUEL FLORES	Cole Information Services
	RONALD DENT	Cole Information Services
	TODD STENHOUSE	Cole Information Services
	NIRANJAN CHOUTKURI	Cole Information Services
	WOMAN TO WOMAN	Cole Information Services
	MARCO CARBODI	Cole Information Services
	JESSE RAMOS	Cole Information Services
	LUIS VASQUEZ	Cole Information Services
	ROBERT APODACA	Cole Information Services
	JASON KOWING	Cole Information Services
	LINDALEE HATCH	Cole Information Services
1999	TINA JACKSON	Cole Information Services
	WILLIE SMITH	Cole Information Services
	MARIO LOPEZ	Cole Information Services
	RIGOBERTO SANCHEZ	Cole Information Services
	MELISSA VONLAHR	Cole Information Services
	TIFFANY PETERSEN	Cole Information Services
	MITCHELL Liliyann	Haines & Company
	NIVA Douglas	Haines & Company
	PORTWOOD Joe	Haines & Company
	LOVE Debbie	Haines & Company
	GARCIA R A	Haines & Company
	APARTMENTS	Haines & Company
	NIVA Lisa	Haines & Company
	1995	LEE Seechuan
1994	ALVAREZ, FELIPE	Cole Information Services
1991	Kim Kathy	Pacific Bell
	Hudson Steve A	Pacific Bell
	Harrison Rodney	Pacific Bell
	Alston Luvleigh	Pacific Bell

### 2593 MILLCREEK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	RIVER TERRACE APTS SACRAMENTO	Cole Information Services

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	RIVER TERRACE APARTMENTS	Cole Information Services
	ALICIA DAVINROY	Cole Information Services
2014	JAMIE SOLTAU	Cole Information Services
	RIVER TERRACE APTS SACRAMENTO	Cole Information Services
	RIVER TERRACE APARTMENTS	Cole Information Services
2009	RIVER TERRACE APARTMENTS	Cole Information Services
2004	RIVER TERRACE APARTMENTS	Cole Information Services
	SUE DOZIER	Cole Information Services
	PAUL LOZANO	Cole Information Services
1999	KENT Bob	Haines & Company
	PFANNER Ted	Haines & Company

### NATOMAS PARK DR

#### 485 NATOMAS PARK DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1999	PRENTISS PROPERTIES LTD INC	Haines & Company

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## FINDINGS

### **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.

<b><u>Address Researched</u></b>	<b><u>Address Not Identified in Research Source</u></b>
1733 CAPITAL PARK DR	2017, 2014, 2009, 2005, 2004, 2002, 1999, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1750 CREEKSIDE OAKS DR	2017, 2014, 2009, 2004, 2002, 1995, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1750 CREEKSIDE OAKS DR	2005, 2002, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1755 CREEKSIDE OAKS DR	2005, 2002, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1755 CREEKSIDE OAKS DR	2017, 2014, 2009, 2004, 2002, 1995, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1760 CREEKSIDE OAKS DR	2017, 2014, 2009, 2005, 2004, 2002, 1995, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1760 CREEKSIDE OAKS DR	2005, 2002, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1765 CAPITAL PARK DR	2005, 2002, 1995, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1765 CAPITAL PARK DR	2017, 2014, 2009, 2004, 2002, 1994, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1767 CAPITAL PARK DR	2017, 2014, 2009, 2005, 2004, 2002, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1767 CAPITAL PARK DR	2005, 2002, 1995, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1769 CAPITAL PARK DR	2005, 2002, 1995, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1769 CAPITAL PARK DR	2017, 2014, 2009, 2004, 2002, 1994, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1770 CREEKSIDE OAKS DR	2017, 2014, 2009, 2005, 2004, 2002, 1995, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1771 CAPITAL PARK DR	2017, 2014, 2009, 2004, 2002, 1994, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1771 CAPITAL PARK DR	2005, 2002, 1995, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1773 CAPITAL PARK DR	2005, 2002, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1773 CAPITAL PARK DR	2017, 2014, 2009, 2004, 2002, 1999, 1994, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1775 CAPITAL PARK DR	2017, 2014, 2009, 2004, 2002, 1994, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1775 CAPITAL PARK DR	2005, 2002, 1995, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920
1777 CAPITAL PARK DR	2005, 2002, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920



## FINDINGS

### **Address Researched**

2586 MILLCREEK DR

2587 MILLCREEK DR

2587 MILLCREEK DR

2589 MILLCREEK DR

2589 MILLCREEK DR

2591 MILLCREEK DR

2591 MILLCREEK DR

2593 MILLCREEK DR

2593 MILLCREEK DR

485 NATOMAS PARK DR

### **Address Not Identified in Research Source**

2017, 2014, 2009, 2005, 2004, 2002, 1994, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

2017, 2014, 2009, 2005, 2004, 2002, 1994, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

2005, 2002, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

2005, 2002, 1995, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

2017, 2014, 2009, 2005, 2004, 2002, 1995, 1994, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

2017, 2014, 2009, 2005, 2004, 2002, 1994, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

2005, 2002, 1995, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

2017, 2014, 2009, 2005, 2004, 2002, 1995, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

2005, 2002, 1999, 1995, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

2017, 2014, 2009, 2005, 2004, 2002, 1995, 1994, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

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**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**

2450 Natomas Park

**Address Not Identified in Research Source**

2002, 1991, 1982, 1980, 1975, 1970, 1966, 1965, 1961, 1957, 1956, 1952, 1947, 1942, 1937, 1933, 1928, 1923, 1920

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**APPENDIX E**  
*ENVIRONMENTAL DATA RESOURCES (EDR) REPORT*

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**DRAFT**



**2450 Natomas Park**  
2450 Natomas Park  
Sacramento, CA 95833

Inquiry Number: 6302266.2s  
December 15, 2020

The EDR Radius Map™ Report with GeoCheck®

DRAFT



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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DRAFT

***Thank you for your business.***  
 Please contact EDR at 1-800-352-0050  
 with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of 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

2450 NATOMAS PARK  
SACRAMENTO, CA 95833

#### COORDINATES

Latitude (North): 38.6112600 - 38° 36' 40.53"  
Longitude (West): 121.5039390 - 121° 30' 14.18"  
Universal Transverse Mercator: Zone 10  
UTM X (Meters): 630259.1  
UTM Y (Meters): 4274493.5  
Elevation: 18 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5619750 SACRAMENTO WEST, CA  
Version Date: 2012

Northeast Map: 5629066 RIO LINDA, CA  
Version Date: 2012

Southeast Map: 5619748 SACRAMENTO EAST, CA  
Version Date: 2012

Northwest Map: 5619770 TAYLOR MONUMENT, CA  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140621  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
 2450 NATOMAS PARK  
 SACRAMENTO, CA 95833

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	NATOMAS RACQUET CLUB	2450 NATOMAS PARK DR	FINDS		TP
A2	T-MOBILE WEST CORP (	2450 NATOMAS PARK DR	Sacramento Co. ML		TP
A3	NATOMAS SPORTS CLUB	2450 NATOMAS PARK DR	Sacramento Co. ML, CERS		TP
4	VERIZON WIRELESS TRU	2000 W EL CAMINO AVE	Sacramento Co. ML, CERS	Higher	99, 0.019, NNW
5	VERIZON BUSINESS	2485 NATOMAS PARK DR	Sacramento Co. ML	Higher	333, 0.063, WSW
6	2020 GATEWAY	2020 W EL CAMINO AVE	Sacramento Co. ML, CERS	Higher	822, 0.156, NW
7	CABLE AND WIRELESS U	2495 NATOMAS PARK DR	Sacramento Co. ML	Higher	916, 0.173, SSW
8	FOUNDATION HLTH/NATO	2554 MILL CREEK DR	Sacramento Co. ML	Lower	1172, 0.222, East
B9	MCI TELECOMMUNICATIO	1740 CREEKSIDE OAKS	Sacramento Co. ML	Lower	1195, 0.226, ESE
B10	HONEYWELL	1740 CREEKSIDE OAKS	Sacramento Co. ML	Lower	1195, 0.226, ESE
11	SHELL SERVICE STATIO	1599 W EL CAMINO	LUST, CA FID UST, Cortese, CERS	Lower	1650, 0.312, ENE
12	CHRISTOFER OAKS ONE	2500 VENTURE OAKS	LUST, Sacramento Co. CS, Cortese, HIST CORTESE,...	Higher	1935, 0.366, WSW
C13	DISCOVERY PLAZA (FOR	1500-1590 WEST EL CA	CPS-SLIC, CERS	Lower	2337, 0.443, ENE
C14	DISCOVERY PLAZA SHOP	1500 WEST EL CAMINO	CPS-SLIC, CERS	Lower	2337, 0.443, ENE
15	BIGGERS INDUSTRIAL G	551 SEQUOIA PACIFIC	ENVIROSTOR, CHMIRS, HIST CORTESE	Higher	4411, 0.835, SSE
16	ARCO SERVICE STATION	222 JIBBOOM STREET	Notify 65	Higher	5031, 0.953, South
17	CALVADA SALES COMPAN	444 RICHARDS BLVD	LUST, Sacramento Co. CS, CERS HAZ WASTE, SWEEPS...	Higher	5175, 0.980, SSE
D18	SACRAMENTO SIGNAL DE		FUDS	Higher	5257, 0.996, SE
D19	SACRAMENTO SIGNAL DE	NORTH 7TH STREET	ENVIROSTOR	Higher	5272, 0.998, SE

DRAFT

# EXECUTIVE SUMMARY

## **TARGET PROPERTY SEARCH RESULTS**

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
NATOMAS RACQUET CLUB 2450 NATOMAS PARK DR SACRAMENTO, CA 95833	FINDS Registry ID:: 110065648598	N/A
T-MOBILE WEST CORP ( ) 2450 NATOMAS PARK DR SACRAMENTO, CA 95833	Sacramento Co. ML	N/A
NATOMAS SPORTS CLUB 2450 NATOMAS PARK DR SACRAMENTO, CA 95833	Sacramento Co. ML CERS	N/A

## **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

## EXECUTIVE SUMMARY

### ***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-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System

US ENG CONTROLS..... Engineering Controls Sites List

US INST CONTROLS..... Institutional Controls Sites List

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

### ***State- and tribal - equivalent NPL***

RESPONSE..... State Response Sites

### ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF..... Solid Waste Information System

### ***State and tribal leaking storage tank lists***

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

### ***State and tribal registered storage tank lists***

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***

INDIAN VCP..... Voluntary Cleanup Priority Listing

VCP..... Voluntary Cleanup Program Properties

### ***State and tribal Brownfields sites***

BROWNFIELDS..... Considered Brownfields Sites Listing

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Brownfield lists***

US BROWNFIELDS..... A Listing of Brownfields Sites

## EXECUTIVE SUMMARY

### **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
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
CERS HAZ WASTE.....	CERS HAZ WASTE
US CDL.....	National Clandestine Laboratory Register
PFAS.....	PFAS Contamination Site Location Listing

### **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
SPILLS 90.....	SPILLS 90 data from FirstSearch

### **Other Ascertainable Records**

RCRA NonGen / NLR.....	RCRA - Non Generators / No Longer Regulated
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

## EXECUTIVE SUMMARY

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
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
ECHO.....	Enforcement & Compliance History Information
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
UXO.....	Unexploded Ordnance Sites
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
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
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
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CIWQS.....	California Integrated Water Quality System
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)



# EXECUTIVE SUMMARY

HWTS..... Hazardous Waste Tracking System  
MINES MRDS..... Mineral Resources Data System

## EDR HIGH RISK HISTORICAL RECORDS

### ***EDR Exclusive Records***

EDR MGP..... EDR Proprietary Manufactured Gas Plants  
EDR Hist Auto..... EDR Exclusive Historical Auto Stations  
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.

## STANDARD ENVIRONMENTAL RECORDS

### ***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/27/2020 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>BIGGERS INDUSTRIAL G</i></b>	<b><i>551 SEQUOIA PACIFIC</i></b>	<b><i>SSE 1/2 - 1 (0.835 mi.)</i></b>	<b><i>15</i></b>	<b><i>32</i></b>

## EXECUTIVE SUMMARY

Facility Id: 34340018  
Status: No Further Action

SACRAMENTO SIGNAL DE NORTH 7TH STREET SE 1/2 - 1 (0.998 mi.) D19 44  
Facility Id: 80000605  
Status: No Further Action

### State and tribal leaking storage tank lists

LUST: 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.

A review of the LUST list, as provided by EDR, has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CHRISTOFER OAKS ONE</b>	<b>2500 VENTURE OAKS</b>	<b>WSW 1/4 - 1/2 (0.366 mi.)</b>	<b>12</b>	<b>27</b>
Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 09/08/2020 Status: Completed - Case Closed Status: Case Closed Global Id: T0606700566				

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>SHELL SERVICE STATIO</b>	<b>1599 W EL CAMINO</b>	<b>ENE 1/4 - 1/2 (0.312 mi.)</b>	<b>11</b>	<b>21</b>
Database: LUST REG 5, Date of Government Version: 07/01/2008 Database: LUST, Date of Government Version: 09/08/2020 Status: Completed - Case Closed Global Id: T0606783253				

CPS-SLIC: 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.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there are 2 CPS-SLIC sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>DISCOVERY PLAZA (FOR</b>	<b>1500-1590 WEST EL CA</b>	<b>ENE 1/4 - 1/2 (0.443 mi.)</b>	<b>C13</b>	<b>30</b>
Database: CPS-SLIC, Date of Government Version: 09/08/2020 Facility Status: Completed - Case Closed Global Id: SLT5S1243164				
<b>DISCOVERY PLAZA SHOP</b>	<b>1500 WEST EL CAMINO</b>	<b>ENE 1/4 - 1/2 (0.443 mi.)</b>	<b>C14</b>	<b>31</b>
Database: CPS-SLIC, Date of Government Version: 09/08/2020 Facility Status: Completed - Case Closed Global Id: SL0606778991				

## EXECUTIVE SUMMARY

Sacramento Co. CS: List of sites where unauthorized releases of potentially hazardous materials have occurred.

A review of the Sacramento Co. CS list, as provided by EDR, and dated 02/18/2020 has revealed that there is 1 Sacramento Co. CS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CHRISTOFER OAKS ONE</b> Facility Id: RO0001124 Date Closed: 08/08/1994	<b>2500 VENTURE OAKS</b>	<b>WSW 1/4 - 1/2 (0.366 mi.)</b>	<b>12</b>	<b>27</b>

### ADDITIONAL ENVIRONMENTAL RECORDS

#### **Other Ascertainable Records**

FUDS: 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.

A review of the FUDS list, as provided by EDR, and dated 08/05/2020 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SACRAMENTO SIGNAL DE		SE 1/2 - 1 (0.996 mi.)	D18	43

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 06/22/2020 has revealed that there are 2 Cortese sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CHRISTOFER OAKS ONE</b> Cleanup Status: COMPLETED - CASE CLOSED	<b>2500 VENTURE OAKS</b>	<b>WSW 1/4 - 1/2 (0.366 mi.)</b>	<b>12</b>	<b>27</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>SHELL SERVICE STATIO</b> Cleanup Status: COMPLETED - CASE CLOSED	<b>1599 W EL CAMINO</b>	<b>ENE 1/4 - 1/2 (0.312 mi.)</b>	<b>11</b>	<b>21</b>

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTATES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CHRISTOFER OAKS ONE</b>	<b>2500 VENTURE OAKS</b>	<b>WSW 1/4 - 1/2 (0.366 mi.)</b>	<b>12</b>	<b>27</b>

## EXECUTIVE SUMMARY

Reg Id: 340665

Sacramento Co. ML: Sacramento County Master List. Any business that has hazardous materials on site - hazardous materials storage sites, underground storage tanks, waste generators.

A review of the Sacramento Co. ML list, as provided by EDR, and dated 02/24/2020 has revealed that there are 7 Sacramento Co. ML sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>VERIZON WIRELESS TRU</b>	<b>2000 W EL CAMINO AVE</b>	<b>NNW 0 - 1/8 (0.019 mi.)</b>	<b>4</b>	<b>12</b>
VERIZON BUSINESS	2485 NATOMAS PARK DR	WSW 0 - 1/8 (0.063 mi.)	5	15
<b>2020 GATEWAY</b>	<b>2020 W EL CAMINO AVE</b>	<b>NW 1/8 - 1/4 (0.156 mi.)</b>	<b>6</b>	<b>16</b>
CABLE AND WIRELESS U	2495 NATOMAS PARK DR	SSW 1/8 - 1/4 (0.173 mi.)	7	19
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FOUNDATION HLTH/NATO	2554 MILL CREEK DR	E 1/8 - 1/4 (0.222 mi.)	8	19
Facility Status: Inactive. Included on a listing no longer updated.				
MCI TELECOMMUNICATIO	1740 CREEKSIDE OAKS	ESE 1/8 - 1/4 (0.226 mi.)	B9	20
Facility Status: Inactive. Included on a listing no longer updated.				
HONEYWELL	1740 CREEKSIDE OAKS	ESE 1/8 - 1/4 (0.226 mi.)	B10	20
Facility Status: Inactive. Included on a listing no longer updated.				

Notify 65: 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.

A review of the Notify 65 list, as provided by EDR, and dated 12/07/2020 has revealed that there are 2 Notify 65 sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ARCO SERVICE STATION	222 JIBBOOM STREET	S 1/2 - 1 (0.953 mi.)	16	35
<b>CALVADA SALES COMPAN</b>	<b>444 RICHARDS BLVD</b>	<b>SSE 1/2 - 1 (0.980 mi.)</b>	<b>17</b>	<b>35</b>

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

<u>Site Name</u>	<u>Database(s)</u>
SACRAMENTO-YOLO MOSQUITO & VECTOR CITY OF SACRAMENTO	CPS-SLIC Sacramento Co. CS

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# OVERVIEW MAP - 6302266.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

County Boundary

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

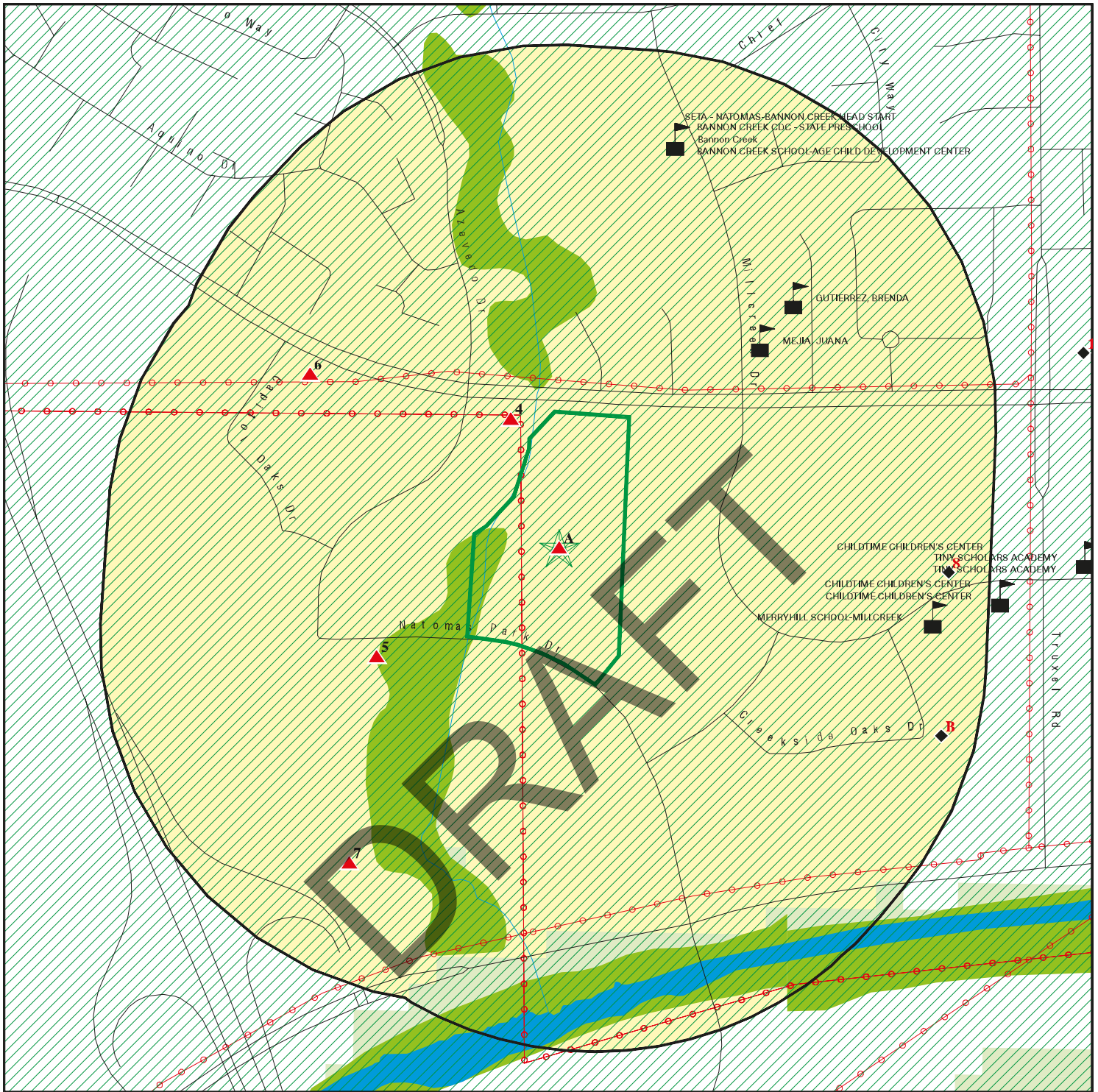


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento CA 95833  
 LAT/LONG: 38.61126 / 121.503939

CLIENT: ANALYTICAL ENVIRONMENTAL SERVICES  
 CONTACT: Charlane Gross  
 INQUIRY #: 6302266.2s  
 DATE: December 15, 2020 12:40 pm  
 Appendix D

# DETAIL MAP - 6302266.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

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: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento CA 95833  
 LAT/LONG: 38.61126 / 121.503939

CLIENT: ANALYTICAL ENVIRONMENTAL SERVICES  
 CONTACT: Charlane Gross  
 INQUIRY #: 6302266.2s  
 DATE: December 15, 2020 12:41 pm  
 Appendix D

## 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	1.000		0	0	0	0	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-VSQG	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 CONTROLS	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	2	NR	2
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST	0.500		0	0	2	NR	NR	2



## 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	2	NR	NR	2
Sacramento Co. CS	0.500		0	0	1	NR	NR	1
<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>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
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
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	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

## 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
LIENS 2	0.001		0	NR	NR	NR	NR	0
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
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	1	NR	1
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	1.000		0	0	0	0	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	0.250		0	0	NR	NR	NR	0
FINDS	0.001	1	0	NR	NR	NR	NR	1
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	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	2	NR	NR	2
CUPA Listings	0.250		0	0	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	1	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
Sacramento Co. ML	0.250	2	2	5	NR	NR	NR	9
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	2	NR	2
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001	1	0	NR	NR	NR	NR	1
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
<b><u>EDR HIGH RISK HISTORICAL RECORDS</u></b>								
<b><i>EDR Exclusive Records</i></b>								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
<b><u>EDR RECOVERED GOVERNMENT ARCHIVES</u></b>								
<b><i>Exclusive Recovered Govt. Archives</i></b>								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		4	2	5	8	5	0	24

## MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>&lt; 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>&gt; 1</u>	<u>Total Plotted</u>
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NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

DRAFT

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**A1**  
**Target**  
**Property**  
**NATOMAS RACQUET CLUB**  
**2450 NATOMAS PARK DR**  
**SACRAMENTO, CA 95833**

**FINDS** **1023274663**  
**N/A**

**Site 1 of 3 in cluster A**

**Actual:** FINDS:  
**18 ft.** Registry ID: 110065648598

Click Here:  
Environmental Interest/Information System:  
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

**A2**  
**Target**  
**Property**  
**T-MOBILE WEST CORP (SC06703A)**  
**2450 NATOMAS PARK DR**  
**SACRAMENTO, CA 95833**

**Sacramento Co. ML** **S123294673**  
**N/A**

**Site 2 of 3 in cluster A**

**Actual:** Sacramento Co. ML:  
**18 ft.** Name: T-MOBILE WEST CORP (SC06703A)  
Address: 2450 NATOMAS PARK DR  
City,State,Zip: SACRAMENTO, CA 95833  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: |  
Billing Codes UST: Not reported  
WG Bill Code: Not reported  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**A3**  
**Target**  
**Property**  
**NATOMAS SPORTS CLUB**  
**2450 NATOMAS PARK DR**  
**SACRAMENTO, CA 95833**

**Sacramento Co. ML** **S102593089**  
**CERS** **N/A**

**Site 3 of 3 in cluster A**

**Actual:** Sacramento Co. ML:  
**18 ft.** Name: NATOMAS SPORTS CLUB  
Address: 2450 NATOMAS PARK DR  
City,State,Zip: SACRAMENTO, CA 95833  
Facility Id: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NATOMAS SPORTS CLUB (Continued)**

**S102593089**

Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: Not reported  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**CERS:**

Name: NATOMAS SPORTS CLUB  
Address: 2450 NATOMAS PARK DR  
City,State,Zip: SACRAMENTO, CA 95833  
Site ID: 137438  
CERS ID: 10221493  
CERS Description: Chemical Storage Facilities

**Evaluation:**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 12-12-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations were noted at the time of the inspection. Notes: The CERS submittal had been not accepted for the ER/Contingency Plan not having the seismic locations. The ER/Contingency Plan was updated while on site. The facility added Hydrochloric Acid to the inventory. An updated CERS submittal was made today. Ensure that an annual HM submittal is made to CERS. Ensure that an adequate eyewash is provided in the pool room.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 12-07-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations observed at time of inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

**Coordinates:**

Site ID: 137438  
Facility Name: NATOMAS SPORTS CLUB

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NATOMAS SPORTS CLUB (Continued)**

**S102593089**

Env Int Type Code: HMBP  
Program ID: 10221493  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 38.611260  
Longitude: -121.503940

Affiliation:

Affiliation Type Desc: Parent Corporation  
Entity Name: NATOMAS RACQUET CLUB  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Property Owner  
Entity Name: Sparetime Inc  
Entity Title: Not reported  
Affiliation Address: 11344 Coloma Road Ste 350  
Affiliation City: Gold River  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95670  
Affiliation Phone: (916) 859-5910

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Document Preparer  
Entity Name: Ricky Ramos  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: Ricky Ramos  
Entity Title: Facilities Manager  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NATOMAS SPORTS CLUB (Continued)**

**S102593089**

Affiliation Type Desc: Environmental Contact  
Entity Name: Ricky Ramos  
Entity Title: Not reported  
Affiliation Address: 2450 Natomas Park Drive  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95833  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 2450 NATOMAS PARK DR  
Affiliation City: SACRAMENTO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95833  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: SPARE TIME INC  
Entity Title: Not reported  
Affiliation Address: 2450 NATOMAS PARK DR  
Affiliation City: SACRAMENTO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95833  
Affiliation Phone: (916) 859-5910

Affiliation Type Desc: Operator  
Entity Name: Sparetime Inc  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 859-5910

**4**  
**NNW**  
**< 1/8**  
**0.019 mi.**  
**99 ft.**

**VERIZON WIRELESS TRUXEL**  
**2000 W EL CAMINO AVE**  
**SACRAMENTO, CA 95833**

**Sacramento Co. ML S118691334**  
**CERS N/A**

**Relative:**  
**Higher**  
**Actual:**  
**18 ft.**

Sacramento Co. ML:  
Name: VERIZON WIRELESS TRUXEL  
Address: 2000 W EL CAMINO AVE  
City,State,Zip: SACRAMENTO, CA 95833  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: Not reported  
Target Property Bill Cod: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VERIZON WIRELESS TRUXEL (Continued)**

**S118691334**

Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**CERS:**

Name: VERIZON WIRELESS TRUXEL  
Address: 2000 W EL CAMINO AVE  
City,State,Zip: SACRAMENTO, CA 95833  
Site ID: 406576  
CERS ID: 10145543  
CERS Description: Chemical Storage Facilities

**Evaluation:**

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 10-26-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: NOTE: No violations observed at time of inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 12-16-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations noted this date.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

**Coordinates:**

Site ID: 406576  
Facility Name: Verizon Wireless Truxel  
Env Int Type Code: HMBP  
Program ID: 10145543  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 38.612530  
Longitude: -121.504550

**Affiliation:**

Affiliation Type Desc: Parent Corporation  
Entity Name: Verizon Wireless [Northern California]  
Entity Title: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VERIZON WIRELESS TRUXEL (Continued)**

**S118691334**

Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: Verizon Wireless  
Entity Title: Not reported  
Affiliation Address: 295 Parkshore Drive  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95630  
Affiliation Phone: (866) 694-2415

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Document Preparer  
Entity Name: Steve Skanderson  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact  
Entity Name: Environmental Compliance  
Entity Title: Not reported  
Affiliation Address: 295 Parkshore Drive  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 295 Parkshore Drive  
Affiliation City: Folsom  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95630  
Affiliation Phone: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VERIZON WIRELESS TRUXEL (Continued)**

**S118691334**

Affiliation Type Desc: Identification Signer  
Entity Name: armand delgado  
Entity Title: environmental compliance mgr  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: Verizon Wireless  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (866) 694-2415

**5**  
**WSW**  
**< 1/8**  
**0.063 mi.**  
**333 ft.**

**VERIZON BUSINESS**  
**2485 NATOMAS PARK DR**  
**SACRAMENTO, CA 95833**

**Sacramento Co. ML S108484524**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**20 ft.**

Sacramento Co. ML:  
Name: VERIZON BUSINESS  
Address: 2485 NATOMAS PARK DR  
City, State, Zip: SACRAMENTO, CA 95833  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: Not reported  
Billing Codes UST: Not reported  
WG Bill Code: Not reported  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

6  
NW  
1/8-1/4  
0.156 mi.  
822 ft.

2020 GATEWAY  
2020 W EL CAMINO AVE  
SACRAMENTO, CA 95833

Sacramento Co. ML S118417627  
CERS N/A

Relative:  
Higher  
Actual:  
18 ft.

Sacramento Co. ML:  
Name: 2020 GATEWAY  
Address: 2020 W EL CAMINO AVE  
City,State,Zip: SACRAMENTO, CA 95833  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: Not reported  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

CERS:  
Name: 2020 GATEWAY  
Address: 2020 W EL CAMINO AVE  
City,State,Zip: SACRAMENTO, CA 95833  
Site ID: 362206  
CERS ID: 10650523  
CERS Description: Chemical Storage Facilities

Evaluation:  
Eval General Type: Compliance Evaluation Inspection  
Eval Date: 02-05-2019  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations were noted at the time of the inspection. Notes: The primary emergency contact changed from Steve Barnett to Clayton Gardner. The CERS submittal was made today.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 03-14-2016  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No violations observed at time of inspection  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

2020 GATEWAY (Continued)

S118417627

Eval Source: CERS

Coordinates:

Site ID: 362206  
Facility Name: 2020 GATEWAY  
Env Int Type Code: HMBP  
Program ID: 10650523  
Coord Name: Not reported  
Ref Point Type Desc: Entrance point of a facility or station  
Latitude: 38.613630  
Longitude: -121.509280

Affiliation:

Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 301 University Ave, #100  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95825  
Affiliation Phone: Not reported

Affiliation Type Desc: Document Preparer  
Entity Name: Clay Gardner  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: 2020 GATEWAY  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655  
Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Operator  
Entity Name: Colliers International Real Estate Management Services  
Entity Title: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

2020 GATEWAY (Continued)

S118417627

Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 923-2020

Affiliation Type Desc: Property Owner  
Entity Name: Bannon Investors c/o KKN Inc, LLC Ltd.  
Entity Title: Not reported  
Affiliation Address: 2020 W. El Camino Ave.  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95833  
Affiliation Phone: (916) 978-4890

Affiliation Type Desc: Environmental Contact  
Entity Name: Clay Gardner  
Entity Title: Not reported  
Affiliation Address: 2020 W. El Camino Ave, #103  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95833  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: Clay Gardner  
Entity Title: Chief Engineer  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: Bannon Investors c/o KKN Inc.  
Entity Title: Not reported  
Affiliation Address: 2020 W. El Camino Ave, Suite #120  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95833  
Affiliation Phone: (916) 978-4890

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**7**  
**SSW**  
**1/8-1/4**  
**0.173 mi.**  
**916 ft.**

**CABLE AND WIRELESS USA**  
**2495 NATOMAS PARK DR**  
**SACRAMENTO, CA 95833**

**Sacramento Co. ML S103707925**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**26 ft.**

Sacramento Co. ML:  
Name: CABLE AND WIRELESS USA  
Address: 2495 NATOMAS PARK DR  
City,State,Zip: SACRAMENTO, CA 95833  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: I  
Billing Codes UST: Not reported  
WG Bill Code: Not reported  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**8**  
**East**  
**1/8-1/4**  
**0.222 mi.**  
**1172 ft.**

**FOUNDATION HLTH/NATOMAS**  
**2554 MILL CREEK DR**  
**SACRAMENTO, CA 95833**

**Sacramento Co. ML S103964834**  
**N/A**

**Relative:**  
**Lower**  
**Actual:**  
**17 ft.**

Sacramento Co. ML:  
Name: FOUNDATION HLTH/NATOMAS  
Address: 2554 MILL CREEK DR  
City,State,Zip: SACRAMENTO, CA 95833  
Facility Id: Not reported  
Facility Status: Inactive. Included on a listing no longer updated.  
FD: Not reported  
Billing Codes BP: Out of Business  
Billing Codes UST: No Tanks  
WG Bill Code: Oil Changed by Outside Company-No Fee  
Target Property Bill Cod: 51  
Food Bill Code: 51  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: 0  
UST Tank Test Date: Not reported  
SIC Code: 8062

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FOUNDATION HLTH/NATOMAS (Continued)**

**S103964834**

Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**B9**  
**ESE**  
**1/8-1/4**  
**0.226 mi.**  
**1195 ft.**

**MCI TELECOMMUNICATIONS**  
**1740 CREEKSIDE OAKS**  
**SACRAMENTO, CA 95833**

**Sacramento Co. ML**

**S123292687**  
**N/A**

**Site 1 of 2 in cluster B**

**Relative:**  
**Lower**  
**Actual:**  
**17 ft.**

Sacramento Co. ML:  
Name: MCI TELECOMMUNICATIONS  
Address: 1740 CREEKSIDE OAKS  
City,State,Zip: SACRAMENTO, CA 95833  
Facility Id: Not reported  
Facility Status: Inactive. Included on a listing no longer updated.  
FD: Not reported  
Billing Codes BP: Disclaimer  
Billing Codes UST: No Tanks  
WG Bill Code: Oil Changed by Outside Company-No Fee  
Target Property Bill Cod: 50  
Food Bill Code: 50  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: 0  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

**B10**  
**ESE**  
**1/8-1/4**  
**0.226 mi.**  
**1195 ft.**

**HONEYWELL**  
**1740 CREEKSIDE OAKS**  
**SACRAMENTO, CA 95833**

**Sacramento Co. ML**

**S123291754**  
**N/A**

**Site 2 of 2 in cluster B**

**Relative:**  
**Lower**  
**Actual:**  
**17 ft.**

Sacramento Co. ML:  
Name: HONEYWELL  
Address: 1740 CREEKSIDE OAKS  
City,State,Zip: SACRAMENTO, CA 95833  
Facility Id: Not reported  
Facility Status: Inactive. Included on a listing no longer updated.  
FD: U  
Billing Codes BP: Disclaimer  
Billing Codes UST: No Tanks  
WG Bill Code: Oil Changed by Outside Company-No Fee  
Target Property Bill Cod: 50  
Food Bill Code: 50  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HONEYWELL (Continued)**

**S123291754**

HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: 0  
UST Tank Test Date: Not reported  
SIC Code: 7382  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: Not reported

11  
ENE  
1/4-1/2  
0.312 mi.  
1650 ft.

**SHELL SERVICE STATION**  
**1599 W EL CAMINO**  
**SACRAMENTO, CA 95833**

**LUST S101590824**  
**CA FID UST N/A**  
**Cortese**  
**CERS**

**Relative:**  
**Lower**

**LUST REG 5:**

**Actual:**  
**17 ft.**

Name: SHELL SERVICE STATION  
Address: 1599 WEST EL CAMINO AVENUE  
City: SACRAMENTO  
Region: 5  
Status: Not reported  
Case Number: 341395  
Case Type: Other ground water affected  
Substance: GASOLINE  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

**LUST:**

Name: SHELL SERVICE STATION  
Address: 1599 WEST EL CAMINO AVENUE  
City,State,Zip: SACRAMENTO, CA 95833  
Lead Agency: SACRAMENTO COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606783253](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606783253)  
Global Id: T0606783253  
Latitude: 38.612969813  
Longitude: -121.4976787  
Status: Completed - Case Closed  
Status Date: 04/12/2011  
Case Worker: JJB  
RB Case Number: 341395  
Local Agency: SACRAMENTO COUNTY LOP  
File Location: Local Agency  
Local Case Number: G014  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Gasoline  
Site History: See GeoTrack link for Site History

**LUST:**

Global Id: T0606783253  
Contact Type: Local Agency Caseworker  
Contact Name: JACK BELLAN  
Organization Name: SACRAMENTO COUNTY LOP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHELL SERVICE STATION (Continued)**

**S101590824**

Address: 10590 Armstong Ave., Suite A  
City: Mather  
Email: bellanj@saccounty.net  
Phone Number: Not reported

Global Id: T0606783253  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

**LUST:**

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 10/05/2004  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 07/21/2004  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 08/25/2004  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 12/29/2004  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 08/27/2007  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 06/02/2008  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 10/30/2008  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 10/21/2008  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHELL SERVICE STATION (Continued)**

**S101590824**

Date: 03/03/2005  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 02/18/2009  
Action: File review

Global Id: T0606783253  
Action Type: Other  
Date: 08/28/2002  
Action: Leak Reported

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 05/11/2005  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 08/30/2005  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 02/08/2008  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 08/14/2006  
Action: File review

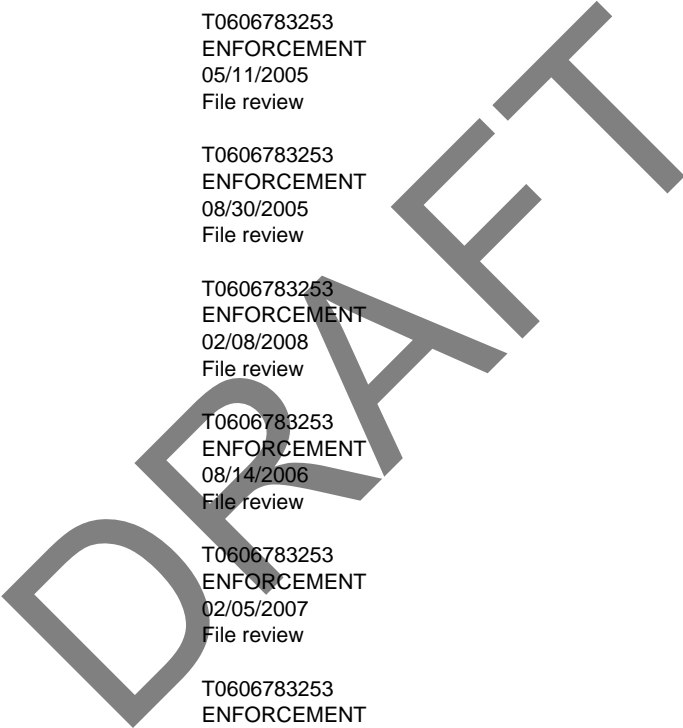
Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 02/05/2007  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 05/03/2006  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 11/01/2005  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 07/29/2008  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 01/07/2004  
Action: File review



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

SHELL SERVICE STATION (Continued)

S101590824

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 07/24/2009  
Action: Technical Correspondence / Assistance / Other

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 09/17/2009  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 04/21/2009  
Action: Technical Correspondence / Assistance / Other

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 10/21/2002  
Action: Notice of Responsibility

Global Id: T0606783253  
Action Type: RESPONSE  
Date: 03/24/2009  
Action: Correspondence

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 11/01/2007  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 10/06/2010  
Action: Staff Letter

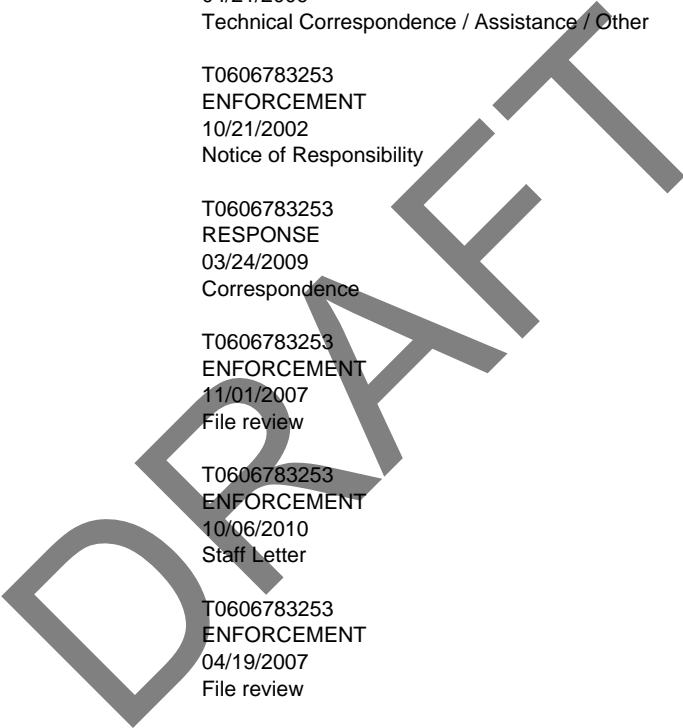
Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 04/19/2007  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 01/29/2007  
Action: Verbal Communication

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 07/12/2006  
Action: Technical Correspondence / Assistance / Other

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 10/12/2010  
Action: Technical Correspondence / Assistance / Other

Global Id: T0606783253  
Action Type: ENFORCEMENT



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHELL SERVICE STATION (Continued)**

**S101590824**

Date: 03/14/2007  
Action: Meeting

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 10/31/2006  
Action: Technical Correspondence / Assistance / Other

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 11/30/2006  
Action: File review

Global Id: T0606783253  
Action Type: Other  
Date: 08/11/2002  
Action: Leak Discovery

Global Id: T0606783253  
Action Type: REMEDIATION  
Date: 11/15/2005  
Action: Pump & Treat (P&T) Groundwater

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 05/19/2008  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 08/08/2005  
Action: File review

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 07/13/2007  
Action: Technical Correspondence / Assistance / Other

Global Id: T0606783253  
Action Type: ENFORCEMENT  
Date: 05/03/2004  
Action: File review

Global Id: T0606783253  
Action Type: Other  
Date: 08/11/2002  
Action: Leak Stopped

**LUST:**

Global Id: T0606783253  
Status: Open - Case Begin Date  
Status Date: 08/11/2002

Global Id: T0606783253  
Status: Open  
Status Date: 10/21/2002

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHELL SERVICE STATION (Continued)**

**S101590824**

Global Id: T0606783253  
Status: Open - Verification Monitoring  
Status Date: 10/21/2002

Global Id: T0606783253  
Status: Completed - Case Closed  
Status Date: 04/12/2011

**CA FID UST:**

Facility ID: 34006893  
Regulated By: UTNKA  
Regulated ID: Not reported  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: Not reported  
Mail To: Not reported  
Mailing Address: 1390 WILLOW PASS RD  
Mailing Address 2: Not reported  
Mailing City,St,Zip: SACRAMENTO 95833  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

**CORTESE:**

Name: SHELL SERVICE STATION  
Address: 1599 WEST EL CAMINO AVENUE  
City,State,Zip: SACRAMENTO, CA 95833  
Region: CORTESE  
Envirostor Id: Not reported  
Global ID: T0606783253  
Site/Facility Type: LUST CLEANUP SITE  
Cleanup Status: COMPLETED - CASE CLOSED  
Status Date: Not reported  
Site Code: Not reported  
Latitude: Not reported  
Longitude: Not reported  
Owner: Not reported  
Enf Type: Not reported  
Swat R: Not reported  
Flag: active  
Order No: Not reported  
Waste Discharge System No: Not reported  
Effective Date: Not reported  
Region 2: Not reported  
WID Id: Not reported  
Solid Waste Id No: Not reported  
Waste Management Uit Name: Not reported  
File Name: Active Open

**CERS:**

Name: SHELL SERVICE STATION

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHELL SERVICE STATION (Continued)**

**S101590824**

Address: 1599 WEST EL CAMINO AVENUE  
City,State,Zip: SACRAMENTO, CA 95833  
Site ID: 229635  
CERS ID: T0606783253  
CERS Description: Leaking Underground Storage Tank Cleanup Site

**Affiliation:**

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Local Agency Caseworker  
Entity Name: JACK BELLAN - SACRAMENTO COUNTY LOP  
Entity Title: Not reported  
Affiliation Address: 10590 Armstong Ave., Suite A  
Affiliation City: Mather  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

12  
WSW  
1/4-1/2  
0.366 mi.  
1935 ft.

**CHRISTOFER OAKS ONE  
2500 VENTURE OAKS  
SACRAMENTO, CA 95833**

**LUST S102427872  
Sacramento Co. CS  
Cortese  
HIST CORTESE  
CERS  
N/A**

**Relative:  
Higher  
Actual:  
18 ft.**

**LUST REG 5:**  
Name: CHRISTOFER OAKS ONE  
Address: 2500 VENTURE OAKS WAY  
City: SACRAMENTO  
Region: 5  
Status: Case Closed  
Case Number: 340665  
Case Type: Soil only  
Substance: HYDRAULIC OIL  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

**LUST:**

Name: CHRISTOFER OAKS ONE  
Address: 2500 VENTURE OAKS WAY  
City,State,Zip: SACRAMENTO, CA 95833  
Lead Agency: SACRAMENTO COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606700566](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606700566)  
Global Id: T0606700566  
Latitude: 38.610114  
Longitude: -121.51145

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHRISTOFER OAKS ONE (Continued)**

**S102427872**

Status: Completed - Case Closed  
Status Date: 07/29/1994  
Case Worker: Not reported  
RB Case Number: 340665  
Local Agency: Not reported  
File Location: Not reported  
Local Case Number: B554  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating  
Site History: Not reported

LUST:

Global Id: T0606700566  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

LUST:

Global Id: T0606700566  
Action Type: Other  
Date: 10/16/1992  
Action: Leak Reported

Global Id: T0606700566  
Action Type: Other  
Date: 07/23/1992  
Action: Leak Discovery

LUST:

Global Id: T0606700566  
Status: Open - Case Begin Date  
Status Date: 04/10/1992

Global Id: T0606700566  
Status: Open - Site Assessment  
Status Date: 04/10/1992

Global Id: T0606700566  
Status: Open - Site Assessment  
Status Date: 07/23/1992

Global Id: T0606700566  
Status: Open - Site Assessment  
Status Date: 08/04/1993

Global Id: T0606700566  
Status: Completed - Case Closed  
Status Date: 07/29/1994

Sacramento Co. CS:  
Name:

CHRISTOPHER OAK I



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHRISTOFER OAKS ONE (Continued)**

**S102427872**

Address: 2500 VENTURE OAKS WAY  
City,State,Zip: SACRAMENTO, CA  
State Site Number: B554  
Lead Staff: Erikson, S.  
Lead Agency: HM  
Remedial Action Taken: YE, S  
Substance: Hydraulic Oil  
Date Reported: 05/19/1992  
Facility Id: RO0001124  
Case Type: Other ground water affected  
Case Closed: Y  
**Date Closed: 08/08/1994**  
**Case Type: Other Groundwater affected (uses other than drinking water)**  
**Substance: Hydraulic Oil**

**CORTESE:**

Name: CHRISTOFER OAKS ONE  
Address: 2500 VENTURE OAKS WAY  
City,State,Zip: SACRAMENTO, CA 95833  
Region: CORTESE  
Envirostor Id: Not reported  
Global ID: T0606700566  
Site/Facility Type: LUST CLEANUP SITE  
Cleanup Status: COMPLETED - CASE CLOSED  
Status Date: Not reported  
Site Code: Not reported  
Latitude: Not reported  
Longitude: Not reported  
Owner: Not reported  
Enf Type: Not reported  
Swat R: Not reported  
Flag: active  
Order No: Not reported  
Waste Discharge System No: Not reported  
Effective Date: Not reported  
Region 2: Not reported  
WID Id: Not reported  
Solid Waste Id No: Not reported  
Waste Management Uit Name: Not reported  
File Name: Active Open

**HIST CORTESE:**

edr\_fname: CHRISTOFER OAKS ONE  
edr\_fadd1: 2500 VENTURE OAKS  
City,State,Zip: SACRAMENTO, CA 95833  
Region: CORTESE  
Facility County Code: 34  
Reg By: LTNKA  
Reg Id: 340665

**CERS:**

Name: CHRISTOFER OAKS ONE  
Address: 2500 VENTURE OAKS WAY  
City,State,Zip: SACRAMENTO, CA 95833  
Site ID: 244814  
CERS ID: T0606700566

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHRISTOFER OAKS ONE (Continued)**

**S102427872**

CERS Description: Leaking Underground Storage Tank Cleanup Site  
Affiliation:  
Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**C13  
ENE  
1/4-1/2  
0.443 mi.  
2337 ft.**

**DISCOVERY PLAZA (FORMER SAGE CLEANERS)  
1500-1590 WEST EL CAMINO AVENUE  
SACRAMENTO, CA**

**CPS-SLIC S106486442  
CERS N/A**

**Site 1 of 2 in cluster C**

**Relative:  
Lower  
Actual:  
17 ft.**

CPS-SLIC:  
Name: DISCOVERY PLAZA (FORMER SAGE CLEANERS)  
Address: 1500-1590 WEST EL CAMINO AVENUE  
City,State,Zip: SACRAMENTO, CA  
Region: STATE  
**Facility Status: Completed - Case Closed**  
Status Date: 03/02/1999  
Global Id: SLT5S1243164  
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5S)  
Lead Agency Case Number: Not reported  
Latitude: 38.615694  
Longitude: -121.535125  
Case Type: Cleanup Program Site  
Case Worker: ZZZ  
Local Agency: Not reported  
RB Case Number: SLT5S124  
File Location: Regional Board  
Potential Media Affected: Other Groundwater (uses other than drinking water), Soil  
Potential Contaminants of Concern: Not reported  
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

CERS:  
Name: DISCOVERY PLAZA (FORMER SAGE CLEANERS)  
Address: 1500-1590 WEST EL CAMINO AVENUE  
City,State,Zip: SACRAMENTO, CA  
Site ID: 255929  
CERS ID: SLT5S1243164  
CERS Description: Cleanup Program Site

Affiliation:  
Affiliation Type Desc: Regional Board Caseworker  
Entity Name: zzz - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DISCOVERY PLAZA (FORMER SAGE CLEANERS) (Continued)**

**S106486442**

Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**C14**  
**ENE**  
**1/4-1/2**  
**0.443 mi.**  
**2337 ft.**

**DISCOVERY PLAZA SHOPPING CENTER**  
**1500 WEST EL CAMINO AVENUE**  
**SACRAMENTO, CA 95833**

**CPS-SLIC** **S106855373**  
**CERS** **N/A**

**Site 2 of 2 in cluster C**

**Relative:**  
**Lower**  
**Actual:**  
**17 ft.**

**CPS-SLIC:**  
Name: DISCOVERY PLAZA SHOPPING CENTER  
Address: 1500 WEST EL CAMINO AVENUE  
City,State,Zip: SACRAMENTO, CA 95833  
Region: STATE  
**Facility Status: Completed - Case Closed**  
Status Date: 03/31/2011  
Global Id: SL0606778991  
Lead Agency: SACRAMENTO COUNTY LOP  
Lead Agency Case Number: C259  
Latitude: 38.612121  
Longitude: -121.494878  
Case Type: Cleanup Program Site  
Case Worker: Not reported  
Local Agency: Not reported  
RB Case Number: Not reported  
File Location: Local Agency  
Potential Media Affected: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Tetrachloroethylene (PCE), Trichloroethylene (TCE)  
Site History: See GeoTrack link for Site History

Click here to access the California GeoTracker records for this facility:

**CERS:**  
Name: DISCOVERY PLAZA SHOPPING CENTER  
Address: 1500 WEST EL CAMINO AVENUE  
City,State,Zip: SACRAMENTO, CA 95833  
Site ID: 199670  
CERS ID: SL0606778991  
CERS Description: Cleanup Program Site

**Affiliation:**  
Affiliation Type Desc: Regional Board Caseworker  
Entity Name: DURIN LINDERHOLM - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 Sun Center Drive, Suite 200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: 9164644657

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

15  
SSE  
1/2-1  
0.835 mi.  
4411 ft.

**BIGGERS INDUSTRIAL GARLIN**  
**551 SEQUOIA PACIFIC**  
**SACRAMENTO, CA 95814**

**ENVIROSTOR**  
**CHMIRS**  
**HIST CORTESE**

**S100275552**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**22 ft.**

**ENVIROSTOR:**

Name: BIGGERS INDUSTRIAL GERLINGER  
 Address: 551 SEQUOIA PACIFIC BOULEVARD  
 City,State,Zip: SACRAMENTO, CA 95814  
 Facility ID: 34340018  
 Status: No Further Action  
 Status Date: 09/30/1992  
 Site Code: 100239  
 Site Type: Historical  
 Site Type Detailed: \* Historical  
 Acres: 0  
 NPL: NO  
 Regulatory Agencies: NONE SPECIFIED  
 Lead Agency: NONE SPECIFIED  
 Program Manager: Not reported  
 Supervisor: Steven Becker  
 Division Branch: Cleanup Sacramento  
 Assembly: 07  
 Senate: 06  
 Special Program: Not reported  
 Restricted Use: NO  
 Site Mgmt Req: NONE SPECIFIED  
 Funding: Not reported  
 Latitude: 38.59902  
 Longitude: -121.4960  
 APN: 00102000350000  
 Past Use: ILLEGAL DUMPING, ILLEGAL DUMPING, METAL PLATING - CHROME, METAL PLATING - OTHER  
 Potential COC: \* CONTAMINATED SOIL Lead Chromium VI Lead Chromium VI  
 Confirmed COC: Lead Chromium VI  
 Potential Description: OTH, SOIL, CSS, OTH, SOIL  
 Alias Name: 00102000350000  
 Alias Type: APN  
 Alias Name: 100239  
 Alias Type: Project Code (Site Code)  
 Alias Name: 34340018  
 Alias Type: Envirostor ID Number

**Completed Info:**

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Preliminary Endangerment Assessment Report  
 Completed Date: 09/30/1992  
 Comments: PEA completed. Low levels of CrVI were detected in the shallow (15ft) ground water (.023 ppm). Elevated lead and chromium seem in 1988 S&E investigation apparently were removed with a railroad spur sometime during the transfer of ownership. Remaining lead and chromium are at acceptable levels for the current and projected land use of commercial/ industrial. No further action required by DTSC. RWQCB informed of low CrVI levels.

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: \* Expedited Response Action

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BIGGERS INDUSTRIAL GARLIN (Continued)**

**S100275552**

Completed Date: 06/29/1992  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Screening  
Completed Date: 12/18/1989  
Comments: SITE SCREENING DONE PROPERTY OWNED BY MARVIN OATES AND RICK MASSIE. GENERAL WASTE REMOVAL COMPLETED IN 1988. NO CLEANUP DONE IN AREA OF DRAIN; RECOMMEND PRELIMINARY ENDANGER- MENT ASSESSMENT (MEDIUM PRIORITY).

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Screening  
Completed Date: 12/06/1989  
Comments: SITE SCREENING DONE LETTER SENT TO REQUEST DOCUMENTATION OF CLEAN-UP (IF ANY).

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Discovery  
Completed Date: 01/05/1988  
Comments: FACILITY IDENTIFIED COMPLAINT RECEIVED INDICATING 55-GALLON DRUMS BEING DUMPED AT RAILROAD TRACKS.

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

**CHMIRS:**

Name: Not reported  
Address: 551 SEQUOIA PACIFIC BL  
City,State,Zip: SACRAMENTO, CA 95814  
OES Incident Number: 000520  
OES notification: Not reported  
OES Date: Not reported  
OES Time: Not reported  
**Date Completed: 07-MAR-90**  
Property Use: 500  
Agency Id Number: 34080  
Agency Incident Number: 7459  
Time Notified: 1511  
Time Completed: 1623  
Surrounding Area: 500  
Estimated Temperature: Not reported  
Property Management: Not reported  
More Than Two Substances Involved?: N  
Resp Agncy Personel # Of Decontaminated: 0  
Responding Agency Personel # Of Injuries: 0  
Responding Agency Personel # Of Fatalities: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BIGGERS INDUSTRIAL GARLIN (Continued)**

**S100275552**

Others Number Of Decontaminated: 0  
Others Number Of Injuries: 0  
Others Number Of Fatalities: 0  
Vehicle Make/year: Not reported  
Vehicle License Number: Not reported  
Vehicle State: Not reported  
Vehicle Id Number: Not reported  
CA DOT PUC/ICC Number: Not reported  
Company Name: Not reported  
Reporting Officer Name/ID: STEVE AYALA CAPTAIN T-20-A  
Report Date: 07-MAR-90  
Facility Telephone: 916 449-5266  
Waterway Involved: Not reported  
Waterway: Not reported  
Spill Site: Not reported  
Cleanup By: Not reported  
Containment: Not reported  
What Happened: Not reported  
Type: Not reported  
Measure: Not reported  
Other: Not reported  
Date/Time: Not reported  
Year: 88-92  
Agency: Not reported  
Incident Date: 07-MAR-90  
Admin Agency: Not reported  
Amount: Not reported  
Contained: Not reported  
Site Type: Not reported  
E Date: 29-MAY-90  
Substance: Not reported  
Unknown: Not reported  
Substance #2: Not reported  
Substance #3: Not reported  
Evacuations: Not reported  
Number of Injuries: Not reported  
Number of Fatalities: Not reported  
#1 Pipeline: Not reported  
#2 Pipeline: Not reported  
#3 Pipeline: Not reported  
#1 Vessel >= 300 Tons: Not reported  
#2 Vessel >= 300 Tons: Not reported  
#3 Vessel >= 300 Tons: Not reported  
Evacs: Not reported  
Injuries: Not reported  
Fataals: Not reported  
Comments: Not reported  
Description: Not reported

**HIST CORTESE:**

edr\_fname: BIGGERS INDUSTRIAL GARLIN  
edr\_fadd1: 551 SEQUOIA PACIFIC  
City,State,Zip: SACRAMENTO, CA 95814  
Region: CORTESE  
Facility County Code: 34  
Reg By: CALSI  
Reg Id: 34340018

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

16  
South  
1/2-1  
0.953 mi.  
5031 ft.

**ARCO SERVICE STATION NO. 6168**  
**222 JIBBOOM STREET**  
**SACRAMENTO, CA 92324**

**Notify 65**    **S100179023**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**23 ft.**

NOTIFY 65:  
Name: ARCO SERVICE STATION NO. 6168  
Address: 222 JIBBOOM STREET  
City,State,Zip: SACRAMENTO, CA 92324  
Date Reported: Not reported  
Staff Initials: Not reported  
Board File Number: Not reported  
Facility Type: Not reported  
Discharge Date: Not reported  
Issue Date: Not reported  
Incident Description: Not reported  
Global ID: Not reported  
Status: Not reported

17  
SSE  
1/2-1  
0.980 mi.  
5175 ft.

**CALVADA SALES COMPANY**  
**444 RICHARDS BLVD**  
**SACRAMENTO, CA 95814**

**LUST**    **S101590615**  
**Sacramento Co. CS**    **N/A**  
**CERS HAZ WASTE**  
**SWEEPS UST**  
**CA FID UST**  
**Cortese**  
**Sacramento Co. ML**  
**Notify 65**  
**CERS**

**Relative:**  
**Higher**  
**Actual:**  
**23 ft.**

LUST REG 5:  
Name: CALVADA FOOD SALES  
Address: 444 RICHARDS BLVD  
City: SACRAMENTO  
Region: 5  
Status: Case Closed  
Case Number: 341185  
Case Type: Other ground water affected  
Substance: HYDROCARBONS  
Staff Initials: VJF  
Lead Agency: Local  
Program: LUST  
MTBE Code: N/A

LUST:  
Name: CALVADA FOOD SALES  
Address: 444 RICHARDS BLVD  
City,State,Zip: SACRAMENTO, CA 95814  
Lead Agency: SACRAMENTO COUNTY LOP  
Case Type: LUST Cleanup Site  
Geo Track: [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=T0606701010](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606701010)  
Global Id: T0606701010  
Latitude: 38.596452  
Longitude: -121.496161  
Status: Completed - Case Closed  
Status Date: 12/19/2007  
Case Worker: DVA  
RB Case Number: 341185  
Local Agency: SACRAMENTO COUNTY LOP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CALVADA SALES COMPANY (Continued)**

**S101590615**

File Location: Local Agency  
Local Case Number: E577  
Potential Media Affect: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Other Solvent or Non-Petroleum Hydrocarbon  
Site History: Not reported

LUST:

Global Id: T0606701010  
Contact Type: Local Agency Caseworker  
Contact Name: DAVID VON ASPERN  
Organization Name: SACRAMENTO COUNTY LOP  
Address: 10590 ARMSTRONG AVENUE, SUITE A  
City: MATHER  
Email: vonaspernd@sacounty.net  
Phone Number: Not reported

Global Id: T0606701010  
Contact Type: Regional Board Caseworker  
Contact Name: VERA FISCHER  
Organization Name: CENTRAL VALLEY RWQCB (REGION 5S)  
Address: 11020 SUN CENTER DRIVE #200  
City: RANCHO CORDOVA  
Email: vera.fischer@waterboards.ca.gov  
Phone Number: Not reported

LUST:

Global Id: T0606701010  
Action Type: ENFORCEMENT  
Date: 10/29/2004  
Action: File review

Global Id: T0606701010  
Action Type: Other  
Date: 05/11/1998  
Action: Leak Reported

Global Id: T0606701010  
Action Type: ENFORCEMENT  
Date: 03/05/1998  
Action: Notification - Proposition 65

Global Id: T0606701010  
Action Type: ENFORCEMENT  
Date: 05/17/2004  
Action: File review

Global Id: T0606701010  
Action Type: ENFORCEMENT  
Date: 12/19/2007  
Action: Closure/No Further Action Letter

Global Id: T0606701010  
Action Type: Other  
Date: 01/13/1998  
Action: Leak Discovery

Global Id: T0606701010



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CALVADA SALES COMPANY (Continued)**

**S101590615**

Action Type: REMEDIATION  
Date: 07/30/2004  
Action: Monitored Natural Attenuation

Global Id: T0606701010  
Action Type: ENFORCEMENT  
Date: 03/05/1998  
Action: Notice of Responsibility

Global Id: T0606701010  
Action Type: Other  
Date: 07/30/2004  
Action: Leak Stopped

**LUST:**

Global Id: T0606701010  
Status: Open - Case Begin Date  
Status Date: 01/13/1998

Global Id: T0606701010  
Status: Open - Site Assessment  
Status Date: 07/12/2001

Global Id: T0606701010  
Status: Open - Verification Monitoring  
Status Date: 09/27/2006

Global Id: T0606701010  
Status: Completed - Case Closed  
Status Date: 12/19/2007

**Sacramento Co. CS:**

Name: CALVADA SALES  
Address: 444 RICHARDS BLVD  
City,State,Zip: SACRAMENTO, CA  
State Site Number: C230  
Lead Staff: VonAspern, D.  
Lead Agency: HM  
Remedial Action Taken: NO  
Substance: Automotive(motor gasoline and additives)  
Date Reported: 01/09/1998  
Facility Id: RO0001005  
Case Type: Undefined  
Case Closed: Y  
**Date Closed: 03/05/1998**  
**Case Type: Undetermined affected**  
**Substance: Automotive(motor gasoline and additives)**

**CERS HAZ WASTE:**

Name: CALVADA SALES CO  
Address: 444 RICHARDS BLVD  
City,State,Zip: SACRAMENTO, CA 95811  
Site ID: 102549  
CERS ID: 10220527  
CERS Description: Hazardous Waste Generator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CALVADA SALES COMPANY (Continued)**

**S101590615**

**SWEEPS UST:**

Name: CALVADA SALES COMPANY  
Address: 444 RICHARDS BLVD  
City: SACRAMENTO  
Status: Active  
Comp Number: 26  
Number: 2  
Board Of Equalization: 44-018592  
Referral Date: 08-19-92  
Action Date: 01-06-93  
Created Date: 10-14-88  
Owner Tank Id: 2  
SWRCB Tank Id: 34-000-000026-000002  
Tank Status: A  
Capacity: 5000  
Active Date: 10-14-88  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: 1

Name: CALVADA SALES COMPANY  
Address: 444 RICHARDS BLVD  
City: SACRAMENTO  
Status: Not reported  
Comp Number: 26  
Number: Not reported  
Board Of Equalization: 44-018592  
Referral Date: Not reported  
Action Date: Not reported  
Created Date: Not reported  
Owner Tank Id: Not reported  
SWRCB Tank Id: 34-000-000026-000001  
Tank Status: Not reported  
Capacity: 2000  
Active Date: Not reported  
Tank Use: M.V. FUEL  
STG: PRODUCT  
Content: REG UNLEADED  
Number Of Tanks: 1

**CA FID UST:**

Facility ID: 34002937  
Regulated By: UTNKA  
Regulated ID: Not reported  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: 9164416290  
Mail To: Not reported  
Mailing Address: 444 RICHARDS BLVD  
Mailing Address 2: Not reported  
Mailing City,St,Zip: SACRAMENTO 95814  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)  
EDR ID Number  
EPA ID Number

**CALVADA SALES COMPANY (Continued)**

**S101590615**

EPA ID: Not reported  
Comments: Not reported  
Status: Active

**CORTESE:**

Name: CALVADA FOOD SALES  
Address: 444 RICHARDS BLVD  
City,State,Zip: SACRAMENTO, CA 95814  
Region: CORTESE  
Envirostor Id: Not reported  
Global ID: T0606701010  
Site/Facility Type: LUST CLEANUP SITE  
Cleanup Status: COMPLETED - CASE CLOSED  
Status Date: Not reported  
Site Code: Not reported  
Latitude: Not reported  
Longitude: Not reported  
Owner: Not reported  
Enf Type: Not reported  
Swat R: Not reported  
Flag: active  
Order No: Not reported  
Waste Discharge System No: Not reported  
Effective Date: Not reported  
Region 2: Not reported  
WID Id: Not reported  
Solid Waste Id No: Not reported  
Waste Management Uit Name: Not reported  
File Name: Active Open

**Sacramento Co. ML:**

Name: CALVADA SALES CO  
Address: 444 RICHARDS BLVD  
City,State,Zip: SACRAMENTO, CA 95811  
Facility Id: Not reported  
Facility Status: Not reported  
FD: Not reported  
Billing Codes BP: A  
Billing Codes UST: Not reported  
WG Bill Code: A  
Target Property Bill Cod: Not reported  
Food Bill Code: Not reported  
CUPA Permit Date: Not reported  
HAZMAT Permit Date: Not reported  
HAZMAT Inspection Date: Not reported  
Hazmat Date BP Received: Not reported  
UST Permit Dt: Not reported  
UST Inspection Date: Not reported  
UST Tank Test Date: Not reported  
Number of Tanks: Not reported  
UST Tank Test Date: Not reported  
SIC Code: Not reported  
Tier Permitting: Not reported  
AST Bill Code: Not reported  
CALARP Bill Code: I

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CALVADA SALES COMPANY (Continued)**

**S101590615**

NOTIFY 65:

Name: CALVADA FOOD SALES  
Address: 444 RICHARDS BLVD  
City,State,Zip: SACRAMENTO, CA 95814  
Date Reported: Not reported  
Staff Initials: Not reported  
Board File Number: Not reported  
Facility Type: Not reported  
Discharge Date: Not reported  
Issue Date: 03/05/1998  
Incident Description: Not reported  
Global ID: Not reported  
Status: Not reported

Name: CALVADA FOOD SALES  
Address: 444 RICHARDS BLVD  
City,State,Zip: SACRAMENTO, CA 95814  
Date Reported: Not reported  
Staff Initials: Not reported  
Board File Number: Not reported  
Facility Type: Not reported  
Discharge Date: Not reported  
Issue Date: Not reported  
Incident Description: Not reported  
Global ID: Not reported  
Status: Not reported

CERS:

Name: CALVADA SALES CO  
Address: 444 RICHARDS BLVD  
City,State,Zip: SACRAMENTO, CA 95811  
Site ID: 102549  
CERS ID: 10220527  
CERS Description: Chemical Storage Facilities

Violations:

Site ID: 102549  
Site Name: CALVADA SALES CO  
Violation Date: 7/19/2018  
Citation: 40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.31  
Violation Description: Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.  
Violation Notes: Returned to compliance on 07/27/2018. OBSERVATION: Oil spilled from the compressor was observed on the floor of the compressor room of the freezer building. Also, oily soil was observed on the ground where the condenser is cleaned out at the cooler building. CORRECTIVE ACTION: Submit photos/documentation to this department demonstrating the spill has been properly removed and managed.  
Violation Division: Sacramento County Env Management Department  
Violation Program: HW  
Violation Source: CERS

DRAFT

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CALVADA SALES COMPANY (Continued)**

**S101590615**

Evaluation:

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 07-19-2018  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No hazardous materials violations observed at time of inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 07-19-2018  
Violations Found: Yes  
Eval Type: Routine done by local agency  
Eval Notes: Email return to compliance documentation to: [suttone@saccounty.net](mailto:suttone@saccounty.net)  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-10-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No hazardous material violations observed at time of inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HMRRP  
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection  
Eval Date: 06-10-2015  
Violations Found: No  
Eval Type: Routine done by local agency  
Eval Notes: No hazardous waste violations observed at time of inspection.  
Eval Division: Sacramento County Env Management Department  
Eval Program: HW  
Eval Source: CERS

Coordinates:

Site ID: 102549  
Facility Name: CALVADA SALES CO  
Env Int Type Code: HWG  
Program ID: 10220527  
Coord Name: Not reported  
Ref Point Type Desc: Center of a facility or station.  
Latitude: 38.596540  
Longitude: -121.496170

Affiliation:

Affiliation Type Desc: CUPA District  
Entity Name: Sacramento County Environmental Management Departm  
Entity Title: Not reported  
Affiliation Address: 10590 Armstrong Avenue, Suite A  
Affiliation City: Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95655

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)  
EDR ID Number  
EPA ID Number

**CALVADA SALES COMPANY (Continued)**

**S101590615**

Affiliation Phone: (916) 875-8550

Affiliation Type Desc: Environmental Contact  
Entity Name: Ramos Oil Company  
Entity Title: Not reported  
Affiliation Address: P.O. Box 401  
Affiliation City: West Sacramento  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95691  
Affiliation Phone: Not reported

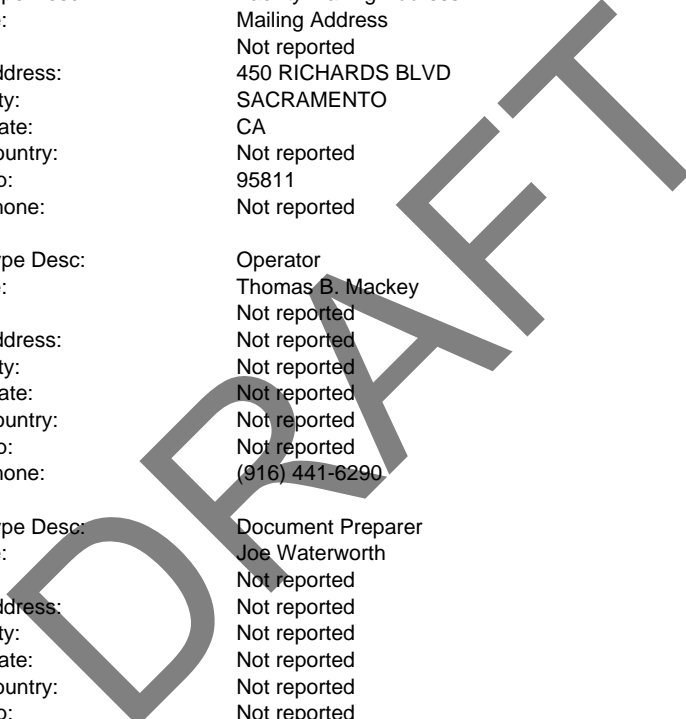
Affiliation Type Desc: Facility Mailing Address  
Entity Name: Mailing Address  
Entity Title: Not reported  
Affiliation Address: 450 RICHARDS BLVD  
Affiliation City: SACRAMENTO  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: 95811  
Affiliation Phone: Not reported

Affiliation Type Desc: Operator  
Entity Name: Thomas B. Mackey  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: (916) 441-6290

Affiliation Type Desc: Document Preparer  
Entity Name: Joe Waterworth  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Parent Corporation  
Entity Name: CALVADA SALES CO  
Entity Title: Not reported  
Affiliation Address: Not reported  
Affiliation City: Not reported  
Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer  
Entity Name: Richard Orr  
Entity Title: Operations Manager  
Affiliation Address: Not reported  
Affiliation City: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CALVADA SALES COMPANY (Continued)**

**S101590615**

Affiliation State: Not reported  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Legal Owner  
Entity Name: CALVADA  
Entity Title: Not reported  
Affiliation Address: 450 RICHARDS BLVD  
Affiliation City: SACRAMENTO  
Affiliation State: CA  
Affiliation Country: United States  
Affiliation Zip: 95811  
Affiliation Phone: (916) 441-6290

Name: CALVADA FOOD SALES  
Address: 444 RICHARDS BLVD  
City,State,Zip: SACRAMENTO, CA 95814  
Site ID: 205064  
CERS ID: T0606701010  
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:  
Affiliation Type Desc: Local Agency Caseworker  
Entity Name: DAVID VON ASPERN - SACRAMENTO COUNTY LOP  
Entity Title: Not reported  
Affiliation Address: 10590 ARMSTRONG AVENUE, SUITE A  
Affiliation City: MATHER  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker  
Entity Name: VERA FISCHER - CENTRAL VALLEY RWQCB (REGION 5S)  
Entity Title: Not reported  
Affiliation Address: 11020 SUN CENTER DRIVE #200  
Affiliation City: RANCHO CORDOVA  
Affiliation State: CA  
Affiliation Country: Not reported  
Affiliation Zip: Not reported  
Affiliation Phone: Not reported

**D18**  
**SE**  
**1/2-1**  
**0.996 mi.**  
**5257 ft.**

**SACRAMENTO SIGNAL DEPOT**  
**SACRAMENTO, CA**  
**Site 1 of 2 in cluster D**

**FUDS 1024903780**  
**N/A**

**Relative:**  
**Higher**

FUDS:  
EPA Region: 09  
Installation ID: CA99799F584400  
Congressional District Number: 06  
Facility Name: SACRAMENTO SIGNAL DEPOT  
FUDS Number: J09CA0924  
City: SACRAMENTO

**Actual:**  
**27 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SACRAMENTO SIGNAL DEPOT (Continued)**

**1024903780**

State: CA  
County: SACRAMENTO  
Object ID: 6932  
USACE District: Sacramento District (SPK)  
Status: Properties without projects  
Current Owner: Other  
EMS Map Link: <https://fudsportal.usace.army.mil/ems/ems/inventory/map/map?id=57950>  
Eligibility: Eligible  
Has Projects: No  
NPL Status: Not Listed  
Latitude: 38.60083333  
Longitude: -121.48916667

**D19  
SE  
1/2-1  
0.998 mi.  
5272 ft.**

**SACRAMENTO SIGNAL DEPOT (J09CA0924)  
NORTH 7TH STREET  
SACRAMENTO, CA 95814**

**ENVIROSTOR S109149607  
N/A**

**Site 2 of 2 in cluster D**

**Relative:  
Higher  
Actual:  
27 ft.**

**ENVIROSTOR:**  
Name: SACRAMENTO SIGNAL DEPOT (J09CA0924)  
Address: NORTH 7TH STREET  
City,State,Zip: SACRAMENTO, CA 95814  
Facility ID: 80000605  
Status: No Further Action  
Status Date: 04/28/2010  
Site Code: Not reported  
Site Type: Military Evaluation  
Site Type Detailed: FUDS  
Acres: 47  
NPL: NO  
Regulatory Agencies: SMBRP  
Lead Agency: SMBRP  
Program Manager: Carrie Tatoian-Cain  
Supervisor: Charles Ridenour  
Division Branch: Cleanup Sacramento  
Assembly: 07  
Senate: 06  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: DERA  
Latitude: 38.60083  
Longitude: -121.4891  
APN: NONE SPECIFIED  
Past Use: VEHICLE MAINTENANCE  
Potential COC: TPH-diesel TPH-gas  
Confirmed COC: 30024-NO 30025-NO  
Potential Description: UE  
Alias Name: Sacramento Army Depot  
Alias Type: Alternate Name  
Alias Name: CA99799F584400  
Alias Type: Federal Facility ID  
Alias Name: J09CA0924  
Alias Type: INPR  
Alias Name: 80000605  
Alias Type: Envirostor ID Number



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SACRAMENTO SIGNAL DEPOT (J09CA0924) (Continued)**

**S109149607**

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: No Department of Defense Action Indicated (NDAI)  
Completed Date: 06/27/2008  
Comments: DTSC did not concur on the NDAI. DTSC is requesting more information about the possibility of Underground Storage Tanks.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: No Department of Defense Action Indicated (NDAI)  
Completed Date: 04/08/2010  
Comments: The ACOE submitted responses to DTSC's comments on the original NDAI. The responses resolved our concerns regarding this FUD site. If further information arises regarding the environmental condition of this FUD site DTSC will reopen an investigation.

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

DRAFT

Count: 2 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SACRAMENTO	S106782284	CITY OF SACRAMENTO	I-5 AT SAN JUAN AVE		Sacramento Co. CS
SACRAMENTO	S106230370	SACRAMENTO-YOLO MOSQUITO & VECTOR	EL CAMINO AVE & BUISNESS HIGHW		CPS-SLIC

DRAFT

# 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: 10/28/2020	Source: EPA
Date Data Arrived at EDR: 11/05/2020	Telephone: N/A
Date Made Active in Reports: 11/25/2020	Last EDR Contact: 12/02/2020
Number of Days to Update: 20	Next Scheduled EDR Contact: 01/11/2021
	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: 10/28/2020	Source: EPA
Date Data Arrived at EDR: 11/05/2020	Telephone: N/A
Date Made Active in Reports: 11/25/2020	Last EDR Contact: 12/02/2020
Number of Days to Update: 20	Next Scheduled EDR Contact: 01/11/2021
	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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991  
Date Data Arrived at EDR: 02/02/1994  
Date Made Active in Reports: 03/30/1994  
Number of Days to Update: 56

Source: EPA  
Telephone: 202-564-4267  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

## ***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: 10/28/2020  
Date Data Arrived at EDR: 11/05/2020  
Date Made Active in Reports: 11/25/2020  
Number of Days to Update: 20

Source: EPA  
Telephone: N/A  
Last EDR Contact: 12/02/2020  
Next Scheduled EDR Contact: 01/11/2021  
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: 04/03/2019  
Date Data Arrived at EDR: 04/05/2019  
Date Made Active in Reports: 05/14/2019  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 703-603-8704  
Last EDR Contact: 10/02/2020  
Next Scheduled EDR Contact: 01/11/2021  
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: 10/28/2020  
Date Data Arrived at EDR: 11/05/2020  
Date Made Active in Reports: 11/25/2020  
Number of Days to Update: 20

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 12/02/2020  
Next Scheduled EDR Contact: 01/25/2021  
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: 10/28/2020	Source: EPA
Date Data Arrived at EDR: 11/05/2020	Telephone: 800-424-9346
Date Made Active in Reports: 11/25/2020	Last EDR Contact: 12/02/2020
Number of Days to Update: 20	Next Scheduled EDR Contact: 01/25/2021
	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: 06/15/2020	Source: EPA
Date Data Arrived at EDR: 06/22/2020	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 87	Next Scheduled EDR Contact: 01/04/2021
	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: 06/15/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/22/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 09/18/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/04/2021
	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: 06/15/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/22/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 09/18/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/04/2021
	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: 06/15/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/22/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 09/18/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Quarterly

## RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly 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). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/22/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 09/18/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/04/2021
	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: 08/06/2020	Source: Department of the Navy
Date Data Arrived at EDR: 08/21/2020	Telephone: 843-820-7326
Date Made Active in Reports: 11/11/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 82	Next Scheduled EDR Contact: 02/22/2021
	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: 10/28/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/05/2020	Telephone: 703-603-0695
Date Made Active in Reports: 11/18/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 03/08/2021
	Data Release Frequency: Varies

### US INST CONTROLS: Institutional Controls Sites List

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: 10/28/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/05/2020	Telephone: 703-603-0695
Date Made Active in Reports: 11/18/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 03/08/2021
	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: 06/15/2020  
Date Data Arrived at EDR: 06/22/2020  
Date Made Active in Reports: 09/17/2020  
Number of Days to Update: 87

Source: National Response Center, United States Coast Guard  
Telephone: 202-267-2180  
Last EDR Contact: 09/22/2020  
Next Scheduled EDR Contact: 01/04/2021  
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: 07/27/2020  
Date Data Arrived at EDR: 07/27/2020  
Date Made Active in Reports: 10/08/2020  
Number of Days to Update: 73

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 10/26/2020  
Next Scheduled EDR Contact: 02/08/2021  
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: 07/27/2020  
Date Data Arrived at EDR: 07/27/2020  
Date Made Active in Reports: 10/08/2020  
Number of Days to Update: 73

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 10/26/2020  
Next Scheduled EDR Contact: 02/08/2021  
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: 05/11/2020  
Date Data Arrived at EDR: 05/12/2020  
Date Made Active in Reports: 07/27/2020  
Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery  
Telephone: 916-341-6320  
Last EDR Contact: 11/10/2020  
Next Scheduled EDR Contact: 02/22/2021  
Data Release Frequency: Quarterly

## **State and tribal leaking storage tank lists**

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

## LUST REG 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: No Update Planned

## LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004	Source: California Regional Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 09/07/2004	Telephone: 213-576-6710
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

## LUST REG 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 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 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-622-2433
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: 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.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

## 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: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 11/30/2020  
Number of Days to Update: 83

Source: State Water Resources Control Board  
Telephone: see region list  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
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 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.

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 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  
Date Data Arrived at EDR: 06/07/2005  
Date Made Active in Reports: 06/29/2005  
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)  
Telephone: 760-241-7365  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
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: 04/14/2020  
Date Data Arrived at EDR: 05/20/2020  
Date Made Active in Reports: 08/12/2020  
Number of Days to Update: 84

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 10/23/2020  
Next Scheduled EDR Contact: 02/01/2021  
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: 04/29/2020  
Date Data Arrived at EDR: 05/20/2020  
Date Made Active in Reports: 08/12/2020  
Number of Days to Update: 84

Source: EPA Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 10/23/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/14/2020	Source: EPA Region 4
Date Data Arrived at EDR: 05/26/2020	Telephone: 404-562-8677
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/01/2021
	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: 04/14/2020	Source: EPA, Region 5
Date Data Arrived at EDR: 05/20/2020	Telephone: 312-886-7439
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	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: 04/08/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/20/2020	Telephone: 415-972-3372
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/14/2020	Source: EPA Region 8
Date Data Arrived at EDR: 05/20/2020	Telephone: 303-312-6271
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	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: 04/15/2020	Source: EPA Region 7
Date Data Arrived at EDR: 05/20/2020	Telephone: 913-551-7003
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	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: 04/08/2020	Source: EPA Region 6
Date Data Arrived at EDR: 05/20/2020	Telephone: 214-665-6597
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	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: 09/08/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/08/2020	Telephone: 866-480-1028
Date Made Active in Reports: 11/30/2020	Last EDR Contact: 12/04/2020
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/22/2021
	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: No Update Planned

## 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: No Update Planned

## 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: Regional 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: No Update Planned

## 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: No Update Planned

## 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: No Update Planned

# 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: No Update Planned

## 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: No Update Planned

## **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: 07/21/2020  
Date Data Arrived at EDR: 09/03/2020  
Date Made Active in Reports: 11/25/2020  
Number of Days to Update: 83

Source: FEMA  
Telephone: 202-646-5797  
Last EDR Contact: 10/01/2020  
Next Scheduled EDR Contact: 01/18/2021  
Data Release Frequency: Varies

### 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/03/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 12/03/2020  
Number of Days to Update: 86

Source: State Water Resources Control Board  
Telephone: 916-327-7844  
Last EDR Contact: 12/08/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

## UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 11/30/2020  
Number of Days to Update: 83

Source: SWRCB  
Telephone: 916-341-5851  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Semi-Annually

## MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 11/30/2020  
Number of Days to Update: 83

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
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  
Date Data Arrived at EDR: 07/12/2016  
Date Made Active in Reports: 09/19/2016  
Number of Days to Update: 69

Source: California Environmental Protection Agency  
Telephone: 916-327-5092  
Last EDR Contact: 12/09/2020  
Next Scheduled EDR Contact: 03/29/2021  
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: 04/08/2020  
Date Data Arrived at EDR: 05/20/2020  
Date Made Active in Reports: 08/12/2020  
Number of Days to Update: 84

Source: EPA Region 6  
Telephone: 214-665-7591  
Last EDR Contact: 10/23/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Varies

## 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: 04/03/2020  
Date Data Arrived at EDR: 05/20/2020  
Date Made Active in Reports: 08/12/2020  
Number of Days to Update: 84

Source: EPA Region 7  
Telephone: 913-551-7003  
Last EDR Contact: 10/23/2020  
Next Scheduled EDR Contact: 02/01/2021  
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: 04/08/2020  
Date Data Arrived at EDR: 05/20/2020  
Date Made Active in Reports: 08/12/2020  
Number of Days to Update: 84

Source: EPA Region 9  
Telephone: 415-972-3368  
Last EDR Contact: 10/23/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 04/14/2020	Source: EPA Region 10
Date Data Arrived at EDR: 05/20/2020	Telephone: 206-553-2857
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	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: 04/29/2020	Source: EPA, Region 1
Date Data Arrived at EDR: 05/20/2020	Telephone: 617-918-1313
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	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: 04/14/2020	Source: EPA Region 8
Date Data Arrived at EDR: 05/20/2020	Telephone: 303-312-6137
Date Made Active in Reports: 08/13/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 02/01/2021
	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: 04/14/2020	Source: EPA Region 4
Date Data Arrived at EDR: 05/26/2020	Telephone: 404-562-9424
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/01/2021
	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: 04/14/2020	Source: EPA Region 5
Date Data Arrived at EDR: 05/20/2020	Telephone: 312-886-6136
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

## **State and tribal voluntary cleanup sites**

### 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/27/2020  
Date Data Arrived at EDR: 07/27/2020  
Date Made Active in Reports: 10/08/2020  
Number of Days to Update: 73

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 10/26/2020  
Next Scheduled EDR Contact: 02/08/2021  
Data Release Frequency: Quarterly

## INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015  
Date Data Arrived at EDR: 09/29/2015  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 142

Source: EPA, Region 1  
Telephone: 617-918-1102  
Last EDR Contact: 09/16/2020  
Next Scheduled EDR Contact: 01/04/2021  
Data Release Frequency: Varies

## 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  
Date Data Arrived at EDR: 04/22/2008  
Date Made Active in Reports: 05/19/2008  
Number of Days to Update: 27

Source: EPA, Region 7  
Telephone: 913-551-7365  
Last EDR Contact: 04/20/2009  
Next Scheduled EDR Contact: 07/20/2009  
Data Release Frequency: Varies

## 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: 09/21/2020  
Date Data Arrived at EDR: 09/22/2020  
Date Made Active in Reports: 12/11/2020  
Number of Days to Update: 80

Source: State Water Resources Control Board  
Telephone: 916-323-7905  
Last EDR Contact: 09/22/2020  
Next Scheduled EDR Contact: 01/04/2021  
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: 09/14/2020  
Date Data Arrived at EDR: 09/15/2020  
Date Made Active in Reports: 12/10/2020  
Number of Days to Update: 86

Source: Environmental Protection Agency  
Telephone: 202-566-2777  
Last EDR Contact: 12/11/2020  
Next Scheduled EDR Contact: 03/29/2021  
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: 10/20/2020  
Next Scheduled EDR Contact: 02/08/2021  
Data Release Frequency: No Update Planned

## SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 11/30/2020  
Number of Days to Update: 83

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 12/08/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Quarterly

## HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 05/28/2020  
Date Data Arrived at EDR: 05/29/2020  
Date Made Active in Reports: 08/12/2020  
Number of Days to Update: 75

Source: Integrated Waste Management Board  
Telephone: 916-341-6422  
Last EDR Contact: 11/05/2020  
Next Scheduled EDR Contact: 02/22/2021  
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: 10/20/2020  
Next Scheduled EDR Contact: 02/08/2021  
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: 10/13/2020  
Next Scheduled EDR Contact: 02/01/2021  
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: 10/30/2020  
Next Scheduled EDR Contact: 02/08/2021  
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: 03/18/2020  
Date Data Arrived at EDR: 03/19/2020  
Date Made Active in Reports: 06/09/2020  
Number of Days to Update: 82

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
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  
Date Data Arrived at EDR: 08/03/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 21

Source: Department of Toxic Substance Control  
Telephone: 916-323-3400  
Last EDR Contact: 02/23/2009  
Next Scheduled EDR Contact: 05/25/2009  
Data Release Frequency: No Update Planned

### SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/27/2020  
Date Data Arrived at EDR: 07/27/2020  
Date Made Active in Reports: 10/08/2020  
Number of Days to Update: 73

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 10/26/2020  
Next Scheduled EDR Contact: 02/08/2021  
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: 06/30/2019  
Date Data Arrived at EDR: 05/28/2020  
Date Made Active in Reports: 08/12/2020  
Number of Days to Update: 76

Source: Department of Toxic Substances Control  
Telephone: 916-255-6504  
Last EDR Contact: 11/11/2020  
Next Scheduled EDR Contact: 01/18/2021  
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  
Date Data Arrived at EDR: 08/30/1995  
Date Made Active in Reports: 09/26/1995  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 916-227-4364  
Last EDR Contact: 01/26/2009  
Next Scheduled EDR Contact: 04/27/2009  
Data Release Frequency: No Update Planned

### 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/20/2020  
Date Data Arrived at EDR: 07/21/2020  
Date Made Active in Reports: 10/07/2020  
Number of Days to Update: 78

Source: CalEPA  
Telephone: 916-323-2514  
Last EDR Contact: 10/19/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Quarterly

## 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.

Date of Government Version: 03/18/2020  
Date Data Arrived at EDR: 03/19/2020  
Date Made Active in Reports: 06/09/2020  
Number of Days to Update: 82

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: Quarterly

## PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 12/01/2020  
Number of Days to Update: 84

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/08/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

## 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: 05/20/2020  
Date Data Arrived at EDR: 05/20/2020  
Date Made Active in Reports: 08/06/2020  
Number of Days to Update: 78

Source: Department of Public Health  
Telephone: 707-463-4466  
Last EDR Contact: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SAN FRANCISCO AST: Aboveground Storage Tank Site Listing Aboveground storage tank sites

Date of Government Version: 08/03/2020	Source: San Francisco County Department of Public Health
Date Data Arrived at EDR: 08/05/2020	Telephone: 415-252-3896
Date Made Active in Reports: 10/22/2020	Last EDR Contact: 10/28/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/15/2021
	Data Release Frequency: Varies

## 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: 07/20/2020	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/21/2020	Telephone: 916-323-2514
Date Made Active in Reports: 10/07/2020	Last EDR Contact: 10/19/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Quarterly

## CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/05/1995	Telephone: 916-341-5851
Date Made Active in Reports: 09/29/1995	Last EDR Contact: 12/28/1998
Number of Days to Update: 24	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## 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: 08/26/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/28/2020	Telephone: 916-323-3400
Date Made Active in Reports: 11/17/2020	Last EDR Contact: 11/23/2020
Number of Days to Update: 81	Next Scheduled EDR Contact: 03/15/2021
	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: 10/28/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/05/2020	Telephone: 202-564-6023
Date Made Active in Reports: 11/25/2020	Last EDR Contact: 12/02/2020
Number of Days to Update: 20	Next Scheduled EDR Contact: 01/11/2021
	Data Release Frequency: Semi-Annually

### DEED: Deed Restriction Listing

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 08/31/2020	Source: DTSC and SWRCB
Date Data Arrived at EDR: 08/31/2020	Telephone: 916-323-3400
Date Made Active in Reports: 11/20/2020	Last EDR Contact: 12/01/2020
Number of Days to Update: 81	Next Scheduled EDR Contact: 03/15/2021
	Data Release Frequency: Semi-Annually

## **Records of Emergency Release Reports**

### **HMIRS: Hazardous Materials Information Reporting System**

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/20/2020	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 09/22/2020	Telephone: 202-366-4555
Date Made Active in Reports: 12/14/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 83	Next Scheduled EDR Contact: 01/04/2021
	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: 06/30/2020	Source: Office of Emergency Services
Date Data Arrived at EDR: 07/21/2020	Telephone: 916-845-8400
Date Made Active in Reports: 10/07/2020	Last EDR Contact: 10/19/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/01/2021
	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: 09/08/2020	Source: State Water Quality Control Board
Date Data Arrived at EDR: 09/08/2020	Telephone: 866-480-1028
Date Made Active in Reports: 11/30/2020	Last EDR Contact: 12/04/2020
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/22/2021
	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: 09/08/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/08/2020	Telephone: 866-480-1028
Date Made Active in Reports: 11/30/2020	Last EDR Contact: 12/04/2020
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## Other Ascertainable Records

### RCRA NonGen / NLR: RCRA - Non Generators / 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.

Date of Government Version: 06/15/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/22/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 09/18/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/04/2021
	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: 08/05/2020	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 08/13/2020	Telephone: 202-528-4285
Date Made Active in Reports: 10/21/2020	Last EDR Contact: 11/17/2020
Number of Days to Update: 69	Next Scheduled EDR Contact: 03/01/2021
	Data Release Frequency: Varies

### DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/13/2020
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/25/2021
	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: 04/02/2018	Source: U.S. Geological Survey
Date Data Arrived at EDR: 04/11/2018	Telephone: 888-275-8747
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 10/08/2020
Number of Days to Update: 574	Next Scheduled EDR Contact: 01/18/2021
	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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 11/09/2020  
Next Scheduled EDR Contact: 02/22/2021  
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: 09/21/2020  
Date Data Arrived at EDR: 09/22/2020  
Date Made Active in Reports: 12/14/2020  
Number of Days to Update: 83

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 09/22/2020  
Next Scheduled EDR Contact: 01/04/2021  
Data Release Frequency: Quarterly

## 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  
Date Data Arrived at EDR: 03/21/2014  
Date Made Active in Reports: 06/17/2014  
Number of Days to Update: 88

Source: Environmental Protection Agency  
Telephone: 617-520-3000  
Last EDR Contact: 11/02/2020  
Next Scheduled EDR Contact: 02/15/2021  
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: 09/30/2017  
Date Data Arrived at EDR: 05/08/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 73

Source: Environmental Protection Agency  
Telephone: 703-308-4044  
Last EDR Contact: 11/06/2020  
Next Scheduled EDR Contact: 02/15/2021  
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  
Date Data Arrived at EDR: 06/17/2020  
Date Made Active in Reports: 09/10/2020  
Number of Days to Update: 85

Source: EPA  
Telephone: 202-260-5521  
Last EDR Contact: 09/18/2020  
Next Scheduled EDR Contact: 12/28/2020  
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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 08/14/2020  
Date Made Active in Reports: 11/04/2020  
Number of Days to Update: 82

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 11/17/2020  
Next Scheduled EDR Contact: 03/01/2021  
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: 07/20/2020  
Date Data Arrived at EDR: 07/21/2020  
Date Made Active in Reports: 10/08/2020  
Number of Days to Update: 79

Source: EPA  
Telephone: 202-564-4203  
Last EDR Contact: 10/19/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Annually

## 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: 10/28/2020  
Date Data Arrived at EDR: 11/05/2020  
Date Made Active in Reports: 11/25/2020  
Number of Days to Update: 20

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 12/02/2020  
Next Scheduled EDR Contact: 03/15/2021  
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: 07/24/2020  
Date Data Arrived at EDR: 08/03/2020  
Date Made Active in Reports: 10/21/2020  
Number of Days to Update: 79

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 10/14/2020  
Next Scheduled EDR Contact: 02/01/2021  
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  
Date Data Arrived at EDR: 07/03/1995  
Date Made Active in Reports: 08/07/1995  
Number of Days to Update: 35

Source: EPA  
Telephone: 202-564-4104  
Last EDR Contact: 06/02/2008  
Next Scheduled EDR Contact: 09/01/2008  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/27/2020	Source: EPA
Date Data Arrived at EDR: 05/06/2020	Telephone: 202-564-6023
Date Made Active in Reports: 06/09/2020	Last EDR Contact: 12/02/2020
Number of Days to Update: 34	Next Scheduled EDR Contact: 02/15/2021
	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: 10/09/2019	Source: EPA
Date Data Arrived at EDR: 10/11/2019	Telephone: 202-566-0500
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 10/02/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 01/18/2021
	Data Release Frequency: Annually

## 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: 10/01/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 01/18/2021
	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: No Update Planned

## 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: No Update Planned

## 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: 08/05/2020	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 08/10/2020	Telephone: 301-415-7169
Date Made Active in Reports: 10/08/2020	Last EDR Contact: 10/12/2020
Number of Days to Update: 59	Next Scheduled EDR Contact: 01/31/2021
	Data Release Frequency: Quarterly



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018	Source: Department of Energy
Date Data Arrived at EDR: 12/04/2019	Telephone: 202-586-8719
Date Made Active in Reports: 01/15/2020	Last EDR Contact: 12/01/2020
Number of Days to Update: 42	Next Scheduled EDR Contact: 03/15/2021
	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: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 11/30/2020
Number of Days to Update: 251	Next Scheduled EDR Contact: 03/15/2021
	Data Release Frequency: Varies

## PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 11/06/2021
Number of Days to Update: 96	Next Scheduled EDR Contact: 02/15/2021
	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: 07/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 09/24/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 01/11/2021
	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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
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: 01/02/2020  
Date Data Arrived at EDR: 01/28/2020  
Date Made Active in Reports: 04/17/2020  
Number of Days to Update: 80

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 10/27/2020  
Next Scheduled EDR Contact: 02/08/2021  
Data Release Frequency: Quarterly

## 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.

Date of Government Version: 06/30/2020  
Date Data Arrived at EDR: 07/15/2020  
Date Made Active in Reports: 07/21/2020  
Number of Days to Update: 6

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 10/01/2020  
Next Scheduled EDR Contact: 01/18/2021  
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: 12/31/2017  
Date Data Arrived at EDR: 06/22/2020  
Date Made Active in Reports: 11/20/2020  
Number of Days to Update: 151

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 09/22/2020  
Next Scheduled EDR Contact: 01/04/2021  
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: 10/06/2020  
Next Scheduled EDR Contact: 01/18/2021  
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: 08/08/2017  
Date Data Arrived at EDR: 09/11/2018  
Date Made Active in Reports: 09/14/2018  
Number of Days to Update: 3

Source: Department of Energy  
Telephone: 202-586-3559  
Last EDR Contact: 11/06/2020  
Next Scheduled EDR Contact: 02/15/2021  
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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/30/2019  
Date Data Arrived at EDR: 11/15/2019  
Date Made Active in Reports: 01/28/2020  
Number of Days to Update: 74

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 11/20/2020  
Next Scheduled EDR Contact: 03/01/2021  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/28/2020  
Date Data Arrived at EDR: 11/05/2020  
Date Made Active in Reports: 11/25/2020  
Number of Days to Update: 20

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 12/02/2020  
Next Scheduled EDR Contact: 01/11/2021  
Data Release Frequency: Varies

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

## 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

## MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 09/10/2020  
Date Data Arrived at EDR: 09/15/2020  
Date Made Active in Reports: 11/20/2020  
Number of Days to Update: 66

Source: DOL, Mine Safety & Health Admi  
Telephone: 202-693-9424  
Last EDR Contact: 11/24/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Quarterly

## 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/04/2020  
Date Data Arrived at EDR: 08/25/2020  
Date Made Active in Reports: 11/18/2020  
Number of Days to Update: 85

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 11/23/2020  
Next Scheduled EDR Contact: 03/08/2021  
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: 05/06/2020  
Date Data Arrived at EDR: 05/27/2020  
Date Made Active in Reports: 08/13/2020  
Number of Days to Update: 78

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 11/25/2020  
Next Scheduled EDR Contact: 03/08/2021  
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: 11/25/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: Varies

## 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: 09/16/2020  
Date Data Arrived at EDR: 09/17/2020  
Date Made Active in Reports: 12/10/2020  
Number of Days to Update: 84

Source: Department of Interior  
Telephone: 202-208-2609  
Last EDR Contact: 12/10/2020  
Next Scheduled EDR Contact: 03/22/2021  
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: 09/04/2020  
Date Data Arrived at EDR: 09/15/2020  
Date Made Active in Reports: 11/20/2020  
Number of Days to Update: 66

Source: EPA  
Telephone: (415) 947-8000  
Last EDR Contact: 12/01/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Quarterly

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 07/02/2020  
Date Made Active in Reports: 09/17/2020  
Number of Days to Update: 77

Source: Department of Defense  
Telephone: 703-704-1564  
Last EDR Contact: 10/08/2020  
Next Scheduled EDR Contact: 01/25/2021  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/27/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/02/2020	Telephone: 202-564-2280
Date Made Active in Reports: 09/28/2020	Last EDR Contact: 10/06/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/18/2021
	Data Release Frequency: Quarterly

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/26/2018	Telephone: 202-564-0527
Date Made Active in Reports: 10/05/2018	Last EDR Contact: 11/17/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 03/08/2021
	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.

Date of Government Version: 08/17/2020	Source: EPA
Date Data Arrived at EDR: 08/17/2020	Telephone: 800-385-6164
Date Made Active in Reports: 10/21/2020	Last EDR Contact: 11/13/2020
Number of Days to Update: 65	Next Scheduled EDR Contact: 03/01/2021
	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	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	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: 06/22/2020	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 06/22/2020	Telephone: 916-323-3400
Date Made Active in Reports: 09/04/2020	Last EDR Contact: 09/23/2020
Number of Days to Update: 74	Next Scheduled EDR Contact: 01/04/2021
	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: 05/01/2019	Source: Livermore-Pleasanton Fire Department
Date Data Arrived at EDR: 05/14/2019	Telephone: 925-454-2361
Date Made Active in Reports: 07/17/2019	Last EDR Contact: 11/13/2020
Number of Days to Update: 64	Next Scheduled EDR Contact: 02/22/2021
	Data Release Frequency: Varies

## DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/19/2020  
Date Data Arrived at EDR: 08/21/2020  
Date Made Active in Reports: 09/04/2020  
Number of Days to Update: 14

Source: South Coast Air Quality Management District  
Telephone: 909-396-3211  
Last EDR Contact: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: Varies

**DRYCLEAN AVAQMD:** Antelope Valley Air Quality Management District Drycleaner Listing  
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 08/25/2020  
Date Data Arrived at EDR: 08/26/2020  
Date Made Active in Reports: 11/13/2020  
Number of Days to Update: 79

Source: Antelope Valley Air Quality Management District  
Telephone: 661-723-8070  
Last EDR Contact: 11/23/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Varies

**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: 08/06/2020  
Date Data Arrived at EDR: 08/28/2020  
Date Made Active in Reports: 11/17/2020  
Number of Days to Update: 81

Source: Department of Toxic Substance Control  
Telephone: 916-327-4498  
Last EDR Contact: 11/23/2020  
Next Scheduled EDR Contact: 03/15/2021  
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: 12/31/2018  
Date Data Arrived at EDR: 06/16/2020  
Date Made Active in Reports: 08/28/2020  
Number of Days to Update: 73

Source: California Air Resources Board  
Telephone: 916-322-2990  
Last EDR Contact: 09/18/2020  
Next Scheduled EDR Contact: 12/28/2020  
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: 07/20/2020  
Date Data Arrived at EDR: 07/21/2020  
Date Made Active in Reports: 10/07/2020  
Number of Days to Update: 78

Source: State Water Resources Control Board  
Telephone: 916-445-9379  
Last EDR Contact: 10/19/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Varies

**Financial Assurance 1:** Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 07/13/2020  
Date Data Arrived at EDR: 07/16/2020  
Date Made Active in Reports: 09/29/2020  
Number of Days to Update: 75

Source: Department of Toxic Substances Control  
Telephone: 916-255-3628  
Last EDR Contact: 10/13/2020  
Next Scheduled EDR Contact: 02/01/2021  
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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/05/2020  
Date Data Arrived at EDR: 08/05/2020  
Date Made Active in Reports: 10/23/2020  
Number of Days to Update: 79

Source: California Integrated Waste Management Board  
Telephone: 916-341-6066  
Last EDR Contact: 11/04/2020  
Next Scheduled EDR Contact: 02/22/2021  
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: 12/31/2019  
Date Data Arrived at EDR: 04/15/2020  
Date Made Active in Reports: 07/02/2020  
Number of Days to Update: 78

Source: California Environmental Protection Agency  
Telephone: 916-255-1136  
Last EDR Contact: 10/05/2020  
Next Scheduled EDR Contact: 01/18/2021  
Data Release Frequency: Annually

## ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/17/2020  
Date Data Arrived at EDR: 08/17/2020  
Date Made Active in Reports: 11/05/2020  
Number of Days to Update: 80

Source: Department of Toxic Substances Control  
Telephone: 877-786-9427  
Last EDR Contact: 11/13/2020  
Next Scheduled EDR Contact: 03/01/2021  
Data Release Frequency: Quarterly

## HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CAL SITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001  
Date Data Arrived at EDR: 01/22/2009  
Date Made Active in Reports: 04/08/2009  
Number of Days to Update: 76

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 01/22/2009  
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: 08/17/2020  
Date Data Arrived at EDR: 08/17/2020  
Date Made Active in Reports: 11/05/2020  
Number of Days to Update: 80

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 11/13/2020  
Next Scheduled EDR Contact: 03/01/2021  
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: 07/06/2020  
Date Data Arrived at EDR: 07/07/2020  
Date Made Active in Reports: 09/17/2020  
Number of Days to Update: 72

Source: Department of Toxic Substances Control  
Telephone: 916-440-7145  
Last EDR Contact: 10/06/2020  
Next Scheduled EDR Contact: 01/18/2021  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/08/2020	Source: Department of Conservation
Date Data Arrived at EDR: 09/08/2020	Telephone: 916-322-1080
Date Made Active in Reports: 11/30/2020	Last EDR Contact: 12/08/2020
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/22/2021
	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: 08/31/2020	Source: Department of Public Health
Date Data Arrived at EDR: 08/31/2020	Telephone: 916-558-1784
Date Made Active in Reports: 11/20/2020	Last EDR Contact: 12/01/2020
Number of Days to Update: 81	Next Scheduled EDR Contact: 03/15/2021
	Data Release Frequency: Varies

## NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/10/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/10/2020	Telephone: 916-445-9379
Date Made Active in Reports: 10/29/2020	Last EDR Contact: 11/09/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/22/2021
	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: 08/31/2020	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 08/31/2020	Telephone: 916-445-4038
Date Made Active in Reports: 11/20/2020	Last EDR Contact: 12/01/2020
Number of Days to Update: 81	Next Scheduled EDR Contact: 03/15/2021
	Data Release Frequency: Quarterly

## PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 09/08/2020	Source: Department of Conservation
Date Data Arrived at EDR: 09/08/2020	Telephone: 916-323-3836
Date Made Active in Reports: 12/01/2020	Last EDR Contact: 12/08/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 03/22/2021
	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: 12/07/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/09/2020	Telephone: 916-445-3846
Date Made Active in Reports: 12/10/2020	Last EDR Contact: 12/07/2020
Number of Days to Update: 1	Next Scheduled EDR Contact: 03/29/2021
	Data Release Frequency: No Update Planned



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 09/08/2020	Source: Department of Conservation
Date Data Arrived at EDR: 09/08/2020	Telephone: 916-445-2408
Date Made Active in Reports: 12/01/2020	Last EDR Contact: 12/08/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Varies

## UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 09/08/2020	Source: State Water Resource Control Board
Date Data Arrived at EDR: 09/08/2020	Telephone: 866-480-1028
Date Made Active in Reports: 11/30/2020	Last EDR Contact: 12/04/2020
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/22/2021
	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: 11/19/2019	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 01/07/2020	Telephone: 559-445-5577
Date Made Active in Reports: 03/09/2020	Last EDR Contact: 10/09/2020
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/18/2021
	Data Release Frequency: Varies

## 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: 11/13/2020
Number of Days to Update: 9	Next Scheduled EDR Contact: 03/01/2021
	Data Release Frequency: No Update Planned

## 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: 09/16/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: No Update Planned

## MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 09/08/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/08/2020	Telephone: 866-480-1028
Date Made Active in Reports: 11/30/2020	Last EDR Contact: 12/04/2020
Number of Days to Update: 83	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Varies

## PROJECT: Project Sites (GEOTRACKER)

Projects sites

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 11/30/2020  
Number of Days to Update: 83

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

## WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 12/01/2020  
Number of Days to Update: 84

Source: State Water Resources Control Board  
Telephone: 916-341-5810  
Last EDR Contact: 12/08/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Quarterly

## CIWQS: 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.

Date of Government Version: 08/31/2020  
Date Data Arrived at EDR: 08/31/2020  
Date Made Active in Reports: 11/20/2020  
Number of Days to Update: 81

Source: State Water Resources Control Board  
Telephone: 866-794-4977  
Last EDR Contact: 12/01/2020  
Next Scheduled EDR Contact: 03/01/2021  
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: 07/20/2020  
Date Data Arrived at EDR: 07/21/2020  
Date Made Active in Reports: 10/07/2020  
Number of Days to Update: 78

Source: California Environmental Protection Agency  
Telephone: 916-323-2514  
Last EDR Contact: 10/19/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Varies

## NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 11/30/2020  
Number of Days to Update: 83

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

## OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 11/30/2020  
Number of Days to Update: 83

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 11/30/2020  
Number of Days to Update: 83

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

## SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 11/30/2020  
Number of Days to Update: 83

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

## WELL STIM PROJ: Well Stimulation Project (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: 09/08/2020  
Date Data Arrived at EDR: 09/08/2020  
Date Made Active in Reports: 11/30/2020  
Number of Days to Update: 83

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/04/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Varies

## PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011  
Date Data Arrived at EDR: 08/05/2011  
Date Made Active in Reports: 09/29/2011  
Number of Days to Update: 55

Source: EPA, Office of Water  
Telephone: 202-564-2496  
Last EDR Contact: 10/02/2020  
Next Scheduled EDR Contact: 01/18/2021  
Data Release Frequency: Semi-Annually

## PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014  
Date Data Arrived at EDR: 01/06/2015  
Date Made Active in Reports: 05/06/2015  
Number of Days to Update: 120

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 10/02/2020  
Next Scheduled EDR Contact: 01/18/2021  
Data Release Frequency: Semi-Annually

## PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 02/05/2015  
Date Made Active in Reports: 03/06/2015  
Number of Days to Update: 29

Source: EPA  
Telephone: 202-564-2497  
Last EDR Contact: 10/02/2020  
Next Scheduled EDR Contact: 01/18/2021  
Data Release Frequency: Varies

## MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/06/2018  
Date Data Arrived at EDR: 10/21/2019  
Date Made Active in Reports: 10/24/2019  
Number of Days to Update: 3

Source: USGS  
Telephone: 703-648-6533  
Last EDR Contact: 11/25/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: Varies

## HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 10/13/2020  
Date Data Arrived at EDR: 10/14/2020  
Date Made Active in Reports: 11/03/2020  
Number of Days to Update: 20

Source: Department of Toxic Substances Control  
Telephone: 916-324-2444  
Last EDR Contact: 10/01/2020  
Next Scheduled EDR Contact: 01/18/2021  
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.

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.

# 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: 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

## COUNTY RECORDS

### ALAMEDA COUNTY:

#### CS ALAMEDA: 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: 01/09/2019  
Date Data Arrived at EDR: 01/11/2019  
Date Made Active in Reports: 03/05/2019  
Number of Days to Update: 53

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 10/01/2020  
Next Scheduled EDR Contact: 01/18/2021  
Data Release Frequency: Semi-Annually

#### UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 06/30/2020  
Date Data Arrived at EDR: 07/01/2020  
Date Made Active in Reports: 07/17/2020  
Number of Days to Update: 16

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 10/01/2020  
Next Scheduled EDR Contact: 01/18/2021  
Data Release Frequency: Semi-Annually

### AMADOR COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA AMADOR: CUPA Facility List Cupa Facility List

Date of Government Version: 05/18/2020  
Date Data Arrived at EDR: 05/19/2020  
Date Made Active in Reports: 06/01/2020  
Number of Days to Update: 13

Source: Amador County Environmental Health  
Telephone: 209-223-6439  
Last EDR Contact: 10/19/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Varies

## BUTTE COUNTY:

### CUPA BUTTE: 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: 10/01/2020  
Next Scheduled EDR Contact: 01/18/2021  
Data Release Frequency: No Update Planned

## CALVERAS COUNTY:

### CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 06/17/2020  
Date Data Arrived at EDR: 06/18/2020  
Date Made Active in Reports: 09/02/2020  
Number of Days to Update: 76

Source: Calveras County Environmental Health  
Telephone: 209-754-6399  
Last EDR Contact: 10/01/2020  
Next Scheduled EDR Contact: 01/04/2021  
Data Release Frequency: Quarterly

## COLUSA COUNTY:

### CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 04/06/2020  
Date Data Arrived at EDR: 04/23/2020  
Date Made Active in Reports: 07/10/2020  
Number of Days to Update: 78

Source: Health & Human Services  
Telephone: 530-458-0396  
Last EDR Contact: 10/28/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Semi-Annually

## CONTRA COSTA COUNTY:

### SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 07/16/2020  
Date Data Arrived at EDR: 07/22/2020  
Date Made Active in Reports: 10/08/2020  
Number of Days to Update: 78

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 10/20/2020  
Next Scheduled EDR Contact: 02/08/2021  
Data Release Frequency: Semi-Annually

## DEL NORTE COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 06/08/2020  
Date Data Arrived at EDR: 08/13/2020  
Date Made Active in Reports: 10/22/2020  
Number of Days to Update: 70

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426  
Last EDR Contact: 10/20/2020  
Next Scheduled EDR Contact: 02/08/2021  
Data Release Frequency: Varies

## EL DORADO COUNTY:

### CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 08/13/2020  
Date Data Arrived at EDR: 08/13/2020  
Date Made Active in Reports: 10/22/2020  
Number of Days to Update: 70

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-6623  
Last EDR Contact: 10/20/2020  
Next Scheduled EDR Contact: 02/08/2021  
Data Release Frequency: Varies

## FRESNO COUNTY:

### CUPA FRESNO: 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: 06/30/2020  
Date Data Arrived at EDR: 07/01/2020  
Date Made Active in Reports: 09/17/2020  
Number of Days to Update: 78

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 10/02/2020  
Next Scheduled EDR Contact: 01/11/2021  
Data Release Frequency: Semi-Annually

## GLENN COUNTY:

### CUPA GLENN: 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: 10/13/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: No Update Planned

## HUMBOLDT COUNTY:

### CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 08/13/2020  
Date Data Arrived at EDR: 08/17/2020  
Date Made Active in Reports: 11/05/2020  
Number of Days to Update: 80

Source: Humboldt County Environmental Health  
Telephone: N/A  
Last EDR Contact: 11/11/2020  
Next Scheduled EDR Contact: 03/01/2021  
Data Release Frequency: Semi-Annually

## IMPERIAL COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 07/14/2020  
Date Data Arrived at EDR: 07/16/2020  
Date Made Active in Reports: 09/29/2020  
Number of Days to Update: 75

Source: San Diego Border Field Office  
Telephone: 760-339-2777  
Last EDR Contact: 10/13/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Varies

## INYO COUNTY:

### CUPA INYO: 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: 11/11/2020  
Next Scheduled EDR Contact: 03/01/2021  
Data Release Frequency: Varies

## KERN COUNTY:

### CUPA KERN: CUPA Facility List

A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 07/28/2020  
Date Data Arrived at EDR: 07/30/2020  
Date Made Active in Reports: 10/13/2020  
Number of Days to Update: 75

Source: Kern County Public Health  
Telephone: 661-324-3000  
Last EDR Contact: 10/28/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Varies

### UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 07/28/2020  
Date Data Arrived at EDR: 07/30/2020  
Date Made Active in Reports: 10/14/2020  
Number of Days to Update: 76

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 10/28/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Quarterly

## KINGS COUNTY:

### CUPA KINGS: 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: 05/11/2020  
Date Data Arrived at EDR: 05/12/2020  
Date Made Active in Reports: 07/27/2020  
Number of Days to Update: 76

Source: Kings County Department of Public Health  
Telephone: 559-584-1411  
Last EDR Contact: 12/03/2020  
Next Scheduled EDR Contact: 03/01/2021  
Data Release Frequency: Varies

## LAKE COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 08/13/2020  
Date Data Arrived at EDR: 08/13/2020  
Date Made Active in Reports: 10/23/2020  
Number of Days to Update: 71

Source: Lake County Environmental Health  
Telephone: 707-263-1164  
Last EDR Contact: 10/07/2020  
Next Scheduled EDR Contact: 01/25/2021  
Data Release Frequency: Varies

## LASSEN COUNTY:

### CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 07/31/2020  
Date Data Arrived at EDR: 08/21/2020  
Date Made Active in Reports: 11/09/2020  
Number of Days to Update: 80

Source: Lassen County Environmental Health  
Telephone: 530-251-8528  
Last EDR Contact: 10/13/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Varies

## LOS ANGELES COUNTY:

### AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

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: N/A  
Telephone: N/A  
Last EDR Contact: 12/09/2020  
Next Scheduled EDR Contact: 03/29/2021  
Data Release Frequency: No Update Planned

### HMS LOS ANGELES: HMS: Street Number List Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/06/2020  
Date Data Arrived at EDR: 07/10/2020  
Date Made Active in Reports: 09/28/2020  
Number of Days to Update: 80

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 10/01/2020  
Next Scheduled EDR Contact: 01/18/2021  
Data Release Frequency: Semi-Annually

### LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/13/2020  
Date Data Arrived at EDR: 07/13/2020  
Date Made Active in Reports: 09/29/2020  
Number of Days to Update: 78

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 10/09/2020  
Next Scheduled EDR Contact: 01/25/2021  
Data Release Frequency: Varies

### LF LOS ANGELES CITY: City of Los Angeles Landfills Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2019  
Date Data Arrived at EDR: 08/17/2020  
Date Made Active in Reports: 11/05/2020  
Number of Days to Update: 80

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 10/07/2020  
Next Scheduled EDR Contact: 01/25/2021  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 09/25/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Varies

## LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 04/17/2019	Telephone: 626-458-6973
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 10/12/2020
Number of Days to Update: 42	Next Scheduled EDR Contact: 01/25/2021
	Data Release Frequency: No Update Planned

## LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 09/25/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Varies

## LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 09/25/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Varies

## SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/25/2020	Source: Community Health Services
Date Data Arrived at EDR: 04/14/2020	Telephone: 323-890-7806
Date Made Active in Reports: 07/01/2020	Last EDR Contact: 10/09/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 01/25/2021
	Data Release Frequency: Annually

## UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 10/07/2020
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/25/2021
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST LONG BEACH: City of Long Beach Underground Storage Tank  
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 562-570-2563
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 10/13/2020
Number of Days to Update: 65	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank  
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 07/30/2019	Telephone: 310-618-2973
Date Made Active in Reports: 10/02/2019	Last EDR Contact: 10/05/2020
Number of Days to Update: 64	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: 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: 08/10/2020	Source: Madera County Environmental Health
Date Data Arrived at EDR: 08/12/2020	Telephone: 559-675-7823
Date Made Active in Reports: 10/23/2020	Last EDR Contact: 11/11/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 03/01/2021
	Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites  
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/04/2018	Telephone: 415-473-6647
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 09/23/2020
Number of Days to Update: 29	Next Scheduled EDR Contact: 01/11/2021
	Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List  
CUPA facility list.

Date of Government Version: 07/28/2020	Source: Merced County Environmental Health
Date Data Arrived at EDR: 07/30/2020	Telephone: 209-381-1094
Date Made Active in Reports: 07/31/2020	Last EDR Contact: 11/11/2020
Number of Days to Update: 1	Next Scheduled EDR Contact: 03/01/2021
	Data Release Frequency: Varies

MONO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA MONO: CUPA Facility List CUPA Facility List

Date of Government Version: 08/20/2020  
Date Data Arrived at EDR: 08/24/2020  
Date Made Active in Reports: 11/09/2020  
Number of Days to Update: 77

Source: Mono County Health Department  
Telephone: 760-932-5580  
Last EDR Contact: 11/15/2020  
Next Scheduled EDR Contact: 03/08/3021  
Data Release Frequency: Varies

## MONTEREY COUNTY:

### CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/13/2020  
Date Data Arrived at EDR: 07/15/2020  
Date Made Active in Reports: 07/31/2020  
Number of Days to Update: 16

Source: Monterey County Health Department  
Telephone: 831-796-1297  
Last EDR Contact: 09/23/2020  
Next Scheduled EDR Contact: 01/11/2021  
Data Release Frequency: Varies

## NAPA COUNTY:

### LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

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: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: No Update Planned

### UST NAPA: Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 52

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: No Update Planned

## NEVADA COUNTY:

### CUPA NEVADA: CUPA Facility List CUPA facility list.

Date of Government Version: 07/29/2020  
Date Data Arrived at EDR: 07/30/2020  
Date Made Active in Reports: 10/13/2020  
Number of Days to Update: 75

Source: Community Development Agency  
Telephone: 530-265-1467  
Last EDR Contact: 10/20/2020  
Next Scheduled EDR Contact: 02/08/2021  
Data Release Frequency: Varies

## ORANGE COUNTY:

### IND\_SITE ORANGE: List of Industrial Site Cleanups Petroleum and non-petroleum spills.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/10/2020  
Date Data Arrived at EDR: 08/03/2020  
Date Made Active in Reports: 10/19/2020  
Number of Days to Update: 77

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/02/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups  
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/02/2020  
Date Data Arrived at EDR: 08/05/2020  
Date Made Active in Reports: 10/23/2020  
Number of Days to Update: 79

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/02/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities  
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/01/2020  
Date Data Arrived at EDR: 08/03/2020  
Date Made Active in Reports: 10/19/2020  
Number of Days to Update: 77

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/03/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 11/24/2020  
Date Data Arrived at EDR: 11/24/2020  
Date Made Active in Reports: 11/25/2020  
Number of Days to Update: 1

Source: Placer County Health and Human Services  
Telephone: 530-745-2363  
Last EDR Contact: 11/23/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List  
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019  
Date Data Arrived at EDR: 04/23/2019  
Date Made Active in Reports: 06/26/2019  
Number of Days to Update: 64

Source: Plumas County Environmental Health  
Telephone: 530-283-6355  
Last EDR Contact: 10/13/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites  
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/06/2020  
Date Data Arrived at EDR: 10/07/2020  
Date Made Active in Reports: 11/03/2020  
Number of Days to Update: 27

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 12/09/2020  
Next Scheduled EDR Contact: 03/29/2021  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 10/06/2020  
Date Data Arrived at EDR: 10/07/2020  
Date Made Active in Reports: 11/03/2020  
Number of Days to Update: 27

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 12/09/2020  
Next Scheduled EDR Contact: 03/29/2021  
Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:

### CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/18/2020  
Date Data Arrived at EDR: 03/31/2020  
Date Made Active in Reports: 06/15/2020  
Number of Days to Update: 76

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 10/02/2020  
Next Scheduled EDR Contact: 01/11/2021  
Data Release Frequency: Quarterly

### ML SACRAMENTO: 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: 02/24/2020  
Date Data Arrived at EDR: 03/31/2020  
Date Made Active in Reports: 06/17/2020  
Number of Days to Update: 78

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 10/02/2020  
Next Scheduled EDR Contact: 01/11/2021  
Data Release Frequency: Quarterly

## SAN BENITO COUNTY:

### CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 08/04/2020  
Date Data Arrived at EDR: 08/05/2020  
Date Made Active in Reports: 10/22/2020  
Number of Days to Update: 78

Source: San Benito County Environmental Health  
Telephone: N/A  
Last EDR Contact: 10/28/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Varies

## SAN BERNARDINO COUNTY:

### PERMITS SAN BERNARDINO: 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: 08/04/2020  
Date Data Arrived at EDR: 08/05/2020  
Date Made Active in Reports: 10/26/2020  
Number of Days to Update: 82

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 10/28/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 08/31/2020  
Date Data Arrived at EDR: 08/31/2020  
Date Made Active in Reports: 11/23/2020  
Number of Days to Update: 84

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 12/01/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Quarterly

## LF SAN DIEGO: 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: 11/16/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Varies

## SAN DIEGO CO LOP: 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: 07/14/2020  
Date Data Arrived at EDR: 07/16/2020  
Date Made Active in Reports: 09/29/2020  
Number of Days to Update: 75

Source: Department of Environmental Health  
Telephone: 858-505-6874  
Last EDR Contact: 10/13/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Varies

## SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010  
Date Data Arrived at EDR: 06/15/2010  
Date Made Active in Reports: 07/09/2010  
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health  
Telephone: 619-338-2371  
Last EDR Contact: 11/23/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: No Update Planned

## SAN FRANCISCO COUNTY:

### CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 08/03/2020  
Date Data Arrived at EDR: 08/05/2020  
Date Made Active in Reports: 10/22/2020  
Number of Days to Update: 78

Source: San Francisco County Department of Environmental Health  
Telephone: 415-252-3896  
Last EDR Contact: 10/28/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Varies

### LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/19/2008  
Date Data Arrived at EDR: 09/19/2008  
Date Made Active in Reports: 09/29/2008  
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920  
Last EDR Contact: 10/28/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: No Update Planned

## UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 08/03/2020  
Date Data Arrived at EDR: 08/05/2020  
Date Made Active in Reports: 10/26/2020  
Number of Days to Update: 82

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 10/28/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:

### UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018  
Date Data Arrived at EDR: 06/26/2018  
Date Made Active in Reports: 07/11/2018  
Number of Days to Update: 15

Source: Environmental Health Department  
Telephone: N/A  
Last EDR Contact: 12/09/2020  
Next Scheduled EDR Contact: 03/29/2021  
Data Release Frequency: Semi-Annually

## SAN LUIS OBISPO COUNTY:

### CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 07/27/2020  
Date Data Arrived at EDR: 08/12/2020  
Date Made Active in Reports: 10/26/2020  
Number of Days to Update: 75

Source: San Luis Obispo County Public Health Department  
Telephone: 805-781-5596  
Last EDR Contact: 11/11/2020  
Next Scheduled EDR Contact: 03/01/2021  
Data Release Frequency: Varies

## SAN MATEO COUNTY:

### BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020  
Date Data Arrived at EDR: 02/20/2020  
Date Made Active in Reports: 04/24/2020  
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 12/11/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Annually

### LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019  
Date Data Arrived at EDR: 03/29/2019  
Date Made Active in Reports: 05/29/2019  
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 12/01/2020  
Next Scheduled EDR Contact: 03/22/2021  
Data Release Frequency: Semi-Annually

## SANTA BARBARA COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA SANTA BARBARA: 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: 11/11/2020  
Next Scheduled EDR Contact: 03/01/2021  
Data Release Frequency: No Update Planned

## SANTA CLARA COUNTY:

### CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 08/20/2020  
Date Data Arrived at EDR: 08/20/2020  
Date Made Active in Reports: 11/09/2020  
Number of Days to Update: 81

Source: Department of Environmental Health  
Telephone: 408-918-1973  
Last EDR Contact: 11/11/2020  
Next Scheduled EDR Contact: 03/01/2021  
Data Release Frequency: Varies

### HIST LUST SANTA CLARA: 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

### LUST SANTA CLARA: 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: 11/16/2020  
Next Scheduled EDR Contact: 03/08/2021  
Data Release Frequency: No Update Planned

### SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 07/30/2020  
Date Data Arrived at EDR: 07/31/2020  
Date Made Active in Reports: 10/16/2020  
Number of Days to Update: 77

Source: City of San Jose Fire Department  
Telephone: 408-535-7694  
Last EDR Contact: 10/28/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Annually

## SANTA CRUZ COUNTY:

### CUPA SANTA CRUZ: 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: 11/11/2020  
Next Scheduled EDR Contact: 03/01/2021  
Data Release Frequency: Varies

## SHASTA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA SHASTA: 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: 11/11/2020  
Next Scheduled EDR Contact: 03/01/2021  
Data Release Frequency: Varies

## SOLANO COUNTY:

### LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019  
Date Data Arrived at EDR: 06/06/2019  
Date Made Active in Reports: 08/13/2019  
Number of Days to Update: 68

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 06/03/2019  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Quarterly

### UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 08/25/2020  
Date Data Arrived at EDR: 08/26/2020  
Date Made Active in Reports: 09/16/2020  
Number of Days to Update: 21

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 12/03/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

### CUPA SONOMA: Cupa Facility List Cupa Facility list

Date of Government Version: 07/07/2020  
Date Data Arrived at EDR: 07/08/2020  
Date Made Active in Reports: 09/25/2020  
Number of Days to Update: 79

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-565-1174  
Last EDR Contact: 09/16/2020  
Next Scheduled EDR Contact: 01/04/2021  
Data Release Frequency: Varies

### LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 09/18/2020  
Date Data Arrived at EDR: 09/22/2020  
Date Made Active in Reports: 12/14/2020  
Number of Days to Update: 83

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 09/16/2020  
Next Scheduled EDR Contact: 01/04/2021  
Data Release Frequency: Quarterly

## STANISLAUS COUNTY:

### CUPA STANISLAUS: CUPA Facility List Cupa facility list

Date of Government Version: 02/04/2020  
Date Data Arrived at EDR: 02/05/2020  
Date Made Active in Reports: 04/15/2020  
Number of Days to Update: 70

Source: Stanislaus County Department of Environmental Protection  
Telephone: 209-525-6751  
Last EDR Contact: 10/02/2020  
Next Scheduled EDR Contact: 01/25/2021  
Data Release Frequency: Varies

## SUTTER COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 08/25/2020  
Date Data Arrived at EDR: 08/26/2020  
Date Made Active in Reports: 11/17/2020  
Number of Days to Update: 83

Source: Sutter County Environmental Health Services  
Telephone: 530-822-7500  
Last EDR Contact: 11/23/2020  
Next Scheduled EDR Contact: 03/15/2021  
Data Release Frequency: Semi-Annually

## TEHAMA COUNTY:

### CUPA TEHAMA: CUPA Facility List

Cupa facilities

Date of Government Version: 08/11/2020  
Date Data Arrived at EDR: 08/12/2020  
Date Made Active in Reports: 10/26/2020  
Number of Days to Update: 75

Source: Tehama County Department of Environmental Health  
Telephone: 530-527-8020  
Last EDR Contact: 11/11/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Varies

## TRINITY COUNTY:

### CUPA TRINITY: CUPA Facility List

Cupa facility list

Date of Government Version: 07/14/2020  
Date Data Arrived at EDR: 07/16/2020  
Date Made Active in Reports: 09/29/2020  
Number of Days to Update: 75

Source: Department of Toxic Substances Control  
Telephone: 760-352-0381  
Last EDR Contact: 10/13/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Varies

## TULARE COUNTY:

### CUPA TULARE: CUPA Facility List

Cupa program facilities

Date of Government Version: 08/06/2020  
Date Data Arrived at EDR: 08/06/2020  
Date Made Active in Reports: 10/26/2020  
Number of Days to Update: 81

Source: Tulare County Environmental Health Services Division  
Telephone: 559-624-7400  
Last EDR Contact: 10/28/2020  
Next Scheduled EDR Contact: 02/15/2021  
Data Release Frequency: Varies

## TUOLUMNE COUNTY:

### CUPA TUOLUMNE: 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: Division of Environmental Health  
Telephone: 209-533-5633  
Last EDR Contact: 10/13/2020  
Next Scheduled EDR Contact: 02/01/2021  
Data Release Frequency: Varies

## VENTURA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## BWT VENTURA: 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: 07/10/2020	Source: Ventura County Environmental Health Division
Date Data Arrived at EDR: 07/22/2020	Telephone: 805-654-2813
Date Made Active in Reports: 10/08/2020	Last EDR Contact: 10/19/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Quarterly

## LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011	Source: Environmental Health Division
Date Data Arrived at EDR: 12/01/2011	Telephone: 805-654-2813
Date Made Active in Reports: 01/19/2012	Last EDR Contact: 09/23/2020
Number of Days to Update: 49	Next Scheduled EDR Contact: 01/11/2021
	Data Release Frequency: No Update Planned

## LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008	Source: Environmental Health Division
Date Data Arrived at EDR: 06/24/2008	Telephone: 805-654-2813
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 11/05/2020
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/22/2021
	Data Release Frequency: No Update Planned

## MED WASTE VENTURA: 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: 07/10/2020	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 07/22/2020	Telephone: 805-654-2813
Date Made Active in Reports: 10/07/2020	Last EDR Contact: 10/19/2020
Number of Days to Update: 77	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Quarterly

## UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/26/2020	Source: Environmental Health Division
Date Data Arrived at EDR: 09/08/2020	Telephone: 805-654-2813
Date Made Active in Reports: 12/01/2020	Last EDR Contact: 12/08/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 03/22/2021
	Data Release Frequency: Quarterly

## YOLO COUNTY:

### UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 06/23/2020	Source: Yolo County Department of Health
Date Data Arrived at EDR: 06/29/2020	Telephone: 530-666-8646
Date Made Active in Reports: 09/15/2020	Last EDR Contact: 10/07/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 01/11/2021
	Data Release Frequency: Annually

## YUBA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 08/06/2020  
Date Data Arrived at EDR: 08/07/2020  
Date Made Active in Reports: 10/26/2020  
Number of Days to Update: 80

Source: Yuba County Environmental Health Department  
Telephone: 530-749-7523  
Last EDR Contact: 11/03/2020  
Next Scheduled EDR Contact: 02/08/2021  
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: 08/10/2020  
Date Data Arrived at EDR: 10/20/2020  
Date Made Active in Reports: 11/02/2020  
Number of Days to Update: 13

Source: Department of Energy & Environmental Protection  
Telephone: 860-424-3375  
Last EDR Contact: 11/09/2020  
Next Scheduled EDR Contact: 02/22/2021  
Data Release Frequency: No Update Planned

## NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 04/10/2019  
Date Made Active in Reports: 05/16/2019  
Number of Days to Update: 36

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 10/09/2020  
Next Scheduled EDR Contact: 01/18/2021  
Data Release Frequency: Annually

## NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019  
Date Data Arrived at EDR: 04/29/2020  
Date Made Active in Reports: 07/10/2020  
Number of Days to Update: 72

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 10/30/2020  
Next Scheduled EDR Contact: 02/08/2021  
Data Release Frequency: Quarterly

## PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018  
Date Data Arrived at EDR: 07/19/2019  
Date Made Active in Reports: 09/10/2019  
Number of Days to Update: 53

Source: Department of Environmental Protection  
Telephone: 717-783-8990  
Last EDR Contact: 10/07/2020  
Next Scheduled EDR Contact: 01/25/2021  
Data Release Frequency: Annually

## RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 10/02/2019  
Date Made Active in Reports: 12/10/2019  
Number of Days to Update: 69

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 11/11/2020  
Next Scheduled EDR Contact: 03/01/2021  
Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018

Date Data Arrived at EDR: 06/19/2019

Date Made Active in Reports: 09/03/2019

Number of Days to Update: 76

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 12/03/2020

Next Scheduled EDR Contact: 03/22/2021

Data Release Frequency: Annually

### Oil/Gas Pipelines

Source: Endeavor Business Media

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 Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

### Electric Power Transmission Line Data

Source: Endeavor Business Media

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**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.

### 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

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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 and Wildlife  
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map  
Source: U.S. Geological Survey

### **STREET AND ADDRESS INFORMATION**

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DRAFT

## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

2450 NATOMAS PARK  
2450 NATOMAS PARK  
SACRAMENTO, CA 95833

### TARGET PROPERTY COORDINATES

Latitude (North): 38.61126 - 38° 36' 40.54"  
Longitude (West): 121.503939 - 121° 30' 14.18"  
Universal Transverse Mercator: Zone 10  
UTM X (Meters): 630259.1  
UTM Y (Meters): 4274493.5  
Elevation: 18 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map: 5619750 SACRAMENTO WEST, CA  
Version Date: 2012

Northeast Map: 5629066 RIO LINDA, CA  
Version Date: 2012

Southeast Map: 5619748 SACRAMENTO EAST, CA  
Version Date: 2012

Northwest Map: 5619770 TAYLOR MONUMENT, 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 principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.



# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

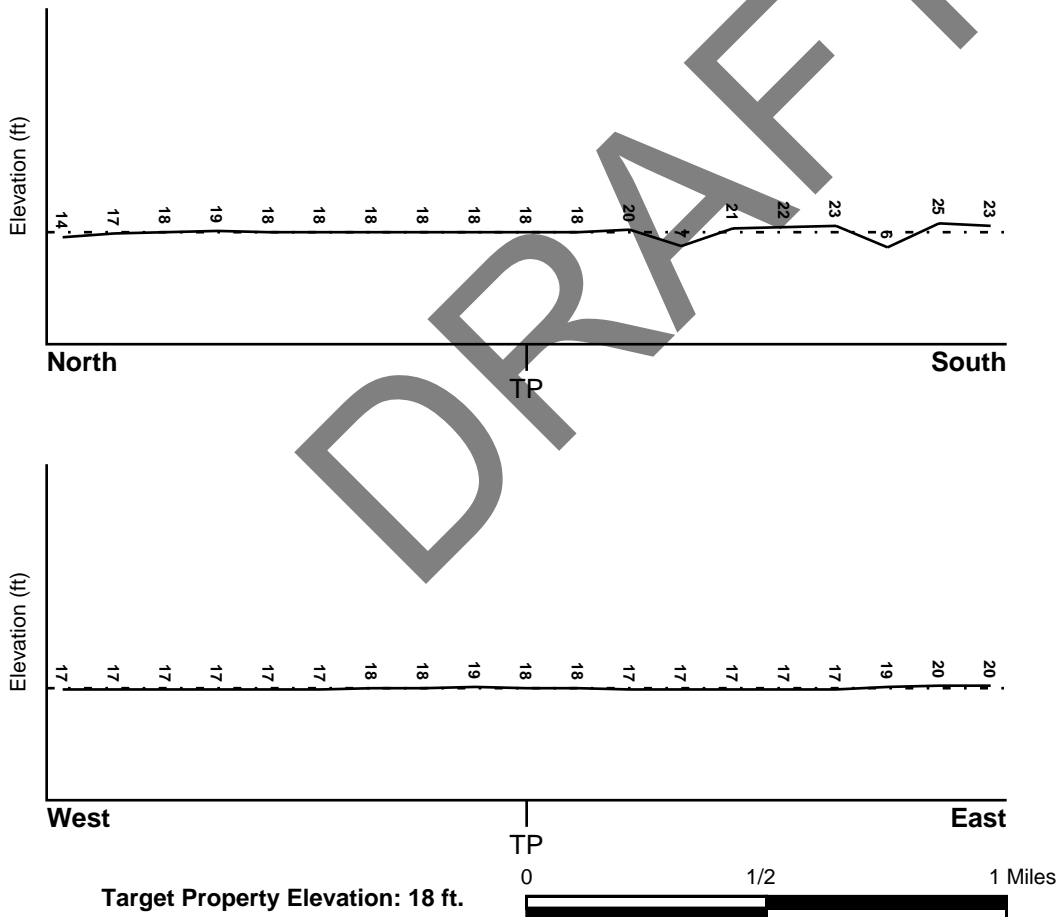
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General North

## 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>
06067C0157J	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06067C0045J	FEMA FIRM Flood data
06067C0063J	FEMA FIRM Flood data
06067C0176J	FEMA FIRM Flood data

## NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
SACRAMENTO WEST	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		

\* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q ( <i>decoded above as Era, System &amp; Series</i> )

#### 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).

DRAFT

# SSURGO SOIL MAP - 6302266.2s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: 2450 Natomas Park  
ADDRESS: 2450 Natomas Park  
Sacramento CA 95833  
LAT/LONG: 38.61126 / 121.503939

CLIENT: ANALYTICAL ENVIRONMENTAL SERVICES  
CONTACT: Charlane Gross  
INQUIRY #: 6302266.2s Appendix D  
DATE: December 15, 2020 12:41 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: SAILBOAT

Soil Surface Texture: silt 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 poorly drained

Hydric Status: Partially 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	16 inches	silt 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. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.4
2	16 inches	27 inches	stratified sandy loam to silty 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. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.4

## 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		
3	27 inches	33 inches	stratified sandy clay loam to silty 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. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.4
4	33 inches	61 inches	stratified loam to silt 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. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 8.4 Min: 7.4

**Soil Map ID: 2**

Soil Component Name:

COSUMNES

Soil Surface Texture:

silt 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:

Somewhat poorly drained

Hydric Status: Partially 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	7 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6
2	7 inches	20 inches	stratified silty clay loam to clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6
3	20 inches	42 inches	stratified clay loam to clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6
4	42 inches	59 inches	stratified clay loam to clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6

### 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 1 mile
State Database	1.000

### FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000189547	1/4 - 1/2 Mile NNW
E23	USGS40000189552	1/2 - 1 Mile ENE
G30	USGS40000189593	1/2 - 1 Mile North
31	USGS40000189510	1/2 - 1 Mile East

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	CAUSGSN00016756	1/4 - 1/2 Mile NNW
A3	CADWR8000038568	1/4 - 1/2 Mile North
B4	CAEDF0000089298	1/4 - 1/2 Mile ENE
B5	CAEDF0000105263	1/4 - 1/2 Mile ENE
B6	CAEDF0000133978	1/4 - 1/2 Mile ENE
B7	CAEDF0000076617	1/4 - 1/2 Mile ENE
B8	CAEDF0000091145	1/4 - 1/2 Mile ENE
B9	CAEDF0000017262	1/4 - 1/2 Mile ENE
C10	CAEDF0000018147	1/4 - 1/2 Mile East
C11	CAEDF0000009682	1/4 - 1/2 Mile East
C12	CAEDF0000096708	1/4 - 1/2 Mile East
C13	CAEDF0000088678	1/4 - 1/2 Mile East
C14	CAEDF0000112337	1/2 - 1 Mile East
C15	CAEDF0000140930	1/2 - 1 Mile East
C16	CAEDF0000140962	1/2 - 1 Mile East
C17	CAEDF0000115317	1/2 - 1 Mile East
18	CADDW0000010566	1/2 - 1 Mile South
D19	CAEDF0000121647	1/2 - 1 Mile WNW
D20	CAEDF0000011933	1/2 - 1 Mile WNW
D21	CAEDF0000108457	1/2 - 1 Mile WNW
D22	CAEDF0000009625	1/2 - 1 Mile WNW
E24	CAUSGSN00013289	1/2 - 1 Mile ENE
F25	CAEDF0000078072	1/2 - 1 Mile NW
F26	CAEDF0000118876	1/2 - 1 Mile NW
G27	CAUSGSN00015112	1/2 - 1 Mile North
F28	CAEDF0000115478	1/2 - 1 Mile NW
F29	CAEDF0000046984	1/2 - 1 Mile NW

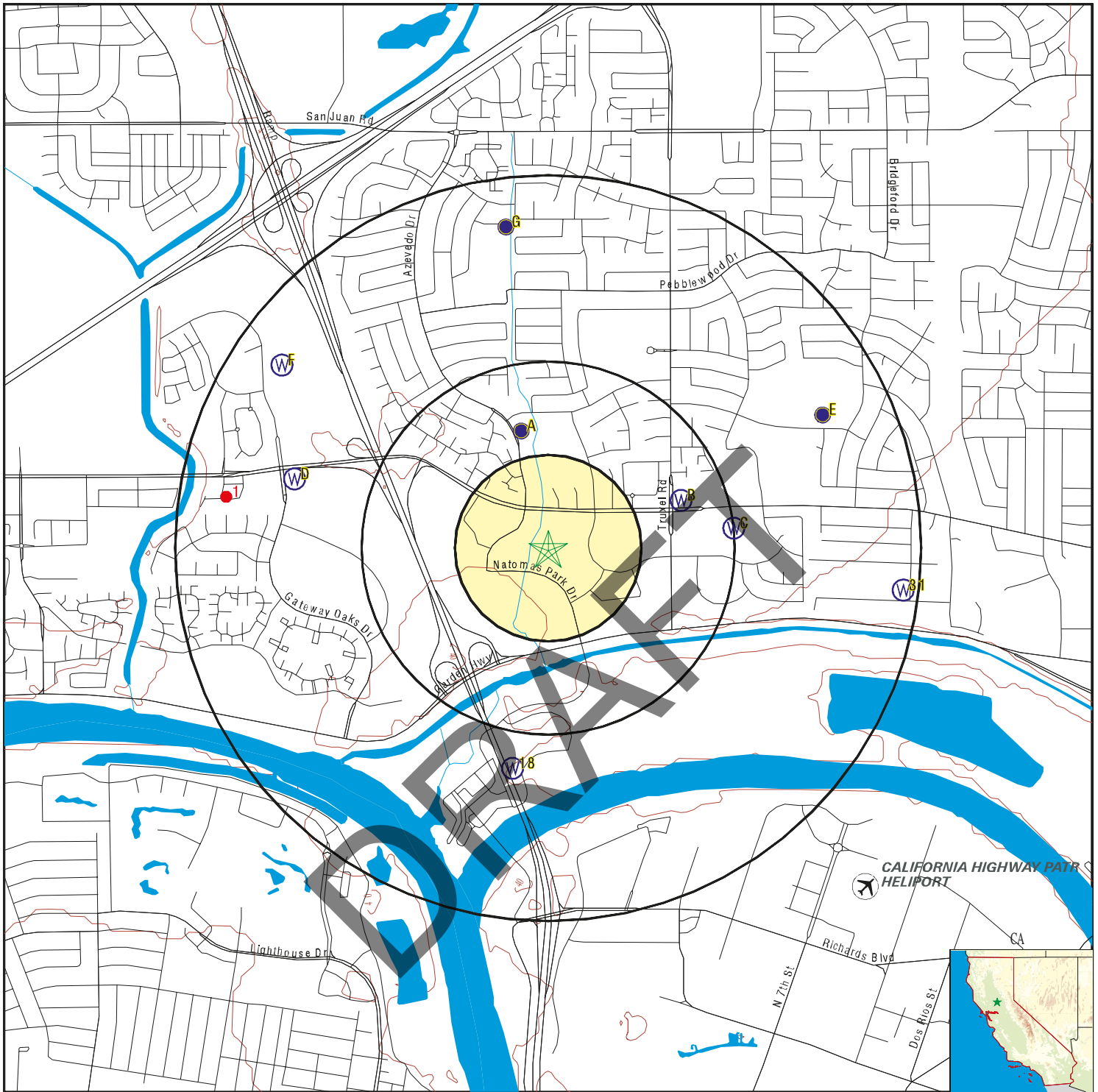
## OTHER STATE DATABASE INFORMATION

## STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG13000008042	1/2 - 1 Mile West



# PHYSICAL SETTING SOURCE MAP - 6302266.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: 2450 Natomas Park  
 ADDRESS: 2450 Natomas Park  
 Sacramento CA 95833  
 LAT/LONG: 38.61126 / 121.503939

CLIENT: ANALYTICAL ENVIRONMENTAL SERVICES  
 CONTACT: Charlane Gross  
 INQUIRY #: 6302266.2s  
 DATE: December 15, 2020 12:41 pm

Appendix D

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**A1**  
**NNW**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      CAUSGSN00016756**

Well ID:	USGS-383655121301601	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-383655121301601	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-383655121301601&store_num=		
GeoTracker Data:	Not Reported		

**A2**  
**NNW**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000189547**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	009N004E23R002M	Type:	Well
Description:	NAWQA DATA ENTRY COM VER 9.30.99 DAWSON BJ		
HUC:	18020109	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Units:	Not Reported	Aquifer:	Central Valley aquifer system
Formation Type:	Sacramento Valley Aquifer	Aquifer Type:	Unconfined single aquifer
Construction Date:	19971015	Well Depth:	48
Well Depth Units:	ft	Well Hole Depth:	48
Well Hole Depth Units:	ft		
Ground water levels,Number of Measurements:	2	Level reading date:	2004-05-26
Feet below surface:	11.97	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1998-08-03	Feet below surface:	9.58
Feet to sea level:	Not Reported	Note:	Not Reported

**A3**  
**North**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      CADWR8000038568**

State Well #:	09N04E23R002M	Station ID:	48041
Well Name:	Bannon Creek Park	Well Use:	Observation
Well Type:	Single Well	Well Depth:	48
Basin Name:	North American	Well Completion Rpt #:	Not Reported

**B4**  
**ENE**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      CAEDF0000089298**

Well ID:	T0606783253-MW-4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4
GAMA PFAS Testing:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=T0606783253&assigned\\_name=MW-4&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606783253&assigned_name=MW-4&store_num=)  
 GeoTracker Data: [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=T0606783253&assigned\\_name=MW-4](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606783253&assigned_name=MW-4)

**B5  
ENE  
1/4 - 1/2 Mile  
Higher**

**CA WELLS      CAEDF0000105263**

Well ID: T0606783253-MW-3      Well Type: MONITORING  
 Source: EDF      Other Name: MW-3  
 GAMA PFAS Testing: Not Reported  
 Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=T0606783253&assigned\\_name=MW-3&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606783253&assigned_name=MW-3&store_num=)  
 GeoTracker Data: [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=T0606783253&assigned\\_name=MW-3](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606783253&assigned_name=MW-3)

**B6  
ENE  
1/4 - 1/2 Mile  
Higher**

**CA WELLS      CAEDF0000133978**

Well ID: T0606783253-MW-5      Well Type: MONITORING  
 Source: EDF      Other Name: MW-5  
 GAMA PFAS Testing: Not Reported  
 Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=T0606783253&assigned\\_name=MW-5&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606783253&assigned_name=MW-5&store_num=)  
 GeoTracker Data: [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=T0606783253&assigned\\_name=MW-5](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606783253&assigned_name=MW-5)

**B7  
ENE  
1/4 - 1/2 Mile  
Higher**

**CA WELLS      CAEDF0000076617**

Well ID: T0606783253-MW-2      Well Type: MONITORING  
 Source: EDF      Other Name: MW-2  
 GAMA PFAS Testing: Not Reported  
 Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=T0606783253&assigned\\_name=MW-2&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606783253&assigned_name=MW-2&store_num=)  
 GeoTracker Data: [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=T0606783253&assigned\\_name=MW-2](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606783253&assigned_name=MW-2)

**B8  
ENE  
1/4 - 1/2 Mile  
Higher**

**CA WELLS      CAEDF0000091145**

Well ID: T0606783253-MW-1      Well Type: MONITORING  
 Source: EDF      Other Name: MW-1  
 GAMA PFAS Testing: Not Reported  
 Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=T0606783253&assigned\\_name=MW-1&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606783253&assigned_name=MW-1&store_num=)

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

GeoTracker Data: [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=T0606783253&assigned\\_name=MW-1](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606783253&assigned_name=MW-1)

**B9  
ENE  
1/4 - 1/2 Mile  
Higher**

**CA WELLS CAEDF0000017262**

Well ID: T0606783253-MW-6 Well Type: MONITORING  
Source: EDF Other Name: MW-6  
GAMA PFAS Testing: Not Reported  
Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=T0606783253&assigned\\_name=MW-6&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606783253&assigned_name=MW-6&store_num=)  
GeoTracker Data: [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=T0606783253&assigned\\_name=MW-6](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606783253&assigned_name=MW-6)

**C10  
East  
1/4 - 1/2 Mile  
Higher**

**CA WELLS CAEDF0000018147**

Well ID: SL0606778991-MW-1S Well Type: MONITORING  
Source: EDF Other Name: MW-1S  
GAMA PFAS Testing: Not Reported  
Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=SL0606778991&assigned\\_name=MW-1S&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0606778991&assigned_name=MW-1S&store_num=)  
GeoTracker Data: [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=SL0606778991&assigned\\_name=MW-1S](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0606778991&assigned_name=MW-1S)

**C11  
East  
1/4 - 1/2 Mile  
Higher**

**CA WELLS CAEDF0000009682**

Well ID: SL0606778991-MW-1D Well Type: MONITORING  
Source: EDF Other Name: MW-1D  
GAMA PFAS Testing: Not Reported  
Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=SL0606778991&assigned\\_name=MW-1D&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0606778991&assigned_name=MW-1D&store_num=)  
GeoTracker Data: [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=SL0606778991&assigned\\_name=MW-1D](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0606778991&assigned_name=MW-1D)

**C12  
East  
1/4 - 1/2 Mile  
Higher**

**CA WELLS CAEDF00000096708**

Well ID: SL0606778991-MW-2S Well Type: MONITORING  
Source: EDF Other Name: MW-2S  
GAMA PFAS Testing: Not Reported  
Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=SL0606778991&assigned\\_name=MW-2S&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0606778991&assigned_name=MW-2S&store_num=)  
GeoTracker Data: [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=SL0606778991&assigned\\_name=MW-2S](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0606778991&assigned_name=MW-2S)

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**C13**  
**East**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      CAEDF0000088678**

Well ID:	SL0606778991-MW-2D	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-2D
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=SL0606778991&amp;assigned_name=MW-2D&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=SL0606778991&amp;assigned_name=MW-2D&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=SL0606778991&amp;assigned_name=MW-2D">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=SL0606778991&amp;assigned_name=MW-2D</a>		

**C14**  
**East**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000112337**

Well ID:	SL0606778991-MW-4S	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-4S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=SL0606778991&amp;assigned_name=MW-4S&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=SL0606778991&amp;assigned_name=MW-4S&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=SL0606778991&amp;assigned_name=MW-4S">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=SL0606778991&amp;assigned_name=MW-4S</a>		

**C15**  
**East**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000140930**

Well ID:	SL0606778991-MW-5S	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-5S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=SL0606778991&amp;assigned_name=MW-5S&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=SL0606778991&amp;assigned_name=MW-5S&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=SL0606778991&amp;assigned_name=MW-5S">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=SL0606778991&amp;assigned_name=MW-5S</a>		

**C16**  
**East**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000140962**

Well ID:	SL0606778991-MW-3S	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-3S
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=SL0606778991&amp;assigned_name=MW-3S&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=SL0606778991&amp;assigned_name=MW-3S&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=SL0606778991&amp;assigned_name=MW-3S">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=SL0606778991&amp;assigned_name=MW-3S</a>		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**C17**  
**East**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAEDF0000115317**

Well ID: SL0606778991-MW-3D      Well Type: MONITORING  
 Source: EDF      Other Name: MW-3D  
 GAMA PFAS Testing: Not Reported  
 Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=SL0606778991&assigned\\_name=MW-3D&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=SL0606778991&assigned_name=MW-3D&store_num=)  
 GeoTracker Data: [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=SL0606778991&assigned\\_name=MW-3D](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=SL0606778991&assigned_name=MW-3D)

**18**  
**South**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADDW0000010566**

Well ID: 3400117-001      Well Type: MUNICIPAL  
 Source: Department of Health Services  
 Other Name: MAIN WELL P-59      GAMA PFAS Testing: Not Reported  
 Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp\\_date=&global\\_id=&assigned\\_name=3400117-001&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=3400117-001&store_num=)  
 GeoTracker Data: Not Reported

**D19**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      CAEDF0000121647**

Well ID: T0606791616-MW2      Well Type: MONITORING  
 Source: EDF      Other Name: MW2  
 GAMA PFAS Testing: Not Reported  
 Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=T0606791616&assigned\\_name=MW2&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606791616&assigned_name=MW2&store_num=)  
 GeoTracker Data: [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=T0606791616&assigned\\_name=MW2](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606791616&assigned_name=MW2)

**D20**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      CAEDF0000011933**

Well ID: T0606791616-MW1      Well Type: MONITORING  
 Source: EDF      Other Name: MW1  
 GAMA PFAS Testing: Not Reported  
 Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=T0606791616&assigned\\_name=MW1&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606791616&assigned_name=MW1&store_num=)  
 GeoTracker Data: [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=T0606791616&assigned\\_name=MW1](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606791616&assigned_name=MW1)

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**D21**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      CAEDF0000108457**

Well ID:	T0606791616-MW3	Well Type:	MONITORING
Source:	EDF	Other Name:	MW3
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0606791616&amp;assigned_name=MW3&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0606791616&amp;assigned_name=MW3&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0606791616&amp;assigned_name=MW3">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0606791616&amp;assigned_name=MW3</a>		

**D22**  
**WNW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      CAEDF0000009625**

Well ID:	T0606791616-MW4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	<a href="https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0606791616&amp;assigned_name=MW4&amp;store_num=">https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&amp;samp_date=&amp;global_id=T0606791616&amp;assigned_name=MW4&amp;store_num=</a>		
GeoTracker Data:	<a href="https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0606791616&amp;assigned_name=MW4">https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&amp;global_id=T0606791616&amp;assigned_name=MW4</a>		

**E23**  
**ENE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000189552**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	009N004E24Q001M	Type:	Well
Description:	NAWQA DATA ENTRY COM VER 9.30.99 DAWSON BJ		
HUC:	18020109	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Central Valley aquifer system
Formation Type:	Sacramento Valley Aquifer	Aquifer Type:	Unconfined single aquifer
Construction Date:	19971009	Well Depth:	42.5
Well Depth Units:	ft	Well Hole Depth:	42.5
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	2004-05-26
Feet below surface:	16.83	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1998-08-05	Feet below surface:	15.25
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**E24**  
**ENE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAUSGSN00013289**

Well ID:                      USGS-383659121292201                      Well Type:                      UNK  
 Source:                      United States Geological Survey  
 Other Name:                      USGS-383659121292201                      GAMA PFAS Testing:                      Not Reported  
 Groundwater Quality Data:                      [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp\\_date=&global\\_id=&assigned\\_name=USGS-383659121292201&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-383659121292201&store_num=)  
 GeoTracker Data:                      Not Reported

**F25**  
**NW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      CAEDF0000078072**

Well ID:                      T0606774789-MW3                      Well Type:                      MONITORING  
 Source:                      EDF                      Other Name:                      MW3  
 GAMA PFAS Testing:                      Not Reported  
 Groundwater Quality Data:                      [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=T0606774789&assigned\\_name=MW3&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606774789&assigned_name=MW3&store_num=)  
 GeoTracker Data:                      [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=T0606774789&assigned\\_name=MW3](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606774789&assigned_name=MW3)

**F26**  
**NW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      CAEDF0000118876**

Well ID:                      T0606774789-MW1                      Well Type:                      MONITORING  
 Source:                      EDF                      Other Name:                      MW1  
 GAMA PFAS Testing:                      Not Reported  
 Groundwater Quality Data:                      [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp\\_date=&global\\_id=T0606774789&assigned\\_name=MW1&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606774789&assigned_name=MW1&store_num=)  
 GeoTracker Data:                      [https://geotracker.waterboards.ca.gov/profile\\_report.asp?cmd=MWEDFResults&global\\_id=T0606774789&assigned\\_name=MW1](https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606774789&assigned_name=MW1)

**G27**  
**North**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CAUSGSN00015112**

Well ID:                      USGS-383727121301801                      Well Type:                      UNK  
 Source:                      United States Geological Survey  
 Other Name:                      USGS-383727121301801                      GAMA PFAS Testing:                      Not Reported  
 Groundwater Quality Data:                      [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp\\_date=&global\\_id=&assigned\\_name=USGS-383727121301801&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-383727121301801&store_num=)  
 GeoTracker Data:                      Not Reported



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**F28**  
**NW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      CAEDF0000115478**

Well ID:	T0606774789-MW4	Well Type:	MONITORING
Source:	EDF	Other Name:	MW4
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606774789&assigned_name=MW4&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606774789&assigned_name=MW4		

**F29**  
**NW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      CAEDF0000046984**

Well ID:	T0606774789-MW2	Well Type:	MONITORING
Source:	EDF	Other Name:	MW2
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=T0606774789&assigned_name=MW2&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=T0606774789&assigned_name=MW2		

**G30**  
**North**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000189593**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	009N004E23A001M	Type:	Well
Description:	NAWQA DATA ENTRY COM VER 9.30.99 DAWSON BJ		
HUC:	18020109	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Central Valley aquifer system
Formation Type:	Sacramento Valley Aquifer	Aquifer Type:	Unconfined single aquifer
Construction Date:	19971001	Well Depth:	36.5
Well Depth Units:	ft	Well Hole Depth:	36.5
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	3	Level reading date:	2004-05-26
Feet below surface:	11.10	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1998-08-06	Feet below surface:	11.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-01-08	Feet below surface:	8
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**31**  
**East**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000189510**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	009N004E25A001M	Type:	Well
Description:	Not Reported	HUC:	18020111
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19560101	Well Depth:	232
Well Depth Units:	ft	Well Hole Depth:	300
Well Hole Depth Units:	ft		

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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance

Database EDR ID Number

1  
West  
1/2 - 1 Mile

OIL\_GAS CAOG13000008042

API #:	0406720015	Well #:	5
Well Status:	Plugged	Well Type:	DH
Operator Name:	A. A. Hopkins, Jr., Operator	Field Name:	Any Field
Lease Name:	Elkhorn	GIS Source:	hud
Area Name:	Any Area	Directionally Drilled:	N
Confidential Well:	N		
SPUD Date:	02/29/1968		

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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95833	19	0

Federal EPA Radon Zone for SACRAMENTO County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level  $\geq$  2 pCi/L and  $\leq$  4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

---

### Federal Area Radon Information for SACRAMENTO COUNTY, CA

Number of sites tested: 52

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.665 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.200 pCi/L	100%	0%	0%
Basement	8.350 pCi/L	50%	50%	0%

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# 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 and Wildlife

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.

## OTHER STATE DATABASE INFORMATION

### Groundwater Ambient Monitoring & Assessment Program

State Water Resources Control Board

Telephone: 916-341-5577

The GAMA Program is California's comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Health Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

### 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.

### California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

### California Earthquake Fault Lines

Source: California Division of Mines and Geology

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.

## RADON

### State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## 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.

## OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

## STREET AND ADDRESS INFORMATION

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**APPENDIX F**

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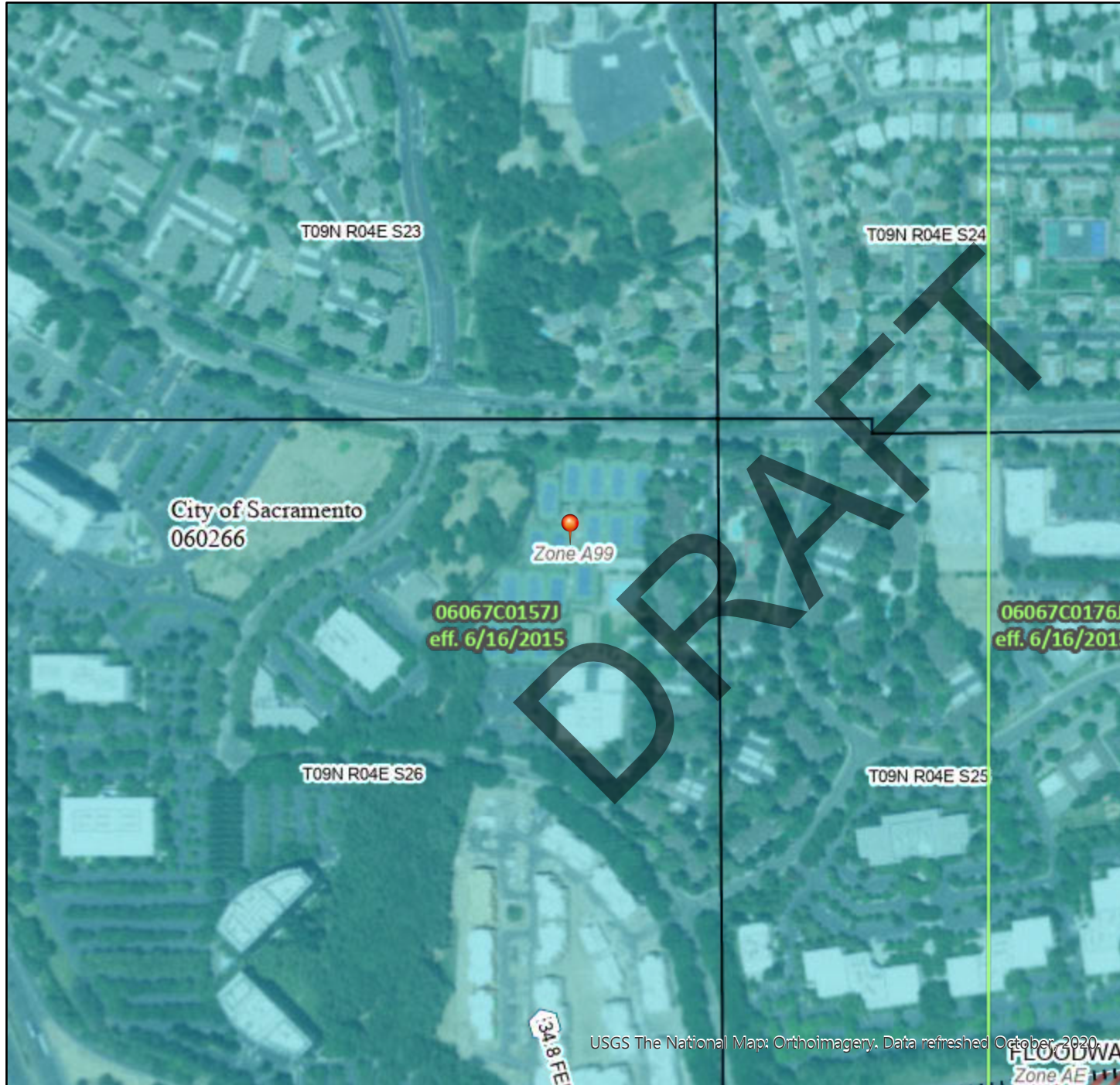
*FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) MAP*



# National Flood Hazard Layer FIRMMette



121°30'33"W 38°36'57"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D

OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall

OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature

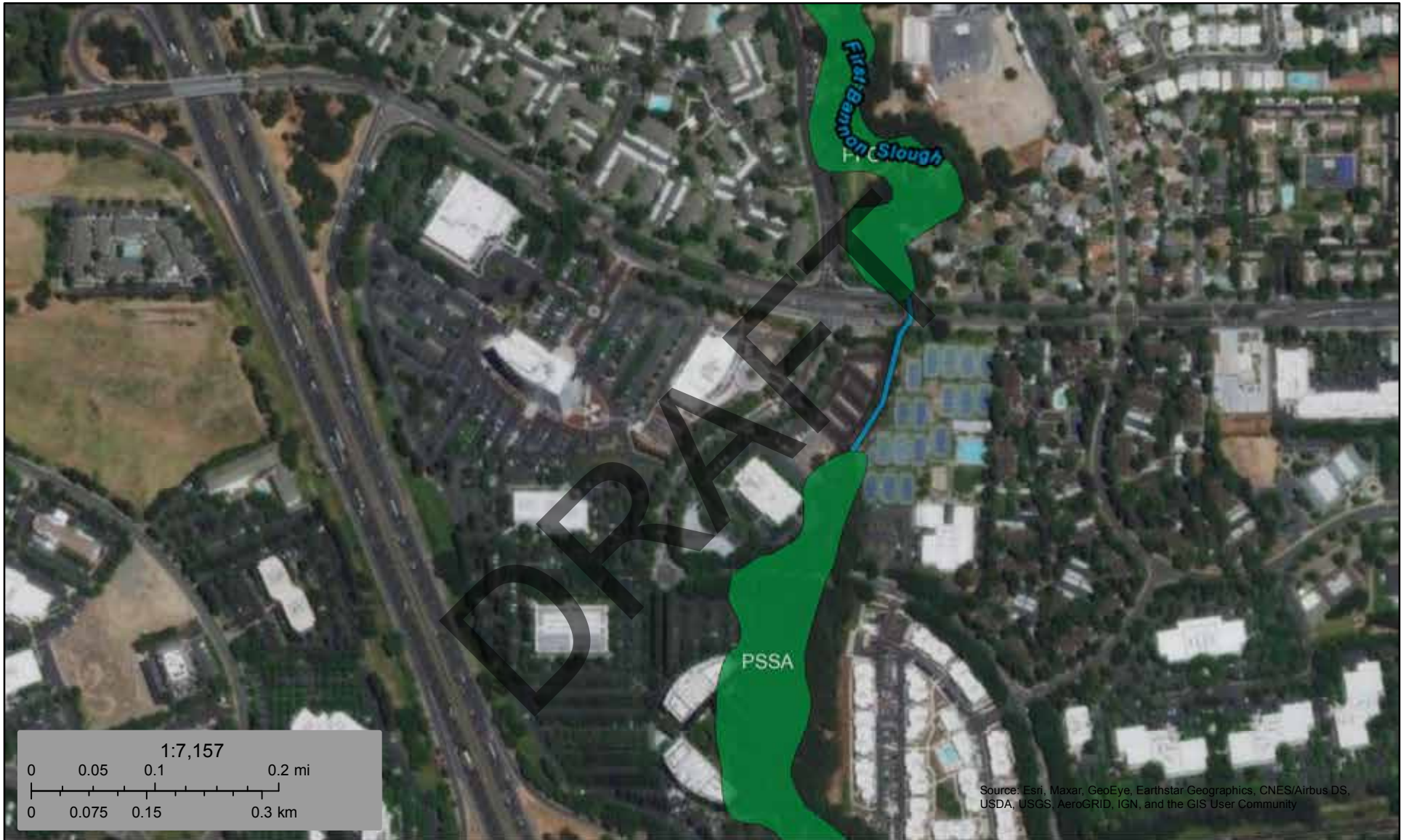
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards






The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **12/21/2020 at 11:09 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



December 21, 2020

**Wetlands**

- |   |                                |   |                                   |   |          |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland       |  | Lake     |
|  | Estuarine and Marine Wetland   |  | Freshwater Forested/Shrub Wetland |  | Other    |
|   |                                |  | Freshwater Pond                   |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

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# **APPENDIX G**

QUESTIONNAIRES

## User/Owner/Occupant/Key Site Manager Questionnaire

The City of Sacramento is conducting a Phase I Environmental Site Assessment according to American Society for Testing and Materials (ASTM) Standard Practice E1527-13. We request your assistance in conducting this Assessment by asking that you complete this questionnaire and return it as soon as possible.

These questions should be answered by someone or a group of people that are most likely to have knowledge about the subject of the questions – typically the owner, long time tenant, or a property manager. *Please do not leave any blank.* Answer in good faith to the best of your knowledge and if you're not sure how to answer the question, feel free to contact the environmental professional for clarification.

Property Name: Natomas Sports Club

Property Address or ID Number (as applicable): 2450 Natomas Park Dr.

General Property Description (location, use, level of development, topography, biota, etc.): Fully developed sports club closed as of November 6, 2020. Facilities include outdoor tennis and volleyball courts and a swimming pool.

Question	Yes	Not Sure	No	If yes, please describe
<p>1. Did a search of land title records (or judicial records where appropriate – see NOTE below) identify any environmental liens filed or recorded against the property under federal, tribal, state or local law?</p> <p>NOTE — Certain jurisdictions require that environmental liens be filed in judicial records rather than in land title records. In such cases judicial records must be searched for environmental liens.</p>		X		
<p>2. Did a search of recorded land title records (or judicial records where appropriate, see NOTE below) 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</p>		X		

Question	Yes	Not Sure	No	If yes, please describe
<p>under federal, tribal, state or local law?</p> <p>NOTE — Certain jurisdictions require that activity and use limitation (AULs) be filed in judicial records rather than in land title records. In such cases judicial records must be searched for AULs.</p>				
<p>3. Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?</p>	X			<p>Spare Time Sports Clubs is the general partner of Natomas Racquet Club Investors, L.P. and operated the sports club business at the property. I am the President of Spare Time Sports Clubs.</p>
<p>4. Does the purchase price paid for the property reasonably reflect the fair market value of the property? If you conclude that there is a difference, do you have any reason to believe that the lower purchase price is because contamination is known or believed to be present at the property?</p>	X			
<p>5. 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 of hazardous materials?</p>	X			

Question	Yes	Not Sure	No	If yes, please describe
6. Do you know the past uses on the property? If so, please generally describe the uses and how long have you have had knowledge of the property?	X			The sports club was constructed in 1990 and operated on the property through November 6, 2020. The property has been unoccupied since November 6, 2020. The sports club business included fitness, swimming, tennis and various other sports activities.
7. Do you know of specific chemicals that are present or once were present at the property?	X			Pool and Spa sanitation chemicals Janitorial products for cleaning of locker rooms
8. Do you know of spills or other chemical releases that have taken place at the property?			X	
9. Do you know of any environmental cleanups that have taken place at the property?			X	

Question	Yes	Not Sure	No	If yes, please describe
10. Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of hazardous materials or petroleum product releases at the property?			X	
11. Are there any pits, ponds, or lagoons on the property that have been used in connection with waste disposal or waste treatment?			X	
12. Are there any areas of stained soil or pavement on the property?			X	
13. Are there any areas of stressed vegetation caused by something other than insufficient water on the property?			X	
14. On the property are there any depressions, mounds, or filled/graded areas that are associated with solid waste disposal?			X	

Question	Yes	Not Sure	No	If yes, please describe
15. Are there any liquid discharges into waterways on the property or injections into groundwater on the property?			X	
16. Are there any wells located on the property?			X	
17. Are there any septic systems or cesspools on the property?			X	
18. Do you have or know of the existence of any of the following records related to the property?  a) Environmental site assessment reports? b) Environmental compliance audit reports?	X		X	Phase 1 Environmental Site Assessment from EMG dated 4/29/1998 provided to buyer as part of due diligence documentation



Question	Yes	Not Sure	No	If yes, please describe
c) Environmental permits (for example, solid waste disposal permits, hazardous waste disposal permit, wastewater permits, NPDES permits, underground injection permits)?			X	
d) Registrations for underground and above-ground storage tanks?			X	
e) Registrations for underground injection system?				
f) Material safety data sheets?	X			The sports club maintained MSDS sheets on the property while operating
g) Community right-to-know plan?			X	
h) Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; facility response plans, etc.?	X			The sports club maintained an Emergency Procedures Manual on the property while operating
i) Reports regarding hydrogeologic conditions on the property or surrounding area?				Seismic Risk Assessment from EMG dated 4/30/1998 provided to buyer as part of due diligence documentation
j) Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property?			X	
k) Hazardous waste generator notices or reports?			X	
l) Geotechnical studies?	X			Geotechnical Report dated 1/9/1989 from Anderson Geotechnical Consulting provided to buyer as part of due diligence documentation
m) Risk assessments?	X			Seismic Risk Assessment noted above
n) Recorded Activity and Use Limitations (AULs)?		X		

Question	Yes	Not Sure	No	If yes, please describe
19. Do you know of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances on the property?			X	
20. Do you know of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances?			X	

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Question	Yes	Not Sure	No	If yes, please describe
21. Do you have any reason to believe contamination is present at the property that was not covered by the above questions?			X	

Name: Larry Gilzean

Title (if applicable): President, Spare Time, Inc., General Partner of Natomas Racquet Club Invesotrs, L.P.

Association with Property (may check more than one if applicable):


User (party seeking to use the Phase I Environmental Site Assessment)

Owner (owner of Property)

Occupant (party occupying or using the Property)

Key Site Manager (person with good knowledge or uses or physical characteristics of the Property)

Years associated with Property:  0 Years  1 Year  5 Years  10+ Years

Sign Here:  Date: 12/29/2020

*If more than one person assisted in completing this form:*

Name: \_\_\_\_\_

Title (if applicable): \_\_\_\_\_

Association with Property (may check more than one if applicable):

User (party seeking to use the Phase I Environmental Site Assessment)

Owner (owner of Property)

Occupant (party occupying *or using* the Property)

Key Site Manager (person with good knowledge or uses or physical characteristics of the Property)

Years associated with Property:       1 Year       5 Years       10+ Years

Sign Here: \_\_\_\_\_ Date: \_\_\_\_\_

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State/Local/Tribal Government Official Interview Form

**Interviewee(s):**

Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Name/Title: \_\_\_\_\_ Phone Number: \_\_\_\_\_  
Email Address: \_\_\_\_\_

Type of Interview:    \_\_\_ On-site    \_\_\_ Off-site/Telephone    \_\_\_ Off-site/Letter or Email

**Governmental Agency Description (as applicable):**

Agency Office Name: \_\_\_\_\_  
Agency Office Address: \_\_\_\_\_  
Agency Function/Jurisdiction: \_\_\_\_\_  
\_\_\_\_\_

**Interview Results (to the best knowledge of the Interviewee(s)):**

Historical Knowledge about Property?    \_\_\_ 1 Year    \_\_\_ 5 Years    \_\_\_ 10+ Years  
Historical Use of Property?    \_\_\_ Residential    \_\_\_ Industrial    \_\_\_ Commercial  
  \_\_\_ Agricultural    \_\_\_ Rural    \_\_\_ Other  
Reason to believe REC present?    \_\_\_ Yes    \_\_\_ No    \_\_\_ Require Data  
Comment(s):

**Signature(s):**

*Charlene Pross* \_\_\_\_\_  
Signed (Interviewer)    Title    Date

## Adjacent Property Interview Form

### Interviewee(s):

Date: Jan 5, 2021

Time: 11:30 am

Name: Scott Walsh

Phone Number: 916-619-2205

Address: 2205 Natomas Park Dr., Sacramento, CA 95833

Type of Interview:  On-site  Off-site/Telephone  Off-site/Letter or Email

### Adjacent Property Description (as applicable):

Adjacent Property Name/Location: Natomas Sports Club

Adjacent Property Address: 2450 Natomas Park Drive

Adjacent Property Use: Commercial

Adjacent Property ID Number(s): \_\_\_\_\_

### Interview Results (to the best knowledge of the Interviewee(s)):

Historical Knowledge about Property?  1 Year  5 Years  10+ Years

Historical Use of Property?  Residential  Industrial  Commercial

Agricultural  Rural  Other

Reason to believe REC present?  Yes  No  Require Data

Comment(s):

### Signature(s):

Charlene Pross

Sr. Archaeologist

Signed (Interviewer)

Title

Date

January 5, 2021

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***APPENDIX H***

*RESUMES*



Mr. Wilson is an environmental toxicologist with over 19 years of experience in performing and managing environmental monitoring projects and providing technical oversight including identification and evaluation of the fate and transport of contaminants in support of environmental compliance projects. Areas of expertise include hazardous materials assessment and remediation, environmental chemistry and toxicology, contaminant identification and sample plan preparation, evaluation of analytical results and determination of compliance obligations, and oversight of analytical toxicology studies and preparation of associated compliance reports. Mr. Wilson also has experience developing and performing various types and levels of environmental monitoring projects including long-term, multi-faceted monitoring projects, performing technical monitoring studies, preparing technical reports, conducting impact analysis, and developing mitigation protocols. As staff Toxicologist, he works with other project managers, coordinates/consults with jurisdictional agencies (U.S Environmental Protection Agency, California Regional Water Quality Control Boards, Department of Toxic Substance Control, Office of Environmental Health Hazard Assessment, as well as numerous county, city, and special districts), and legal counsel to ensure environmental monitoring studies, data, and analyses are technically accurate and legally defensible. Mr. Wilson has also served as lead instructor for various types of technical training sessions including hazardous materials courses such as the mandated 40-hour Hazardous Wastes Operations for emergency response to hazardous waste incidents under 29 CFR 1910.120. Mr. Wilson is an Environmental Professional as defined under the recent amendment to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

### **Education**

B.S., Environmental Toxicology, Specialization, Analytical Chemistry  
University of California, Davis

### **Certification**

CARB Lead Offset Verifier (#H2-19-165)  
CARB Lead GHG Verifier (#H-18-166)

### **Key Qualifications**

- 19 years experience in the field of environmental compliance
- Extensive experience as lead instructor for various types of technical training sessions, including environmental monitoring.
- Areas of expertise include energy, waste water, recycled water, air quality analysis, hydrology and water quality, geology and soils, traffic, and noise.

### **Representative Project Experience**

- Lytton Rancheria 1.25-Acres Phase I ESA, Windsor, Sonoma County, CA.
- Lytton Rancheria 2.29-Acres Phase I ESA, Windsor, Sonoma County, CA.
- MJL Phase I Environmental Site Assessment, Sacramento, Sacramento County, CA.
- Shirland Tract Phase I Environmental Site Assessment, Auburn, Placer County, CA.
- 4848 Madison Avenue Phase I ESA, Sacramento County, CA
- 620 and 628 15<sup>th</sup> Street Phase I ESA, Sacramento County, CA
- Copper Whole-Effluent Toxicity Study, Placer County, CA. Determined the toxicological activity of copper within wastewater to assess accuracy of permitted discharge levels established by the Regional Water Quality Control Board.
- Instructor, 2000-Current. Courses included Hazardous Materials Chemistry and Toxicology for private companies; OSHA 40-hour Hazardous Waste Operations (Hazwoper)-Toxicology Section for private companies and government institutions; Clandestine Drug Lab Basic Safety for the Drug Enforcement Agency in Quantico, Virginia.  
Clandestine Drug Laboratory Property Contamination Assessments, Sacramento, Amador, Calaveras, Placer, Yolo, Yuba, and Merced counties, CA, 2000-2002.





Ms. Gross has over 30 years of management, field, and research experience in the field of archaeology. Ms. Gross' range of experience has been acquired by working as both a field technician and field director in 17 states and U.S. territories, including both coasts, the central Plains, and the South Pacific. This exposure has resulted in the widest possible range of experience in all forms of archaeological survey, from shovel testing to pedestrian survey, with the accompanying ability to look at landscape forms and assess the potential for prehistoric cultural sites. Ms. Gross has considerable experience in the development and production of cultural resources recordation and management documents including survey, testing, and data recovery reports, National Register of Historic Places evaluations, and cultural resources chapters for various CEQA and NEPA documents. Ms. Gross is also highly skilled in agency, client, and Native American community coordination and consultation.

### **Education**

M.A., Anthropology, San Jose State University

B.A., Anthropology, University of California, Berkeley

### **Certification**

Register of Professional Archaeologists (RPA)

### **Key Qualifications**

- 30 years of management, field, and research experience on a wide variety of projects
- Well-versed in all aspects of historic-era and prehistoric resource investigations and the requirements of CEQA, NEPA, Section 106, and Section 110 of the National Historic Preservation Act.
- Extensive large-scale project management experience

### **Representative Project Experience**

Ms. Gross has been a contributing analyst and author of numerous environmental impact statements, environmental assessments, Phase I Environmental Site Assessments, and environmental overviews required for NEPA/CEQA compliance, including the following:

- Chickasaw Nation Development Project Phase I, OK
- Menominee Phase I, MI
- Trinidad Rancheria Phase I, Trinidad, CA
- 2300 Fair Oaks Drive Phase I, Sacramento County, CA
- Casa Grande Cultural Study and Phase I, Sonoma County, CA
- Vanden Meadows Annexation, Specific Plan and Development Project EIR, City of Vacaville, CA
- Vanden Meadows Annexation, Specific Plan and Development Project EIR, City of Vacaville
- Vacaville Well 8 Cultural Study, Solano County, CA
- Vanden Meadows Annexation, Specific Plan and Development Project EIR, City of Vacaville, Solano County, CA
- Copart Automotive Salvage Yard IS, Solano County, CA
- Lodi Pump and Irrigation Cultural Study, Solano County, CA
- Foxboro Knoll EA, Solano County, CA
- Scott's Valley Technical Studies, Solano County, CA
- Zocchi EA, Solano County, CA
- Lodi Pump and Irrigation Cultural Study, Solano County, CA
- Water District, Sacramento County, CA
- Greenback Lane Cultural Study, Sacramento County, CA
- La Vista Water Tank Project Cultural Study, Sacramento County, CA
- Liberty Towers Church Cultural Study, Sacramento County, CA
- Sears Ditch, Leisure Lane, Jibboom Street Projects Cultural Resources studies, City of Sacramento, CA
- Mutual Housing Cultural Study, Sacramento County, CA
- Kent Farm CEQA, Yolo County, CA
- Lopez Farm CEQA, Yolo County, CA
- Upper Swanston Ranch/Yolo Bypass Medicinal Cannabis Farm IS, Yolo County, CA
- Yocha Dehe TEIR, Yolo County
- Wilton Rancheria EIS, Galt, CA
- Lytton San Pablo Parking Lot IS, Contra Costa County, CA



# Environmental Noise Assessment

## Natomas Park Drive Apartments

City of Sacramento, California

July 1, 2021

Project #210317

Prepared for:



**Raney Planning and Management**

1501 Sports Drive, Suite A  
Sacramento, CA 95834

Prepared by:

**Saxelby Acoustics LLC**



**Luke Saxelby, INCE Bd. Cert.**  
**Principal Consultant**  
**Board Certified, Institute of Noise Control Engineering (INCE)**

(916) 760-8821  
www.SaxNoise.com | Luke@SaxNoise.com  
915 Highland Pointe Drive, Suite 250  
Roseville, CA 95678

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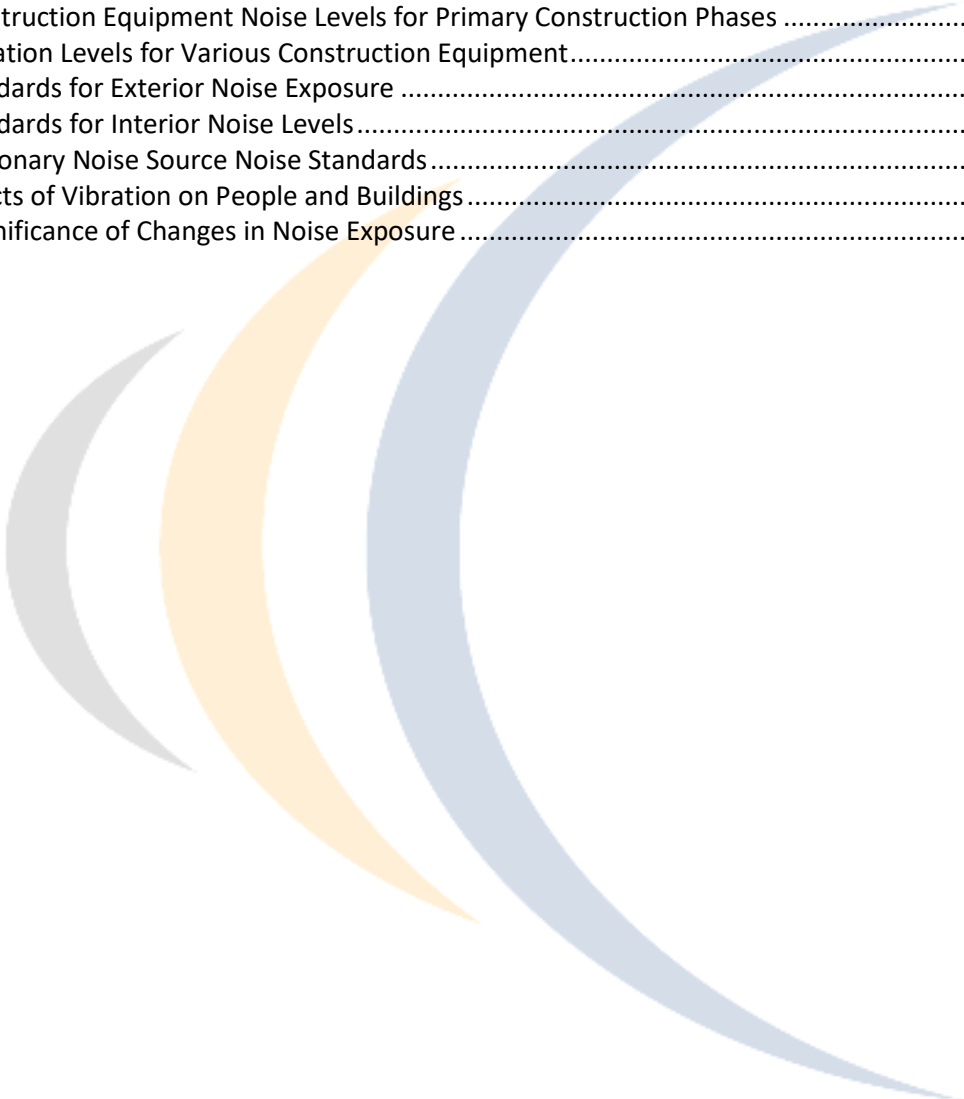
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## INTRODUCTION

The Natomas Park Drive Apartments residential project is located at 2450 Natomas Park Drive in the City of Sacramento, California. The property is currently occupied by a recreational facility including tennis courts, pools, and a gym. The project consists of the demolition of the existing facilities and the construction of 10 multi-family residential buildings totaling 190 new units. The surrounding land uses include multi-family residential uses to the east and south of the project site as well as commercial office buildings to the west. The northern project boundary is adjacent to West El Camino Avenue.

**Figure 1** shows the project site plan. **Figure 2** shows an aerial photo of the project site.

## ENVIRONMENTAL SETTING

### BACKGROUND INFORMATION ON NOISE

#### *Fundamentals of Acoustics*

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment.



**SITE DATA**

UNITS	190
LOT SIZE	9.06 ACRES
DENSITY	20.97 UNITS/ ACRE

**PARKING DATA**

SURFACE PARKING	253 SPACES
GARAGE	96 SPACES
TOTAL PARKING	353 SPACES
PARKING RATIO	1.86 SPACES/UNIT



SITE PLAN

2450 Natomas Park Dr. | SACRAMENTO, CA **A01**

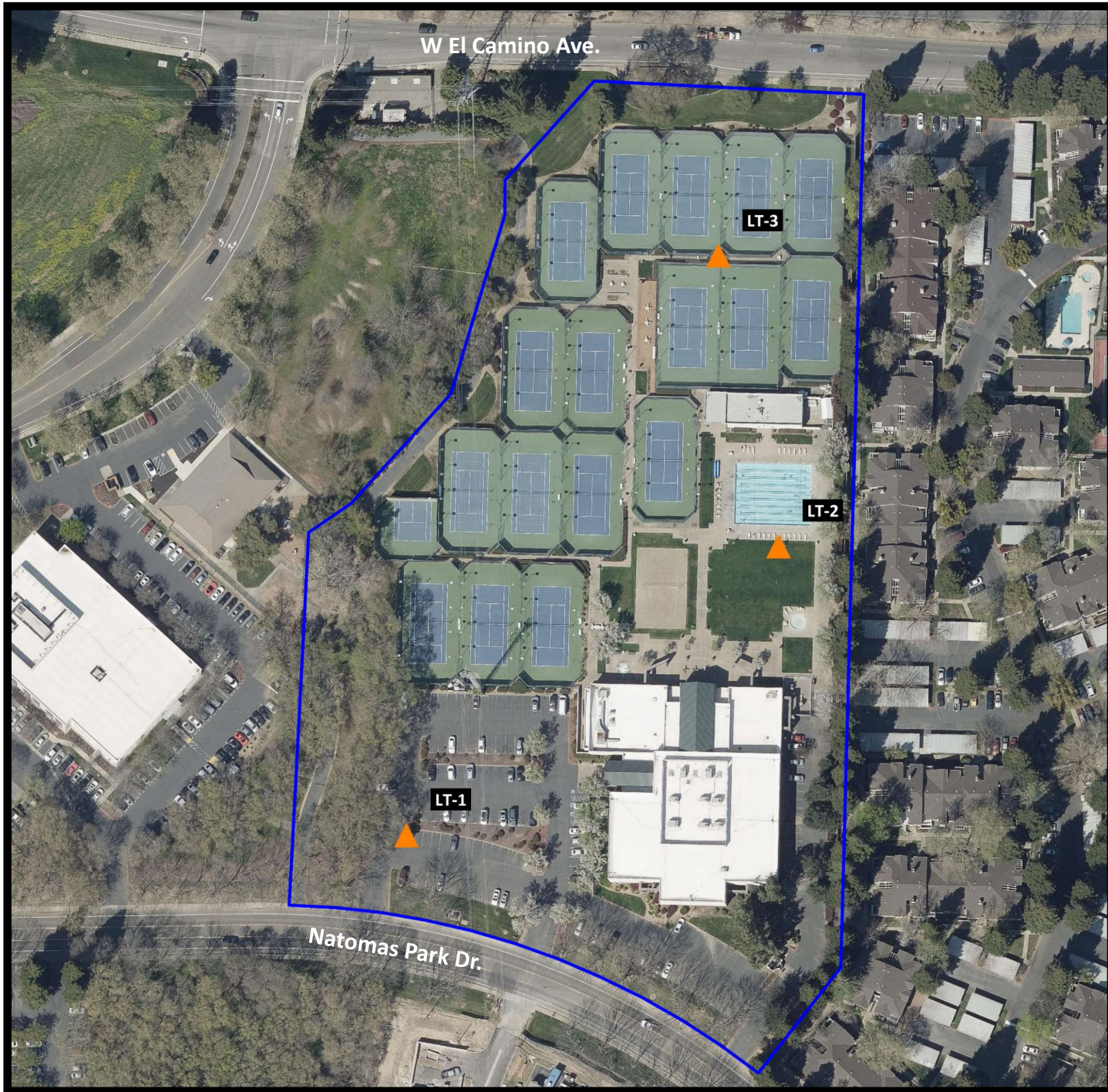
PROJECT NO. 1194-0006

12/18/2020

**Natomas Park Drive Apartments**  
City of Sacramento, California

**Figure 1**  
Project Site Plan



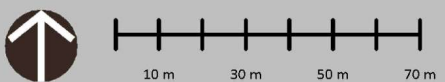


# Natomas Park Drive Apartments

Sacramento, California

Figure 2  
Noise Measurement Sites

- Legend**
- Project Site
  - ▲ Noise Measurement Site - Long Term



Projection: UTM Zone 10 / WGS84 / meters  
Rev. Date: 06/17/2021



The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level ( $L_{eq}$ ), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The  $L_{eq}$  is the foundation of the composite noise descriptor,  $L_{dn}$ , and shows very good correlation with community response to noise.

The day/night average level (DNL or  $L_{dn}$ ) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because  $L_{dn}$  represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

**Table 1** lists several examples of the noise levels associated with common situations. **Appendix A** provides a summary of acoustical terms used in this report.

**TABLE 1: TYPICAL NOISE LEVELS**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft.)	--100--	
Gas Lawn Mower at 1 m (3 ft.)	--90--	
Diesel Truck at 15 m (50 ft.), at 80 km/hr. (50 mph)	--80--	Food Blender at 1 m (3 ft.) Garbage Disposal at 1 m (3 ft.)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft.)	--70--	Vacuum Cleaner at 3 m (10 ft.)
Commercial Area Heavy Traffic at 90 m (300 ft.)	--60--	Normal Speech at 1 m (3 ft.)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. September, 2013.



## EFFECTS OF NOISE ON PEOPLE

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

## EXISTING NOISE AND VIBRATION ENVIRONMENTS

### EXISTING NOISE RECEPTORS

Some land uses are considered more sensitive to noise than others. Land uses often associated with sensitive receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Sensitive noise receptors may also include threatened or endangered noise sensitive biological species, although many jurisdictions have not adopted noise standards for wildlife areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise.

Sensitivity is a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. In the vicinity of the project site, sensitive land uses include existing and multi-family residential uses located to the south and east.

### EXISTING GENERAL AMBIENT NOISE LEVELS

The existing noise environment in the project area is primarily defined by traffic on West El Camino Avenue and Natomas Park Drive.

To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurements at three locations on the project site. Noise measurement locations are shown on **Figure 2**. A summary of the noise level measurement survey results is provided in **Table 2**. **Appendix B** contains the complete results of the noise monitoring.

The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted  $L_{max}$ , represents the highest noise level measured. The average value, denoted  $L_{eq}$ , represents the energy average of all the noise received by the sound level meter microphone during the monitoring period. The median value, denoted  $L_{50}$ , represents the sound level exceeded 50 percent of the time during the monitoring period.

Larson Davis Laboratories (LDL) model 820 and 812 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with a CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

**TABLE 2: SUMMARY OF EXISTING BACKGROUND NOISE MEASUREMENT DATA**

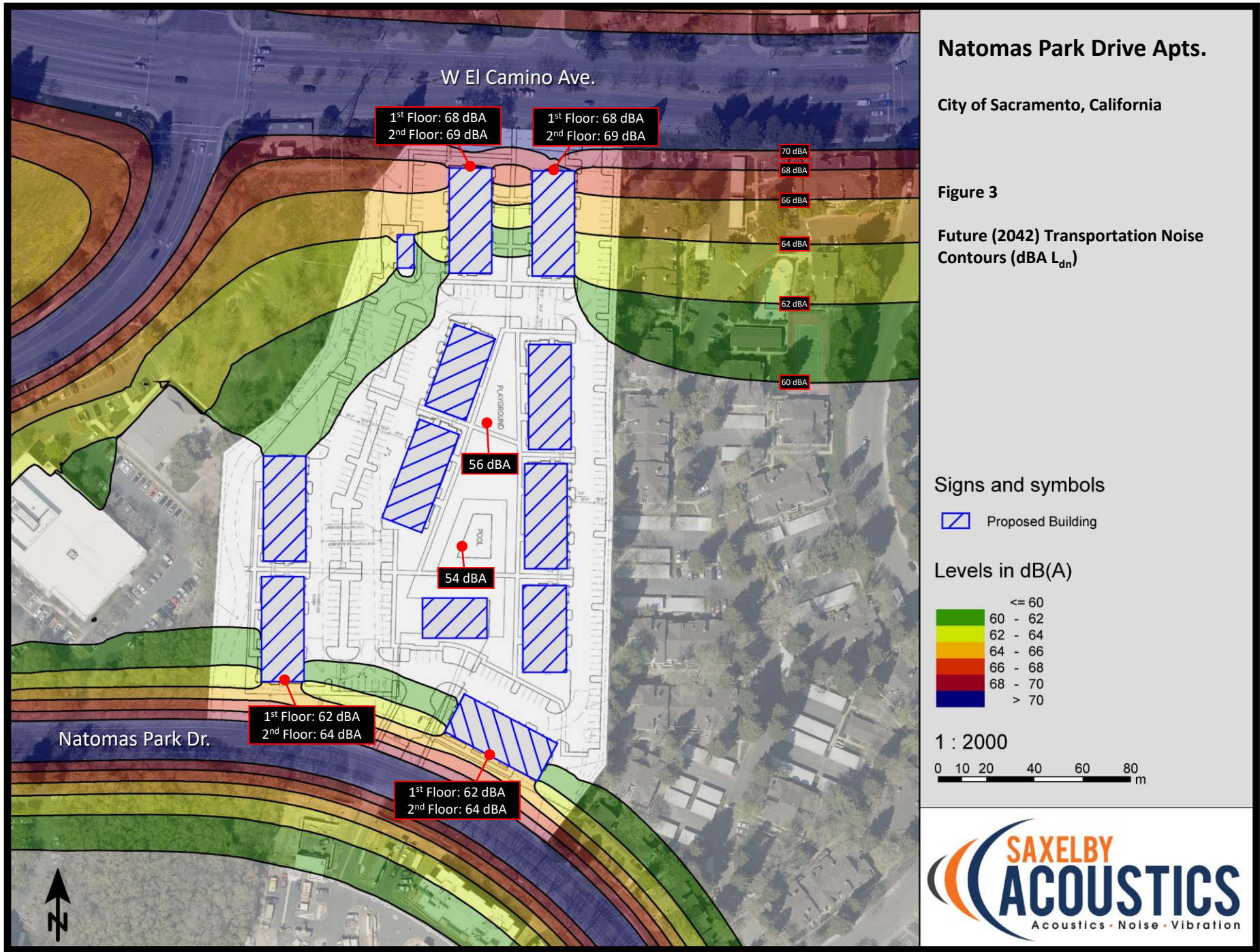
Site	Date	Average Measured Hourly Noise Levels, dBA						
		CNEL/L <sub>dn</sub>	Daytime (7:00 am - 10:00 pm)			Nighttime (10:00 pm – 7:00 am)		
			L <sub>eq</sub>	L <sub>50</sub>	L <sub>max</sub>	L <sub>eq</sub>	L <sub>50</sub>	L <sub>max</sub>
LT-1	4/29/2021	62/61	58	53	71	54	53	65
LT-2	4/29/2021	60/60	54	52	67	54	53	63
LT-3	4/29/2021	64/63	60	57	78	57	55	69

Source: Saxelby Acoustics – 2021

## EVALUATION OF TRANSPORTATION NOISE SOURCES ON THE PROJECT SITE

### ON-SITE TRANSPORTATION NOISE PREDICTION METHODOLOGY

Saxelby Acoustics used the SoundPLAN noise model to calculate traffic noise levels at the proposed residential uses due to traffic on West El Camino Avenue and Natomas Park Drive. The model was calibrated to existing conditions. Future (2042) increases in noise were applied based upon an assumed annual 1% increase in traffic volumes. The proposed project buildings and surrounding structures were input into the SoundPLAN model to determine the traffic noise exposure on the project site. The results of this analysis are shown on **Figure 3**.



## FUTURE TRANSPORTATION NOISE ENVIRONMENT AT OFF-SITE RECEPTORS

### OFF-SITE TRAFFIC NOISE IMPACT ASSESSMENT METHODOLOGY

To assess noise impacts due to project-related traffic increases on the local roadway network, traffic noise levels are predicted at sensitive receptors for project and no-project conditions.

Existing noise levels due to traffic are calculated using the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108). The model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site.

The FHWA model was developed to predict hourly  $L_{eq}$  values for free-flowing traffic conditions. To predict traffic noise levels in terms of  $L_{dn}$ , it is necessary to adjust the input volume to account for the day/night distribution of traffic.

Existing traffic volumes were obtained from the City of Sacramento published traffic volumes. Project trip generation volumes were provided by the project traffic engineer. Truck usage and vehicle speeds on the local area roadways were estimated from field observations. The predicted increases in traffic noise levels on the local roadway network for Existing and Existing Plus Project conditions which would result from the project are provided in terms of  $L_{dn}$ .

**Table 3** summarizes the modeled traffic noise levels at the nearest sensitive receptors along each roadway segment in the Project area. **Appendix C** provides the complete inputs and results of the FHWA traffic modeling.

**TABLE 3: PREDICTED TRAFFIC NOISE LEVEL AND PROJECT-RELATED TRAFFIC NOISE LEVEL INCREASES**

Roadway	Segment	Predicted Exterior Noise Level (dBA $L_{dn}$ ) at Closest Sensitive Receptors		
		Existing No Project	Existing + Project	Change
Natomas Park Dr.	W. El Camino Ave to Garden Hwy.	61.5	62.1	0.6
W. El Camino Ave.	15 to Truxel Rd.	64.8	65.0	0.2

## CONSTRUCTION NOISE ENVIRONMENT

The Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) was used to predict noise levels for standard construction equipment used for roadway improvement projects. The assessment of potential significant noise effects due to construction is based on the standards and procedures described in the Federal Transit Authority (FTA) guidance manual and FHWA's RCNM.

The RCNM is a Windows-based noise prediction model that enables the prediction of construction noise levels for a variety of construction equipment based on a compilation of empirical data and the application of acoustical propagation formulas. It enables the calculation of construction noise levels in more detail than the manual methods, which eliminates the need to collect extensive amounts of project-specific input data. RCNM allows for the modeling of multiple pieces of construction equipment working either independently or simultaneously, the character of noise emission, and the usage factors for each piece of equipment.

Construction noise varies depending on the construction process, type of equipment involved, location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week), and the duration of the construction work.

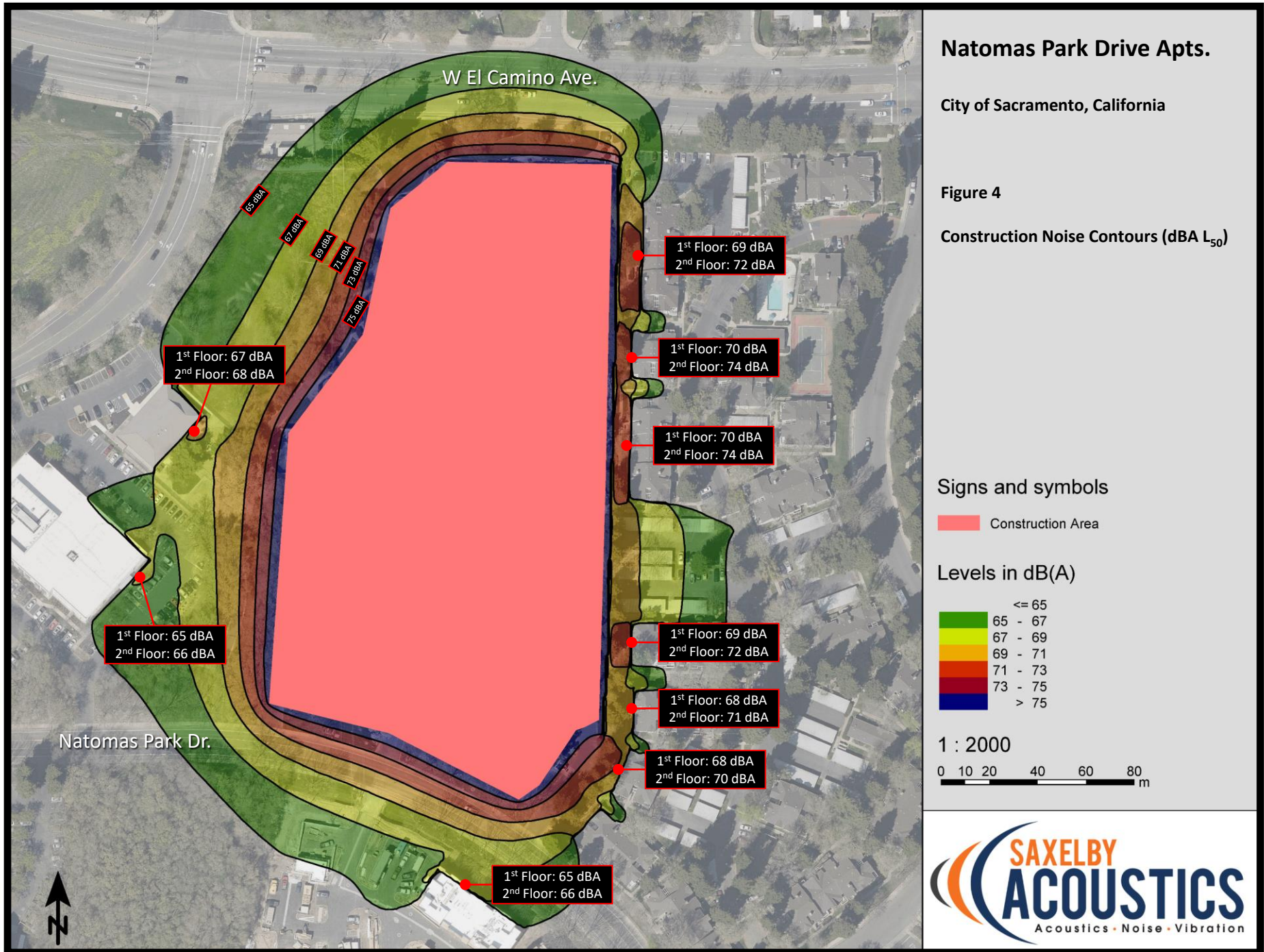
Noise sources in the RCNM database include actual noise levels and equipment usage percentages. This source data was used in this construction noise analysis. **Table 4** shows predicted construction noise levels for each of the project construction phases.

**TABLE 4: CONSTRUCTION EQUIPMENT NOISE LEVELS FOR PRIMARY CONSTRUCTION PHASES**

Equipment	Quantity	Usage (%)	Maximum, L <sub>max</sub> (dBA at 50 feet)	Hourly Average, L <sub>eq</sub> (dBA at 50 feet)
<b>Demolition</b>				
Concrete Saw	1	20	90	83
Excavator	3	40	81	82
Dozer	2	40	82	81
<b>Total:</b>				<b>87</b>
<b>Site Preparation</b>				
Dozer	3	40	82	83
Tractor/Loader/Backhoe	4	40	84	86
<b>Total:</b>				<b>88</b>
<b>Grading</b>				
Grader	2	40	85	84
Dozer	1	40	82	78
Scraper	1	40	84	80
Tractor/Loader/Backhoe	2	40	84	83
<b>Total:</b>				<b>88</b>
<b>Building Construction</b>				
Crane	1	16	81	73
Forklift	3	40	83	84
Generator	1	50	81	78
Tractor/Loader/Backhoe	3	40	84	85
Welder/Torch	1	40	74	70
<b>Total:</b>				<b>88</b>
<b>Paving</b>				
Paver	2	50	77	77
Paving Equipment	2	50	77	77
Rollers	2	20	80	76
<b>Total:</b>				<b>81</b>
<b>Architectural Coating</b>				
Air Compressor	1	40	79	75
<b>Total:</b>				<b>75</b>

Source: FHWA, Roadway Construction Noise Model (RCNM), January 2006.

Based upon the **Table 4** data, site preparation and grading are predicted to be the loudest phase of construction with an average noise exposure of 88 dBA at 50 feet. Saxelby Acoustics used the SoundPLAN noise model to calculate noise levels at the nearest sensitive receptors. The results of this analysis are shown graphically on **Figure 4**.





## CONSTRUCTION VIBRATION ENVIRONMENT

The primary vibration-generating activities would be grading, utilities placement, and parking lot construction. **Table 5** shows the typical vibration levels produced by construction equipment.

**TABLE 5: VIBRATION LEVELS FOR VARIOUS CONSTRUCTION EQUIPMENT**

Type of Equipment	Peak Particle Velocity at 25 feet (inches/second)	Peak Particle Velocity at 50 feet (inches/second)	Peak Particle Velocity at 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

Source: *Transit Noise and Vibration Impact Assessment Guidelines*. Federal Transit Administration. May 2006.

## REGULATORY CONTEXT

### FEDERAL

There are no federal regulations related to noise that apply to the Proposed Project.

### STATE

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations, establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses, and dwellings other than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB L<sub>dn</sub> or CNEL in any habitable room. Title 24 also mandates that for structures containing noise-sensitive uses to be located where the L<sub>dn</sub> or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

### LOCAL

#### *City of Sacramento General Plan*

The Sacramento General Plan goals and policies relating to noise and vibration that are applicable to the proposed project are presented in **Table 6** and **Table 7**.

**TABLE 6: STANDARDS FOR EXTERIOR NOISE EXPOSURE**

Land Use Category	Highest Level of Noise Exposure That is Regarded as “Normally Acceptable” <sup>a</sup> (L <sub>dn</sub> or CNEL)
Residential – Low Density Single Family, Duplex, Mobile Homes	60 dBA <sup>b</sup>
Residential – Multi-family <sup>c</sup>	65 dBA
Urban Residential Infill <sup>d</sup> and Mixed-Use Projects <sup>e,f</sup>	70 dBA
Transient Lodging – Motels, Hotels	65 dBA
Schools, Libraries, Churches, Hospitals, Nursing Homes	70 dBA
Auditoriums, Concert Halls, Amphitheaters	Mitigation based on site-specific study
Sports Arenas, Outdoor Spectator Sports	Mitigation based on site-specific study
Playgrounds, Neighborhood Parks	70 dBA
Golf Courses, Riding Stables, Water Recreation, Cemeteries	75 dBA
Office Buildings – Business, Commercial and Professional	70 dBA
Industrial, Manufacturing, Utilities, Agriculture	75 dBA
<p>Notes:</p> <p>a. As defined in the Guidelines, “Normally Acceptable” means that the “specified land use is satisfactory, based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements.”</p> <p>b. Applies to the primary open space area of a detached single-family home, duplex, or mobile home, which is typically the backyard or fenced side yard, as measured from the center of the primary open space area (not the property line). This standard does not apply to the secondary open space areas, such as front yards, balconies, stoops, and porches.</p> <p>c. Applies to the primary open space areas of townhomes and multi-family apartments or condominiums (privates year yards for townhomes; common courtyards, roof gardens, or gathering spaces for multi-family developments). These standards shall not apply to balconies or small attached patios in multistoried multi-family structures.</p> <p>d. With land use designations of Central Business District, Urban Neighborhood (Low, Medium, or High), Urban Center (Low or High), Urban Corridor (low or High).</p> <p>e. All mixed-use projects located anywhere in the City of Sacramento.</p> <p>f. See notes d and f above for definition of primary open space area for single-family and multi-family developments.</p>	

Source: City of Sacramento. Sacramento 2035 General Plan. Table EC 1. Adopted March 2013.

**TABLE 7: STANDARDS FOR INTERIOR NOISE LEVELS**

Use	Noise Level (dBA)
Residences, Transient Lodging, Hospitals, Nursing Homes, Other Uses where People Sleep	45
Office Buildings and Similar Uses	45 (peak hour)

Source: City of Sacramento. Sacramento 2035 General Plan. EC 3.1.3. Adopted March 2013.

**City of Sacramento Municipal Code**

The City of Sacramento Municipal Code, Section 8.68.060 establishes and allowable exterior noise level limit of 55 dBA  $L_{50}$  and 75 dBA  $L_{max}$  during daytime (7:00 a.m. to 10:00 p.m.) hours and 50 dBA  $L_{50}$  and 70 dBA  $L_{max}$  during nighttime (10:00 p.m. to 7:00 a.m.) for sources of noise which occur for more than 30 minutes per hour ( $L_{50}$ ).

If the existing ambient noise level exceeds the 50/55 dBA  $L_{50}$  standard the allowable limit is increased in five dBA increments to encompass the ambient noise level. If the existing ambient noise level exceeds the 70/75 dBA  $L_{max}$  noise standard, the limit becomes the measured  $L_{max}$  existing ambient noise level. For example, if measured existing ambient daytime noise levels are 57 dBA  $L_{50}$  and 77 dBA  $L_{max}$ , the noise ordinance limits would be 60 dBA  $L_{50}$  and 77 dBA  $L_{max}$ .

The City of Sacramento Municipal Code standards are summarized in **Table 8** below.

**TABLE 8: STATIONARY NOISE SOURCE NOISE STANDARDS**

Noise Level Descriptor	Outdoor Activity Areas Daytime (7 a.m. to 10 p.m.)	Outdoor Activity Areas Nighttime (10 p.m. to 7 a.m.)
Hourly equivalent sound level ( $L_{50}$ ), dB	55	50
Maximum sound level ( $L_{max}$ ), dB	75	70

Source: City of Sacramento Municipal Code

## CRITERIA FOR ACCEPTABLE VIBRATION

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. **Table 9**, which was developed by Caltrans, shows the vibration levels which would normally be required to result in damage to structures. The vibration levels are presented in terms of peak particle velocity in inches per second.

**Table 9** indicates that the threshold for architectural damage to structures is 0.20 in/sec p.p.v. The general threshold at which human annoyance could occur is noted as 0.10 in/sec p.p.v. for continuous vibrations and 0.20 in/sec p.p.v. for intermittent vibrations. For construction projects which generally include intermittent vibrations, a threshold of 0.20 in/sec p.p.v. is considered to be a reasonable threshold to protect against architectural damage and annoyance to people.

**TABLE 9: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS**

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/second	in/second		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of “architectural” damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of “architectural” damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize “architectural” damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause “architectural” damage and possibly minor structural damage

Source: *Transportation Related Earthborne Vibrations*. Caltrans. TAV-02-01-R9601. February 20, 2002.

## IMPACTS AND MITIGATION MEASURES

### THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines states that a project would normally be considered to result in significant noise impacts if noise levels conflict with adopted environmental standards or plans or if noise generated by the project would substantially increase existing noise levels at sensitive receivers on a permanent or temporary basis. Significance criteria for noise impacts are drawn from CEQA Guidelines Appendix G (Items XI [a-c]).

Would the project:

- a. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b. Generate excessive groundborne vibration or groundborne noise levels?
- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The proposed project is not located within two miles of a public or private airport, therefore item “c” is not discussed any further in this study.

The City of Sacramento General Plan Noise Element does not establish any specific criteria for evaluating noise level increases. Therefore, the following increase criteria are recommended.

### ***Noise Level Increase Criteria for Long-Term Project-Related Noise Level Increases***

The California Environmental Quality Act (CEQA) guidelines define a significant impact of a project if it “increases substantially the ambient noise levels for adjoining areas.” Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in traffic noise from the project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following:

- A 3-dB change is barely perceptible,
- A 5-dB change is clearly perceptible, and
- A 10-dB change is perceived as being twice or half as loud.

A limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project-noise conditions. **Table 10** is based upon recommendations made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient

noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been accepted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the  $L_{dn}$ .

**TABLE 10: SIGNIFICANCE OF CHANGES IN NOISE EXPOSURE**

Ambient Noise Level Without Project, $L_{dn}$	Increase Required for Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON)

Based on the **Table 10** data, an increase in the traffic noise level of 5 dB or more would be significant where the pre-project noise levels are less than 60 dB  $L_{dn}$ , or 3 dB or more where existing noise levels are between 60 to 65 dB  $L_{dn}$ . Extending this concept to higher noise levels, an increase in the traffic noise level of 1.5 dB or more may be significant where the pre-project traffic noise level exceeds 65 dB  $L_{dn}$ . The rationale for the **Table 10** criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause annoyance.

#### PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

**IMPACT 1:** **WOULD THE PROJECT GENERATE A SUBSTANTIAL TEMPORARY OR PERMANENT INCREASE IN AMBIENT NOISE LEVELS IN THE VICINITY OF THE PROJECT IN EXCESS OF STANDARDS ESTABLISHED IN THE LOCAL GENERAL PLAN OR NOISE ORDINANCE, OR APPLICABLE STANDARDS OF OTHER AGENCIES?**

##### ***Traffic Noise at Off-Site Receptors***

The FICON guidelines specify criteria to determine the significance of traffic noise impacts. Where existing traffic noise levels are greater than 65 dB  $L_{dn}$ , at the outdoor activity areas of noise-sensitive uses, a +1.5 dB  $L_{dn}$  increase in roadway noise levels will be considered significant. The maximum increase is traffic noise at the nearest sensitive receptor is predicted to be 0.6 dBA.

Therefore, impacts resulting from increased traffic noise would be considered ***less-than-significant***.

##### ***Operational Noise at Off-Site Receptors***

The proposed project would include typical residential noise which would be compatible with the adjacent existing residential uses.

Therefore, impacts resulting from project-generated noise would be considered ***less-than-significant***.

### **Construction Noise**

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. Based upon the **Figure 4** data, the proposed project is predicted to generate construction noise levels ranging between 65-74 dBA  $L_{eq}$  at the nearest noise-sensitive receptors.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from the construction site. This noise increase would be of short duration and would likely occur primarily during daytime hours.

The City of Sacramento's Noise Ordinance of the Municipal Code exempts construction activities from the noise standards, provided that they take place between the hours of 7:00 AM and 6:00 PM Monday through Saturday and 9:00 AM and 6:00 PM Sundays and holidays. Although the construction activities could result in infrequent periods of high noise, this noise will not be sustained and will only occur only during the City's permitted construction noise hours. However, construction of the project would result in a short-term **potentially significant** impact.

### Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a **less-than-significant** level.

1(a) *Prior to issuance of a grading permit, the project applicant shall prepare a construction noise management plan that identifies measures to be taken to minimize construction noise on surrounding sensitive land uses and include specific noise management measures to be included within the project plans and specifications, subject to review and approval by the City Planning Division. The project applicant shall demonstrate, to the satisfaction of the City that the project complies with the following:*

- *Construction activities shall only take place between the hours of 7:00 AM and 6:00 PM Monday through Saturday and 9:00 AM and 6:00 PM Sundays and holidays.*
- *All heavy construction equipment used on the proposed project shall be maintained in good operating condition, with all internal combustion, engine-driven equipment fitted with intake and exhaust mufflers that are in good condition.*
- *All mobile or fixed noise producing equipment used on the proposed project that is regulated for noise output by a local, state, or federal agency shall comply with such regulations while in the source of project activity.*
- *Where feasible, electrically-powered equipment shall be used instead of pneumatic or internal combustion powered equipment.*
- *All stationary noise-generating equipment shall be located as far away as possible from neighboring property lines.*
- *Signs prohibiting unnecessary idling of internal combustion engines shall be posted.*
- *A truck route haul plan shall be created to avoid residential areas.*



- *The use of noise-producing signals, including horns, whistles, alarms and bells shall be for safety warning purposes only.*
- *A noise complaint coordinator shall be retained amongst the construction crew to be responsible for responding to any local complaints about construction noise. When a complaint is received, the coordinator shall notify the City within 24 hours of the complaint and determine the cause of the noise complaint and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the City.*

### **Exterior Transportation Noise**

Compliance with City standards on new noise-sensitive receptors is not a CEQA consideration. However, this information is provided here so that a determination can be made regarding the ability of the proposed project to meet the requirements of the City of Sacramento for exterior and interior noise levels at new sensitive uses proposed under the project.

As shown on **Figure 3**, the pool area and playground are predicted to be exposed to exterior transportation noise levels up to approximately 56 dBA during daytime (7:00 a.m. to 10:00 p.m.) hours. This would comply with the 65 dBA limit for outdoor activity areas in multi-family residential uses established by the City of Sacramento General Plan (**Table 6**) with no additional noise control measures.

### **Interior Transportation Noise**

Based upon **Figure 3**, the proposed project would be exposed to exterior noise levels of up to 68 dBA  $L_{dn}$  at the ground floor building facades closest to West El Camino Avenue. Second floor locations would be exposed to noise levels up to 69 dBA  $L_{dn}$ .

Modern building construction methods typically yield an exterior-to-interior noise level reduction of 25 dBA. Therefore, where exterior noise levels are 70 dBA  $L_{dn}$ , or less, no additional interior noise control measures are typically required. For this project, exterior noise levels are predicted to be up to 69 dBA  $L_{dn}$ , resulting in an interior noise level of 44 dBA  $L_{dn}$  based on typical building construction. This would comply with the City's 45 dBA  $L_{dn}$  interior noise level standard.

Therefore, no additional noise control measures would be required.

**IMPACT 2:        WOULD THE PROJECT GENERATE EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS?**

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural.

The **Table 5** data indicate that construction vibration levels anticipated for the project are less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located approximately 26 feet, or further, from typical construction activities. At these distances construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

This is a **less-than-significant** impact and no mitigation is required.

**IMPACT 3:        FOR A PROJECT LOCATED WITHIN THE VICINITY OF A PRIVATE AIRSTRIP OR AN AIRPORT LAND USE PLAN OR, WHERE SUCH A PLAN HAS NOT BEEN ADOPTED, WITHIN TWO MILES OF A PUBLIC AIRPORT OR PUBLIC USE AIRPORT, WOULD THE PROJECT EXPOSE PEOPLE RESIDING OR WORKING IN THE PROJECT AREA TO EXCESSIVE NOISE LEVELS?**

There are no airports in the project vicinity. Therefore, this impact is not applicable to the proposed project.

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## Appendix A: Acoustical Terminology

<b>Acoustics</b>	The science of sound.
<b>Ambient Noise</b>	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
<b>ASTC</b>	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
<b>Attenuation</b>	The reduction of an acoustic signal.
<b>A-Weighting</b>	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
<b>Decibel or dB</b>	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
<b>CNEL</b>	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by +5 dBA and nighttime hours weighted by +10 dBA.
<b>DNL</b>	See definition of Ldn.
<b>IIC</b>	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
<b>Frequency</b>	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
<b>Ldn</b>	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
<b>Leq</b>	Equivalent or energy-averaged sound level.
<b>Lmax</b>	The highest root-mean-square (RMS) sound level measured over a given period of time.
<b>L(n)</b>	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
<b>Loudness</b>	A subjective term for the sensation of the magnitude of sound.
<b>NIC</b>	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
<b>NNIC</b>	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
<b>Noise</b>	Unwanted sound.
<b>NRC</b>	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
<b>RT60</b>	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
<b>Sabin</b>	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
<b>SEL</b>	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
<b>SPC</b>	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
<b>STC</b>	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
<b>Threshold of Hearing</b>	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
<b>Threshold of Pain</b>	Approximately 120 dB above the threshold of hearing.
<b>Impulsive</b>	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
<b>Simple Tone</b>	Any sound which can be judged as audible as a single pitch or set of single pitches.

## Appendix B: Continuous and Short-Term Ambient Noise Measurement Results



**Appendix B1: Continuous Noise Monitoring Results**

Date	Time	Measured Level, dBA			
		L <sub>eq</sub>	L <sub>max</sub>	L <sub>50</sub>	L <sub>90</sub>
Thursday, April 29, 2021	0:00	51	62	51	48
Thursday, April 29, 2021	1:00	52	64	51	48
Thursday, April 29, 2021	2:00	52	70	51	48
Thursday, April 29, 2021	3:00	52	62	52	49
Thursday, April 29, 2021	4:00	54	65	54	51
Thursday, April 29, 2021	5:00	58	65	58	55
Thursday, April 29, 2021	6:00	57	67	56	54
Thursday, April 29, 2021	7:00	62	78	54	52
Thursday, April 29, 2021	8:00	63	78	57	53
Thursday, April 29, 2021	9:00	60	70	56	52
Thursday, April 29, 2021	10:00	54	66	52	50
Thursday, April 29, 2021	11:00	53	68	51	49
Thursday, April 29, 2021	12:00	52	70	50	48
Thursday, April 29, 2021	13:00	52	68	50	48
Thursday, April 29, 2021	14:00	53	66	51	48
Thursday, April 29, 2021	15:00	54	69	51	48
Thursday, April 29, 2021	16:00	54	72	52	48
Thursday, April 29, 2021	17:00	54	66	52	49
Thursday, April 29, 2021	18:00	56	70	55	53
Thursday, April 29, 2021	19:00	57	71	56	55
Thursday, April 29, 2021	20:00	63	92	55	54
Thursday, April 29, 2021	21:00	56	68	55	53
Thursday, April 29, 2021	22:00	55	68	54	52
Thursday, April 29, 2021	23:00	53	65	52	50

Statistics	Leq	Lmax	L50	L90
Day Average	58	71	53	51
Night Average	54	65	53	51
Day Low	52	66	50	48
Day High	63	92	57	55
Night Low	51	62	51	48
Night High	58	70	58	55
Ldn	61	Day %		81
CNEL	62	Night %		19

Site: LT-1

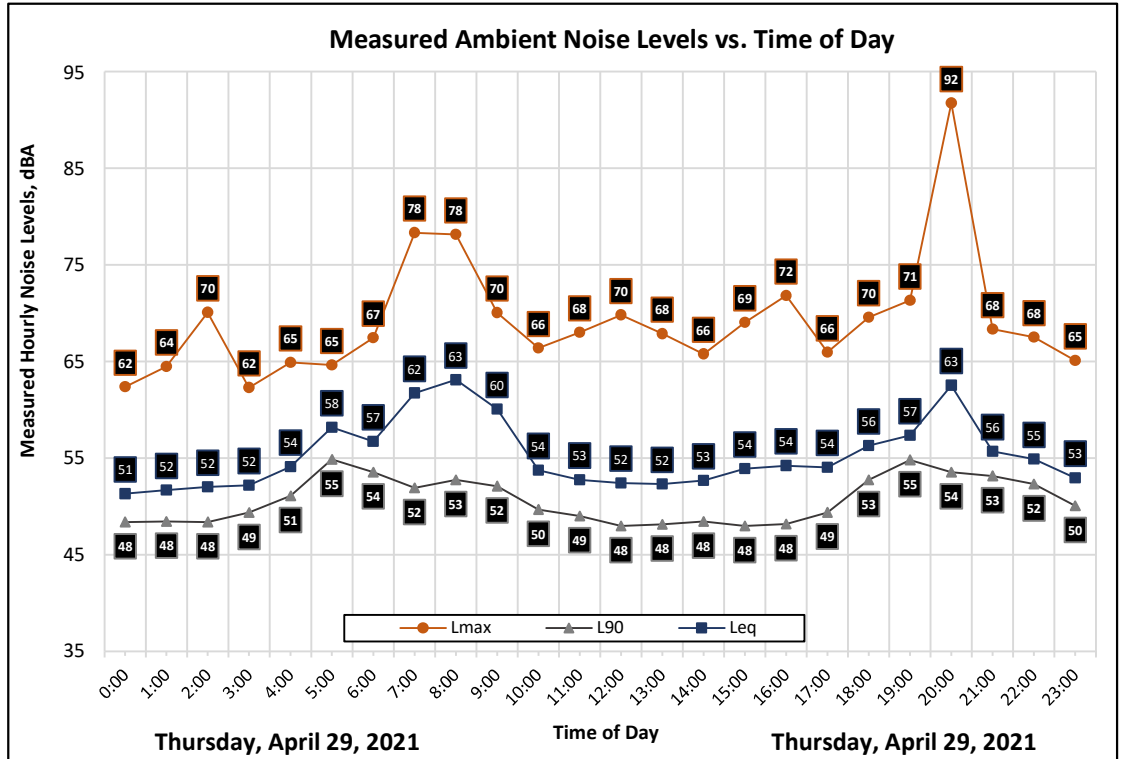
Project: Natomas Park Drive Apartments

Meter: LDL 812-2

Location: Southern Project Boundary

Calibrator: CAL200

Coordinates: 38.6105673°, -121.5046766°



**Appendix B2: Continuous Noise Monitoring Results**

Date	Time	Measured Level, dBA			
		L <sub>eq</sub>	L <sub>max</sub>	L <sub>50</sub>	L <sub>90</sub>
Thursday, April 29, 2021	0:00	51	63	50	48
Thursday, April 29, 2021	1:00	51	66	50	48
Thursday, April 29, 2021	2:00	50	62	50	48
Thursday, April 29, 2021	3:00	51	58	51	49
Thursday, April 29, 2021	4:00	53	64	53	51
Thursday, April 29, 2021	5:00	58	64	57	54
Thursday, April 29, 2021	6:00	56	65	56	53
Thursday, April 29, 2021	7:00	53	61	52	51
Thursday, April 29, 2021	8:00	57	75	54	51
Thursday, April 29, 2021	9:00	55	67	53	51
Thursday, April 29, 2021	10:00	52	65	51	49
Thursday, April 29, 2021	11:00	51	67	50	48
Thursday, April 29, 2021	12:00	52	67	49	47
Thursday, April 29, 2021	13:00	50	62	49	47
Thursday, April 29, 2021	14:00	51	68	49	47
Thursday, April 29, 2021	15:00	50	66	49	47
Thursday, April 29, 2021	16:00	51	67	49	47
Thursday, April 29, 2021	17:00	52	66	51	48
Thursday, April 29, 2021	18:00	56	71	56	52
Thursday, April 29, 2021	19:00	58	72	57	56
Thursday, April 29, 2021	20:00	56	70	56	54
Thursday, April 29, 2021	21:00	56	66	56	54
Thursday, April 29, 2021	22:00	55	64	54	53
Thursday, April 29, 2021	23:00	52	61	52	50

Statistics	Leq	Lmax	L50	L90
Day Average	54	67	52	50
Night Average	54	63	53	50
Day Low	50	61	49	47
Day High	58	75	57	56
Night Low	50	58	50	48
Night High	58	66	57	54
Ldn	60	Day %	68	
CNEL	60	Night %	32	

Site: LT-2

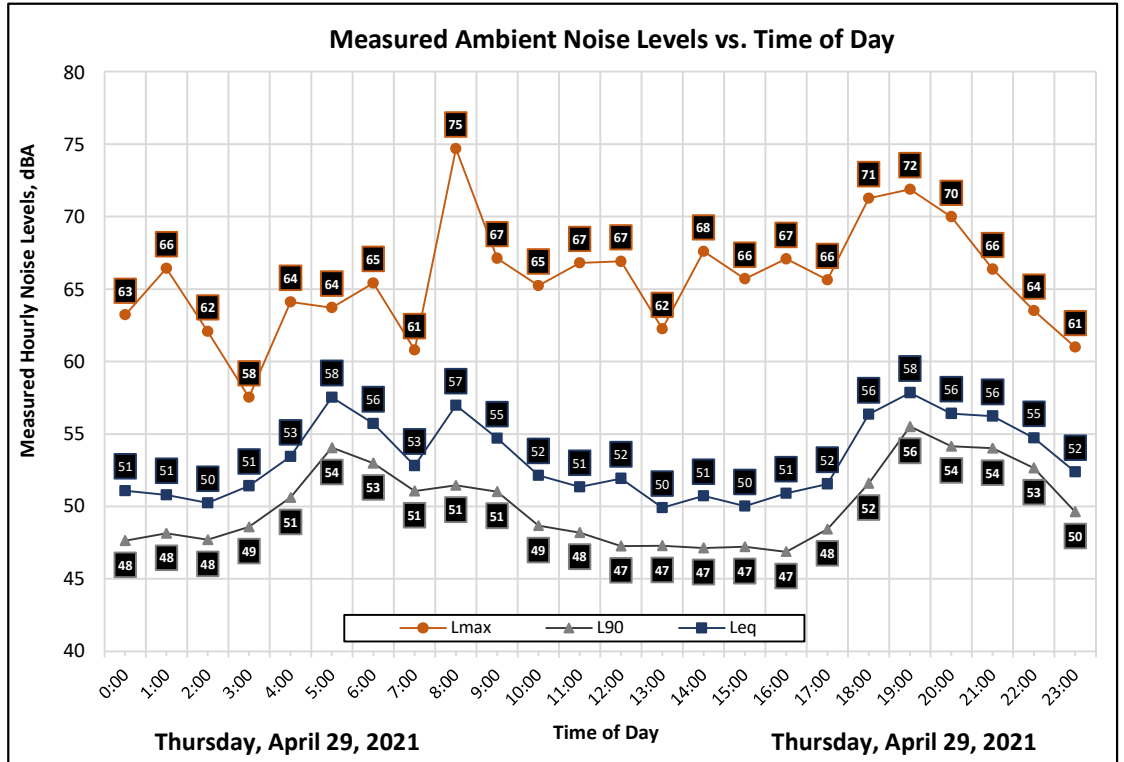
Project: Natomas Park Drive Apartments

Meter: LDL 820-3

Location: Residences

Calibrator: CAL200

Coordinates: 38.6113297°, -121.5033854°



**Appendix B1: Continuous Noise Monitoring Results**

Date	Time	Measured Level, dBA			
		L <sub>eq</sub>	L <sub>max</sub>	L <sub>50</sub>	L <sub>90</sub>
Thursday, April 29, 2021	0:00	54	68	54	51
Thursday, April 29, 2021	1:00	54	69	53	50
Thursday, April 29, 2021	2:00	54	71	53	50
Thursday, April 29, 2021	3:00	55	68	54	51
Thursday, April 29, 2021	4:00	56	66	56	53
Thursday, April 29, 2021	5:00	60	68	60	57
Thursday, April 29, 2021	6:00	59	73	59	56
Thursday, April 29, 2021	7:00	59	72	57	54
Thursday, April 29, 2021	8:00	64	77	60	55
Thursday, April 29, 2021	9:00	58	75	56	53
Thursday, April 29, 2021	10:00	57	77	55	52
Thursday, April 29, 2021	11:00	57	74	56	52
Thursday, April 29, 2021	12:00	57	74	56	51
Thursday, April 29, 2021	13:00	58	83	55	51
Thursday, April 29, 2021	14:00	61	84	57	53
Thursday, April 29, 2021	15:00	58	83	56	52
Thursday, April 29, 2021	16:00	59	80	56	52
Thursday, April 29, 2021	17:00	60	85	57	53
Thursday, April 29, 2021	18:00	59	74	58	56
Thursday, April 29, 2021	19:00	62	79	59	57
Thursday, April 29, 2021	20:00	59	75	58	56
Thursday, April 29, 2021	21:00	59	72	58	56
Thursday, April 29, 2021	22:00	58	70	57	55
Thursday, April 29, 2021	23:00	55	66	55	52

Statistics	Leq	Lmax	L50	L90
Day Average	60	78	57	54
Night Average	57	69	55	53
Day Low	57	72	55	51
Day High	64	85	60	57
Night Low	54	66	53	50
Night High	60	73	60	57
Ldn	63	Day %	79	
CNEL	64	Night %	21	

Site: LT-3

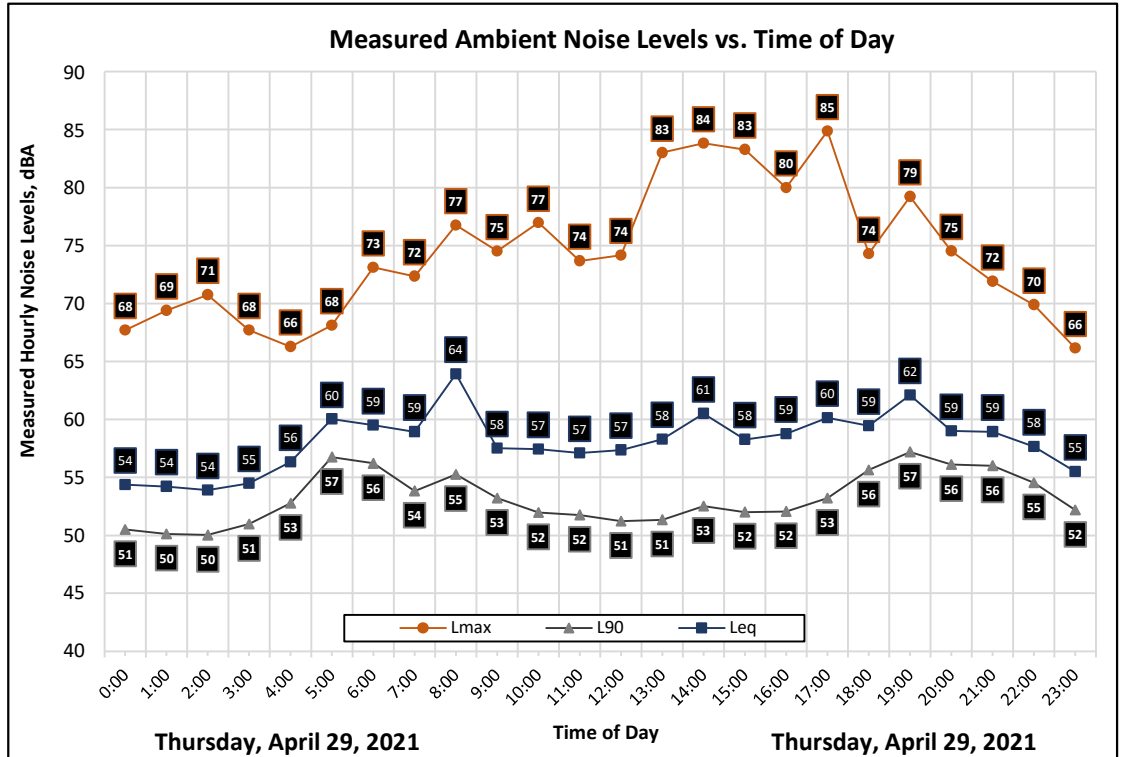
Project: Natomas Park Drive Apartments

Meter: LDL 820-2

Location: Northern Project Site

Calibrator: CAL200

Coordinates: 38.6121146°, -121.5035748°





## Appendix C: Traffic Noise Calculation Inputs and Results



**Appendix C-1**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Project #:** 210317

**Description:** Natomas Park Drive Apartments - Existing

**Ldn/CNEL:** Ldn

**Hard/Soft:** Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset			Level, dBA
												60 dBA	65 dBA	70 dBA	
1	Natomas Park Drive	W El Camino Ave to Garden Hwy	6,520	81	0	19	1.0%	1.0%	30	55	0	69	32	15	61.5
2	W El Camino Ave	I5 to Truxel Road	21,820	79	0	21	1.0%	1.0%	35	90	0	189	88	41	64.8



**Appendix C-2**

**FHWA-RD-77-108 Highway Traffic Noise Prediction Model**

**Project #:** 210317

**Description:** Natomas Park Drive Apartments - Existing Plus Project

**Ldn/CNEL:** Ldn

**Hard/Soft:** Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset			Level, dBA
												60 dBA	65 dBA	70 dBA	
1	Natomas Park Drive	W El Camino Ave to Garden Hwy	7,570	81	0	19	1.0%	1.0%	30	55	0	76	35	16	62.1
2	W El Camino Ave	I5 to Truxel Road	22,870	79	0	21	1.0%	1.0%	35	90	0	195	91	42	65.0



Transportation Division

City Hall  
915 I Street, 2<sup>nd</sup> Floor  
Sacramento, CA  
95814-2604  
916-808-8502

### VMT TECHNICAL MEMORANDUM

**DATE:** May 20, 2021  
**TO:** Scott Johnson, Community Development Department  
**FROM:** Matthew Ilagan, Public Works – Transportation  
**CC:** Pelle Clarke, Public Works - Transportation  
**SUBJECT: P21-013 Sutter Greens 2.0 Apartments**

Public Works has reviewed the application for the above referenced project. The project proposes a 190-unit apartment community development with 346 parking spaces at 2450 Natomas Park Drive. The site was formerly the Natomas Sports Club.

#### Vehicle Miles Traveled Thresholds

Based on current practice of the City of Sacramento for residential projects, transportation impacts for CEQA purposes are considered significant if the proposed project would generate Household VMT per capita figures that exceed 85% of the regional average for Household VMT per capita, consistent with technical advisory guidance published by the Governor’s Office of Planning and Research (OPR) in 2018.

#### VMT Screening Criteria

Based on current practice of the City of Sacramento, several “screening thresholds” are used to quickly determine whether a project may be presumed to have a less-than-significant VMT impact without conducting a detailed projected generated VMT analysis. For residential projects, screening criteria include:

- Small Projects – Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.
- Map-Based Screening – Maps created with VMT data can illustrate areas that are currently below threshold VMT. Output from the SACOG regional travel demand model may be generalized to simplify project VMT estimates as well as producing screening maps. Because new development in such locations would likely result in a similar level of VMT, such maps can be used to screen out residential and office projects from needing to prepare a detailed VMT analysis.
- Near Transit Stations – presumption that certain projects proposed within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor will have a less-than-

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City Hall  
915 I Street, 2<sup>nd</sup> Floor  
Sacramento, CA  
95814-2604  
916-808-8502

significant impact on VMT. Additionally, the project would need to have a floor area ratio of at least 0.75, without excessive parking, is consistent with the adopted regional SCS, and does not result in a reduction of citywide affordable housing.

- Affordable Residential Development – adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT.

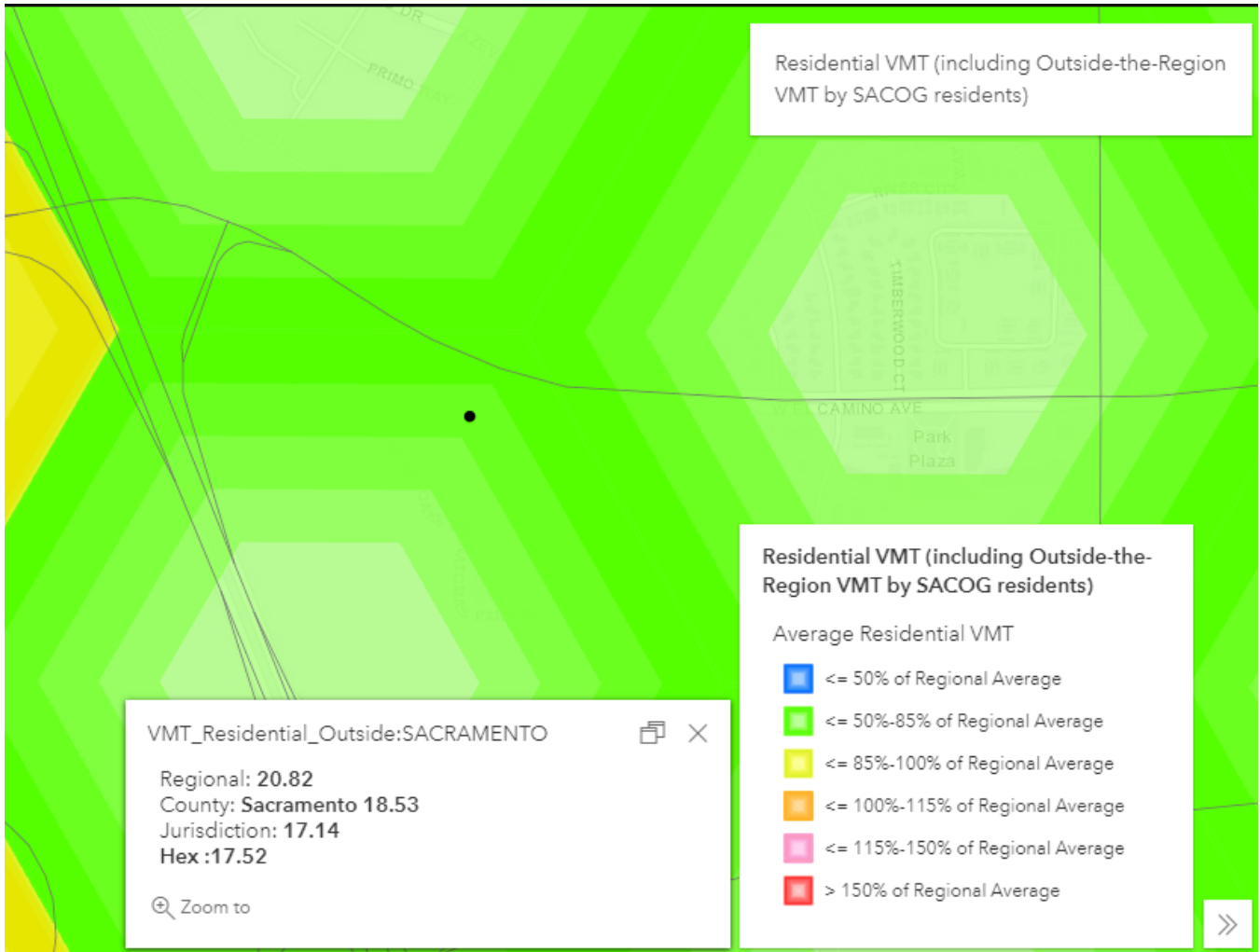
### **VMT Screening Evaluation**

The project was evaluated against the following screening criteria to determine if it could be presumed to have a less-than-significant VMT impact:

- Map-Based Screening – The proposed project’s VMT was determined using the residential VMT SACOG maps derived from the traffic analysis zone results from SACOG’s travel demand model, known as SACSIM. These maps use hexagonal shaped geographic areas (HEX) to establish a uniform grid of Household VMT per capita by tallying all household VMT’s generated by residents within the HEX and dividing by the total population in the HEX. As evidenced in Figure 1, the proposed project falls within a HEX calculated to produce between 50% to 85% of the Regional Average which is less than the average household VMT per capita for the region.

Because of the project meeting screening criteria using the Map-Based screening, a VMT analysis for the proposed project is not required.

If you have any questions, please call me at (916) 808-8502, or contact me via e-mail at [Mllagan@cityofsacramento.org](mailto:Mllagan@cityofsacramento.org).



**Figure 1 – SACOG VMT Residential Screening Map**