

# Appendix A

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Morningstar Loop AQGHG and HRA



# Morningstar Loop Project

## Air Quality and Greenhouse Gas Study

*prepared for*

**CSL Engineering, Inc.**

3410 La Sierra Avenue, #F1190

Riverside, California 92503

Contact: Jeff LeGrand

*prepared by*

**Rincon Consultants, Inc.**

1980 Orange Tree Lane, Suite 105

Redlands, California 92374

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**RINCON CONSULTANTS, INC.**

Environmental Scientists | Planners | Engineers

[rinconconsultants.com](http://rinconconsultants.com)

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# 1 Project Description

## 1.1 Introduction

This study analyzes the potential air quality, health risk, and greenhouse gas (GHG) impacts of the proposed Morningstar Loop Convenience Store and Gas Station and Loop Rapid Car Wash Project(project) located in the city of Riverside, California. Rincon Consultants, Inc. (Rincon) prepared this study for CSL Engineering, Inc. (applicant) for use in support of environmental documentation pursuant to the California Environmental Quality Act (CEQA). The purpose of this study is to analyze the project's air quality and GHG impacts related to both temporary construction activity and long-term operation of the project. The conclusions of this study are summarized in Table 1.

**Table 1 Summary of Impacts**

<b>Impact Statement</b>	<b>Proposed Project's Level of Significance</b>	<b>Applicable Recommendations</b>
<b>Air Quality</b>		
Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than significant Impact	None
Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	Less than significant impact	None
Would the project expose sensitive receptors to substantial pollutant concentrations?	Less than significant impact with mitigation	See Mitigation Measure AQ-1 in Impact Analysis section
Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than significant impact	None
<b>Greenhouse Gas Emissions</b>		
Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than significant impact with mitigation incorporated	Screening Table for GHG Implementation for Commercial Development
Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than significant impact	None

## 1.2 Project Summary

### Project Location

The project site is located at 34410 Pourroy Road in the community of Winchester in unincorporated Riverside County. The project site is an approximately 6.81-acre property at the northwestern corner of Pourroy Road 9 and Winchester Road (State Route 79) identified by

Assessor's Parcel Numbers (APNs) 476-010-081 through 476-010-084. The site is regionally accessible by Interstate 215 (I-215) and locally accessible by Winchester Road, Pourroy Road, Abelia Street, Ruff Road, and Pat Road. The site is bordered by low-density residential and undeveloped land to the north. Winchester Road borders the project site to the east, with the Abelia Sports Park and medium-density residential development to the southeast and undeveloped land planned to be a medium-density residential development to the northeast. Pourroy Road borders the northern portion of the site on the west, with low-density residential, undeveloped land, and a church beyond. To the west of the southern part of the site is a medium-density, single-family residential neighborhood. Figure 1 shows the location of the project site in the region, and Figure 2 shows the location of the project site in its neighborhood context.

## **Project Description**

The Morningstar Loop Project (hereafter referred to as "proposed project" or "project") is a commercial development on an approximately 6.81-acre site. The project would involve the construction of an approximately 3,593-square foot (sf) 12 pump fuel station and a 6,100-sf convenience store with a 1,000-sf restaurant and seating area and a 4,800-sf rapid pass carwash with 20 car vacuum stalls on the eastern portion of the site. In addition, the car wash building will have areas for an office, a breakroom, restrooms, and spaces for storage and car wash, and vacuum equipment. The convenience store will be open 24 hours per day, and the car wash would be operational from 6:00 am to 10:00 am.

The gas station component of the project will include:

- 12 pumps.
- A 10,000-gallon underground storage tank (UST) for diesel fuel.
- A 20,000-gallon unleaded gasoline UST.
- A 12,000-gallon premium gasoline UST.
- A 1,000-gallon propane aboveground storage tank.

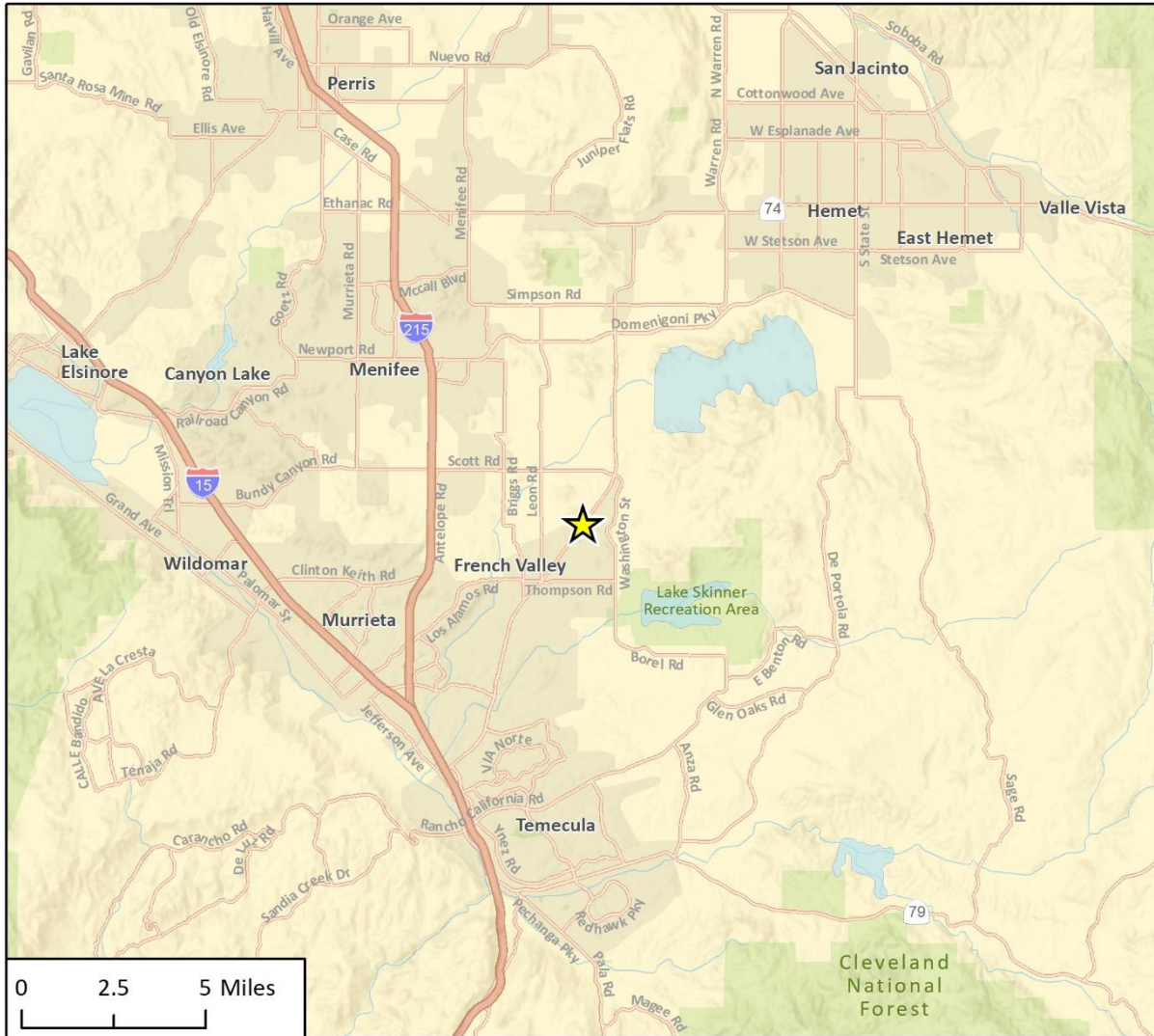
The gas station would include a propane storage tank above ground but, it is not considered an emission source. The car wash portion of the site will accommodate one car wash lane with three queuing lanes and 20 canopied car vacuum stalls. In addition, 27,300 sf of drought-tolerant landscaping would be installed throughout the project site, as well as a 13,000-SF detention basin and 56,000 sf detention basin, both in the northern portion of the site. In total, 90,300 sf of the project site would be paved.

Access to the project site would be provided via two ingress/egress driveways off Pourroy Road, with interconnecting roads (Drive Isles A through C) between the gas station and the car wash areas on the site. The primary access would be from Drive Isle A, with secondary access available from Drive Isle B (also connected to Drive Isle A through Drive Isle C). The project would provide for a total of 61 parking spaces. The gas station portion of the project site would include 18 standard spaces, 12 canopy spaces, two ADA-accessible spaces, one high-occupancy vehicle (HOV) employee space, and three electric vehicles (EV) parking spaces equipped with chargers, as well as four bicycle racks.. The car wash portion of the site would include one HOV employee space, four standard spaces, 20 vacuum spaces, and four bike racks.

One trash enclosure would be located at the southeast corner of the convenience store, and one trash enclosure would be located at the northwest corner of the carwash. Figure 4 shows the

proposed site plan. The project site will connect to existing water, sewer, electrical, telephone, and gas utilities in the Pourroy Road right-of-way.

Figure 1 Regional Location



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★ Project Location

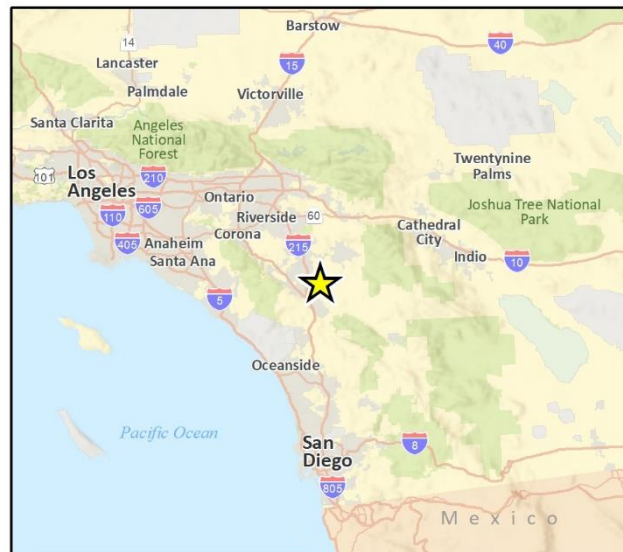


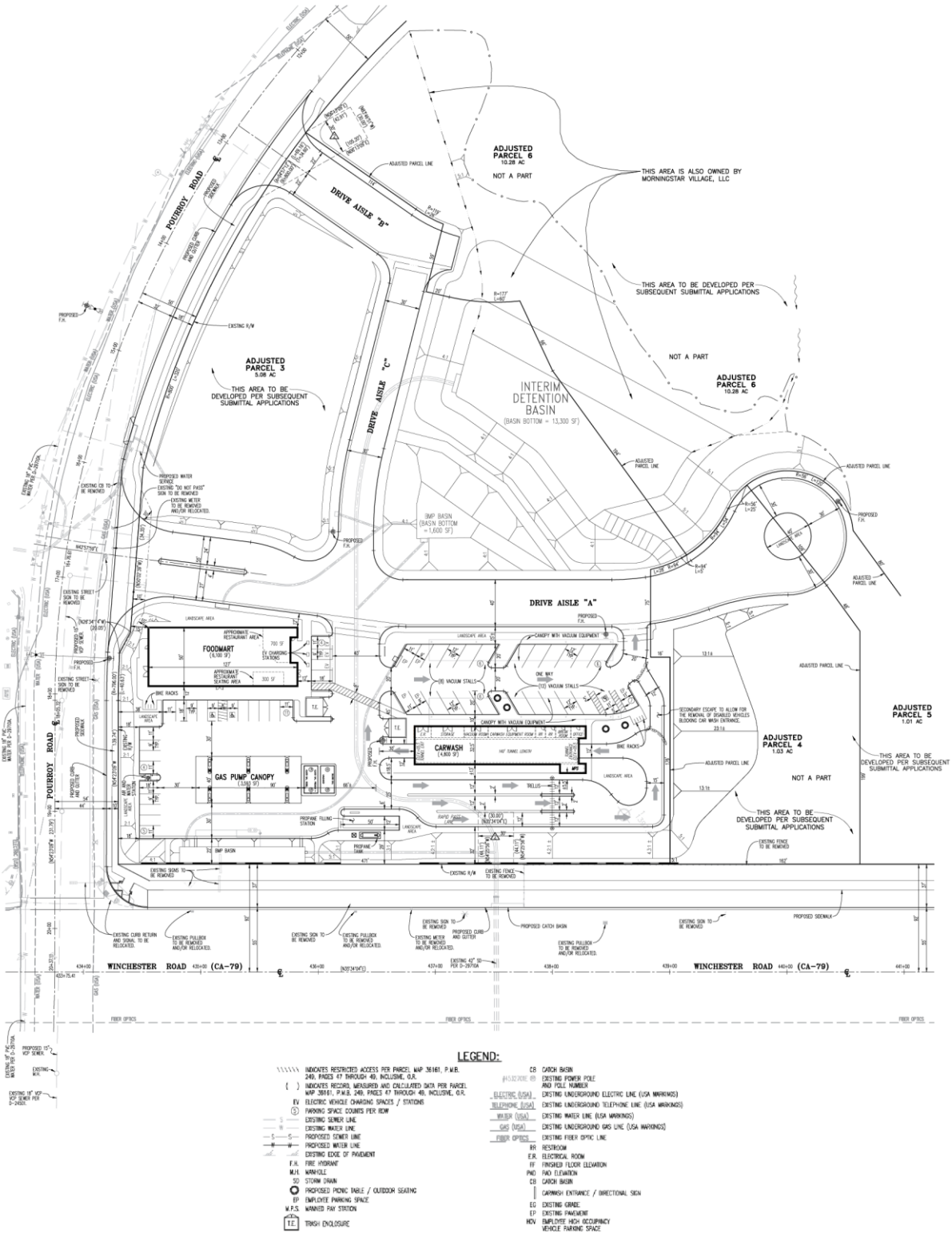
Fig 1 Regional Location



Figure 2 Project Site

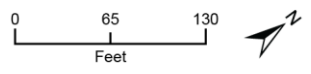


**Figure 3 Project Site Plans**



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Source: CSL Engineering, Inc., 2021.

## **Construction**

Construction of the project is proposed to start in August 2023 and estimated to be completed in December 2024 for a total construction period of 17 months. Construction activities would include site preparation, grading, building construction, paving, and architectural coating (e.g., painting). The project would include excavation of approximately 23,156 cubic yards (cy) of cut soil, all of which would be reused as fill. All construction would occur within the current conceptual limits of the project. Detailed construction phasing and equipment assumptions are summarized in Section 3.1, *Methodology*.

## 2 Background

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### 2.1 Local Climate and Meteorology

The project site is within the South Coast Air Basin (SCAB), which is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area in Riverside County. The regional climate in the SCAB is semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality within the SCAB is primarily influenced by meteorology and a wide range of emission sources, such as dense population centers, substantial vehicular traffic, and industry. The South Coast Air Quality and Management District (SCAQMD) monitors and regulates local air quality in Riverside County.

Air pollutant emissions in the SCAB are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

The predominant wind direction in the vicinity of project site is from the northwest and the average wind speed is approximately five miles per hour. In 2022, the maximum average daily temperature in the project area is approximately 80 degrees Fahrenheit (°F), and the minimum average daily temperature is approximately 51°F. Total precipitation in the project area averages approximately 10 inches annually (Iowa Environmental Mesonet 2023, Weather Currents 2023).

### 2.2 Air Pollutants of Primary Concern

Primary criteria pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere. Primary criteria pollutants include carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), fine particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), and lead (Pb). Ozone (O<sub>3</sub>) is considered a secondary criteria pollutant because it is created by atmospheric chemical and photochemical reactions between reactive organic gases (ROG) and nitrogen oxides (NO<sub>x</sub>). The project would generate CO, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, and Pb as well as ozone precursors ROG and NO<sub>x</sub> (including NO<sub>2</sub>) during construction and operation. These pollutants can have adverse impacts on human health at certain levels of exposure. The following subsections describe the characteristics, sources, and health and atmospheric effects of air pollutants.

## **Ozone**

Ozone (O<sub>3</sub>) is a highly oxidative unstable gas produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO<sub>x</sub>) and reactive organic gases (ROG)/volatile organic compounds (VOC).<sup>1</sup> ROG is composed of non-methane hydrocarbons (with specific exclusions), and NO<sub>x</sub> is composed of different chemical combinations of nitrogen and oxygen, mainly nitric oxide and NO<sub>2</sub>. NO<sub>x</sub> is formed during the combustion of fuels, while ROG is formed during the combustion and evaporation of organic solvents. As a highly reactive molecule, O<sub>3</sub> readily combines with many different atmosphere components. Consequently, high O<sub>3</sub> levels tend to exist only while high ROG and NO<sub>x</sub> levels are present to sustain the O<sub>3</sub> formation process. Once the precursors have been depleted, O<sub>3</sub> levels rapidly decline. Because these reactions occur on a regional rather than local scale, O<sub>3</sub> is considered a regional pollutant. In addition, because O<sub>3</sub> requires sunlight to form, it mainly occurs in concentrations considered serious between April and October. Groups most sensitive to O<sub>3</sub> include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors (U.S. EPA 2022a). Depending on the level of exposure, O<sub>3</sub> can cause coughing and a sore or scratch throat; make it more difficult to breathe deeply and vigorously and cause pain when taking a deep breath; inflame and damage the airways; make the lungs more susceptible to infection; and aggravate lung diseases such as asthma, emphysema, and chronic bronchitis.

## **Carbon Monoxide**

CO is a localized pollutant found in high concentrations only near its source. The primary source of CO, a colorless, odorless, poisonous gas, is automobile traffic's incomplete combustion of petroleum fuels. Therefore, elevated concentrations are usually only found near areas of high traffic volumes. Other sources of CO include the incomplete combustion of petroleum fuels at power plants and fuel combustion from wood stoves and fireplaces during the winter. When CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. These people already have a reduced ability to get oxygenated blood to their hearts in situations where they need more oxygen than usual. As a result, they are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain, also known as angina. (U.S. EPA 2022a).

## **Nitrogen Dioxide**

Nitrogen dioxide (NO<sub>2</sub>) is a by-product of fuel combustion; the primary sources are motor vehicles and industrial boilers, and furnaces. The principal form of NO<sub>x</sub> produced by combustion is nitric oxide, but nitric oxide reacts rapidly to form NO<sub>2</sub>, creating the mixture of nitric oxide and NO<sub>2</sub>, commonly called NO<sub>x</sub>. NO<sub>2</sub> is a reactive, oxidizing gas and an acute irritant capable of damaging cell linings in the respiratory tract. Breathing air with a high concentration of NO<sub>2</sub> can irritate airways in the human respiratory system. Such exposures over short periods can aggravate respiratory diseases leading to respiratory symptoms (such as coughing, wheezing, or difficulty breathing), hospital admissions, and visits to emergency rooms. Longer exposures to elevated concentrations of NO<sub>2</sub> may contribute to the development of asthma and potentially increase susceptibility to

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<sup>1</sup> CARB defines VOC and ROG similarly as, "any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term ROG is used in this report.

respiratory infections. People with asthma and children and the elderly are generally at greater risk for the health effects of NO<sub>2</sub>. (U.S. EPA 2022a). NO<sub>2</sub> absorbs blue light and causes a reddish-brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of O<sub>3</sub>/smog and acid rain.

## Sulfur Dioxide

Sulfur dioxide (SO<sub>2</sub>) is included in a group of highly reactive gases known as “oxides of sulfur.” The largest sources of SO<sub>2</sub> emissions are from fossil fuel combustion at power plants (73 percent) and other industrial facilities (20 percent). Smaller sources of SO<sub>2</sub> emissions include industrial processes such as extracting metal from ore and burning fuels with a high sulfur content by locomotives, large ships, and off-road equipment. Short-term exposures to SO<sub>2</sub> can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO<sub>2</sub> (U.S. EPA 2022a).

## Particulate Matter

Suspended atmospheric PM<sub>10</sub> and PM<sub>2.5</sub> are comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. Both PM<sub>10</sub> and PM<sub>2.5</sub> are emitted into the atmosphere as by-products of fuel combustion and wind erosion of soil and unpaved roads. The atmosphere, through chemical reactions, can form particulate matter. The characteristics, sources, and potential health effects of PM<sub>10</sub> and PM<sub>2.5</sub> can be very different. PM<sub>10</sub> is generally associated with dust mobilized by wind and vehicles. In contrast, PM<sub>2.5</sub> is generally associated with combustion processes and formation in the atmosphere as a secondary pollutant through chemical reactions. PM<sub>10</sub> can cause increased respiratory disease, lung damage, cancer, premature death, reduced visibility, surface soiling. For PM<sub>2.5</sub>, short-term exposures (up to 24-hours duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases (California Air Resource Board [CARB] 2022a).

## Lead

Pb is a metal found naturally in the environment, as well as in manufacturing products. The major sources of lead emissions historically have been mobile and industrial. However, due to the U.S. EPA’s regulatory efforts to remove lead from gasoline, atmospheric Pb concentrations have declined substantially over the past several decades. The most dramatic reductions in Pb emissions occurred before 1990 due to the removal of Pb from gasoline sold for most highway vehicles. Pb emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries at least partly due to national emissions standards for hazardous air pollutants (U.S. EPA 2013). As a result of phasing out leaded gasoline, metal processing is currently the primary source of Pb emissions. The highest Pb level in the air is generally found near Pb smelters. Other stationary sources include waste incinerators, utilities, and Pb-acid battery manufacturers. Pb can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and cardiovascular system depending on exposure. Pb exposure also affects the oxygen-carrying capacity of the blood. The Pb effects most likely encountered in current populations are neurological in children. Infants and young children are susceptible to Pb exposures, contributing to behavioral problems, learning deficits, and lowered IQ (U.S. EPA 2022a).

## **Toxic Air Contaminants**

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). More than 90 percent of DPM is less than one micron in diameter (about 1/70<sup>th</sup> the diameter of a human hair) and thus is a subset of PM<sub>2.5</sub>. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs (CARB 2022a).

TACs are different than criteria pollutants because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

TACs include both organic and inorganic chemical substances. One of the main sources of TACs in California is diesel engines that emit exhaust containing solid material known as diesel particulate matter; however, TACs may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs commonly associated with gasoline dispensing stations include the organic compounds of benzene, toluene, and xylene. In particular, benzene is a known human carcinogen and can result in short-term acute and long-term chronic health impacts (United States Environmental Protection Agency [U.S. EPA] n.d.). Between 1990 and 2005, benzene in California's air was reduced by over 75 percent due to implementation of control technologies, such as vapor recovery systems, and reductions of benzene levels in gasoline (CARB 2005). Today, gasoline dispensing facilities account for a relatively small fraction of total benzene emissions. However, near source exposure resulting from gasoline dispensing facilities, particularly very high throughput retail or wholesale facilities, can result in elevated health risks to nearby sensitive receptors. People exposed to toxic air pollutants at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems (U.S. EPA 2020).

## **2.3 Air Quality Regulation**

The federal and state governments have authority under the federal and state Clean Air Acts to regulate emissions of airborne pollutants and have established ambient air quality standards (AAQS) for the protection of public health. An air quality standard is defined as “the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harming public health” (CARB 2023a). The U.S. EPA is the federal agency designated to administer air quality regulation, while CARB is the state equivalent in California. Federal and state AAQS have been established for six criteria pollutants: O<sub>3</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and Pb. AAQS are designed to protect those segments of the public most susceptible to respiratory distress, such as children under the age of 14, the elderly (over the age of 65), persons engaged in strenuous work or exercise, and people with cardiovascular and chronic respiratory diseases (U.S. EPA 2022a). In



addition, the State of California has established health-based ambient air quality standards for these and other pollutants, some of which are more stringent than the federal standards (CARB 2016). The federal and state Clean Air Acts are described in more detail below.

## Federal Air Quality Regulations

The Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 [42 United States Code (USC) 7401] for the purposes of protecting and enhancing the quality of the nation’s air resources to benefit public health, welfare, and productivity. In 1971, to achieve the purposes of Section 109 of the CAA [42 USC 7409], the U.S. EPA developed primary and secondary National Ambient Air Quality Standards (NAAQS).

The primary NAAQS “in the judgment of the Administrator<sup>2</sup>, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health,” and the secondary standards are to “protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air” [42 USC 7409(b)(2)]. The U.S. EPA classifies specific geographic areas as either “attainment” or “nonattainment” areas for each pollutant based on the comparison of measured data with the NAAQS. States are required to adopt enforceable plans, known as a State Implementation Plan (SIP), to achieve and maintain air quality meeting the NAAQS. State plans also must control emissions that drift across state lines and harm air quality in downwind states. Table 2 lists the current federal standards for regulated pollutants.

**Table 2 Federal and State Ambient Air Quality Standards**

Pollutant	NAAQS	CAAQS
Ozone	0.070 ppm (8-hr avg)	0.09 ppm (1-hr avg) 0.070 ppm (8-hr avg)
Carbon Monoxide	35.0 ppm (1-hr avg) 9.0 ppm (8-hr avg)	20.0 ppm (1-hr avg) 9.0 ppm (8-hr avg)
Nitrogen Dioxide	0.100 ppm (1-hr avg) 0.053 ppm (annual avg)	0.18 ppm (1-hr avg) 0.030 ppm (annual avg)
Sulfur Dioxide	0.075 ppm (1-hr avg) 0.5 ppm (3-hr avg) 0.14 ppm (24-hr avg) 0.030 ppm (annual avg)	0.25 ppm (1-hr avg) 0.04 ppm (24-hr avg)
Lead	0.15 µg/m <sup>3</sup> (rolling 3-month avg) 1.5 µg/m <sup>3</sup> (calendar quarter)	1.5 µg/m <sup>3</sup> (30-day avg)
Particulate Matter (PM <sub>10</sub> )	150 µg/m <sup>3</sup> (24-hr avg)	50 µg/m <sup>3</sup> (24-hr avg) 20 µg/m <sup>3</sup> (annual avg)
Particulate Matter (PM <sub>2.5</sub> )	35 µg/m <sup>3</sup> (24-hr avg) 12 µg/m <sup>3</sup> (annual avg)	12 µg/m <sup>3</sup> (annual avg)
Visibility-Reducing Particles	No Federal Standards	Extinction coefficient of 0.23 per kilometer – visibility of ten miles or more (0.07 - 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape. (8-hr avg)

<sup>2</sup> The term “Administrator” means the Administrator of the U.S. EPA.

Pollutant	NAAQS	CAAQS
Sulfates	No Federal Standards	25 µg/m <sup>3</sup> (24-hr avg)
Hydrogen Sulfide	No Federal Standards	0.03 ppm (1-hr avg)
Vinyl Chloride	No Federal Standards	0.01 ppm (24-hr avg)

NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; ppm = parts per million; avg = average; µg/m<sup>3</sup> = micrograms per cubic meter  
 Source: CARB 2016, U.S. EPA 2022b.

To derive the NAAQS, the U.S. EPA reviews data from integrated science assessments and risk/exposure assessments to determine the ambient pollutant concentrations at which human health impacts occur, then reduces these concentrations to establish a margin of safety (U.S. EPA 2018). As a result, human health impacts caused by the air pollutants discussed above may affect people when ambient air pollutant concentrations are at or above the concentrations established by the NAAQS. The closer a region is to attaining a particular NAAQS, the lower the human health impact is from that pollutant (SJVACPD 2015). Accordingly, ambient air pollutant concentrations below the NAAQS are considered to be protective of human health (CARB 2023b). The NAAQS and the underlying science that forms the basis of the NAAQS are reviewed every five years to determine whether updates are necessary to continue protecting public health with an adequate margin of safety (U.S. EPA 2015).

### **NAAQS and CAAQS Attainment Status**

California is divided geographically into 15 air basins for managing the air resources of the state on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. If an air basin is not in either federal or state attainment for a particular pollutant, the basin is classified as a nonattainment area for that pollutant. Under the federal and state Clean Air Acts, once a nonattainment area has achieved the air quality standards for a particular pollutant, it may be redesignated to an attainment area for that pollutant. To be redesignated, the area must meet air quality standards and have a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the federal CAA. Areas that have been redesignated to attainment are called maintenance areas.

The project is within the SCAB, which is designated extreme nonattainment for the federal 8-hour ozone standard moderate nonattainment for the federal annual PM<sub>2.5</sub> standard, and serious nonattainment for the federal 24-hour PM<sub>2.5</sub> standard. The air basin is also designated nonattainment for the state ozone, PM<sub>2.5</sub>, and PM<sub>10</sub> standards (CARB 2020a).

### **State Air Quality Regulations**

#### *California Clean Air Act*

The California Clean Air Act (CCAA) was enacted in 1988 (California Health & Safety Code (H&SC) §39000 et seq.). Under the CCAA, the State has developed the California Ambient Air Quality Standards (CAAQS), which are generally more stringent than the NAAQS. Table 2 lists the current state standards for regulated pollutants. In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Similar to the federal CAA, the CCAA classifies specific geographic areas as either “attainment” or “nonattainment” areas for each pollutant, based on the comparison of measured data within the

CAAQS. The project site, with SCAB, is in attainment with CAAQS standards for CO, NO<sub>2</sub>, hydrogen sulfide, sulfates, and vinyl chloride while in nonattainment for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

### *Toxic Air Contaminants*

In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: H&SC Sections 39650–39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act, California Senate Bill 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air quality monitoring network, and develop any additional air toxic control measures needed to protect children's health.

The SCAQMD regulates TAC emissions in the SCAB. SCAQMD's Rule 1401, *New Source Review of Toxic Air Contaminants*, establishes limits for maximum individual cancer risk, cancer burden, and non-cancer acute and chronic hazard indices from new permit units, relocations, or modifications to existing permit units emitting various TACs. Benzene, including benzene from gasoline, is included on SCAQMD's list of TACs subject to cancer risk and non-cancer hazard index limits.

### *State Implementation Plan*

The SIP is a collection of documents that set forth the state's strategies for achieving the AAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, and permitting), district rules, state regulations, and federal controls. The CARB is the lead agency for all purposes related to the SIP under state law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register. The items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

As the regional air quality management district, the SCAQMD is responsible for preparing and implementing the portion of the SIP applicable to the portion of the SCAB within its jurisdiction. The air pollution control district for each county adopts rules, regulations, and programs to attain federal and state air quality standards and appropriates money (including permit fees) to achieve these objectives.

In addition, the following California Code of Regulations would be applicable to the project:

- **Engine Idling.** In accordance with Section 2485 of Title 13 of the California Code of Regulations, the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to five minutes at any location.

- **Emission Standards.** In accordance with Section 93115 of Title 17 of the California Code of Regulations, operation of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emission standards.

## **Local Air Quality Regulations**

To meet the NAAQS and CAAQS, the SCAQMD has adopted a series of AQMPs that serve as a regional blueprint to develop and implement an emission reduction strategy that will bring the area into attainment with the standards in a timely manner. The most significant air quality challenge in the Air Basin is to reduce NO<sub>x</sub> emissions to meet the 2037 ozone standard deadline for the non-Coachella Valley portion of the South Coast Air Basin, as NO<sub>x</sub> plays a critical role in the creation of ozone. The 2022 AQMP includes strategies to ensure the SCAQMD does its part to further the district's ability to meet the 2015 federal ozone standards (SCAQMD 2022). The 2022 AQMP builds on the measures already in place from the previous AQMPs and includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technology, best management practices, co-benefits from existing programs, incentives, and other CAA measures to meet the 8-hour ozone standard.

The SCAQMD's strategy to meet the NAAQS and CAAQS distributes the responsibility for emission reductions across federal, State, and local levels and industries. The majority of these emissions are from heavy-duty trucks, ships, and other State and federally regulated mobile source emissions that the majority of which are beyond SCAQMD's control. The SCAQMD has limited control over truck emissions with rules such as Rule 1196. In addition to federal action, the 2022 AQMP relies on substantial future development of advanced technologies to meet the standards, including the transition to zero- and low-emission technologies. The AQMP also incorporates the transportation strategy and transportation control measures from SCAG's 2020-2045 RTP/SCS Plan (Connect SoCal) (SCAG 2020). SCAG is required by law to ensure that transportation activities "conform" to, and are supportive of, the goals of regional and State air quality plans to attain the NAAQS. Connect SoCal includes transportation programs, measures, and strategies generally designed to reduce vehicle miles traveled (VMT), which are contained in the AQMP.

To minimize potential impacts from project emissions, the SCAQMD implements rules and regulations for emissions that may be generated by various uses and activities. The rules and regulations detail pollution-reduction measures that must be implemented during construction and operation of projects. Rules and regulations relevant to the project include the following:

- **Rule 402 (Nuisance).** A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- **Rule 403 (Fugitive Dust).** This rule pertains to any activity or man-made condition capable of generating fugitive dust. The rule has best available control measures that are applicable to all construction activity sources. The new construction would be required to comply with all provisions of Rule 403, including the following measures:
  - All unpaved demolition and construction areas shall be wetted at least twice daily during excavation and construction, and temporary dust covers shall be used to reduce dust emissions and meet SCAQMD Rule 403.

- The construction area shall be kept sufficiently dampened to control dust caused by grading and hauling, and at all times provide reasonable control of dust caused by wind.
  - All clearing, earth moving, or excavation activities shall be discontinued during periods of high winds (i.e., greater than 15 mph), so as to prevent excessive amounts of dust.
  - All dirt/soil shall be secured by trimming, watering, or other appropriate means to prevent spillage and dust.
  - All dirt/soil materials transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.
  - General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions.
  - Trucks having no current hauling activity shall not idle but be turned off.
  - Exposed surfaces shall be maintained at a minimum soil moisture of 12 percent and vehicle speeds shall be limited to 15 miles per hour on unpaved roads.
- **Rule 461 (Gasoline Transfer and Dispensing).** This rule applies to the transfer of gasoline from any tank truck, trailer, or railroad tank car into any stationary storage tank or mobile fueler, and from any stationary storage tank or mobile fueler into any mobile fueler or motor vehicle fuel tank. This rule has specific requirements for how facility equipment and operation, such as operating signs, daily maintenance inspection protocol, and periodic compliance inspection protocol.
  - **Rule 1113 (Architectural Coatings).** This rule limits the content of VOCs in architectural coatings that are supplied, sold, offered for sale, and manufactured within the Air District. Effective January 1, 2019, all building envelope coatings were limited to a VOC content of 50 grams per liter (SCAQMD 2016).

### *County of Riverside*

The County of Riverside Air Quality Element was revised on July 17, 2018. It lists several air quality policies designed to establish a regional basis for improving air quality that supplement those of the SCAQMD. The following policies are applicable to the proposed project (County of Riverside 2018):

- **AQ 1.1:** Promote and participate with regional and local agencies, both public and private, to protect and improve air quality.
- **AQ 1.4:** Coordinate with the SCAQMD and MDAQMD to ensure that all elements of air quality plans regarding reduction of air pollutant emissions are being enforced.
- **AQ 2.3:** Encourage the use of pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution.
- **AQ 4.1:** Require the use of all feasible building materials/methods which reduce emissions.
- **AQ 4.5:** Require stationary pollution sources to minimize the release of toxic pollutants through:
  - Design features;
  - Operating procedures;
  - Preventive maintenance;
  - Operator training; and
  - Emergency response planning.

- **AQ 4.6:** Require stationary air pollution sources to comply with applicable air district rules and control measures.
- **AQ 4.9:** Require compliance with SCAQMD Rules 403 and 403.1 and support appropriate future measures to reduce fugitive dust emanating from construction sites.
- **AQ 20.1.** Reduce VMT by requiring expanded multi-modal facilities and services that provide transportation alternatives, such as transit, bicycle, and pedestrian modes. Improve connectivity of the multi-modal facilities by providing linkages between various uses in the developments.
- **AQ 20.27.** Increase the average fuel efficiency of County-owned vehicles powered by gasoline and diesel through fleet transitioning programs. Also, reduce total vehicle miles traveled by County employees, both commuting to work sites and travel for the conduction of County activities.

## 2.4 Current Air Quality

The SCAQMD operates a network of air quality monitoring stations throughout the SCAB. The monitoring stations aim to measure ambient concentrations of pollutants and determine whether ambient air quality meets the California and federal standards. SCAQMD has divided the air basin into general forecast and air monitoring areas. Current Air Quality information is obtained from the same, or closest monitoring area (or source receptor area [SRA]) where the project is located. The project site is in SRA 26 along with the closest monitoring station. The monitoring station closest to the project site is Winchester station (located at 33700 Borel Road in Winchester), approximately 3 miles southeast of the project site. This station collects 8-hour ozone, hourly  $O_3$ , and  $PM_{2.5}$  measurements. The Lake Elsinore station (located at 506 W Flint Street in Lake Elsinore) collects  $NO_2$  and  $PM_{10}$  measurements. This station is approximately 14 miles northwest of the project site. Table 3 indicates the number of days each federal and state standard exceeded at Winchester and Lake Elsinore stations. As shown therein, 2019 through 2021,  $O_3$  measurements exceeded the federal and state eight-hour ozone standards. In addition, the state's worst ozone hour standards were exceeded in 2020 and 2021.  $PM_{10}$  measurements exceeded the federal standard, and insufficient data in 2019, 2020, and 2021 to determine state  $PM_{10}$  standard exceedances. Also,  $PM_{2.5}$  measurements taken from Winchester were insufficient to determine federal  $PM_{2.5}$  standard exceedances in 2019, 2020, and 2021. No other state or federal standards were exceeded at these monitoring stations. Since CO and  $SO_2$  are in attainment with the SCAB region, they are not monitored at the nearest air monitoring stations and therefore ambient air quality is not reported for these two pollutants.

**Table 3 Ambient Air Quality at the Nearest Monitoring Stations**

Pollutant	2019	2020	2021
8 Hour Ozone (ppm), 8-Hour Average <sup>1</sup>	0.079	0.091	0.083
Number of Days of state exceedances (>0.070 ppm)	6	37	10
Number of days of federal exceedances (>0.070 ppm)	6	37	10
Ozone (ppm), Worst Hour <sup>1</sup>	0.091	0.108	0.095
Number of days of state exceedances (>0.09 ppm)	0	5	1
Nitrogen Dioxide (ppm) - Worst Hour <sup>2</sup>	0.038	0.044	0.044
Number of days of state exceedances (>0.18 ppm)	0	0	0
Number of days of federal exceedances (>0.10 ppm)	0	0	0
Particulate Matter 10 microns, $\mu\text{g}/\text{m}^3$ , Worst 24 Hours <sup>2</sup>	93.8	192.4	90
Number of days of state exceedances (>50 $\mu\text{g}/\text{m}^3$ )	*	*	*
Number of days above federal standard (>150 $\mu\text{g}/\text{m}^3$ )	*	1	0
Particulate Matter <2.5 microns, $\mu\text{g}/\text{m}^3$ , Worst 24 Hours <sup>1</sup>	17.0	37.1	26.9
Number of days above federal standard (>35 $\mu\text{g}/\text{m}^3$ )	*	*	*

<sup>1</sup> Measurements were taken from the Winchester Station

<sup>2</sup> Measurements taken from the Lake Elsinore Station.

\*Insufficient data available to determine the value.

Source: CARB 2023c

## Sensitive Receptors

Sensitive receptors refer to those segments of the population most susceptible to poor air quality (i.e., children, elderly, and the sick). According to the County of Riverside, certain at-risk sensitive land uses include schools, hospitals, parks, or residential communities (County of Riverside 2018). The project's analysis follows SCAQMD guidance for air quality impacts, as such SCAQMD Risk Assessment Procedures define receptors as any location outside the boundaries of a facility at which a person could experience repeated, continuous exposure. The procedures further note that sensitive receptors include any residence (e.g., private homes, condominiums, apartments, and living quarters), schools (including preschools and daycare centers), health facilities (e.g., hospitals, retirement and nursing homes, long-term care hospitals, hospices), as well as prisons, dormitories, or similar live-in housing where children, chronically ill individuals, or other sensitive persons could be exposed to TACs (SCAQMD 2017a).

The sensitive receptors nearest to the project site are planned single-family residences south of the project. These residences are approximately 250 feet south of the main project site, the gas pump fuel stations, food market, convince market, and car wash. Additional single-family residences are located approximately 650 feet south of the project site across Winchester Road. SCAQMD Risk Assessment Procedures also recommend the assessment of potential health risks at nearby occupational receptors. Therefore, the Health Risk Assessment (HRA) performed for the project, further discussed under Threshold 3, also considers impacts to off-site workers at adjacent commercial land uses immediately west of the project site along Pourroy Road.

## 3 Air Quality Impact Analysis

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### 3.1 Methodology

The project's construction and operational emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2022.1. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses, and location, to estimate a project's construction and operational emissions. The modeling also incorporated the CARB adjustment factors to account for the Safer Affordable Fuel-Efficient (SAFE) vehicles rules and actions adopted by the US EPA and the National Highway Safety Administration in 2019 and 2020. The adjustment factors apply to NO<sub>x</sub>, CO, particulate matter, and total organic gases (TOG). The TOG adjustment factors apply to ROG, while the PM adjustment factors apply to both PM<sub>10</sub> and PM<sub>2.5</sub>. These adjustments apply to gasoline-fueled light duty and medium vehicles for construction and operational emissions (CAPCOA 2021). The construction and operational models include the CARB's adjustment factors for the Emission Factor 2021 (EMFAC2021) model.

#### Construction

Project construction would primarily generate temporary criteria pollutant and GHG emissions from construction equipment operation on-site, construction worker vehicle trips to and from the site, and export of materials off-site. According to the project applicant, construction is anticipated to take approximately 17 months and would occur from August 2023 to December 2024. CalEEMod default assumptions for construction equipment was used for the model. The project would include excavating and filling approximately 23,156 and 5,000 cubic yards (cy) during the grading and site preparation phase, respectively. The remainder of the excavated soil would be balanced on-site. It is assumed construction equipment to be diesel-fueled. This analysis assumes that the project would comply with all applicable regulatory standards. In particular, the project would comply with SCAQMD Rule 403 for dust control measures and Rule 1113 for architectural coating VOC limits, which are discussed under Section 2.3, *Air Quality Regulation*

#### Operation

In CalEEMod, operational sources of criteria pollutant emissions include area, energy, and mobile sources. The project would include land use subtypes, such as gas station and convenience store, restaurant, and carwash. The project's CalEEMod model uses CalEEMod default assumptions for energy, area, and mobile sources for the gas station and convenience store, and restaurant. CalEEMod does not contain a land-use directly correlated to a car wash use. The project's car wash was attributed to the "Automobile Care Center" land use subtype. The mobile and energy use are modified for the unique characteristics of a car wash, as described below.

#### *Energy Sources*

Emissions from energy use include electricity and natural gas use. The emissions factors for natural gas combustion are based on USEPA's AP-42 (*Compilation of Air Pollutant Emissions Factors*) and California Climate Action Registry (CCAR) General Reporting Protocol (CCAR 2009). Data from professional car wash industry surveys and reports were inserted in the CalEEMod model to estimate the energy requirements for the proposed car wash. The annual number of vehicles that



the project's carwash would service was estimated at an average of approximately 80,000 vehicles per year for exterior-only automated conveyor car washes (Professional Car Washing 2017). The total annual gas usage used of the car wash, the cost of \$0.12 for natural gas, was converted to 16.6 kilo-British Thermal Units (kBtu) per vehicle for the natural gas-based average cost of \$7.49 per 1,000 cubic feet<sup>3</sup> for commercial customers in the U.S. in 2017 (USEIA 2022b). As a result, the carwash's total annual natural gas use is 1,329,132 kBtu per year.

### Area Sources

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod and utilize standard emission rates from CARB, USEPA, and emission factor values provided by the local air district (CAPCOA 2021).

### Mobile Sources

Mobile source emissions are generated by the increase in vehicle trips to and from the project site associated with the operation of onsite development. The restaurant, gas station and convenience store, and car wash trip rates were estimated using the latest Institute of Transportation Engineers (ITE) 11th edition trip rates (ITE 2021). CalEEMod 2022.1 version used the trip generation rates from the Trip Generation Manual, 10<sup>th</sup> edition. ITE trip rates for an automated car wash (#948) are estimated as 30.4 Saturday peak hour trips and 11.6 Weekday peak hour trips. As the ITE trip rates do not list a Sunday trip rate, Sunday's peak hour trips are assumed to be the same as the data provided by ITE for Saturday. Peak hour trips are approximately 10 percent of average daily trips; therefore, the project would result in 304 average daily trips. The ITE trip rates for the gas station and convenience store (#945) are estimated at 345.75 vehicle trips generation per vehicle fueling position on weekdays. On Saturday and Sunday, the vehicles trips generation per vehicle fueling position are estimated at 297.7 and 256.7 respectfully.

## Health Risk Assessment

To evaluate the potential impacts of TACs emitted during operation of the proposed gas station component of the project, Rincon completed an HRA using Lakes Environmental American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) View model (version 10.2.1), and CARB's Hotspot Analysis and Reporting Program (HARP2, version 2.1.5). Potential health risks to nearby sensitive receptors from the emission of TACs during operations at the proposed gasoline fueling facility were analyzed in accordance with the SCAQMD's *Risk Assessment Procedures for Rules 1401, 1401.1 and 212* (SCAQMD 2017b, 2020), *AB 2588 and Rule 1402 Supplemental Guidelines* (SCAQMD 2018), California Air Pollution Control Officers Association's (CAPCOA) *Gasoline Service Station Industrywide Risk Assessment Guidelines* (CAPCOA 1997), and the OEHHA *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA 2015).

According to the SCAQMD's Risk Assessment Procedures, benzene, naphthalene, and ethylbenzene are the only TACs with cancer toxicity values from gasoline dispensing facilities, with benzene accounting for nearly 84 percent of cancer risk from gasoline. Furthermore, under the maximum permitted cancer risk of 10 in one million, maximum acute and chronic hazard indices are much lower than SCAQMD's acute and chronic threshold of 1.0. The SCAQMD Risk Assessment Procedures conclude that chronic and acute non-cancer health effects do not need to be calculated for gasoline

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<sup>3</sup> For natural gas, 1,000 cubic feet = 1,037 kBtu

dispensing facilities (SCAQMD 2017b) as it would require approximately 33 million gallons of throughput to reach the acute threshold and approximately 50 million gallons of throughput to reach the chronic threshold. The project would only result in approximately 6 million gallons of throughput. Therefore, the risk analysis contained in this report only evaluates cancer risk associated with exposure to benzene, ethylbenzene, and naphthalene emissions. Additionally, while the gas station may include diesel fueling, benzene concentrations in diesel fuel are on the order of 0.02 percent by volume (International Agency on Research for Cancer 1989). As a result, benzene emissions from diesel fuel vapors are not substantial, and this source is not considered in this analysis.

### *Emissions and Air Dispersion Modeling*

The U.S. EPA's AERMOD atmospheric dispersion modeling system was used to determine concentrations to import into HARP2 for risk quantification. SCAQMD's 2017 Risk Assessment Procedures include methodology for modeling benzene, ethylbenzene, and naphthalene emission sources commonly associated with gasoline dispensing stations (SCAQMD 2017b). In accordance with this methodology, TAC emissions were modeled in AERMOD based on five primary emissions sources associated with gasoline dispensing stations:

- **Loading.** Loading emissions are point source emissions that occur when fuel tanker trucks unload gasoline to the storage tanks, displacing storage tank vapors and causing emissions through the vent pipe.
- **Breathing.** Breathing emissions are driven by temperature and pressure changes in the storage tank and, like loading emissions, are considered a point source for modeling purposes.
- **Refueling.** Refueling emissions are those that occur between the vehicle/nozzle interface. In AERMOD, refueling is modeled as a volume source.
- **Spillage.** Spillage emissions result from evaporating gasoline that spills during vehicle fueling. In AERMOD, spillage is modeled as a volume source.
- **Hose Permeation.** These emissions occur when gasoline, in liquid or vapor form, diffuses through the hose's outer surface to the atmosphere. Hose permeation is modeled as a volume source.

The loading and breathing emissions sources were sited at the location of proposed underground gasoline tanks northeast of the pump canopy. Refueling, spillage, and hose permeation sources were sited at the center of the pump canopy, as such emissions would occur throughout the refueling area.

SCAQMD procedures recommend gas station point source and volume source AERMOD parameters, provided in Table 4. According to the project site plan, the gasoline pump canopy dimensions would be approximately 27 meters by 12 meters. Therefore, side dimensions for the gasoline volume sources were adjusted to 19.5 meters, based on the average side dimension of the refueling area. The gasoline storage tank vents were assumed to have a rain cap and an initial gasoline vapor vertical exit velocity of 0.01 meters per second. Flagpole height was not applied, consistent with SCAQMD Modeling Guidance for AERMOD, which states that flagpole receptors are only necessary for analyses that have instances where sensitive receptors are located on patios/decks at nearby high-rise apartment buildings (SCAQMD 2022). The nearby sensitive receptors are in single-family residences that are ground-level.

**Table 4 Source Modeling Parameters**

Emissions Source	Release Height (m)	Point Source Parameters			Volume Source Parameters	
		Diameter (m)	Temperature (Gas) (K)	Exit Velocity (m/s)	Initial Lateral Dimension (m)	Initial Vertical Dimension (m)
<b>Gasoline Service Station</b>						
Loading	3.7	0.05	291	0.01 <sup>1</sup>	–	–
Breathing	3.7	0.05	289	0.01 <sup>1</sup>	–	–
Refueling	1	–	–	–	4.53 <sup>2</sup>	2.33 <sup>3</sup>
Spillage	0 (ground level)	–	–	–	4.53 <sup>2</sup>	2.33 <sup>3</sup>
Hose Permeation	1	–	–	–	4.53 <sup>2</sup>	2.33 <sup>3</sup>

<sup>1</sup> Assumes vents are equipped with a rain cap. Based on CAPCOA guidance for a Scenario 6B, which is a facility with an underground storage tank and Phase I and II vapor recovery system with vent values.

<sup>2</sup> Assumes an average pump canopy dimension of 19.5 meters, divided by 4.3 per HARP 2 standard.

<sup>3</sup> This value is based on an approximate canopy height of 5 meters recommended by SCAQMD (2017b), divided by 2.15.

Source: SCAQMD 2017b, CAPCOA 1997

SCAQMD procedures assume continuous gas station operation year-round, with 80 percent of daily emissions occurring between 6 a.m. and 8 p.m. and 20 percent of the daily emissions occurring between 8 p.m. and 6 a.m. (SCAQMD 2017b). The variable emission rates function in HARP 2 was used to model this temporal emissions distribution.

SCAQMD procedures provide benzene, ethylbenzene, and naphthalene emissions factors per 1,000 gallons of throughput. SCAQMD Rule 461 requires all gasoline dispensing stations to be equipped with Phase I and Phase II Enhanced Vapor Recovery (EVR) technology, which reduce emissions during tanker truck off-loading (loading emissions) and vehicle refueling, respectively. Generally, SCAQMD's emission factors are based on CARB's *Revised Emission Factors for Gasoline Marketing Operations at California Gasoline Dispensing Facilities* (CARB 2013), which assume use of Phase I EVR systems for loading emissions and Phase II EVR systems for spillage emissions. Emissions calculations are based on a proposed maximum throughput of approximately six million gallons annually. Table 5 summarizes SCAQMD provided benzene, ethylbenzene, and naphthalene emission factors and the corresponding maximum annual and hourly emissions rates, assuming a six million-gallon annual throughput.

**Table 5 Benzene Emissions by Source**

Emissions Source	SCAQMD Emissions Factor (lbs/1,000 gallons)	Annual Emissions (lbs/year) <sup>1</sup>	Average Hourly Emissions (lbs/hour)
<b>Benzene</b>			
Loading	6.83 x 10 <sup>-4</sup>	4.098	4.68 x 10 <sup>-4</sup>
Breathing	1.09 x 10 <sup>-4</sup>	0.654	7.47 x 10 <sup>-5</sup>
Refueling	1.46 x 10 <sup>-3</sup>	8.760	1.0 x 10 <sup>-3</sup>
Spillage	1.07 x 10 <sup>-3</sup>	10.200	1.16 x 10 <sup>-3</sup>
Hose Permeation	4.10 x 10 <sup>-5</sup>	0.246	2.81 x 10 <sup>-5</sup>
<b>Ethylbenzene</b>			
Loading	1.61 x 10 <sup>-4</sup>	0.966	1.10 x 10 <sup>-4</sup>
Breathing	2.57 x 10 <sup>-5</sup>	0.154	1.76 x 10 <sup>-5</sup>
Refueling	3.42 x 10 <sup>-4</sup>	2.052	2.34 x 10 <sup>-4</sup>
Spillage	3.10 x 10 <sup>-3</sup>	18.600	2.12 x 10 <sup>-3</sup>
Hose Permeation	9.63 x 10 <sup>-6</sup>	0.058	6.60 x 10 <sup>-6</sup>
<b>Naphthalene</b>			
Loading	6.00 x 10 <sup>-7</sup>	0.004	4.11 x 10 <sup>-7</sup>
Breathing	9.60 x 10 <sup>-8</sup>	0.001	6.58 x 10 <sup>-8</sup>
Refueling	1.28 x 10 <sup>-6</sup>	0.008	8.77 x 10 <sup>-7</sup>
Spillage	4.18 x 10 <sup>-4</sup>	2.508	2.86 x 10 <sup>-4</sup>
Hose Permeation	3.60 x 10 <sup>-8</sup>	2.160 x 10 <sup>-4</sup>	2.47 x 10 <sup>-8</sup>

lbs/year = pounds per year

<sup>1</sup> Assumes six million gallons of annual throughput.

Source: SCAQMD 2017b.

Downwash from the proposed on-site carwash and convenience market building was modeled using the Building Profile Input Program (BPIP – a building preprocessing program for AERMOD). Building sizes and locations were estimated from SCAQMD’s 2017 Risk Assessment Procedures and Google Earth aerial imagery.

AERMOD requires meteorological and topographic data. Pre-processed meteorological data was obtained from SCAQMD’s Perris’ Station located in source receptor area (SRA) 24. SCAQMD’s Perris’ Station is the nearest station with meteorological data to the project site approximately 13.7 miles northwest of the project site, in SRA 26. The dataset was developed by SCAQMD for use in AERMOD and includes 5 years of meteorological data between 2010 and 2016 (i.e., 2010-2011 and 2014-2016). AERMOD’s Urban Dispersion option and a 2,189,641 population for Riverside County was applied. This application is consistent with SCAQMD’s Modeling Guidance for AERMOD (SCAQMD 2017b).

### Risk Analysis

To develop risk contours and ensure the area of maximum impact was captured, receptors were placed in a Cartesian grid 798 meters by 798 meters, centered on the project site with a grid spacing

of 42 meters. Additionally, to determine cancer risk for the Maximum Exposed Individual Resident (MEIR), ground level concentrations were modeled at 44 residential receptors near the project site.

Following the calculation of ground level concentrations, residential cancer risks were calculated for a 30-year exposure duration using the Risk Management Policy (RMP) and the Derived Method by selecting HARP 2's Inhalation, Soil Ingestion, Dermal, Mother's Milk, and Homegrown Produce pathways. Pursuant to SCAQMD Risk Assessment Procedures, residents age 16 and older were assumed to spend 73 percent of their time at home. Residents under age 16 were assumed to attend a school or daycare proximate to their home, and therefore, fraction of time at home values were not applied to this age group. The model did not include off-site worker receptors and school receptors due to the distance of the project's emission sources to receptors. Harvest Hill STEAM Academy is the nearest school to the project site approximately 1,700 feet west of the project site. St. Thomas The Hermit Coptic Orthodox Church is the nearest off-site worker approximately 700 feet west of the project site.

Finally, for comparison with applicable SCAQMD thresholds, overall cancer burden associated with the project was calculated. Cancer burden evaluates the potential population-level increase in cancer risk and is defined as the increases in cancer cases in the population due exposure to TACs from a project. Pursuant to OEHHA, cancer burden uses a 70-year exposure duration and only evaluates residential exposure. In this analysis, cancer burden was calculated by estimating the number of residents that could be exposed to an incremental excess cancer risk of one in one million and multiplying the number of exposed residents by the estimated incremental excess cancer risk of the maximum exposed individual resident (MEIR) at the 70-year exposure duration. The number of residents that could be exposed to an incremental excess cancer risk was estimated by counting the number of residences in or touching the one in one million risk isopleth at the 70-year exposure duration (two residences for this project) and assuming that each residence contains 3.23 individuals, the average household size in the County of Riverside (California Department of Finance 2021).

**Figure 4 Emissions Sources and Receptors**



Fig. 4 Emissions Sources and Receptors

## 3.2 Significance Thresholds

To determine whether a project would result in a significant impact to air quality, Appendix G of the *CEQA Guidelines* requires consideration of whether a project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The SCAQMD has adopted guidelines for quantifying and determining the significance of air quality emissions.

### SCAQMD Significance Thresholds

The SCAQMD recommends quantitative regional significance thresholds for temporary construction activities and long-term project operation in the SCAB, shown in Table 6, are used to evaluate a project's potential air quality impacts.

**Table 6 SCAQMD Air Quality Significance Thresholds**

Pollutant	Construction (pounds per day)	Operation (pounds per day)
NO <sub>x</sub>	100	55
VOC	75	55
PM <sub>10</sub>	150	150
PM <sub>2.5</sub>	55	55
SO <sub>x</sub>	150	150
CO	550	550

NO<sub>x</sub> = Nitrogen Oxides; VOC = Volatile Organic Compounds; PM<sub>10</sub> = Particulate Matter with a diameter no more than 10 microns; PM<sub>2.5</sub> = Particulate Matter with a diameter no more than 2.5 microns; SO<sub>x</sub> = Sulfur Oxide; CO = Carbon Monoxide

Source: SCAQMD 2019

### Localized Significance Thresholds

In addition to the above regional thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the *CEQA Air Quality Handbook* (1993). LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each SRA, distance to the sensitive receptor, and project size. LSTs have been developed for emissions within site areas up to five acres in size. However, LSTs only apply to emissions in a fixed stationary location (such as fugitive dust, equipment exhaust, and operational energy and area sources) and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2008a, 2009). Due to the potential for queuing and

idling associated with the carwash, 1 percent of the mobile sources associated with the carwash were included in the localized emissions estimates to conservatively account for these idling emissions.

The SCAQMD provides LST lookup tables for project sites that measure one, two, or five acres. If a site is greater than five acres, SCAQMD recommends a dispersion analysis be performed. The project parcel totals approximately 6.81 acres, but project construction would only disturb a total area of approximately 5.6 acres. Therefore, this analysis utilizes the 5-acre LSTs. LSTs are provided for receptors at a distance of 82 feet (25 meters) 164 feet (50 meters), 328 feet (100 meters), 656 (200 meters), 1,640 feet (500 meters) from the project disturbance boundary to the sensitive receptors. The project analysis will assume main construction activity would occur approximately 250 feet (76 meters) northwest of the closest sensitive receptor, which are planned single-family residential properties. The planned residential properties near the project site could be operational during the grading phase of the proposed project. Therefore, The LST thresholds would represent a worst case scenario. The allowable emissions for project were between SCAQMD’s 164 feet and 328 feet receptor threshold. The project would utilize the 164 feet receptor distance, which is more stringent and conservative for the analysis. The project is in SRA-26 (Temecula Valley) and the LST threshold for construction and operation are shown in Table 7 and Table 8.

**Table 7 SCAQMD LSTs for Construction**

Pollutant	Allowable Emissions for a 5-acre Site in SRA-26 for a Receptor 164 Feet Away (pounds per day)
Gradual conversion of NO <sub>x</sub> to NO <sub>2</sub>	416
CO	2,714
PM <sub>10</sub>	40
PM <sub>2.5</sub>	10

NO<sub>x</sub> = Nitrogen Oxides; NO<sub>2</sub> = Nitrogen Dioxide; CO = Carbon Monoxide; PM<sub>10</sub> = Particulate Matter with a diameter no more than 10 microns; PM<sub>2.5</sub> = Particulate Matter with a diameter no more than 2.5 microns  
 Source: SCAQMD 2009

**Table 8 SCAQMD LST for Operation**

Pollutant	Allowable Emissions for a 5-acre Site in SRA-26 for a Receptor 164 Feet Away (pounds per day)
Gradual conversion of NO <sub>x</sub> to NO <sub>2</sub>	416
CO	2,714
PM <sub>10</sub>	10
PM <sub>2.5</sub>	3

NO<sub>x</sub> = Nitrogen Oxides; NO<sub>2</sub> = Nitrogen Dioxide; CO = Carbon Monoxide; PM<sub>10</sub> = Particulate Matter with a diameter no more than 10 microns; PM<sub>2.5</sub> = Particulate Matter with a diameter no more than 2.5 microns  
 Source: SCAQMD 2009



### *Toxic Air Containments Thresholds*

SCAQMD has developed significance thresholds for the emissions of TACs based on health risks associated with elevated exposure to such compounds. For carcinogenic compounds, cancer risk is assessed in terms of incremental excess cancer risk. A project would result in a potentially significant impact if it would generate an incremental excess cancer risk of 10 in one million ( $1 \times 10^{-6}$ ) or a cancer burden of 0.5 excess cancer cases in areas exceeding one in one million risk. Additionally, non-carcinogenic health risks are assessed in terms of a hazard index. A project would result in a potentially significant impact if it would result in a chronic and acute hazard index greater than 1.0 (SCAQMD 2019).

### 3.3 Impact Analysis

<b>Threshold 1:</b> Would the project conflict with or obstruct implementation of the applicable air quality plan?
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**Impact AQ-1 THE PROJECT WOULD NOT CONFLICT WITH OR OBSTRUCT THE IMPLEMENTATION OF THE SCAQMD FINAL 2022 AIR QUALITY MANAGEMENT PLAN. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding forecasts used in the development of the AQMP. The 2022 AQMP, the most recent AQMP adopted by the SCAQMD, incorporates local county general plans and the SCAG's 2020-2045 RTP/SCS socioeconomic forecast projections of regional population, housing, and employment growth (SCAQMD 2022, SCAG 2020a)<sup>4</sup>.

The employment growth forecasts in SCAG's 2020-2045 RTP/SCS for unincorporated Riverside County estimate that the total number of jobs would increase from 76,100 in 2016 to 139,600 in 2045, for an increase of 63,500 jobs (SCAG 2020b). The project would include approximately 30 employment opportunities<sup>5</sup> from a gas station with convenience store, restaurant, and carwash. The proposed project would be within the SCAG's project 2045 employment increase of 63,500 from 2016, and the project would not cause the unincorporated Riverside County to exceed official regional employment projections.

In addition, the AQMP provides strategies and measures to reach attainment with the thresholds for 8-hour and 1-hour ozone and PM<sub>2.5</sub>. As shown in Table 9 and Table 10, below, the project would not generate criteria pollutant emissions that would exceed SCAQMD thresholds for ozone precursors (ROG and NO<sub>x</sub>) and PM<sub>2.5</sub>. Since the project's employment would be within SCAG 2020 RTP/SCS forecasts, the project would be consistent with the AQMP. Impacts would be less than significant.

<b>Threshold 2</b> Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?
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**Impact AQ-2 PROJECT CONSTRUCTION AND OPERATION WOULD NOT RESULT IN A CUMULATIVELY CONSIDERABLE NET INCREASE OF A CRITERIA POLLUTANT FOR WHICH THE PROJECT REGION IS IN NON-ATTAINMENT UNDER AN APPLICABLE FEDERAL OR STATE AMBIENT AIR QUALITY STANDARD. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

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#### Construction Emissions

Project construction would involve site preparation, grading, building construction, paving, and architectural coating activities that have the potential to generate air pollutant emissions. Table 10 summarizes the estimated maximum daily emissions of VOC, NO<sub>x</sub>, CO, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions would not exceed the SCAQMD regional thresholds or LSTs. Furthermore, the project would implement all SCAQMD Rule 403 measures to control fugitive PM<sub>10</sub> dust. Therefore, project

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<sup>4</sup> On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (titled Connect SoCal). However, the SIPs were adopted prior to this date and relies on the demographic and growth forecasts of the 2016-2040 RTP/SCS; therefore, these forecasts are utilized in the analysis of the project's consistency with the AQMP.

<sup>5</sup> Based on the site plans employee parking requirements and assuming multiple shifts per day.

construction would not result in a cumulatively considerable net increase of criteria pollutant, and impacts would be less than significant.

**Table 9 Project Construction Emissions**

Year	Maximum Daily Emissions (lbs/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2023	6	60	57	<1	14	8
2024	7	30	33	<1	4	3
SCAQMD Regional Thresholds	75	100	550	150	150	55
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Maximum Onsite Emissions	7	60	57	<1	13	8
SCAQMD LST <sup>1</sup>	N/A	416	2,714	N/A	40	10
<b>Threshold Exceeded?</b>	<b>N/A</b>	<b>No</b>	<b>No</b>	<b>N/A</b>	<b>No</b>	<b>No</b>

lbs/day = pounds per day; N/A = not applicable; VOC = volatile organic compounds; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; PM<sub>10</sub> = particulate matter with a diameter no more than 10 microns; PM<sub>2.5</sub> = particulate matter with a diameter no more than 2.5 microns; SO<sub>x</sub> = sulfur oxide

<sup>1</sup>SCAQMD’s LST threshold, which assists lead agencies to analyze localized impacts, does not include VOC and SO<sub>2</sub> emission level limits.

Notes: Some numbers may not add up precisely due to rounding considerations. Maximum on-site emissions are the highest emissions that would occur on the project site from on-site sources, such as heavy construction equipment and architectural coatings, and excludes off-site emissions from sources such as construction worker vehicle trips and haul truck trips

Source: Table 2.1 “Overall Construction-mitigated” emissions. Highest of Summer and Winter emissions results are shown for all emissions. See CalEEMod worksheets in Attachment A.

### Operational Emissions

The project would generate criteria pollutants during operation. To determine whether a project would result in emissions that would violate an air quality standard or contribute substantially to an existing or projected air quality violation, a project’s emissions are evaluated based on the quantitative emission thresholds established by the SCAQMD.

Table 10 summarizes the project’s operational emissions by emission source (area, energy, and mobile). As shown below, the emissions generated by operation of the proposed project would not exceed the SCAQMD’s threshold for any criteria pollutant. Therefore, project would not contribute substantially to an existing or projected air quality violation. In addition, because criteria pollutant emissions and regional thresholds are cumulative in nature, the project would not result in a cumulatively considerable net increase of criteria pollutants.

**Table 10 Project Operational Emissions**

Emission Source	Maximum Daily Emissions (lbs/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Area	<1	<1	<	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	22	24	202	<1	16	3
<b>Project Emissions</b>	<b>22</b>	<b>24</b>	<b>203</b>	<b>&lt;1</b>	<b>16</b>	<b>3</b>
SCAQMD Regional Thresholds	55	55	550	150	150	55
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
Maximum Onsite Emissions <sup>1</sup>	<b>1</b>	<b>1</b>	<b>3</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>
SCAQMD LST <sup>2</sup>	<b>N/A</b>	<b>416</b>	<b>2,714</b>	<b>N/A</b>	<b>10</b>	<b>3</b>
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

lbs/day = pounds per day; N/A = not applicable; VOC = volatile organic compounds; NO<sub>x</sub> = nitrogen oxide; CO = carbon monoxide; PM<sub>10</sub> = particulate matter with a diameter no more than 10 microns; PM<sub>2.5</sub> = particulate matter with a diameter no more than 2.5 microns; SO<sub>x</sub> = sulfur oxide

<sup>1</sup>One percent of mobile emissions were included to account for idling emissions on-site during car wash operations.

<sup>2</sup>SCAQMD's LST threshold, which assists lead agencies to analyze localized impacts, does not include VOC and SO<sub>2</sub> emission level limits.

Notes: Some numbers may not add up precisely due to rounding considerations.

Source: Table 2.2 "Overall Operation-Mitigated" emissions. Highest of Summer and Winter emissions results are shown for all emissions. The mitigated emissions account for project sustainability features and/or compliance with specific regulatory standards. No mitigation measures are required for this project. See CalEEMod worksheets in Attachment A.

**Threshold 3** Would the project expose sensitive receptors to substantial pollutant concentrations?

**Impact AQ-3 THE PROJECT WOULD NOT INCREASE CO CONCENTRATIONS SUCH THAT IT WOULD CREATE CO HOTSPOTS. IMPLEMENTING MITIGATION MEASURE AQ-1 WOULD REDUCE CONSTRUCTION TAC EMISSION FROM OFF-ROAD VEHICLES AND OPERATION OF THE PROJECT WOULD NOT RESULT IN EMISSIONS OF TACS SUFFICIENT TO EXCEED APPLICABLE HEALTH RISK CRITERIA. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION.**

As discussed above, the sensitive receptors nearest to the project site are single-family residences approximately 250 feet southeast of the main project operational area. Residences are also located north of the project boundaries along Pourroy Road.

### Carbon Monoxide Hotspots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal one-hour standard of 35.0 ppm or the federal and state eight-hour standard of 9.0 ppm (CARB 2016).

A detailed CO analysis was conducted during the preparation of SCAQMD's 2003 AQMP. The locations selected for microscale modeling in the 2003 AQMP included high average daily traffic

(ADT) intersections in the SCAB, those which would be expected to experience the highest CO concentrations. The highest CO concentration observed was at the intersection of Wilshire Boulevard and Veteran Avenue on the west side of Los Angeles near the I-405 Freeway which has an ADT of approximately 100,000 vehicles per day. The concentration of CO at this intersection was 4.6 ppm, which is well below the state and federal standards. Furthermore, the SCAB has been in attainment of federal CO standards since 2007 (SCAQMD 2016). Monitoring stations within Riverside County in 2021 recorded a max concentration of 2.1 parts per million for 1-hour CO and 1.8 parts per million for 8-hour CO in Metropolitan Riverside County 1. The federal and state 8-hour CO standards (9 ppm and the federal and state 1-hour CO standards (35 ppm and 20 ppm) were not exceeded (SCAQMD 2023).

According to Caltrans 2020 traffic volumes, the traffic volumes near the project site have an existing traffic volume of 28,000 vehicles per day. In addition, the project would add approximately 4,550 daily trips. Assuming they all traverse SR-79 and enter from the same intersection, total traffic through any intersection would not exceed 33,000 vehicles per day, even with additional growth in the area. This is well below the SCAQMD's CO analysis of 100,000 vehicles per day and therefore the project would not exceed the CO state and federal standards. Impacts would be less than significant.

## Toxic Air Contaminants

### *Construction Impacts*

Construction-related activities would result in temporary project-generated emissions of DPM exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998 (CARB 2017).

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately 16 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that a person has to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., 16 months) is two percent of the total exposure period used for health risk calculation. Additionally, localized diesel particulate matter emissions are below localized thresholds as presented in Table 10. Although the localized analysis does not directly measure health risk impacts, it does provide data that can be used to evaluate the potential to cause health risk impacts. The low level of PM emissions coupled with the short-term duration of construction activity will result in a low level of diesel particulate matter concentrations in the project area.

The Project would be consistent with the applicable AQMP requirements and control strategies intended to reduce emissions from construction equipment and activities. The Project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle

idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction.

With its incorporation of Mitigation Measure AQ-1, the Project would be required to utilize off-road diesel-powered construction equipment that meets or exceeds the most stringent and environmentally protective CARB and USEPA Tier 4 off-road emissions standards, or alternatively fueled equipment which would substantially reduce DPM emissions. The Tier 4 standards reduce DPM emissions by approximately 81 to 96 percent as compared to equipment that meet the Tier 2 off-road emissions standards, depending on the specific horsepower rating of each piece of equipment. Thus, construction activities would not expose sensitive receptors to substantial toxic air contaminant concentrations, and construction-related health impacts would be less than significant.

**Mitigation Measure AQ-1:** All mobile off-road equipment (wheeled or tracked) greater than 50 horsepower used during construction activities shall meet the USEPA Tier 4 final standards. Tier 4 certification can be for the original equipment or equipment that is retrofitted to meet the Tier 4 Final standards. In the event of specialized equipment where Tier 4 Final equipment is not commercially available at the time of construction, the equipment shall meet Tier 3 standards at a minimum. Alternative Fuel (natural gas, propane, electric, etc.) construction equipment shall be incorporated where available. These requirements shall be incorporated into the contract agreement with the construction contractor. A copy of the equipment's certification or model year specifications shall be available upon request for all equipment onsite. Electricity shall be supplied to the site from the existing power grid to support the electric construction equipment. If connection to the grid is determined to be infeasible for portions of the project, a non-diesel fueled generator shall be used.

### *Operational Impacts*

The project would require a permit to construct and operate a gasoline dispensing facility from the SCAQMD, which will review the facility design and location for compliance with SCAQMD standards for air quality and community health. As stated in Section 3.1, *Methodology*, SCAQMD Rule 461 requires all retail service stations to have Phase I and Phase II EVR systems to control gasoline emissions (SCAQMD 2017b). All storage tank vent pipes are also required to have valves to further control emissions. While the emission factors employed in this analysis assume use of Phase I EVR technology to control loading emissions and Phase II EVR systems for spillage emissions, hose permeation and refueling emission factors do not account for use of Phase II EVR systems and, therefore, the analysis is conservative.

Maximum resident cancer risks, as well as cancer burden, are presented in Table 11. The MEIR is the modeled residential receptor experiencing the highest incremental excess cancer risk under 30-year residential exposure duration. The MEIR was determined through an iterative process evaluating and relocating potential receptors based on model-generated risk contours to ensure the maximum incremental excess cancer risk is captured. The model outputs and summary form, along with the risk isopleths, are available in Attachment B. As shown in Table 11, incremental excess cancer risks resulting from operation of the project would not exceed SCAQMD thresholds. See Figure 4 for the approximate location of the MEIR.

**Table 11 Maximum Resident Cancer Risk**

	Maximum Exposed Individual Resident (MEIR) <sup>1</sup>	Cancer Burden <sup>2</sup>
Incremental Excess Cancer Risk	1.64 in 1 million	0.00001
Threshold	10 in 1 million	0.5
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>

<sup>1</sup> Based on 30-year resident exposure. The MEIR is Receptor 250 feet, located at the closest residential building to the Site.

<sup>2</sup> Based on two households within the one in one million incremental excess cancer risk contours, an average household size of 3.23 persons per household in the County of Riverside (California Department of Finance 2021), and the MEIR 70-year incremental excess cancer risk of  $5.48 \times 10^{-6}$ .

Other long-term operational TAC emissions include toxic substances such as cleaning agents in use on-site. Compliance with state and federal handling regulations would ensure that emissions remain below a level of significance. The use of such substances such as cleaning agents is regulated by the 1990 CAA Amendments as well as state-adopted regulations for the chemical composition of consumer products. Therefore, long-term operation of the project would not result in the exposure of sensitive receptors to substantial pollutant concentrations and the impact would be less than significant.

**Threshold 4** Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

**Impact AQ-4 THE PROJECT WOULD NOT GENERATE ODORS ADVERSELY AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE DURING CONSTRUCTION OR OPERATION. IMPACTS WOULD BE LESS THAN SIGNIFICANT.**

For construction activities, odors would be short-term in nature and are subject to SCAQMD Rule 402 *Nuisance* (SCAQMD 1976). Construction activities would be temporary and transitory and associated odors would cease upon construction completion. Accordingly, the proposed project would not create objectionable odors affecting a substantial number of people during construction, and short-term impacts would be less than significant.

Common sources of operational odor complaints include sewage treatment plants, landfills, recycling facilities, and agricultural uses. The proposed project, a fuel station, convenience store with restaurant, and car wash, would not include any of these uses. The fueling station would emit odors during operation in the form of diesel exhaust from vehicles and operation of the fueling pumps. The increase in odor emissions, however, would be minimal, as vehicle exhaust is already prevalent due to the high levels of vehicle traffic on State Route 79.

Solid waste generated by the proposed on-site uses would be collected by a contracted waste hauler, ensuring that any odors resulting from onsite waste would be managed and collected in a manner to prevent the proliferation of odors. Operational odor impacts would be less than significant.

## 4 Greenhouse Gas Emissions

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### 4.1 Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but climate change is preferred because it conveys other changes are happening in addition to rising temperatures. The baseline against which these changes are measured originates in historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously, as evidenced in the geologic record which indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years. The United Nations Intergovernmental Panel on Climate Change (IPCC) expressed that the rise and continued growth of atmospheric CO<sub>2</sub> concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report (2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, that a total of 2,390 gigatonnes of anthropogenic CO<sub>2</sub> was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature.

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxides (N<sub>2</sub>O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and natural processes, such as oceanic evaporation, largely determine its atmospheric concentrations.

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO<sub>2</sub>) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO<sub>2</sub>e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO<sub>2</sub> on a molecule per molecule basis (IPCC 2021).<sup>6</sup>

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 33 degrees Celsius (°C) cooler (World Meteorological Organization 2020). However, since 1750, estimated concentrations of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O in the atmosphere have increased by 47 percent, 156 percent, and 23 percent,

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<sup>6</sup> The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.



respectively, primarily due to human activity (IPCC 2021). GHG emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, are believed to have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

## 4.2 Greenhouse Gas Emissions Inventory

### Global Emissions Inventory

In 2015, worldwide anthropogenic total 47,000 million metric tons (MMT) of CO<sub>2</sub>e, which is a 43 percent increase from 1990 GHG levels (U.S. EPA 2022b). Specifically, 34,522 MMT of CO<sub>2</sub>e of CO<sub>2</sub>, 8,241 MMT of CO<sub>2</sub>e of CH<sub>4</sub>, 2,997 MMT of CO<sub>2</sub>e of N<sub>2</sub>O, and 1,001 MMT of CO<sub>2</sub>e of fluorinated gases were emitted in 2015. The largest source of GHG emissions were energy production and use (includes fuels used by vehicles and buildings), which accounted for 75 percent of the global GHG emissions. Agriculture uses and industrial processes contributed 12 percent and six percent, respectively. Waste sources contributed three percent and two percent was due to international transportation sources.

### United States Emissions Inventory

U.S. GHG emissions were 5,981.4 MMT of CO<sub>2</sub>e in 2020. Emissions decreased by nine percent from 2019 to 2020; since 1990, total U.S. emissions have decreased by 7.3 percent from 1990 to 2020, down from a high 15.7 percent above 1990 levels in 2007. The sharp decline in emissions from 2019 to 2020 is largely due to the impacts of the coronavirus (COVID-19) pandemic on travel and economic activity; however, the decline also reflects the combined impacts of long-term trends in many factors, including population, economic growth, energy markets, technological changes including energy efficiency, and the carbon intensity of energy fuel choices. In 2020, transportation activities accounted for the largest portion (27.2 percent) of total U.S. greenhouse gas emissions. Emissions from electric power accounted for the second largest portion (24.8 percent), while emissions from industry accounted for the third largest portion (23.8 percent) of total U.S. greenhouse gas emissions in 2020 (U.S. EPA 2022c).

### California Emissions Inventory

Based on the CARB California Greenhouse Gas Inventory for 2000-2020, California produced 369.2 MMT of CO<sub>2</sub>e in 2020, which is 35.3 MMT of CO<sub>2</sub>e lower than 2019 levels. The 2019 to 2020 decrease in emissions is likely due in large part to the impacts of the COVID-19 pandemic. The major source of GHG emissions in California is the transportation sector, which comprises 37 percent of the state's total GHG emissions. The industrial sector is the second largest source, comprising 20 percent of the state's GHG emissions while electric power accounts for approximately 16 percent (CARB 2022b). The magnitude of California's total GHG emissions is due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other states is its relatively mild climate. In 2016, the State of California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels as emissions fell below 431 MMT of CO<sub>2</sub>e (CARB 2023d). The annual 2030 statewide target emissions level is 260 MMT of CO<sub>2</sub>e (CARB 2017).

## **Local Emissions Inventory**

The County of Riverside generated a total of 4,905,518 MT CO<sub>2</sub>e in a 2017 GHG emissions inventory. Transportation GHG emissions were the largest contributor at approximately 36 percent of the total GHG emissions or 1,766,784 MT CO<sub>2</sub>e. The second largest sector was agriculture, which generated approximately 1,670,954 MT CO<sub>2</sub>e or 34 percent of the total. The energy sector generated 1,188,138 or 24 percent of the total (County of Riverside 2019).

## **4.3 Potential Effects of Climate Change**

Globally, climate change has the potential to affect numerous environmental resources though potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21<sup>st</sup> century than were observed during the 20<sup>th</sup> century. The year 2022 was the sixth warmest year since global records began in 1880 at 0.86°C (1.55°F) above the 20<sup>th</sup> century average of 13.9°C (57.0°F). This value is 0.13°C (0.23°F) less than the record set in 2016 and it is only 0.02°C (0.04°F) higher than the last year's (2021) value, which now ranks as the seventh highest (National Oceanic and Atmospheric Administration 2023). Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations jointly indicate that LSAT and sea surface temperatures have increased.

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 0.6 to 1.1°C higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the state and regionally specific climate change case studies (State of California 2018). However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. The following information summarizes some of the potential effects that could be experienced in California as a result of climate change.

### **Air Quality and Wildfires**

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C in the next 50 years and by 3.1 to 4.9°C in the next century (State of California 2018). Higher temperatures are conducive to air pollution formation, and rising temperatures could therefore result in worsened air quality in California. As a result, climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. In addition, as temperatures have increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains (State of California 2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality could worsen. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state. With increasing temperatures, shifting weather patterns, longer dry seasons, and more dry fuel loads, the frequency

of large wildfires and area burned is expected to increase. (California Natural Resources Agency 2021).

## **Water Supply**

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (California Department of Water Resources 2018). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The average early spring snowpack in the western U.S., including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 0.15 meter along the central and southern California coasts (State of California 2018). The Sierra snowpack provides the majority of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the fraction of precipitation that falls as snow and the amount of snowfall at lower elevations, thereby reducing the total snowpack (State of California 2018). Projections indicate that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018).

## **Hydrology and Sea Level Rise**

Climate change could affect the intensity and frequency of storms and flooding (State of California 2018). Furthermore, climate change could induce substantial sea level rise in the coming century. Rising sea level increases the likelihood of and risk from flooding. The rate of increase of global mean sea levels between 1993 to 2022, observed by satellites, is approximately 3.4 millimeters per year, double the twentieth century trend of 1.6 millimeters per year (World Meteorological Organization 2013; National Aeronautics and Space Administration 2023). Global mean sea levels in 2013 were about 0.23 meter higher than those of 1880 (National Oceanic and Atmospheric Administration 2022). Sea levels are rising faster now than in the previous two millennia, and the rise will probably accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea level rise ranging between 0.25 to 1.01 meters by 2100 with the sea level ranges dependent on a low, intermediate, or high GHG emissions scenario (IPCC 2021). A rise in sea levels could erode 31 to 67 percent of southern California beaches and cause flooding of approximately 370 miles of coastal highways during 100-year storm events. This would also jeopardize California's water supply due to saltwater intrusion and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2018). Furthermore, increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

## **Agriculture**

California has an over \$50 billion annual agricultural industry that produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts (California Department of Food and Agriculture 2020). Higher CO<sub>2</sub> levels can stimulate plant production and increase plant water-

use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent, which would increase water demand as hotter conditions lead to the loss of soil moisture. In addition, crop yield could be threatened by water-induced stress and extreme heat waves, and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2018). Temperature increases could also change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

## **Ecosystems**

Climate change and the potential resultant changes in weather patterns could have ecological effects on the global and local scales. Soil moisture is likely to decline in many regions due to higher temperatures, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: timing of ecological events; geographic distribution and range of species; species composition and the incidence of nonnative species within communities; and ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2018).

## 4.4 Regulatory and Legal Setting

### **Federal Regulations**

#### *Federal Clean Air Act*

The U.S. Supreme Court determined in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120) that the U.S. EPA has the authority to regulate motor vehicle GHG emissions under the federal Clean Air Act. The U.S. EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the U.S. EPA issued a Final Rule that established the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In *Utility Air Regulatory Group v. Environmental Protection Agency* (134 Supreme Court 2427 [2014]), the U.S. Supreme Court held the U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source can be considered a major source required to obtain a Prevention of Significant Deterioration or Title V permit. The Court also held that Prevention of Significant Deterioration permits otherwise required based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

#### *Safer Affordable Fuel-Efficient Vehicles Rule*

On September 27, 2019, the U.S. E.P.A and the National Highway Traffic Safety Administration published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The SAFE Rule Part One revokes California's authority to set its own GHG emissions standards and to adopt its own zero-emission vehicle mandates. On April 30, 2020, the U.S. E.P.A and the National Highway Traffic Safety Administration published Part Two of the SAFE Vehicles Rule, which revised corporate average fuel economy and CO<sub>2</sub> emissions standards for passenger cars and trucks of

model years 2021-2026 such that the standards increase by approximately 1.5 percent each year through model year 2026 as compared to the approximately five percent annual increase required under the 2012 standards (National Highway Traffic Safety Administration 2020). To account for the effects of the SAFE Vehicles Rule, CARB released off-model adjustment factors on June 26, 2020 to adjust GHG emissions outputs from the EMFAC model (CARB 2020b).

## State Regulations

CARB is responsible for the coordination and oversight of state and local air pollution control programs in California. There are numerous regulations aimed at reducing the state's GHG emissions. These initiatives are summarized below. For more information on the Senate and Assembly Bills, executive orders, building codes, and reports discussed below, and to view reports and research referenced below, please refer to the following websites:

<https://www.energy.ca.gov/data-reports/reports/californias-fourth-climate-change-assessment>, [www.arb.ca.gov/cc/cc.htm](http://www.arb.ca.gov/cc/cc.htm), and <https://www.dgs.ca.gov/BSC/Codes>.

### *California Advanced Clean Cars Program*

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, the U.S. EPA granted the waiver of Clean Air Act preemption to California for its GHG emission standards for motor vehicles, beginning with the 2009 model year, which allows California to implement more stringent vehicle emission standards than those promulgated by the U.S. EPA. Pavley I regulates model years from 2009 to 2016 and Pavley II, now referred to as "LEV (Low Emission Vehicle) III GHG," regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, the rules will be fully implemented, and new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

### *California Global Warming Solutions Act of 2006 (Assembly Bill 32 and Senate Bill 32)*

The "California Global Warming Solutions Act of 2006," (AB 32), outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main state strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT CO<sub>2</sub>e, which was achieved in 2016. CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2008). Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the Scoping Plan's approval.

The CARB approved the 2013 Scoping Plan update in May 2014. The update defined the CARB's climate change priorities for the next five years, set the groundwork to reach post-2020 statewide goals, and highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the state's longer

term GHG reduction strategies with other state policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the state to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100 (discussed later). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of six MT CO<sub>2</sub>e by 2030 and two MT CO<sub>2</sub>e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub-regional, or regional level), but not for specific individual projects because they include all emissions sectors in the state (CARB 2017).

### *2022 Update to the Climate Change Scoping Plan*

In response to the passage of AB 1279 and the identification of the 2045 GHG reduction target, CARB published the Final 2022 Climate Change Scoping Plan in November 2022 (CARB 2022c). The 2022 Update builds upon the framework established by the 2008 Climate Change Scoping Plan and previous updates while identifying new, technologically feasible, cost-effective, and equity-focused path to achieve California's climate target. The 2022 Update includes policies to achieve a significant reduction in fossil fuel combustion, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands (NWL) to reduce emissions and sequester carbon, and the capture and storage of carbon.

The 2022 Update assesses the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan, addresses recent legislation and direction from Governor Newsom, extends and expands upon these earlier plans, and implements a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, as well as taking an additional step of adding carbon neutrality as a science-based guide for California's climate work. As stated in the 2022 Update, "The plan outlines how carbon neutrality can be achieved by taking bold steps to reduce GHGs to meet the anthropogenic emissions target and by expanding actions to capture and store carbon through the state's NWL and using a variety of mechanical approaches" (CARB 2022c). Specifically, the 2022 Update:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.

- Integrates equity and protecting California’s most impacted communities as driving principles throughout the document.
- Incorporates the contribution of NWL to the State’s GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

In addition to reducing emissions from transportation, energy, and industrial sectors, the 2022 Update includes emissions and carbon sequestration in NWL and explores how NWL contribute to long-term climate goals. Under the Scoping Plan Scenario, California’s 2030 emissions are anticipated to be 48 percent below 1990 levels, representing an acceleration of the current SB 32 target. Cap-and-Trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the accelerated 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet our GHG reduction goals and achieve carbon neutrality no later than 2045. The 2022 Update approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology.

#### *Senate Bill 375*

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state’s ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPO’s Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy (categorized as “transit priority projects”) can receive incentives to streamline CEQA processing.

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The SCAG was assigned targets of an 8 percent reduction in per capita GHG emissions from passenger vehicles by 2020<sup>□</sup> and a 19 percent reduction in per capita GHG emissions from passenger vehicles by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements.

#### *Senate Bill 100*

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state’s Renewables Portfolio Standard (RPS) Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement

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<sup>□</sup>SCAG met 2020 GHG reduction but confirmation from CARB is still pending.

from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

### *Executive Order B-55-18*

On September 10, 2018, the former Governor Brown issued Executive Order (EO) B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

### *California Building Standards Code*

The California Code of Regulations (CCR) Title 24 is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2022 Title 24 standards. The California Building Standards Code's energy-efficiency and green building standards are outlined below.

## **PART 6 – BUILDING ENERGY EFFICIENCY STANDARDS/ENERGY CODE**

CCR Title 24, Part 6 is the Building Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission (CEC). The 2022 Title 24 standards are the applicable building energy efficiency standards for the project because they became effective on January 1, 2023.

## **PART 11 – CALIFORNIA GREEN BUILDING STANDARDS**

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective on January 1, 2011 (as part of the 2010 California Building Standards Code). The 2022 CALGreen includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. It also includes voluntary tiers with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements.

The mandatory standards applicable to air quality require:

- Minimum 20 percent reduction in indoor water use relative to specified baseline levels;<sup>8</sup>
- Waste Reduction:

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<sup>8</sup> Similar to the compliance reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CALGreen water reduction requirements must be demonstrated through completion of water use reporting forms. Buildings must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CALGreen or a reduced per-plumbing-fixture water use rate.



- Minimum 65 percent non-hazardous construction/demolition waste diverted from landfills;
- Non-residential and multi-family dwellings with five or more units: Provide readily accessible areas identified for the depositing, storage and collection of nonhazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastic, organic waste, and metals; and/or
- Non-residential: Reuse and/or recycling of 100 percent of trees, stumps, rocks, and associated vegetation soils resulting from primary land clearing;
- Inspections of energy systems to ensure optimal working efficiency;
- Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particleboards; and
- Electric Vehicle (EV) Charging for New Construction:<sup>9</sup>
  - One- and two-family dwellings and town houses with attached private garages: Dedicated circuitry to facilitate installation of electric vehicle (EV) charging;
  - Multi-family dwellings and hotels/motels with less than 20 units/rooms: Designation of at least 10 percent of the total number of parking spaces shall be EV capable and at least 25 percent of the total number of parking spaces shall be EV-ready;
  - Multi-family dwellings and hotels/motels with greater than 20 units/rooms: Designation of at least 10 percent of the total number of parking spaces shall be EV capable, at least 25 percent of the total number of parking spaces shall be EV-ready, and at least 5 percent of the total number of parking spaces shall be equipped with a Level 2 charging station;
  - Non-residential land uses shall comply with the following EV charging requirements based on the number of passenger vehicle parking spaces:
    - 0-9: no EV capable spaces or charging stations required;
    - 10-25: 4 EV capable spaces but no charging stations required;
    - 26-50: 8 EV capable spaces of which 2 must be equipped with charging stations;
    - 51-75: 13 EV capable spaces of which 3 must be equipped with charging stations;
    - 76-100: 17 EV capable spaces of which 4 must be equipped with charging stations;
    - 101-150: 25 EV capable spaces of which 6 must be equipped with charging stations;
    - 151-200: 35 EV capable spaces of which 9 must be equipped with charging stations; and
    - More than 200: 20 percent of the total available parking spaces of which 25 percent must be equipped with charging stations;
  - Non-residential land uses shall comply with the following EV charging requirements for medium- and heavy-duty vehicles: warehouses, grocery stores, and retail stores with

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<sup>9</sup> EV Capable = a vehicle space with electrical panel space and load capacity to support a branch circuit and necessary raceways to support EV charging; EV-ready = a vehicle space which is provided with a branch circuit and any necessary raceways to accommodate EV charging stations, including a receptacle for future installation of a charger (see 2022 California Green Building Standard Code, Title 24 Part 11 for full explanation of mandatory measures, including exceptions).

planned off-street loading spaces shall install EV supply and distribution equipment, spare raceway(s) or busway(s) and adequate capacity for transformer(s), service panel(s), or subpanel(s) at the time of construction based on the number of off-street loading spaces as indicated in Table 5.106.5.4.1 of the California Green Building Standards;

- **Bicycle Parking:**
  - Non-residential short-term bicycle parking for projects anticipated to generate visitor traffic: permanently anchored bicycle racks within 200 feet of visitor entrance for 5 percent of new visitor motorized vehicle parking spaces with a minimum of one 2-bike capacity rack; and/or
  - Non-residential buildings with tenant spaces of 10 or more employees/tenant-occupants: secure bicycle parking for 5 percent of the employee/tenant-occupant vehicle parking spaces with a minimum of one bicycle parking facility.
- **Shade Trees (Non-Residential):**
  - Surface parking: minimum No. 10 container size or equal shall be installed to provide shade over 50 percent of the parking within 15 years (unless parking area covered by appropriate shade structures and/or solar);
  - Landscape areas: minimum No. 10 container size or equal shall be installed to provide shade of 20 percent of the landscape area within 15 years; and/or
  - Hardscape areas: minimum No. 10 container size or equal shall be installed to provide shade of 20 percent of the landscape area within 15 years (unless covered by applicable shade structures and/or solar or the marked area is for organized sports activities).

The voluntary standards include:

- Deconstruct existing buildings and reuse applicable salvaged materials;
- Residential – Cool Roofs: have a thermal mass over the roof membrane, including green roofs weighing a minimum of 25 pounds per square foot or roof areas covered by solar photovoltaic panels and building integrated solar thermal panels;
- Residential – Reduce nonroof heat island for 50 percent of sidewalks, patios, driveways or other paved areas;
- One- and two-family dwelling units and townhouses with attached garages: install a dedicated 208/250-volt branch circuit for EV charging;
- Residential Bicycle Parking:
  - Multi-family/hotel/motel short-term parking: provide permanently anchored bicycle racks within 100 feet of visitor's entrance for 5 percent of visitor motorized vehicle parking capacity (minimum one 2-bike capacity rack);
  - Multi-family buildings long-term parking: provide acceptable on-site bicycle parking for at least one bicycle per every two dwelling units; and/or
  - Hotel/motel long-term parking: provide one acceptable on-site bicycle parking space for every 25,000 square feet but not less than two spaces;
- Tier I:
  - Stricter energy efficiency requirements;
  - Stricter water conservation requirements for specific fixtures;
  - minimum 65 percent reduction in construction waste with third-party verification, Minimum 10 percent recycled content for building materials;

- Minimum 20 percent permeable paving;
- Minimum 20 percent cement reduction;
- Multi-family developments/hotels/motels: minimum 35 percent of total parking spaces shall be EV ready and for projects with 20 or more dwelling units/rooms a minimum of 10 percent of the total number of parking spaces shall be equipped with EV charging stations.
- Tier II:
  - Stricter energy efficiency requirements,
  - Stricter water conservation requirements for specific fixtures;
  - Minimum 75 percent reduction in construction waste with third-party verification,
  - Minimum 15 percent recycled content for building materials;
  - Minimum 30 percent permeable paving;
  - Minimum 25 percent cement reduction; and/or
  - Multi-family developments/hotels/motels: minimum 40 percent of total parking spaces shall be EV ready and for projects with 20 or more dwelling units/rooms, a minimum of 15 percent of the total number of parking spaces shall be equipped with EV charging stations.

#### *California Integrated Waste Management Act (Assembly Bill 341)*

The California Integrated Waste Management Act of 1989, as modified by AB 341 in 2011, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities and (2) diversion of 50 percent of all solid waste on and after January 1, 2000.

#### *Executive Order N-79-20*

On September 23, 2020, Governor Newsom issued EO N-79-20, which established the following new statewide goals:

- All new passenger cars and trucks sold in-state to be zero-emission by 2035;
- All medium- and heavy-duty vehicles in the state to be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks; and
- All off-road vehicles and equipment to be zero-emission by 2035 where feasible.

EO N-79-20 directs CARB, the Governor's Office of Business and Economic Development, the CEC, the California Department of Transportation, and other state agencies to take steps toward drafting regulations and strategies and leveraging agency resources toward achieving these goals.

#### *The California Climate Crisis Act (Assembly Bill 1279)*

AB 1279 was passed on September 16, 2022 and declares the State would achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045. In addition, achieve and maintain net negative greenhouse gas emissions and ensure that by 2045, statewide anthropogenic greenhouse gas emissions are reduced to at least 85% below the 1990 levels. The bill would require updates to the scoping plan (once every five years) to implement various policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies.

*Clean Energy, Jobs, and Affordability Act of 2022 (Senate Bill 1020)*

Adopted on September 16, 2022, SB 1020 creates clean electricity targets for eligible renewable energy resources and zero-carbon resources to supply 90 percent of retail sale electricity by 2035, 95 percent by 2040, 100 percent by 2045, and 100 percent of electricity procured to serve all state agencies by 2035. This bill shall not increase carbon emissions elsewhere in the western grid and shall not allow resource shuffling.

**Regional Regulations**

*2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (titled Connect SoCal). The 2020-2045 RTP/SCS builds upon the progress made through implementation of the 2016-2040 RTP/SCS and includes ten goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation (SCAG 2020a).

*County of Riverside General Plan*

As stated in Section 2.3 *Air Quality Regulation* the County adopted their 2040 General Plan. The Air Quality Element lists specific climate change policies (County of Riverside 2018). See Section 2.3, *Air Quality Regulation*, for policy AQ 20.1 and 20.7 that would also reduce GHG emission applicable to the project.

- **AQ 19.1.** Continue to coordinate with CARB, SCAQMD, and the State Attorney General's office to ensure that the milestones and reduction strategies presented in the General Plan and the CAP adequately address the county's GHG emissions.
- **AQ 20.10.** Reduce energy consumption of the new developments (residential, commercial, and industrial) through efficient site design that takes into consideration solar orientation and shading, as well as passive solar design.
- **AQ 20.14.** Reduce the amount of water used for landscaping irrigation through implementation of County Ordinance 859 and increase use of non-potable water.
- **AQ 20.18.** Encourage the installation of solar panels and other energy-efficient improvements and facilitate residential and commercial renewable energy facilities (solar array installations, individual wind energy generators, etc.).

*Riverside County Climate Action Plan (CAP)*

The County of Riverside Climate Action Plan (CAP), updated on December 17, 2019, identifies many GHG emissions reduction programs and regulations to meet the County's GHG reduction targets of a 49 percent decrease below 2008 levels by 2030 and an 83 percent decrease below 2008 levels by 2050. The County's targets are consistent with the State's targets of a 40 percent decrease below

1990 levels by 2030 (Senate Bill 32) and an 80 percent decrease below 1990 levels by 2050 (Executive Order S-3-05; County of Riverside 2019). Pursuant with CEQA Guidelines Section 15183.5(b), the CAP is considered a qualified GHG reduction strategy that will allow developments to tier off and streamline the GHG analyses under CEQA.

## 5 Greenhouse Gas Impact Analysis

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### 5.1 Methodology

The County of Riverside has adopted a qualified GHG reduction strategy that can be used to streamline the GHG analysis.

Calculations of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions are provided to identify the magnitude of potential project effects. The analysis focuses on CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O because these make up 98 percent of all GHG emissions by volume and are the GHG emissions the project would emit in the largest quantities (IPCC 2014). Emissions of all GHGs are converted into their equivalent GWP in terms of CO<sub>2</sub> (i.e., CO<sub>2</sub>e). Minimal amounts of other GHGs (such as chlorofluorocarbons [CFCs]) would be emitted; however, these other GHG emissions would not substantially add to the total GHG emissions. GHG emissions associated with the proposed project were calculated using the California Emissions Estimator Model (CalEEMod) version 2022.1 (see Attachment A for calculations). The project's CalEEMod model uses CalEEMod default assumptions for energy, solid waste, and area for the gas station and convenience store, and restaurant. CalEEMod does not contain a land-use directly correlated to a car wash use. The project's car wash was attributed to the "Automobile Care Center" land use subtype. The mobile, energy and water use is modified for the unique characteristics of a car wash, as described below. Solid waste inputs for the car wash were left in CalEEMod default assumptions for automobile care center. See section 3.1 *Methodology*, for area, natural gas, and mobile source assumptions which inform both the air quality and GHG emissions estimates.

#### *Energy Sources*

Data from professional car wash industry surveys and reports were inserted in the CalEEMod model to estimate the energy requirements for the proposed car wash. The annual number of vehicles that the project's carwash would service was estimated at an average of approximately 80,000 vehicles per year for exterior-only automated conveyor car washes (Professional Car Washing 2017).

They are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt-hour (CAPCOA 2021). The default electricity consumption values in CalEEMod include the CEC-sponsored California Commercial End-Use Survey and Residential Appliance Saturation Survey studies.

The energy requirements for the car wash were estimated using the survey cost averages of \$0.50 per vehicle for electricity, \$0.12 per vehicle for natural gas, and \$3.00 per vacuum cycle (Professional Car Washing 2014, Professional Car Washing 2017). The total annual electricity use of the car wash and vacuum pump, the cost of \$3.50 for electricity, was converted to 33.05 kilowatt-hours (kwh) per vehicle for electricity based on an average cost of \$0.1059 per kWh for commercial customers in the U.S. in 2020 (U.S. Energy Information Administration [USEIA] 2021). As a result, the total annual electricity use for the carwash is 2,644,004 kWh per year.

#### *Waste Sources*

GHG emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CAPCOA 2021). Waste disposal rates by land use and overall composition of

municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle). As specific waste data for car washes were unavailable, the emissions estimates assume waste generation consistent with the automotive care land use.

### *Water and Wastewater Sources*

CalEEMod calculated GHG emissions from water and wastewater usage based on the default electricity intensity from the CEC's 2006 *Refining Estimates of Water-Related Energy Use in California*. The average values for northern and southern California were used in the model. In addition, CalEEMod incorporated a 20 percent reduction in indoor potable water use per CALGreen standards.

Data from professional car wash industry surveys and reports were inserted in the project's CalEEMod model to estimate the water requirements for the proposed car wash. As detailed under Energy sources above, an estimated 80,000 vehicles per year throughput for exterior-only automated conveyor car washes was used in the analysis. According to a report on water conservation from the International Carwash Association, typical freshwater use for a friction type of conveyor car wash without water reclamation is 65.8 gallons per vehicle (International Carwash Association 2000). AB 2230, signed by the Governor in 2012, requires that any conveyor car wash installed after 2013 reuse a minimum of 60 percent of the water previously used in the wash or rinse cycles. Therefore, the proposed car wash would reclaim at least 39.5 gallons per vehicle for total water use of 26.3 gallons per vehicle. Based on 80,000 vehicles washed per year, the estimated water use for the proposed car wash would be 2,104,000 gallons per year.

The South Coast Air Quality Management District has recommended amortizing construction-related emissions over a 30-year period in conjunction with the proposed project's operational emissions (SCAQMD 2008b). This guidance is used in this analysis.

The project would be served by Southern California Edison (SCE). Specific energy intensity factors (i.e., the amount of CO<sub>2</sub>e per megawatt-hour) from SCE are used in the calculations of GHG emissions.

## 5.2 Significance Thresholds

Based on Appendix G of the *CEQA Guidelines*, impacts related to GHG emissions from the proposed project would be significant if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. As a result, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when

viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

According to *CEQA Guidelines* Section 15183.5, projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project’s consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (AEP) in their white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project’s GHG emissions (AEP 2016).

As mentioned under Section 4.4, *Regulatory and Legal Setting*, the County of Riverside has adopted a qualified GHG reduction plan. For the purposes of this analysis the project’s significance is determined by consistency with the CAP, which is consistent with the 2017 Scoping Plan and emission reduction targets per SB 32. The CAP used SCAQMD analysis of small projects to determine the GHG emissions allowed by a project such that 90 percent of the emissions on average from all projects would exceed that level. Therefore, GHG emissions associated with the proposed project would be less than significant if the project is below the 3,000 MT CO<sub>2</sub>e per year threshold and incorporates Title 24 energy efficiency and water conservation.

### 5.3 Project-level Impact Analysis

**Threshold 1:** Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

**Impact GHG-1** THE PROPOSED PROJECT WOULD GENERATE TEMPORARY AND LONG-TERM INCREASES IN GHG EMISSIONS THAT WOULD EXCEED THE COUNTY’S SCREENING LEVEL THRESHOLD OF 3,000 MT CO<sub>2</sub>E PER YEAR FOR SMALL PROJECTS. HOWEVER, THE PROPOSED PROJECT WOULD INCORPORATE DESIGN FEATURES CONSISTENT WITH THE COUNTY’S CAP THAT GARNER AT LEAST 100 POINTS. UPON INCORPORATION OF THESE MEASURES, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Construction of the proposed project would generate temporary GHG emissions primarily from the operation of construction equipment on-site as well as from vehicles transporting construction workers to and from the project site and heavy trucks to transport building materials and soil export. It was assumed that construction activity would begin as early as August 2023 with completion as early as December 2024. As shown in Table 12, construction of the proposed project would generate an estimated total of 614 MT CO<sub>2</sub>e. Amortized over a 30-year period per SCAQMD guidance, construction of the proposed project would generate an estimated 20 MT CO<sub>2</sub>e per year.

**Table 12 Estimated Construction Emissions of Greenhouse Gases**

Construction	Project Emissions MT CO <sub>2</sub> e
2023	230
2024	384
<b>Total</b>	<b>614</b>
Amortized over 30 Years	20

MT CO<sub>2</sub>e = metric tons of carbon dioxide equivalent  
 Source: CalEEMod worksheets (Attachment A)



Operation of the proposed project would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, vehicle trips, and wastewater and solid waste generation. Table 13 combines the estimated construction and operational GHG emissions associated with development of the project. As shown therein, annual emissions from the proposed project would be approximately 4,670 MT of CO<sub>2</sub>e per year, which would exceed the County's screening-level threshold of 3,000 MT of CO<sub>2</sub>e per year for small projects.

**Table 13 Combined Annual Emissions of Greenhouse Gases**

<b>Emission Source</b>	<b>Annual Emissions (MT CO<sub>2</sub>e)</b>
<b>Construction<sup>1</sup></b>	<b>20</b>
<b>Operational</b>	<b>4,650</b>
Area	<1
Energy	564
Mobile	3,573
Solid Waste	11
Water, Wastewater	3
Refrigerant	498
<b>Total</b>	<b>4,670</b>
CAP Numeric Threshold	3,000
<b>Exceed Threshold?</b>	<b>Yes</b>

MT CO<sub>2</sub>e = metric tons of carbon dioxide equivalent

<sup>1</sup> Amortized construction related GHG emissions over 30 years

Source: CalEEMod worksheets (Attachment A)

## Mitigation Measure

**Table 14 Screening Table for GHG Implementation Measures for Commercial Development**

<b>Feature<sup>1</sup></b>	<b>Description</b>	<b>Assigned Point Values</b>
EE10.A Building Envelope		
EE10.A.1 Insulation	Enhanced Insulation (rigid wall insulation R-13, roof/attic R-38)	11
EE10. A.2 Windows (pg 244)	Modestly Enhanced Window Insulation (0.4 U-factor, 0.32 SHGC) <sup>2</sup>	4

EE10.A.3 Cool Roofs (pg 236)	Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance)	10
EE10.A.4 Air Infiltration	Air barrier applied to exterior walls, caulking, and visual inspection such as the HERS Verified Quality Insulation (QII or equivalent).	7
EE10.B Indoor Space Efficiencies		
EE10.B.1 Heating/Cooling Distribution System	Enhanced Duct Insulation (R-8)	6
EE10.B.2 Space Heating/Cooling Equipment	High Efficiency HVAC (EER 15/80% AFUE or 8.5 HSPF)	5
EE10.B.4 Water Heaters	High Efficiency Water Heater (0.72 Energy Factor)	10
EE10.B.6 Artificial Lighting	High Efficiency Lights (50% of in-unit fixtures are high efficiency)	7
EE10.B.7 Appliances (pg 163)	Energy Star Commercial Refrigerator	2
	Energy Star Commercial Dishwasher	2
EE10.C Miscellaneous Commercial Building Efficiencies		
W2.D Irrigation and Landscaping		
W2.D.2 Water Efficient Irrigation Systems	Weather based irrigation control systems combined with drip irrigation	3

W2.E Potable Water		
W2.E.1 Showers	Water Efficient Showerheads (2.0 gpm)	2
W2.E.2 Toilets	Water Efficient Toilets/Urinals (1.5 gpm)	3
W2.E.3 Faucets	Water Efficient Faucets (1.28 gpm)	2
W.2.E.4 Commercial Dishwashers	Water Efficient Dishwashers (20 percent water savings)	2
Reduction Measure R2-T4: Electrify the Fleet		
T4.B.1 Electric Vehicle Recharging	Install electric charging stations in garages/parking areas	24 (3 EV charging Stations, 8 points per station) per station ( )
<b>Total Screening Table Points</b>		<b>100</b>
Notes: See Attachment C for the full list of design features from Riverside County's CAP screening table for commercial uses.		
<sup>1</sup> Unhighlighted text are design features the project has to implement based on the 2022 Title 24 Standards.		
<sup>2</sup> This measure could be enhanced with "Greatly Enhanced Window Insulation" for seven points.		

### Significance After Mitigation

Projects that exceed the County's screening-level threshold would incorporate design features in the County's CAP screening table and garner at least 100 points to be consistent with the reduction quantities anticipated in the County's CAP. As shown in Table 14, the proposed project would garner at least 100 points and impacts would be less than significant with mitigation incorporated.

**Threshold 2:** Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

**Impact GHG-2 THE PROPOSED PROJECT WOULD BE CONSISTENT WITH THE SCAG 2020-2045 RTP/SCS AND THE COUNTY OF RIVERSIDE CLIMATE ACTION PLAN, WHICH IS CONSISTENT WITH THE 2017 SCOPING PLAN AND EMISSION REDUCTION TARGETS PER SB 32. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.**

Several plans and policies have been adopted to reduce GHG emissions in the project region, including the State’s 2022 Climate Change Scoping Plan, the SCAG 2020-2045 RTP/SCS, and the Riverside County Climate Action Plan. The project’s consistency with these plans is discussed in the following subsections.

**County of Riverside Climate Action Plan**

The proposed project qualifies as a small project under the Riverside County CAP since the project would exceed the 3,000 MT CO<sub>2</sub>e per year emission level; therefore, the project would incorporate design features in the CAP’s screening table that would garner at least 100 points to be consistent with the CAP and impacts would be less than significant with mitigation incorporated.

**SCAG 2020-2045 RTP/SCS**

As detailed in Section 4.4, *Regulatory and Legal Setting*, SB 375 is a state-level policy directing each of California’s 18 major MPO to prepare a SCS that contains a growth strategy to meet emission targets for inclusion in the RTP. The applicable MPO for the project site is SCAG, and project consistency with the goals contained in SCAG’s 2020-2045 RTP/SCS is discussed below.

The SCAG’s 2020-2045 RTP/SCS is forecast to help California reach its GHG reduction goals. According to the 2020-2045 RTP/SCS, the updated target for the SCAG region is 19 percent below 2005 per capita emissions levels by 2035. The 2020-2045 RTP/SCS includes implementation strategies for focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, supporting implementation of sustainability policies, and promoting a green region. Strategies the project would be consistent with in the 2020-2045 RTP/SCS are discussed in Table 15. As shown therein, the proposed project would be consistent with the GHG emission reduction strategies contained in the 2020-2045 RTP/SCS. Impacts would be less than significant.

**Table 15 Consistency with Applicable SCAG RTP/SCS GHG Emission Reduction Strategies**

Strategy/Action	Project Consistency
<p><b>Focus Growth Near Destinations &amp; Mobility Options</b></p> <ul style="list-style-type: none"> <li>▪ Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations</li> <li>▪ Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets</li> </ul>	<p><b>Consistent.</b> The project would provide employment opportunities for the local workforce at the gas station, restaurant, and car wash. According to the site plans, nine employee spaces would be provided at the project site. Assuming three work shifts per day, the project would potentially add 27 employment opportunities for the local workforce. The project would not result in a substantial increase in employment of population.</p>

Strategy/Action	Project Consistency
<ul style="list-style-type: none"> <li>▪ Plan for growth near transit investments and support implementation of first/last mile strategies.</li> <li>▪ Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses</li> <li>▪ Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods</li> <li>▪ Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations)</li> <li>▪ Identify ways to “right size” parking requirements and promote alternative parking strategies (e.g., shared parking or smart parking)</li> </ul>	
<p><b>Leverage Technology Innovations</b></p> <ul style="list-style-type: none"> <li>▪ Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space</li> <li>▪ Improve access to services through technology—such as telework and telemedicine as well as other incentives such as a “mobility wallet,” an app-based system for storing transit and other multi-modal payments</li> <li>▪ Identify ways to incorporate “micro-power grids” in communities, for example solar energy, hydrogen fuel cell power storage and power generation</li> </ul>	<p><b>Consistent.</b> The proposed project would add three EV charging stations adjacent to the proposed food mark. In addition, eight bicycle parking spaces would be implemented at the food market and car wash.</p>
<p>Source: SCAG 2020</p>	

## 2022 Scoping Plan

The principal State plan and policy adopted to reduce GHG emissions is AB 32, the California Global Warming Solutions Act of 2006, and the follow up, SB 32. The quantitative goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. Pursuant to the SB 32 goal, the Scoping Plans were created to outline goals and measures for the state to achieve the reductions. The latest iteration of the scoping plan is the 2022 Scoping Plan. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State’s long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities. The proposed Project would be consistent with these goals through Project design, which includes complying with the latest Title 24 Green Building Code and Building Efficiency Energy Standards. In addition, the project would install three electric vehicle charging station. The proposed project is approximately a quarter mile or less from several residential neighborhoods, which could potentially reduce the number of solo trips to the restaurant and convenience store. In addition, the project would construct eight bicycle parking spaces to promote alternative modes of transportation to the project site. Statewide plans and regulations in support of these strategies, such as GHG emissions standards for vehicles (AB 1493), the Low Carbon Fuel Standard, and regulations requiring an increasing fraction of electricity to be generated from

**Morningstar Loop Project**

renewable sources, are being implemented at the statewide level; as such, compliance at a project level would occur as implementation continues statewide. Furthermore, as described in Section 4.4, *Regulatory and Legal Setting*, the County's CAP demonstrates that its adopted local reduction measures are sufficient to achieve the GHG reduction target set by SB 32 (40 percent below 1990 levels by 2030). As mentioned in GHG Impact 1, the project would incorporate design features consistent with the CAP. Because the CAP is directly tied to the State's GHG emission reduction target under SB 32 (and the associated 2017 Scoping Plan), the project would also not conflict with implementation of SB 32 and the 2022 Scoping Plan. No impact would occur.

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# Attachment A

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CalEEMod Output Files

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# Morningstar Gas Station, Car Wash and Convenience Store Project Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Morningstar Gas Station, Car Wash and Convenience Store Project
Construction Start Date	8/1/2023
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	14.0
Location	34410 Pourroy Rd, Winchester, CA 92596, USA
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5545
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.13

## 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
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Convenience Market with Gas Pumps	12.0	Pump	4.05	9,693	27,300	0.00	—	—
Parking Lot	61.0	Space	0.55	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	90.3	1000sqft	2.07	0.00	0.00	0.00	—	—
Automobile Care Center	4.80	1000sqft	0.11	4,800	0.00	0.00	—	—
Fast Food Restaurant w/o Drive Thru	1.00	1000sqft	0.02	1,000	0.00	0.00	—	—

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-10-A	Water Exposed Surfaces
Construction	C-10-B	Water Active Demolition Sites
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads

\* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

## 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	4.04	39.8	37.1	0.05	1.81	19.9	21.7	1.66	10.2	11.8	—	5,553	5,553	0.23	0.05	1.37	5,575
Mit.	4.04	39.8	37.1	0.05	1.81	7.89	9.70	1.66	3.99	5.65	—	5,553	5,553	0.23	0.05	1.37	5,575
% Reduced	—	—	—	—	—	60%	55%	—	61%	52%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.55	59.9	57.4	0.08	2.75	27.2	29.9	2.53	13.6	16.2	—	8,692	8,692	0.36	0.08	0.05	8,726
Mit.	6.55	59.9	57.4	0.08	2.75	10.9	13.6	2.53	5.38	7.90	—	8,692	8,692	0.36	0.08	0.05	8,726
% Reduced	—	—	—	—	—	60%	55%	—	61%	51%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.50	10.9	13.1	0.02	0.49	4.48	4.92	0.45	2.26	2.66	—	2,309	2,309	0.09	0.03	0.26	2,320
Mit.	1.50	10.9	13.1	0.02	0.49	1.79	2.23	0.45	0.89	1.30	—	2,309	2,309	0.09	0.03	0.26	2,320
% Reduced	—	—	—	—	—	60%	55%	—	61%	51%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.27	1.98	2.39	< 0.005	0.09	0.82	0.90	0.08	0.41	0.49	—	382	382	0.02	< 0.005	0.04	384
Mit.	0.27	1.98	2.39	< 0.005	0.09	0.33	0.41	0.08	0.16	0.24	—	382	382	0.02	< 0.005	0.04	384
% Reduced	—	—	—	—	—	60%	55%	—	61%	51%	—	—	—	—	—	—	—

## 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



2023	4.04	39.8	37.1	0.05	1.81	19.9	21.7	1.66	10.2	11.8	—	5,553	5,553	0.23	0.05	1.10	5,575
2024	2.24	19.2	24.8	0.04	0.89	0.28	1.17	0.82	0.07	0.88	—	4,277	4,277	0.17	0.05	1.37	4,298
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	6.15	59.9	57.4	0.08	2.75	27.2	29.9	2.53	13.6	16.2	—	8,692	8,692	0.36	0.08	0.05	8,726
2024	6.55	29.7	33.2	0.05	1.34	7.37	8.70	1.23	3.49	4.72	—	5,700	5,700	0.23	0.07	0.04	5,726
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.99	9.64	9.16	0.01	0.44	4.48	4.92	0.41	2.26	2.66	—	1,385	1,385	0.06	0.01	0.14	1,390
2024	1.50	10.9	13.1	0.02	0.49	0.95	1.44	0.45	0.43	0.88	—	2,309	2,309	0.09	0.03	0.26	2,320
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.18	1.76	1.67	< 0.005	0.08	0.82	0.90	0.07	0.41	0.49	—	229	229	0.01	< 0.005	0.02	230
2024	0.27	1.98	2.39	< 0.005	0.09	0.17	0.26	0.08	0.08	0.16	—	382	382	0.02	< 0.005	0.04	384

### 2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	4.04	39.8	37.1	0.05	1.81	7.89	9.70	1.66	3.99	5.65	—	5,553	5,553	0.23	0.05	1.10	5,575
2024	2.24	19.2	24.8	0.04	0.89	0.28	1.17	0.82	0.07	0.88	—	4,277	4,277	0.17	0.05	1.37	4,298
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	6.15	59.9	57.4	0.08	2.75	10.9	13.6	2.53	5.38	7.90	—	8,692	8,692	0.36	0.08	0.05	8,726
2024	6.55	29.7	33.2	0.05	1.34	3.05	4.38	1.23	1.40	2.63	—	5,700	5,700	0.23	0.07	0.04	5,726
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2023	0.99	9.64	9.16	0.01	0.44	1.79	2.23	0.41	0.89	1.30	—	1,385	1,385	0.06	0.01	0.14	1,390
2024	1.50	10.9	13.1	0.02	0.49	0.45	0.94	0.45	0.19	0.64	—	2,309	2,309	0.09	0.03	0.26	2,320
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.18	1.76	1.67	< 0.005	0.08	0.33	0.41	0.07	0.16	0.24	—	229	229	0.01	< 0.005	0.02	230
2024	0.27	1.98	2.39	< 0.005	0.09	0.08	0.17	0.08	0.03	0.12	—	382	382	0.02	< 0.005	0.04	384

## 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22.3	22.8	203	0.48	0.40	15.6	16.0	0.38	2.77	3.15	19.7	52,131	52,151	4.21	2.17	3,203	56,106
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.7	24.4	169	0.45	0.40	15.6	16.0	0.38	2.77	3.15	19.7	49,145	49,165	4.29	2.24	3,011	52,952
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.9	13.5	95.7	0.21	0.21	7.00	7.21	0.20	1.24	1.44	19.7	24,570	24,589	3.58	1.21	3,044	28,085
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.08	2.47	17.5	0.04	0.04	1.28	1.32	0.04	0.23	0.26	3.25	4,068	4,071	0.59	0.20	504	4,650

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	21.8	22.3	202	0.48	0.36	15.6	16.0	0.34	2.77	3.11	—	48,722	48,722	1.93	2.13	197	49,603
Area	0.48	0.01	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	—	2.78
Energy	0.02	0.43	0.36	< 0.005	0.03	—	0.03	0.03	—	0.03	—	3,391	3,391	0.32	0.03	—	3,409
Water	—	—	—	—	—	—	—	—	—	—	0.82	15.6	16.5	0.09	< 0.005	—	19.3
Waste	—	—	—	—	—	—	—	—	—	—	18.8	0.00	18.8	1.88	0.00	—	65.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,006	3,006
Total	22.3	22.8	203	0.48	0.40	15.6	16.0	0.38	2.77	3.15	19.7	52,131	52,151	4.21	2.17	3,203	56,106
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	20.3	24.0	169	0.45	0.36	15.6	16.0	0.34	2.77	3.11	—	45,739	45,739	2.00	2.21	5.11	46,451
Area	0.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.43	0.36	< 0.005	0.03	—	0.03	0.03	—	0.03	—	3,391	3,391	0.32	0.03	—	3,409
Water	—	—	—	—	—	—	—	—	—	—	0.82	15.6	16.5	0.09	< 0.005	—	19.3
Waste	—	—	—	—	—	—	—	—	—	—	18.8	0.00	18.8	1.88	0.00	—	65.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,006	3,006
Total	20.7	24.4	169	0.45	0.40	15.6	16.0	0.38	2.77	3.15	19.7	49,145	49,165	4.29	2.24	3,011	52,952
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.4	13.1	94.9	0.21	0.17	7.00	7.18	0.16	1.24	1.41	—	21,162	21,162	1.29	1.18	38.2	21,583
Area	0.44	< 0.005	0.46	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.90	1.90	< 0.005	< 0.005	—	1.90
Energy	0.02	0.43	0.36	< 0.005	0.03	—	0.03	0.03	—	0.03	—	3,391	3,391	0.32	0.03	—	3,409
Water	—	—	—	—	—	—	—	—	—	—	0.82	15.6	16.5	0.09	< 0.005	—	19.3
Waste	—	—	—	—	—	—	—	—	—	—	18.8	0.00	18.8	1.88	0.00	—	65.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,006	3,006
Total	16.9	13.5	95.7	0.21	0.21	7.00	7.21	0.20	1.24	1.44	19.7	24,570	24,589	3.58	1.21	3,044	28,085

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.99	2.39	17.3	0.04	0.03	1.28	1.31	0.03	0.23	0.26	—	3,504	3,504	0.21	0.19	6.32	3,573
Area	0.08	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.31	0.31	< 0.005	< 0.005	—	0.32
Energy	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	561	561	0.05	0.01	—	564
Water	—	—	—	—	—	—	—	—	—	—	0.14	2.59	2.73	0.01	< 0.005	—	3.19
Waste	—	—	—	—	—	—	—	—	—	—	3.12	0.00	3.12	0.31	0.00	—	10.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	498	498
Total	3.08	2.47	17.5	0.04	0.04	1.28	1.32	0.04	0.23	0.26	3.25	4,068	4,071	0.59	0.20	504	4,650

## 2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	21.8	22.3	202	0.48	0.36	15.6	16.0	0.34	2.77	3.11	—	48,722	48,722	1.93	2.13	197	49,603
Area	0.48	0.01	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	—	2.78
Energy	0.02	0.43	0.36	< 0.005	0.03	—	0.03	0.03	—	0.03	—	3,391	3,391	0.32	0.03	—	3,409
Water	—	—	—	—	—	—	—	—	—	—	0.82	15.6	16.5	0.09	< 0.005	—	19.3
Waste	—	—	—	—	—	—	—	—	—	—	18.8	0.00	18.8	1.88	0.00	—	65.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,006	3,006
Total	22.3	22.8	203	0.48	0.40	15.6	16.0	0.38	2.77	3.15	19.7	52,131	52,151	4.21	2.17	3,203	56,106
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	20.3	24.0	169	0.45	0.36	15.6	16.0	0.34	2.77	3.11	—	45,739	45,739	2.00	2.21	5.11	46,451
Area	0.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.43	0.36	< 0.005	0.03	—	0.03	0.03	—	0.03	—	3,391	3,391	0.32	0.03	—	3,409
Water	—	—	—	—	—	—	—	—	—	—	0.82	15.6	16.5	0.09	< 0.005	—	19.3

Waste	—	—	—	—	—	—	—	—	—	—	18.8	0.00	18.8	1.88	0.00	—	65.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,006	3,006
Total	20.7	24.4	169	0.45	0.40	15.6	16.0	0.38	2.77	3.15	19.7	49,145	49,165	4.29	2.24	3,011	52,952
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.4	13.1	94.9	0.21	0.17	7.00	7.18	0.16	1.24	1.41	—	21,162	21,162	1.29	1.18	38.2	21,583
Area	0.44	< 0.005	0.46	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.90	1.90	< 0.005	< 0.005	—	1.90
Energy	0.02	0.43	0.36	< 0.005	0.03	—	0.03	0.03	—	0.03	—	3,391	3,391	0.32	0.03	—	3,409
Water	—	—	—	—	—	—	—	—	—	—	0.82	15.6	16.5	0.09	< 0.005	—	19.3
Waste	—	—	—	—	—	—	—	—	—	—	18.8	0.00	18.8	1.88	0.00	—	65.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,006	3,006
Total	16.9	13.5	95.7	0.21	0.21	7.00	7.21	0.20	1.24	1.44	19.7	24,570	24,589	3.58	1.21	3,044	28,085
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.99	2.39	17.3	0.04	0.03	1.28	1.31	0.03	0.23	0.26	—	3,504	3,504	0.21	0.19	6.32	3,573
Area	0.08	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.31	0.31	< 0.005	< 0.005	—	0.32
Energy	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	561	561	0.05	0.01	—	564
Water	—	—	—	—	—	—	—	—	—	—	0.14	2.59	2.73	0.01	< 0.005	—	3.19
Waste	—	—	—	—	—	—	—	—	—	—	3.12	0.00	3.12	0.31	0.00	—	10.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	498	498
Total	3.08	2.47	17.5	0.04	0.04	1.28	1.32	0.04	0.23	0.26	3.25	4,068	4,071	0.59	0.20	504	4,650

### 3. Construction Emissions Details

#### 3.1. Site Preparation (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	7.19	6.41	0.01	0.33	—	0.33	0.30	—	0.30	—	958	958	0.04	0.01	—	961
Dust From Material Movement	—	—	—	—	—	3.55	3.55	—	1.83	1.83	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.31	1.17	< 0.005	0.06	—	0.06	0.05	—	0.05	—	159	159	0.01	< 0.005	—	159

Dust From Material Movement	—	—	—	—	—	0.65	0.65	—	0.33	0.33	—	—	—	—	—	—	
Onsite truck	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	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.09	0.09	1.59	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	257	257	0.01	0.01	1.10	261
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.09	0.11	1.20	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	236	236	0.01	0.01	0.03	239
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.02	0.23	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.3	43.3	< 0.005	< 0.005	0.09	43.9
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.16	7.16	< 0.005	< 0.005	0.01	7.26
Vendor	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
Hauling	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

### 3.2. Site Preparation (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	7.19	6.41	0.01	0.33	—	0.33	0.30	—	0.30	—	958	958	0.04	0.01	—	961
Dust From Material Movement	—	—	—	—	—	1.39	1.39	—	0.71	0.71	—	—	—	—	—	—	—
Onsite truck	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



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Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.31	1.17	< 0.005	0.06	—	0.06	0.05	—	0.05	—	159	159	0.01	< 0.005	—	159
Dust From Material Movement	—	—	—	—	—	0.25	0.25	—	0.13	0.13	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	1.59	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	257	257	0.01	0.01	1.10	261
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.11	1.20	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	236	236	0.01	0.01	0.03	239
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.3	43.3	< 0.005	< 0.005	0.09	43.9
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.16	7.16	< 0.005	< 0.005	0.01	7.26
Vendor	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
Hauling	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

### 3.3. Grading (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.04	20.0	19.7	0.03	0.94	—	0.94	0.87	—	0.87	—	2,958	2,958	0.12	0.02	—	2,968
Dust From Material Movement	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	2.42	2.39	< 0.005	0.11	—	0.11	0.11	—	0.11	—	359	359	0.01	< 0.005	—	360
Dust From Material Movement	—	—	—	—	—	0.86	0.86	—	0.42	0.42	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.44	0.44	< 0.005	0.02	—	0.02	0.02	—	0.02	—	59.4	59.4	< 0.005	< 0.005	—	59.6

Dust From Material Movement	—	—	—	—	—	0.16	0.16	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.03	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	202	202	0.01	0.01	0.02	205
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.9	24.9	< 0.005	< 0.005	0.05	25.2
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.12	4.12	< 0.005	< 0.005	0.01	4.18
Vendor	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
Hauling	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

### 3.4. Grading (2023) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.04	20.0	19.7	0.03	0.94	—	0.94	0.87	—	0.87	—	2,958	2,958	0.12	0.02	—	2,968
Dust From Material Movement	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	2.42	2.39	< 0.005	0.11	—	0.11	0.11	—	0.11	—	359	359	0.01	< 0.005	—	360
Dust From Material Movement	—	—	—	—	—	0.34	0.34	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.44	0.44	< 0.005	0.02	—	0.02	0.02	—	0.02	—	59.4	59.4	< 0.005	< 0.005	—	59.6
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.09	1.03	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	202	202	0.01	0.01	0.02	205
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.9	24.9	< 0.005	< 0.005	0.05	25.2
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.12	4.12	< 0.005	< 0.005	0.01	4.18
Vendor	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
Hauling	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

### 3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969

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Dust From Material Movement	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	2.14	2.21	< 0.005	0.10	—	0.10	0.09	—	0.09	—	347	347	0.01	< 0.005	—	349
Dust From Material Movement	—	—	—	—	—	0.83	0.83	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.39	0.40	< 0.005	0.02	—	0.02	0.02	—	0.02	—	57.5	57.5	< 0.005	< 0.005	—	57.7
Dust From Material Movement	—	—	—	—	—	0.15	0.15	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.09	0.95	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	0.01	0.01	0.02	201
Vendor	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
Hauling	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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	0.04	23.9
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.91	3.91	< 0.005	< 0.005	0.01	3.96
Vendor	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
Hauling	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

### 3.6. Grading (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	2.14	2.21	< 0.005	0.10	—	0.10	0.09	—	0.09	—	347	347	0.01	< 0.005	—	349

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Dust From Material Movement	—	—	—	—	—	0.32	0.32	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.39	0.40	< 0.005	0.02	—	0.02	0.02	—	0.02	—	57.5	57.5	< 0.005	< 0.005	—	57.7
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.09	0.95	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	0.01	0.01	0.02	201
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	0.04	23.9
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.91	3.91	< 0.005	< 0.005	0.01	3.96
Vendor	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



Hauling	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
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### 3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	6.73	7.87	0.01	0.30	—	0.30	0.27	—	0.27	—	1,439	1,439	0.06	0.01	—	1,444
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.23	1.44	< 0.005	0.05	—	0.05	0.05	—	0.05	—	238	238	0.01	< 0.005	—	239
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.42	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	72.8	72.8	< 0.005	< 0.005	0.29	73.9
Vendor	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	78.8	78.8	< 0.005	0.01	0.22	82.6
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.03	0.32	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.9	66.9	< 0.005	< 0.005	0.01	67.7
Vendor	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	78.9	78.9	< 0.005	0.01	0.01	82.5
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.7	40.7	< 0.005	< 0.005	0.07	41.2
Vendor	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	47.3	47.3	< 0.005	0.01	0.06	49.5
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.73	6.73	< 0.005	< 0.005	0.01	6.83
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.83	7.83	< 0.005	< 0.005	0.01	8.20
Hauling	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

### 3.8. Building Construction (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	6.73	7.87	0.01	0.30	—	0.30	0.27	—	0.27	—	1,439	1,439	0.06	0.01	—	1,444
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.23	1.44	< 0.005	0.05	—	0.05	0.05	—	0.05	—	238	238	0.01	< 0.005	—	239
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.42	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	72.8	72.8	< 0.005	< 0.005	0.29	73.9
Vendor	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	78.8	78.8	< 0.005	0.01	0.22	82.6
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.03	0.32	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.9	66.9	< 0.005	< 0.005	0.01	67.7

Vendor	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	78.9	78.9	< 0.005	0.01	0.01	82.5
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.7	40.7	< 0.005	< 0.005	0.07	41.2
Vendor	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	47.3	47.3	< 0.005	0.01	0.06	49.5
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.73	6.73	< 0.005	< 0.005	0.01	6.83
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.83	7.83	< 0.005	< 0.005	0.01	8.20
Hauling	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

### 3.9. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	1.84	2.36	< 0.005	0.09	—	0.09	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Paving	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.34	0.43	< 0.005	0.02	—	0.02	0.02	—	0.02	—	59.0	59.0	< 0.005	< 0.005	—	59.2
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.25	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	216	216	0.01	0.01	0.86	219
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.09	0.95	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	0.01	0.01	0.02	201
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.3	47.3	< 0.005	< 0.005	0.09	48.0
Vendor	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

Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.84	7.84	< 0.005	< 0.005	0.01	7.95
Vendor	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
Hauling	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

### 3.10. Paving (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	1.84	2.36	< 0.005	0.09	—	0.09	0.08	—	0.08	—	356	356	0.01	< 0.005	—	357
Paving	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.34	0.43	< 0.005	0.02	—	0.02	0.02	—	0.02	—	59.0	59.0	< 0.005	< 0.005	—	59.2
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	1.25	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	216	216	0.01	0.01	0.86	219
Vendor	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
Hauling	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.09	0.95	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	0.01	0.01	0.02	201
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.3	47.3	< 0.005	< 0.005	0.09	48.0
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.84	7.84	< 0.005	< 0.005	0.01	7.95
Vendor	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
Hauling	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

### 3.11. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	< 0.005	13.5
Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.74	0.74	< 0.005	< 0.005	< 0.005	0.75
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.12
Vendor	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
Hauling	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

### 3.12. Architectural Coating (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	< 0.005	13.5

Vendor	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
Hauling	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.74	0.74	< 0.005	< 0.005	< 0.005	0.75
Vendor	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
Hauling	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.12	0.12	< 0.005	< 0.005	< 0.005	0.12
Vendor	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
Hauling	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

## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	18.0	18.5	167	0.39	0.30	12.9	13.2	0.28	2.29	2.58	—	40,291	40,291	1.60	1.76	163	41,019
Parking Lot	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

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Other Asphalt Surfaces	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
Automobile Care Center	0.53	0.54	4.92	0.01	0.01	0.38	0.39	0.01	0.07	0.08	—	1,185	1,185	0.05	0.05	4.79	1,207
Fast Food Restaurant w/o Drive Thru	3.25	3.32	30.1	0.07	0.05	2.32	2.37	0.05	0.41	0.46	—	7,246	7,246	0.29	0.32	29.3	7,377
Total	21.8	22.3	202	0.48	0.36	15.6	16.0	0.34	2.77	3.11	—	48,722	48,722	1.93	2.13	197	49,603
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	16.8	19.8	139	0.37	0.30	12.9	13.2	0.28	2.29	2.58	—	37,823	37,823	1.65	1.83	4.22	38,413
Parking Lot	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
Other Asphalt Surfaces	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
Automobile Care Center	0.49	0.58	4.10	0.01	0.01	0.38	0.39	0.01	0.07	0.08	—	1,113	1,113	0.05	0.05	0.12	1,130
Fast Food Restaurant w/o Drive Thru	3.02	3.56	25.1	0.07	0.05	2.32	2.37	0.05	0.41	0.46	—	6,802	6,802	0.30	0.33	0.76	6,908
Total	20.3	24.0	169	0.45	0.36	15.6	16.0	0.34	2.77	3.11	—	45,739	45,739	2.00	2.21	5.11	46,451
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Convenience	2.59	1.92	13.9	0.03	0.02	0.98	1.01	0.02	0.17	0.20	—	2,706	2,706	0.18	0.16	4.85	2,762
Parking Lot	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
Other Asphalt Surfaces	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
Automobile Care Center	0.08	0.07	0.52	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	115	115	0.01	0.01	0.21	117
Fast Food Restaurant w/o Drive Thru	0.33	0.40	2.85	0.01	0.01	0.25	0.26	0.01	0.05	0.05	—	683	683	0.03	0.03	1.26	695
<b>Total</b>	<b>2.99</b>	<b>2.39</b>	<b>17.3</b>	<b>0.04</b>	<b>0.03</b>	<b>1.28</b>	<b>1.31</b>	<b>0.03</b>	<b>0.23</b>	<b>0.26</b>	<b>—</b>	<b>3,504</b>	<b>3,504</b>	<b>0.21</b>	<b>0.19</b>	<b>6.32</b>	<b>3,573</b>

#### 4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	18.0	18.5	167	0.39	0.30	12.9	13.2	0.28	2.29	2.58	—	40,291	40,291	1.60	1.76	163	41,019
Parking Lot	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
Other Asphalt Surfaces	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

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Automobile Care Center	0.53	0.54	4.92	0.01	0.01	0.38	0.39	0.01	0.07	0.08	—	1,185	1,185	0.05	0.05	4.79	1,207
Fast Food Restaurant w/o Drive Thru	3.25	3.32	30.1	0.07	0.05	2.32	2.37	0.05	0.41	0.46	—	7,246	7,246	0.29	0.32	29.3	7,377
Total	21.8	22.3	202	0.48	0.36	15.6	16.0	0.34	2.77	3.11	—	48,722	48,722	1.93	2.13	197	49,603
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	16.8	19.8	139	0.37	0.30	12.9	13.2	0.28	2.29	2.58	—	37,823	37,823	1.65	1.83	4.22	38,413
Parking Lot	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
Other Asphalt Surfaces	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
Automobile Care Center	0.49	0.58	4.10	0.01	0.01	0.38	0.39	0.01	0.07	0.08	—	1,113	1,113	0.05	0.05	0.12	1,130
Fast Food Restaurant w/o Drive Thru	3.02	3.56	25.1	0.07	0.05	2.32	2.37	0.05	0.41	0.46	—	6,802	6,802	0.30	0.33	0.76	6,908
Total	20.3	24.0	169	0.45	0.36	15.6	16.0	0.34	2.77	3.11	—	45,739	45,739	2.00	2.21	5.11	46,451
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	2.59	1.92	13.9	0.03	0.02	0.98	1.01	0.02	0.17	0.20	—	2,706	2,706	0.18	0.16	4.85	2,762

Parking Lot	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
Other Asphalt Surfaces	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
Automobile Care Center	0.08	0.07	0.52	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	115	115	0.01	0.01	0.21	117
Fast Food Restaurant w/o Drive Thru	0.33	0.40	2.85	0.01	0.01	0.25	0.26	0.01	0.05	0.05	—	683	683	0.03	0.03	1.26	695
Total	2.99	2.39	17.3	0.04	0.03	1.28	1.31	0.03	0.23	0.26	—	3,504	3,504	0.21	0.19	6.32	3,573

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	297	297	0.03	< 0.005	—	299
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	20.0	20.0	< 0.005	< 0.005	—	20.1
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

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Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	2,525	2,525	0.24	0.03	—	2,540
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	33.5	33.5	< 0.005	< 0.005	—	33.7
Total	—	—	—	—	—	—	—	—	—	—	—	2,876	2,876	0.27	0.03	—	2,893
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	297	297	0.03	< 0.005	—	299
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	20.0	20.0	< 0.005	< 0.005	—	20.1
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	2,525	2,525	0.24	0.03	—	2,540
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	33.5	33.5	< 0.005	< 0.005	—	33.7
Total	—	—	—	—	—	—	—	—	—	—	—	2,876	2,876	0.27	0.03	—	2,893
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	49.2	49.2	< 0.005	< 0.005	—	49.5



Parking Lot	—	—	—	—	—	—	—	—	—	—	—	3.31	3.31	< 0.005	< 0.005	—	3.33
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	418	418	0.04	< 0.005	—	421
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	5.55	5.55	< 0.005	< 0.005	—	5.59
Total	—	—	—	—	—	—	—	—	—	—	—	476	476	0.05	0.01	—	479

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	297	297	0.03	< 0.005	—	299
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	20.0	20.0	< 0.005	< 0.005	—	20.1
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	2,525	2,525	0.24	0.03	—	2,540

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Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	33.5	33.5	< 0.005	< 0.005	—	33.7
Total	—	—	—	—	—	—	—	—	—	—	—	2,876	2,876	0.27	0.03	—	2,893
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	297	297	0.03	< 0.005	—	299
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	20.0	20.0	< 0.005	< 0.005	—	20.1
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	2,525	2,525	0.24	0.03	—	2,540
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	33.5	33.5	< 0.005	< 0.005	—	33.7
Total	—	—	—	—	—	—	—	—	—	—	—	2,876	2,876	0.27	0.03	—	2,893
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	49.2	49.2	< 0.005	< 0.005	—	49.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	3.31	3.31	< 0.005	< 0.005	—	3.33

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	418	418	0.04	< 0.005	—	421
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	5.55	5.55	< 0.005	< 0.005	—	5.59
Total	—	—	—	—	—	—	—	—	—	—	—	476	476	0.05	0.01	—	479

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	52.1	52.1	< 0.005	< 0.005	—	52.3
Parking Lot	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
Other Asphalt Surfaces	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
Automobile Care Center	0.02	0.36	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	426	426	0.04	< 0.005	—	427

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Fast Food Restaurant w/o Drive Thru	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.6	36.6	< 0.005	< 0.005	—	36.7
Total	0.02	0.43	0.36	< 0.005	0.03	—	0.03	0.03	—	0.03	—	515	515	0.05	< 0.005	—	516
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	52.1	52.1	< 0.005	< 0.005	—	52.3
Parking Lot	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
Other Asphalt Surfaces	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
Automobile Care Center	0.02	0.36	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	426	426	0.04	< 0.005	—	427
Fast Food Restaurant w/o Drive Thru	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.6	36.6	< 0.005	< 0.005	—	36.7
Total	0.02	0.43	0.36	< 0.005	0.03	—	0.03	0.03	—	0.03	—	515	515	0.05	< 0.005	—	516
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.63	8.63	< 0.005	< 0.005	—	8.66
Parking Lot	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

Other Asphalt Surfaces	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
Automobile Care Center	< 0.005	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	70.5	70.5	0.01	< 0.005	—	70.7
Fast Food Restaurant w/o Drive Thru	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.05	6.05	< 0.005	< 0.005	—	6.07
Total	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85.2	85.2	0.01	< 0.005	—	85.4

#### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	52.1	52.1	< 0.005	< 0.005	—	52.3
Parking Lot	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
Other Asphalt Surfaces	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
Automobile Care Center	0.02	0.36	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	426	426	0.04	< 0.005	—	427

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Fast Food Restaurant w/o Drive Thru	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.6	36.6	< 0.005	< 0.005	—	36.7
Total	0.02	0.43	0.36	< 0.005	0.03	—	0.03	0.03	—	0.03	—	515	515	0.05	< 0.005	—	516
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	52.1	52.1	< 0.005	< 0.005	—	52.3
Parking Lot	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
Other Asphalt Surfaces	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
Automobile Care Center	0.02	0.36	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	426	426	0.04	< 0.005	—	427
Fast Food Restaurant w/o Drive Thru	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.6	36.6	< 0.005	< 0.005	—	36.7
Total	0.02	0.43	0.36	< 0.005	0.03	—	0.03	0.03	—	0.03	—	515	515	0.05	< 0.005	—	516
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.63	8.63	< 0.005	< 0.005	—	8.66
Parking Lot	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

Other Asphalt Surfaces	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
Automobile Care Center	< 0.005	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	70.5	70.5	0.01	< 0.005	—	70.7
Fast Food Restaurant w/o Drive Thru	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.05	6.05	< 0.005	< 0.005	—	6.07
Total	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85.2	85.2	0.01	< 0.005	—	85.4

### 4.3. Area Emissions by Source

#### 4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscaping Equipment	0.11	0.01	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	—	2.78
Total	0.48	0.01	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	—	2.78
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consume Products	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectu ral Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consume r Products	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectu ral Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscap e Equipme nt	0.01	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.31	0.31	< 0.005	< 0.005	—	0.32
Total	0.08	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.31	0.31	< 0.005	< 0.005	—	0.32

4.3.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consume r Products	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectu ral Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



Landscap e Equipme nt	0.11	0.01	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	—	2.78
Total	0.48	0.01	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.77	2.77	< 0.005	< 0.005	—	2.78
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectu ral Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.37	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Products	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectu ral Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscap e Equipme nt	0.01	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.31	0.31	< 0.005	< 0.005	—	0.32
Total	0.08	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.31	0.31	< 0.005	< 0.005	—	0.32

#### 4.4. Water Emissions by Land Use

##### 4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	0.24	3.01	3.25	0.02	< 0.005	—	4.06
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	0.00	10.7	10.7	< 0.005	< 0.005	—	10.7
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	0.58	1.97	2.56	0.06	< 0.005	—	4.48
Total	—	—	—	—	—	—	—	—	—	—	0.82	15.6	16.5	0.09	< 0.005	—	19.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	0.24	3.01	3.25	0.02	< 0.005	—	4.06
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Automobile Care Center	—	—	—	—	—	—	—	—	—	—	0.00	10.7	10.7	< 0.005	< 0.005	—	10.7
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	0.58	1.97	2.56	0.06	< 0.005	—	4.48
Total	—	—	—	—	—	—	—	—	—	—	0.82	15.6	16.5	0.09	< 0.005	—	19.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	0.04	0.50	0.54	< 0.005	< 0.005	—	0.67
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	0.00	1.77	1.77	< 0.005	< 0.005	—	1.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	0.10	0.33	0.42	0.01	< 0.005	—	0.74
Total	—	—	—	—	—	—	—	—	—	—	0.14	2.59	2.73	0.01	< 0.005	—	3.19

#### 4.4.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	0.24	3.01	3.25	0.02	< 0.005	—	4.06
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	0.00	10.7	10.7	< 0.005	< 0.005	—	10.7
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	0.58	1.97	2.56	0.06	< 0.005	—	4.48
Total	—	—	—	—	—	—	—	—	—	—	0.82	15.6	16.5	0.09	< 0.005	—	19.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	0.24	3.01	3.25	0.02	< 0.005	—	4.06
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Automobile Care Center	—	—	—	—	—	—	—	—	—	—	0.00	10.7	10.7	< 0.005	< 0.005	—	10.7
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	0.58	1.97	2.56	0.06	< 0.005	—	4.48
Total	—	—	—	—	—	—	—	—	—	—	0.82	15.6	16.5	0.09	< 0.005	—	19.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	0.04	0.50	0.54	< 0.005	< 0.005	—	0.67
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	0.00	1.77	1.77	< 0.005	< 0.005	—	1.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	0.10	0.33	0.42	0.01	< 0.005	—	0.74
Total	—	—	—	—	—	—	—	—	—	—	0.14	2.59	2.73	0.01	< 0.005	—	3.19

#### 4.5. Waste Emissions by Land Use

##### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	2.74	0.00	2.74	0.27	0.00	—	9.59
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	9.88	0.00	9.88	0.99	0.00	—	34.6
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	6.21	0.00	6.21	0.62	0.00	—	21.7
Total	—	—	—	—	—	—	—	—	—	—	18.8	0.00	18.8	1.88	0.00	—	65.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	2.74	0.00	2.74	0.27	0.00	—	9.59
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Automobile Care Center	—	—	—	—	—	—	—	—	—	—	9.88	0.00	9.88	0.99	0.00	—	34.6
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	6.21	0.00	6.21	0.62	0.00	—	21.7
Total	—	—	—	—	—	—	—	—	—	—	18.8	0.00	18.8	1.88	0.00	—	65.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	0.45	0.00	0.45	0.05	0.00	—	1.59
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	1.64	0.00	1.64	0.16	0.00	—	5.72
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.10	0.00	—	3.60
Total	—	—	—	—	—	—	—	—	—	—	3.12	0.00	3.12	0.31	0.00	—	10.9

#### 4.5.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	2.74	0.00	2.74	0.27	0.00	—	9.59
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	9.88	0.00	9.88	0.99	0.00	—	34.6
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	6.21	0.00	6.21	0.62	0.00	—	21.7
Total	—	—	—	—	—	—	—	—	—	—	18.8	0.00	18.8	1.88	0.00	—	65.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	2.74	0.00	2.74	0.27	0.00	—	9.59
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00



Automobile Care Center	—	—	—	—	—	—	—	—	—	—	9.88	0.00	9.88	0.99	0.00	—	34.6
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	6.21	0.00	6.21	0.62	0.00	—	21.7
Total	—	—	—	—	—	—	—	—	—	—	18.8	0.00	18.8	1.88	0.00	—	65.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	0.45	0.00	0.45	0.05	0.00	—	1.59
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	1.64	0.00	1.64	0.16	0.00	—	5.72
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.10	0.00	—	3.60
Total	—	—	—	—	—	—	—	—	—	—	3.12	0.00	3.12	0.31	0.00	—	10.9

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,010	2,010
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	995	995
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.56	1.56
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,006	3,006
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,010	2,010
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	995	995
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.56	1.56
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,006	3,006
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	333	333
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	165	165
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.26	0.26
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	498	498

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,010	2,010
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	995	995
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.56	1.56
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,006	3,006

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,010	2,010
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	995	995
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.56	1.56
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3,006	3,006
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	333	333
Automobile Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	165	165
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.26	0.26
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	498	498

### 4.7. Offroad Emissions By Equipment Type

#### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### 4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.9. User Defined Emissions By Equipment Type

##### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

##### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

#### 4.10. Soil Carbon Accumulation By Vegetation Type

##### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

##### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequeste	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequeste red	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

## 5. Activity Data

### 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	8/1/2023	10/31/2023	5.00	66.0	—
Grading	Grading	10/31/2023	2/29/2024	5.00	88.0	—
Building Construction	Building Construction	2/29/2024	12/31/2024	5.00	219	—
Paving	Paving	3/1/2024	6/28/2024	5.00	86.0	—
Architectural Coating	Architectural Coating	12/4/2024	12/31/2024	5.00	20.0	—

### 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

### 5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41

Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

### 5.3. Construction Vehicles

#### 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	5.06	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	2.54	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1.01	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

### 5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT

Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	5.06	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	2.54	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1.01	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	23,240	7,747	6,853

## 5.6. Dust Mitigation



### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	99.0	0.00	—
Grading	0.00	0.00	88.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.62

### 5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

### 5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Convenience Market with Gas Pumps	0.00	0%
Parking Lot	0.55	100%
Other Asphalt Surfaces	2.07	100%
Automobile Care Center	0.00	0%
Fast Food Restaurant w/o Drive Thru	0.00	0%

### 5.8. Construction Electricity Consumption and Emissions Factors

#### kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	349	0.03	< 0.005
2024	0.00	349	0.03	< 0.005

### 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
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Convenience Market with Gas Pumps	3,870	3,870	3,870	1,412,550	8,503	46,404	46,404	7,056,210
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Automobile Care Center	114	114	57.0	38,594	757	1,365	684	304,256
Fast Food Restaurant w/o Drive Thru	346	696	500	152,630	4,152	8,346	5,995	1,830,158

### 5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Convenience Market with Gas Pumps	3,870	3,870	3,870	1,412,550	8,503	46,404	46,404	7,056,210
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Automobile Care Center	114	114	57.0	38,594	757	1,365	684	304,256
Fast Food Restaurant w/o Drive Thru	346	696	500	152,630	4,152	8,346	5,995	1,830,158

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

#### 5.10.1.2. Mitigated

### 5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	23,240	7,747	6,853

### 5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

### 5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Convenience Market with Gas Pumps	310,949	349	0.0330	0.0040	162,695
Parking Lot	20,949	349	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	349	0.0330	0.0040	0.00
Automobile Care Center	2,644,004	349	0.0330	0.0040	1,329,132
Fast Food Restaurant w/o Drive Thru	35,115	349	0.0330	0.0040	114,059

### 5.11.2. Mitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Convenience Market with Gas Pumps	310,949	349	0.0330	0.0040	162,695
Parking Lot	20,949	349	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	349	0.0330	0.0040	0.00
Automobile Care Center	2,644,004	349	0.0330	0.0040	1,329,132
Fast Food Restaurant w/o Drive Thru	35,115	349	0.0330	0.0040	114,059

### 5.12. Operational Water and Wastewater Consumption

#### 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Convenience Market with Gas Pumps	125,486	432,861
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Automobile Care Center	0.00	2,104,000
Fast Food Restaurant w/o Drive Thru	303,534	0.00

#### 5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Convenience Market with Gas Pumps	125,486	432,861
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Automobile Care Center	0.00	2,104,000

Fast Food Restaurant w/o Drive Thru	303,534	0.00
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### 5.13. Operational Waste Generation

#### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Convenience Market with Gas Pumps	5.08	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
Automobile Care Center	18.3	—
Fast Food Restaurant w/o Drive Thru	11.5	—

#### 5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Convenience Market with Gas Pumps	5.08	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
Automobile Care Center	18.3	—
Fast Food Restaurant w/o Drive Thru	11.5	—

### 5.14. Operational Refrigeration and Air Conditioning Equipment

#### 5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Convenience Market with Gas Pumps	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Convenience Market with Gas Pumps	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Automobile Care Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Automobile Care Center	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Convenience Market with Gas Pumps	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market with Gas Pumps	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Automobile Care Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Automobile Care Center	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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### 5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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### 5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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## 5.17. User Defined

Equipment Type	Fuel Type
—	—

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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### 5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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#### 5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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#### 5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.7	annual days of extreme heat



Extreme Precipitation	3.15	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	25.1	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	80.0
AQ-PM	37.9
AQ-DPM	44.4
Drinking Water	10.2
Lead Risk Housing	9.44
Pesticides	0.00

Toxic Releases	14.8
Traffic	16.4
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	5.57
Impaired Water Bodies	58.7
Solid Waste	0.00
Sensitive Population	—
Asthma	29.8
Cardio-vascular	78.4
Low Birth Weights	36.1
Socioeconomic Factor Indicators	—
Education	27.6
Housing	13.6
Linguistic	17.3
Poverty	41.5
Unemployment	87.4

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.36070833
Employed	15.11612986
Median HI	82.34312845
Education	—

Bachelor's or higher	49.0183498
High school enrollment	9.611189529
Preschool enrollment	44.32182728
Transportation	—
Auto Access	92.6344155
Active commuting	1.039394328
Social	—
2-parent households	67.89426408
Voting	50.86616194
Neighborhood	—
Alcohol availability	97.0101373
Park access	2.194276915
Retail density	3.195175157
Supermarket access	12.42140382
Tree canopy	3.284999358
Housing	—
Homeownership	79.76389067
Housing habitability	86.52636982
Low-inc homeowner severe housing cost burden	61.08045682
Low-inc renter severe housing cost burden	79.71256256
Uncrowded housing	59.34813294
Health Outcomes	—
Insured adults	89.88836135
Arthritis	14.6
Asthma ER Admissions	91.2
High Blood Pressure	23.1
Cancer (excluding skin)	16.1

Asthma	49.0
Coronary Heart Disease	25.9
Chronic Obstructive Pulmonary Disease	35.3
Diagnosed Diabetes	68.9
Life Expectancy at Birth	59.4
Cognitively Disabled	68.5
Physically Disabled	41.1
Heart Attack ER Admissions	13.8
Mental Health Not Good	60.0
Chronic Kidney Disease	55.3
Obesity	44.9
Pedestrian Injuries	58.6
Physical Health Not Good	57.2
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	15.4
Current Smoker	54.4
No Leisure Time for Physical Activity	70.6
Climate Change Exposures	—
Wildfire Risk	4.5
SLR Inundation Area	0.0
Children	3.5
Elderly	83.1
English Speaking	72.6
Foreign-born	27.2
Outdoor Workers	51.2
Climate Change Adaptive Capacity	—

Impervious Surface Cover	68.6
Traffic Density	14.8
Traffic Access	23.0
Other Indices	—
Hardship	36.3
Other Decision Support	—
2016 Voting	63.0

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	18.0
Healthy Places Index Score for Project Location (b)	53.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

Screen	Justification
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Land Use	Per applicant information and site plans (12 pumps, 3,593 SF gas pump + 6,100 FoodMart = 9,693, 4,800 SF Carwash, 1,000 SF Resturant, 90,300 SF paved area, 27,300 SF landscape)
Construction: Construction Phases	Based applicant provided construction schedule. Default Architectural Coating schedule
Construction: Architectural Coatings	Based on SCAQMD Rule 1113
Operations: Vehicle Data	ITE rates 11th edition for LU #945 (Gas station and convenience store) and LU#948 (automated car wash). Default trips rates for Fast Food restaurant.
Operations: Architectural Coatings	Based on SCAQMD Rule 1113
Operations: Energy Use	Energy assumption for Car Wash Projects using Professional Car Washing survey in 2015 and U.S. Energy Information Administration electricity conversion.
Operations: Water and Waste Water	Based on 80,000 vehicles washed per year and typical gallons per vehicle according to International Car Wash Associaiton 2000 and AB 2230 (26.3 gallons per vehicle x 80,000 vehicles per year)

# Attachment B

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AERMOD Input, HARP Risk Results, and Risk Isopeths

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▲ \*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* 21-12119 Morningstar\_Riverside County\_Gas  
Station \*\*\* 02/25/22  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\* SCAQMD and PERRIS MET data  
\*\*\* 14:59:14

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* MODEL SETUP OPTIONS SUMMARY

\*\*\*

---  
---  
\*\*Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --

\*\*NO GAS DEPOSITION Data Provided.

\*\*NO PARTICLE DEPOSITION Data Provided.

\*\*Model Uses NO DRY DEPLETION. DRYDPLT = F

\*\*Model Uses NO WET DEPLETION. WETDPLT = F

\*\*Model Uses URBAN Dispersion Algorithm for the SBL for 5 Source(s),  
for Total of 1 Urban Area(s):

Urban Population = 2189641.0 ; Urban Roughness Length = 1.000 m

\*\*Model Allows User-Specified Options:

1. Stack-tip Downwash.
2. Model Assumes Receptors on FLAT Terrain.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.
6. Urban Roughness Length of 1.0 Meter Used.

\*\*Other Options Specified:

ADJ\_U\* - Use ADJ\_U\* option for SBL in AERMET

CCVR\_Sub - Meteorological data includes CCVR substitutions

TEMP\_Sub - Meteorological data includes TEMP substitutions

\*\*Model Assumes No FLAGPOLE Receptor Heights.

\*\*The User Specified a Pollutant Type of: GASTAT

\*\*Model Calculates 1 Short Term Average(s) of: 1-HR  
and Calculates PERIOD Averages

\*\*This Run Includes: 5 Source(s); 6 Source Group(s); and 444  
Receptor(s)

with: 2 POINT(s), including  
0 POINTCAP(s) and 0 POINTHOR(s)

and: 3 VOLUME source(s)  
and: 0 AREA type source(s)  
and: 0 LINE source(s)  
and: 0 RLINE/RLINEXT source(s)  
and: 0 OPENPIT source(s)  
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)

\*\*Model Set To Continue RUNning After the Setup Testing.

\*\*The AERMET Input Meteorological Data Version Date: 16216

\*\*Output Options Selected:

Model Outputs Tables of PERIOD Averages by Receptor

Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE  
Keyword)

Model Outputs External File(s) of High Values for Plotting (PLOTFILE  
Keyword)

Model Outputs Separate Summary File of High Ranked Values (SUMMFILE  
Keyword)

\*\*NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours  
m for Missing Hours  
b for Both Calm and  
Missing Hours

\*\*Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 442.00 ; Decay  
Coef. = 0.000 ; Rot. Angle = 0.0  
Emission Units = GRAMS/SEC ;  
Emission Rate Unit Factor = 0.10000E+07  
Output Units = MICROGRAMS/M\*\*3

\*\*Approximate Storage Requirements of Model = 3.7 MB of RAM.

\*\*Input Runstream File: aermod.inp

\*\*Output Print File: aermod.out

\*\*Detailed Error/Message File: Moringstar\_RIV\_Gas\_Station.err

\*\*File for Summary of Results: Moringstar\_RIV\_Gas\_Station.sum

▲ \*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* 21-12119 Moringstar\_Riverside County\_Gas  
Station \*\*\* 02/25/22  
\*\*\* AERMET - VERSION 16216 \*\*\* \*\*\* SCAQMD and PERRIS MET data  
\*\*\* 14:59:14

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*



Surface station no.: 3171  
Name: UNKNOWN

Upper air station no.: 3190  
Name: UNKNOWN

Year: 2010

Year: 2010

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN
ALBEDO	REF	WS	WD	HT	REF	TA	HT							
10	01	01	1	01	-7.9	0.125	-9.000	-9.000	-999.	106.	21.2	0.19	0.61	
1.00	1.30	335.		9.1	282.5	5.5								
10	01	01	1	02	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	
1.00	0.90	142.		9.1	280.9	5.5								
10	01	01	1	03	-3.9	0.088	-9.000	-9.000	-999.	62.	15.1	0.19	0.61	
1.00	0.90	324.		9.1	280.4	5.5								
10	01	01	1	04	-1.3	0.064	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	
1.00	0.40	294.		9.1	278.8	5.5								
10	01	01	1	05	-3.9	0.088	-9.000	-9.000	-999.	62.	15.0	0.19	0.61	
1.00	0.90	205.		9.1	278.1	5.5								
10	01	01	1	06	-1.3	0.065	-9.000	-9.000	-999.	39.	18.3	0.19	0.61	
1.00	0.40	3.		9.1	277.0	5.5								
10	01	01	1	07	-8.0	0.125	-9.000	-9.000	-999.	106.	21.0	0.19	0.61	
1.00	1.30	99.		9.1	277.0	5.5								
10	01	01	1	08	-3.3	0.086	-9.000	-9.000	-999.	61.	16.8	0.19	0.61	
0.54	0.90	319.		9.1	278.8	5.5								
10	01	01	1	09	20.1	0.128	0.307	0.010	49.	110.	-9.0	0.19	0.61	
0.33	0.90	239.		9.1	284.2	5.5								
10	01	01	1	10	56.7	0.087	0.560	0.010	107.	62.	-1.0	0.19	0.61	
0.26	0.40	188.		9.1	289.2	5.5								
10	01	01	1	11	81.5	0.323	0.867	0.008	277.	441.	-35.9	0.19	0.61	
0.23	2.70	310.		9.1	290.9	5.5								
10	01	01	1	12	97.1	0.281	1.058	0.008	421.	357.	-19.7	0.19	0.61	
0.22	2.20	357.		9.1	293.1	5.5								
10	01	01	1	13	92.2	0.279	1.117	0.008	523.	354.	-20.4	0.19	0.61	
0.22	2.20	356.		9.1	293.8	5.5								
10	01	01	1	14	77.6	0.275	1.102	0.008	595.	347.	-23.2	0.19	0.61	
0.23	2.20	50.		9.1	294.2	5.5								
10	01	01	1	15	54.9	0.230	1.006	0.008	640.	266.	-19.2	0.19	0.61	
0.27	1.80	53.		9.1	293.8	5.5								
10	01	01	1	16	12.3	0.206	0.613	0.008	648.	225.	-61.5	0.19	0.61	
0.36	1.80	11.		9.1	292.5	5.5								
10	01	01	1	17	-3.6	0.087	-9.000	-9.000	-999.	71.	15.6	0.19	0.61	
0.64	0.90	351.		9.1	290.4	5.5								
10	01	01	1	18	-3.8	0.087	-9.000	-9.000	-999.	62.	15.2	0.19	0.61	
1.00	0.90	186.		9.1	287.5	5.5								
10	01	01	1	19	-3.8	0.087	-9.000	-9.000	-999.	62.	15.2	0.19	0.61	
1.00	0.90	275.		9.1	285.9	5.5								
10	01	01	1	20	-1.2	0.064	-9.000	-9.000	-999.	39.	18.1	0.19	0.61	

```

1.00  0.40 181.  9.1 285.4  5.5
10 01 01  1 21 -7.8 0.125 -9.000 -9.000 -999. 106.  21.3 0.19  0.61
1.00  1.30 318.  9.1 284.9  5.5
10 01 01  1 22 -3.8 0.088 -9.000 -9.000 -999.  62.  15.1 0.19  0.61
1.00  0.90 196.  9.1 283.1  5.5
10 01 01  1 23 -3.8 0.088 -9.000 -9.000 -999.  62.  15.1 0.19  0.61
1.00  0.90 330.  9.1 281.4  5.5
10 01 01  1 24 -7.9 0.125 -9.000 -9.000 -999. 106.  21.2 0.19  0.61
1.00  1.30 332.  9.1 280.9  5.5

```

First hour of profile data

```

YR MO DY HR HEIGHT F  WDIR      WSPD AMB_TMP sigmaA  sigmaW  sigmaV
10 01 01 01    5.5 0 -999.  -99.00  282.6  99.0  -99.00  -99.00
10 01 01 01    9.1 1  335.   1.30  -999.0  99.0  -99.00  -99.00

```

F indicates top of profile (=1) or below (=0)

```

^ *** AERMOD - VERSION 21112 ***      *** 21-12119 Morningstar_Riverside County_Gas
Station                               ***      02/25/22
*** AERMET - VERSION 16216 ***      *** SCAQMD and PERRIS MET data
***                               ***      14:59:14

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43824

HRS) RESULTS \*\*\*

\*\* CONC OF GASTAT IN MICROGRAMS/M\*\*3

\*\*

GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV,
ZHILL, ZFLAG)	OF TYPE GRID-ID		
BREATHIN	1ST HIGHEST VALUE IS	907.68513 AT (	490775.15, 3720180.36, 442.00,
	442.00, 0.00) GC UCART1		
	2ND HIGHEST VALUE IS	868.32408 AT (	490817.15, 3720180.36, 442.00,
	442.00, 0.00) GC UCART1		
	3RD HIGHEST VALUE IS	414.31641 AT (	490775.15, 3720222.36, 442.00,
	442.00, 0.00) GC UCART1		
	4TH HIGHEST VALUE IS	388.93015 AT (	490817.15, 3720222.36, 442.00,
	442.00, 0.00) GC UCART1		
	5TH HIGHEST VALUE IS	239.08585 AT (	490817.15, 3720138.36, 442.00,
	442.00, 0.00) GC UCART1		
	6TH HIGHEST VALUE IS	197.16674 AT (	490775.15, 3720138.36, 442.00,

442.00,	0.00) GC UCART1	147.21416 AT (	490733.15,	3720180.36,	442.00,
442.00,	0.00) GC UCART1	143.09374 AT (	490859.15,	3720180.36,	442.00,
442.00,	0.00) GC UCART1	122.91846 AT (	490733.15,	3720222.36,	442.00,
442.00,	0.00) GC UCART1	117.50567 AT (	490859.15,	3720222.36,	442.00,
442.00,	0.00) GC UCART1				
LOADING	1ST HIGHEST VALUE IS	907.49008 AT (	490775.15,	3720180.36,	442.00,
442.00,	0.00) GC UCART1				
	2ND HIGHEST VALUE IS	868.16441 AT (	490817.15,	3720180.36,	442.00,
442.00,	0.00) GC UCART1				
	3RD HIGHEST VALUE IS	414.28622 AT (	490775.15,	3720222.36,	442.00,
442.00,	0.00) GC UCART1				
	4TH HIGHEST VALUE IS	388.90013 AT (	490817.15,	3720222.36,	442.00,
442.00,	0.00) GC UCART1				
	5TH HIGHEST VALUE IS	239.08561 AT (	490817.15,	3720138.36,	442.00,
442.00,	0.00) GC UCART1				
	6TH HIGHEST VALUE IS	197.16769 AT (	490775.15,	3720138.36,	442.00,
442.00,	0.00) GC UCART1				
	7TH HIGHEST VALUE IS	147.21680 AT (	490733.15,	3720180.36,	442.00,
442.00,	0.00) GC UCART1				
	8TH HIGHEST VALUE IS	143.09604 AT (	490859.15,	3720180.36,	442.00,
442.00,	0.00) GC UCART1				
	9TH HIGHEST VALUE IS	122.92132 AT (	490733.15,	3720222.36,	442.00,
442.00,	0.00) GC UCART1				
	10TH HIGHEST VALUE IS	117.50792 AT (	490859.15,	3720222.36,	442.00,
442.00,	0.00) GC UCART1				
HOSE	1ST HIGHEST VALUE IS	2832.11156 AT (	490775.15,	3720180.36,	442.00,
442.00,	0.00) GC UCART1				
	2ND HIGHEST VALUE IS	717.29618 AT (	490775.15,	3720138.36,	442.00,
442.00,	0.00) GC UCART1				
	3RD HIGHEST VALUE IS	331.55289 AT (	490817.15,	3720180.36,	442.00,
442.00,	0.00) GC UCART1				
	4TH HIGHEST VALUE IS	295.99327 AT (	490817.15,	3720138.36,	442.00,
442.00,	0.00) GC UCART1				
	5TH HIGHEST VALUE IS	259.49125 AT (	490733.15,	3720180.36,	442.00,
442.00,	0.00) GC UCART1				
	6TH HIGHEST VALUE IS	209.88806 AT (	490775.15,	3720222.36,	442.00,
442.00,	0.00) GC UCART1				
	7TH HIGHEST VALUE IS	208.17240 AT (	490733.15,	3720138.36,	442.00,
442.00,	0.00) GC UCART1				
	8TH HIGHEST VALUE IS	146.55522 AT (	490775.15,	3720096.36,	442.00,
442.00,	0.00) GC UCART1				
	9TH HIGHEST VALUE IS	137.85115 AT (	490817.15,	3720222.36,	442.00,
442.00,	0.00) GC UCART1				
	10TH HIGHEST VALUE IS	135.61734 AT (	490817.15,	3720096.36,	442.00,

442.00, 0.00) GC UCART1

REFUELIN 1ST HIGHEST VALUE IS 2832.11156 AT ( 490775.15, 3720180.36, 442.00,  
 442.00, 0.00) GC UCART1  
 2ND HIGHEST VALUE IS 717.29618 AT ( 490775.15, 3720138.36, 442.00,  
 442.00, 0.00) GC UCART1  
 3RD HIGHEST VALUE IS 331.55289 AT ( 490817.15, 3720180.36, 442.00,  
 442.00, 0.00) GC UCART1  
 4TH HIGHEST VALUE IS 295.99327 AT ( 490817.15, 3720138.36, 442.00,  
 442.00, 0.00) GC UCART1  
 5TH HIGHEST VALUE IS 259.49125 AT ( 490733.15, 3720180.36, 442.00,  
 442.00, 0.00) GC UCART1  
 6TH HIGHEST VALUE IS 209.88806 AT ( 490775.15, 3720222.36, 442.00,  
 442.00, 0.00) GC UCART1  
 7TH HIGHEST VALUE IS 208.17240 AT ( 490733.15, 3720138.36, 442.00,  
 442.00, 0.00) GC UCART1  
 8TH HIGHEST VALUE IS 146.55522 AT ( 490775.15, 3720096.36, 442.00,  
 442.00, 0.00) GC UCART1  
 9TH HIGHEST VALUE IS 137.85115 AT ( 490817.15, 3720222.36, 442.00,  
 442.00, 0.00) GC UCART1  
 10TH HIGHEST VALUE IS 135.61734 AT ( 490817.15, 3720096.36, 442.00,  
 442.00, 0.00) GC UCART1

▲ \*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* 21-12119 Morningstar\_Riverside County\_Gas  
 Station \*\*\* 02/25/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\* SCAQMD and PERRIS MET data  
 \*\*\* 14:59:14

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF MAXIMUM PERIOD ( 43824

HRS) RESULTS \*\*\*

\*\* CONC OF GASTAT IN MICROGRAMS/M\*\*3

\*\*

GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV,
ZHILL, ZFLAG) OF TYPE	GRID-ID		

SPILLAGE 1ST HIGHEST VALUE IS	2885.65866 AT (	490775.15,	3720180.36,	442.00,
442.00, 0.00) GC UCART1				
2ND HIGHEST VALUE IS	718.06304 AT (	490775.15,	3720138.36,	442.00,
442.00, 0.00) GC UCART1				
3RD HIGHEST VALUE IS	331.94132 AT (	490817.15,	3720180.36,	442.00,
442.00, 0.00) GC UCART1				

442.00,	4TH HIGHEST VALUE IS	294.60565 AT (	490817.15,	3720138.36,	442.00,
0.00)	GC UCART1				
442.00,	5TH HIGHEST VALUE IS	259.80134 AT (	490733.15,	3720180.36,	442.00,
0.00)	GC UCART1				
442.00,	6TH HIGHEST VALUE IS	210.75822 AT (	490775.15,	3720222.36,	442.00,
0.00)	GC UCART1				
442.00,	7TH HIGHEST VALUE IS	208.78440 AT (	490733.15,	3720138.36,	442.00,
0.00)	GC UCART1				
442.00,	8TH HIGHEST VALUE IS	144.64488 AT (	490775.15,	3720096.36,	442.00,
0.00)	GC UCART1				
442.00,	9TH HIGHEST VALUE IS	138.71049 AT (	490817.15,	3720096.36,	442.00,
0.00)	GC UCART1				
442.00,	10TH HIGHEST VALUE IS	137.99002 AT (	490817.15,	3720222.36,	442.00,
0.00)	GC UCART1				
ALL	1ST HIGHEST VALUE IS	10365.05698 AT (	490775.15,	3720180.36,	442.00,
442.00,	0.00)	GC UCART1			
442.00,	2ND HIGHEST VALUE IS	2731.53560 AT (	490817.15,	3720180.36,	442.00,
0.00)	GC UCART1				
442.00,	3RD HIGHEST VALUE IS	2546.98983 AT (	490775.15,	3720138.36,	442.00,
0.00)	GC UCART1				
442.00,	4TH HIGHEST VALUE IS	1459.13696 AT (	490775.15,	3720222.36,	442.00,
0.00)	GC UCART1				
442.00,	5TH HIGHEST VALUE IS	1364.76366 AT (	490817.15,	3720138.36,	442.00,
0.00)	GC UCART1				
442.00,	6TH HIGHEST VALUE IS	1191.52260 AT (	490817.15,	3720222.36,	442.00,
0.00)	GC UCART1				
442.00,	7TH HIGHEST VALUE IS	1073.21481 AT (	490733.15,	3720180.36,	442.00,
0.00)	GC UCART1				
442.00,	8TH HIGHEST VALUE IS	816.08763 AT (	490733.15,	3720138.36,	442.00,
0.00)	GC UCART1				
442.00,	9TH HIGHEST VALUE IS	617.69694 AT (	490733.15,	3720222.36,	442.00,
0.00)	GC UCART1				
442.00,	10TH HIGHEST VALUE IS	593.26495 AT (	490775.15,	3720096.36,	442.00,
0.00)	GC UCART1				

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

▲ \*\*\* AERMOD - VERSION 21112 \*\*\* \*\*\* 21-12119 Morningstar\_Riverside County\_Gas  
 Station \*\*\* 02/25/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\*\* SCAQMD and PERRIS MET data  
 \*\*\* 14:59:14

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* THE SUMMARY OF HIGHEST 1-HR



RESULTS \*\*\*

\*\* CONC OF GASTAT IN MICROGRAMS/M\*\*3

\*\*

GROUP ID (XR, YR, ZELEV, ZHILL, ZFLAG)	AVERAGE CONC OF TYPE	NETWORK GRID-ID	DATE (YYMMDDHH)	RECEPTOR
BREATHIN HIGH	1ST HIGH VALUE IS 3720180.36, 442.00, 442.00,	9716.22349 0.00) GC UCART1	ON 11010316: AT (	490775.15,
LOADING HIGH	1ST HIGH VALUE IS 3720180.36, 442.00, 442.00,	9683.60064 0.00) GC UCART1	ON 11010316: AT (	490775.15,
HOSE HIGH	1ST HIGH VALUE IS 3720180.36, 442.00, 442.00,	16466.46625 0.00) GC UCART1	ON 16010516: AT (	490775.15,
REFUELIN HIGH	1ST HIGH VALUE IS 3720180.36, 442.00, 442.00,	16466.46625 0.00) GC UCART1	ON 16010516: AT (	490775.15,
SPILLAGE HIGH	1ST HIGH VALUE IS 3720180.36, 442.00, 442.00,	17621.50038 0.00) GC UCART1	ON 16010516: AT (	490775.15,
ALL HIGH	1ST HIGH VALUE IS 3720180.36, 442.00, 442.00,	51433.67041 0.00) GC UCART1	ON 16010516: AT (	490775.15,

\*\*\* RECEPTOR TYPES: GC = GRIDCART  
 GP = GRIDPOLR  
 DC = DISCCART  
 DP = DISCPOLR

▲ \*\*\* AERMOD - VERSION 21112 \*\*\* \*\* 21-12119 Morningstar\_Riverside County\_Gas  
 Station \*\*\* 02/25/22  
 \*\*\* AERMET - VERSION 16216 \*\*\* \*\* SCAQMD and PERRIS MET data  
 \*\*\* 14:59:14

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\*\*\* MODELOPTs: NonDEFAULT CONC FLAT URBAN ADJ\_U\*

\*\*\* Message Summary : AERMOD Model Execution \*\*\*

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)  
 A Total of 4 Warning Message(s)

A Total of 2028 Informational Message(s)  
A Total of 43824 Hours Were Processed  
A Total of 978 Calm Hours Identified  
A Total of 1050 Missing Hours Identified ( 2.40 Percent)

\*\*\*\*\* FATAL ERROR MESSAGES \*\*\*\*\*  
\*\*\* NONE \*\*\*

\*\*\*\*\* WARNING MESSAGES \*\*\*\*\*  
ME W186 225 MEOPEN: THRESH\_1MIN 1-min ASOS wind speed threshold used  
0.50  
ME W187 225 MEOPEN: ADJ\_U\* Option for Stable Low Winds used in AERMET  
MX W450 17521 CHKDAT: Record Out of Sequence in Meteorological File at:  
14010101  
MX W450 17521 CHKDAT: Record Out of Sequence in Meteorological File at:  
2 year gap

HARP2 - HRACalc (dated 21081) 2/25/2022 3:22:08 PM - Output Log

GLCs loaded successfully  
Pollutants loaded successfully  
Pathway receptors loaded successfully

\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: Cancer  
Calculation Method: Derived

\*\*\*\*\*

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25  
Total Exposure Duration: 30

Exposure Duration Bin Distribution

3rd Trimester Bin: 0.25  
0<2 Years Bin: 2  
2<9 Years Bin: 0  
2<16 Years Bin: 14  
16<30 Years Bin: 14  
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: True  
Dermal: True  
Mother's milk: True  
Water: False  
Fish: False  
Homegrown crops: True  
Beef: False  
Dairy: False  
Pig: False  
Chicken: False  
Egg: False

\*\*\*\*\*

INHALATION

Daily breathing rate: RMP

**\*\*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

\*\*\*\*\*  
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02  
Soil mixing depth (m): 0.01  
Dermal climate: Warm

\*\*\*\*\*  
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden  
Fraction leafy: 0.137  
Fraction exposed: 0.137  
Fraction protected: 0.137  
Fraction root: 0.137

\*\*\*\*\*  
TIER 2 SETTINGS  
Tier2 not used.

\*\*\*\*\*

Calculating cancer risk  
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\arojas\OneDrive - Rincon  
Consultants\Desktop\HARP2\_Projects\MORNINGSTAR\_GS\_HRA\hra\Resident\_Cancer\_Burden\_30y  
rCancerRisk.csv  
Cancer risk total by receptor saved to: C:\Users\arojas\OneDrive - Rincon  
Consultants\Desktop\HARP2\_Projects\MORNINGSTAR\_GS\_HRA\hra\Resident\_Cancer\_Burden\_30y  
rCancerRiskSumByRec.csv  
HRA ran successfully























HARP2 - HRACalc (dated 21081) 2/25/2022 3:07:14 PM - Output Log

GLCs loaded successfully  
Pollutants loaded successfully  
Pathway receptors loaded successfully

\*\*\*\*\*

RISK SCENARIO SETTINGS

Receptor Type: Resident  
Scenario: Cancer  
Calculation Method: Derived

\*\*\*\*\*

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25  
Total Exposure Duration: 70

Exposure Duration Bin Distribution

3rd Trimester Bin: 0.25  
0<2 Years Bin: 2  
2<9 Years Bin: 0  
2<16 Years Bin: 14  
16<30 Years Bin: 0  
16 to 70 Years Bin: 54

\*\*\*\*\*

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: True  
Dermal: True  
Mother's milk: True  
Water: False  
Fish: False  
Homegrown crops: True  
Beef: False  
Dairy: False  
Pig: False  
Chicken: False  
Egg: False

\*\*\*\*\*

INHALATION

Daily breathing rate: RMP

**\*\*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

\*\*\*\*\*  
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02  
Soil mixing depth (m): 0.01  
Dermal climate: Warm

\*\*\*\*\*  
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden  
Fraction leafy: 0.137  
Fraction exposed: 0.137  
Fraction protected: 0.137  
Fraction root: 0.137

\*\*\*\*\*  
TIER 2 SETTINGS  
Tier2 not used.

\*\*\*\*\*

Calculating cancer risk  
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\arojas\OneDrive - Rincon  
Consultants\Desktop\HARP2\_Projects\MORNINGSTAR\_GS\_HRA\hra\Resident\_Cancer\_Burden\_70y  
rCancerRisk.csv  
Cancer risk total by receptor saved to: C:\Users\arojas\OneDrive - Rincon  
Consultants\Desktop\HARP2\_Projects\MORNINGSTAR\_GS\_HRA\hra\Resident\_Cancer\_Burden\_70y  
rCancerRiskSumByRec.csv  
HRA ran successfully


























# Risk Isopleths

Write a description for your map.

## Legend

 Abelia Park



# Attachment C

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Riverside County Climate Action Plan's Screening Table for Commercial Development

**Table 2: Screening Table for GHG Implementation Measures for Commercial Development and Public Facilities**

Feature	Description	Assigned Point Values	Project Points
<b>Reduction Measure R2-EE10: Exceed Energy Efficiency Standards in New Commercial Units</b>			
<b>EE10.A Building Envelope</b>			
EE10.A.1 Insulation	<ul style="list-style-type: none"> <li>2017 Title 24 Requirements (walls R-13; roof/attic R-30)</li> <li>Modestly Enhanced Insulation (walls R-13, roof/attic R-38)</li> <li>Enhanced Insulation (rigid wall insulation R-13, roof/attic R-38)</li> <li>Greatly Enhanced Insulation (spray foam insulated walls R-15 or higher, roof/attic R-38 or higher)</li> </ul>	0 points 9 points 11 points 12 points	
EE10.A.2 Windows	<ul style="list-style-type: none"> <li>2016 Title 24 Windows (0.57 U-factor, 0.4 SHGC)</li> <li>Modestly Enhanced Window Insulation (0.4 U-factor, 0.32 SHGC)</li> <li>Enhanced Window Insulation (0.32 U-factor, 0.25 SHGC)</li> <li>Greatly Enhanced Window Insulation (0.28 or less U-factor, 0.22 or less SHGC)</li> </ul>	0 points 4 points 5 points 7 points	
EE10.A.3 Cool Roofs	<ul style="list-style-type: none"> <li>Modest Cool Roof (CRRC Rated 0.15 aged solar reflectance, 0.75 thermal emittance)</li> <li>Enhanced Cool Roof (CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance)</li> <li>Greatly Enhanced Cool Roof ( CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance)</li> </ul>	7 points 8 points 10 points	
EE10.A.4 Air Infiltration	Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage. <ul style="list-style-type: none"> <li>Air barrier applied to exterior walls, caulking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent)</li> <li>Blower Door HERS Verified Envelope Leakage or equivalent</li> </ul>	7 points 6 points	
EE10.A.5 Thermal Storage of Building	Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water filled columns, water storage tanks, and thick masonry walls. <ul style="list-style-type: none"> <li>Modest Thermal Mass (10% of floor or 10% of walls 12" or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials)</li> <li>Enhanced Thermal Mass (20% of floor or 20% of walls 12" or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials)</li> <li>Enhanced Thermal Mass (80% of floor or 80% of walls 12" or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials)</li> </ul>	2 points 4 points 14 points	

**CEQA THRESHOLDS AND SCREENING TABLES**

<b>Feature</b>	<b>Description</b>	<b>Assigned Point Values</b>	<b>Project Points</b>
<b>EE10.B Indoor Space Efficiencies</b>			
EE10.B.1 Heating/Cooling Distribution System	<ul style="list-style-type: none"> <li>• Minimum Duct Insulation (R-4.2 required)</li> <li>• Modest Duct insulation (R-6)</li> <li>• Enhanced Duct Insulation (R-8)</li> <li>• Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent)</li> </ul>	0 points 5 points 6 points 8 points	
EE10.B.2 Space Heating/Cooling Equipment	<ul style="list-style-type: none"> <li>• 2016 Title 24 Minimum HVAC Efficiency (EER 13/75% AFUE or 7.7 HSPF)</li> <li>• Improved Efficiency HVAC (EER 14/78% AFUE or 8 HSPF)</li> <li>• High Efficiency HVAC (EER 15/80% AFUE or 8.5 HSPF)</li> <li>• Very High Efficiency HVAC (EER 16/82% AFUE or 9 HSPF)</li> </ul>	0 points 4 points 5 points 7 points	
EE10.B.3 Commercial Heat Recovery Systems	Heat recovery strategies employed with commercial laundry, cooking equipment, and other commercial heat sources for reuse in HVAC air intake or other appropriate heat recovery technology. Point values for these types of systems will be determined based upon design and engineering data documenting the energy savings.	TBD	
EE10.B.4 Water Heaters	<ul style="list-style-type: none"> <li>• 2016 Title 24 Minimum Efficiency (0.57 Energy Factor)</li> <li>• Improved Efficiency Water Heater (0.675 Energy Factor)</li> <li>• High Efficiency Water Heater (0.72 Energy Factor)</li> <li>• Very High Efficiency Water Heater (0.92 Energy Factor)</li> <li>• Solar Pre-heat System (0.2 Net Solar Fraction)</li> <li>• Enhanced Solar Pre-heat System (0.35 Net Solar Fraction)</li> </ul>	0 points 8 points 10 points 11 points 2 points 5 points	
EE10.B.5 Daylighting	Daylighting is the ability of each room within the building to provide outside light during the day reducing the need for artificial lighting during daylight hours. <ul style="list-style-type: none"> <li>• All peripheral rooms within building have at least one window or skylight</li> <li>• All rooms within building have daylight (through use of windows, solar tubes, skylights, etc.)</li> <li>• All rooms daylighted</li> </ul>	0 points 1 point 1 point	
EE10.B.6 Artificial Lighting	<ul style="list-style-type: none"> <li>• Efficient Lights (25% of in-unit fixtures considered high efficiency. High efficiency is defined as 40 lumens/watt for 15 watt or less fixtures; 50 lumens/watt for 15-40 watt fixtures, 60 lumens/watt for fixtures &gt;40watt)</li> <li>• High Efficiency Lights (50% of in-unit fixtures are high efficiency)</li> <li>• Very High Efficiency Lights (100% of in-unit fixtures are high efficiency)</li> </ul>	5 points 7 points 8 points	
EE10.B.7 Appliances	<ul style="list-style-type: none"> <li>• Energy Star Commercial Refrigerator (new)</li> <li>• Energy Star Commercial Dishwasher (new)</li> <li>• Energy Star Commercial Clothes Washer</li> </ul>	2 points 2 points 2 points	
<b>EE10.C Miscellaneous Commercial Building Efficiencies</b>			
EE10.C.1 Building Placement	North/south alignment of building or other building placement such that the orientation of the buildings optimizes conditions for natural heating, cooling, and lighting.	4 points	
EE10.C.2 Shading	At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on Jun 21st.	6 points	
EE10.C.3 Other	This allows innovation by the applicant to provide design features that increase the energy efficiency of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards.	TBD	

**CEQA THRESHOLDS AND SCREENING TABLES**

<b>Feature</b>	<b>Description</b>	<b>Assigned Point Values</b>	<b>Project Points</b>
EE10.C.4 Existing Commercial Buildings Retrofits	<p>The applicant may wish to provide energy efficiency retrofit projects to existing commercial buildings to further the point value of their project. Retrofitting existing commercial buildings within the unincorporated County is a key reduction measure that is needed to reach the reduction goal. The potential for an applicant to take advantage of this program will be decided on a case-by-case basis and shall have the approval of the Riverside County Planning Department. The decision to allow applicants to participate in this program will be evaluated based upon, but not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Will the energy efficiency retrofit project benefit low income or disadvantaged communities?</li> <li>• Does the energy efficiency retrofit project provide co-benefits important to the County?</li> <li>• Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project.</li> </ul>	TBD	
<b>Reduction Measure R2-CE1: Clean Energy</b>			
<b>CE1.B Commercial/Industrial Renewable Energy Generation</b>			
CE1.B.1 Photovoltaic	<p>Solar Photovoltaic panels installed on commercial buildings or in collective arrangements within a commercial development such that the total power provided augments:</p> <ul style="list-style-type: none"> <li>• 30 percent of the power needs of the project</li> <li>• 40 percent of the power needs of the project</li> <li>• 50 percent of the power needs of the project</li> <li>• 60 percent of the power needs of the project</li> <li>• 70 percent of the power needs of the project</li> <li>• 80 percent of the power needs of the project</li> <li>• 90 percent of the power needs of the project</li> <li>• 100 percent of the power needs of the project</li> </ul>	8 points 12 points 16 points 19 points 23 points 26 points 30 points 34 points	
CE1.B.2 Wind Turbines	<p>Some areas of the County lend themselves to wind turbine applications. Analysis of the areas capability to support wind turbines should be evaluated prior to choosing this feature.</p> <p>Wind turbines as part of the commercial development such that the total power provided augments:</p> <ul style="list-style-type: none"> <li>• 30 percent of the power needs of the project</li> <li>• 40 percent of the power needs of the project</li> <li>• 50 percent of the power needs of the project</li> <li>• 60 percent of the power needs of the project</li> <li>• 70 percent of the power needs of the project</li> <li>• 80 percent of the power needs of the project</li> <li>• 90 percent of the power needs of the project</li> <li>• 100 percent of the power needs of the project</li> </ul>	8 points 12 points 16 points 19 points 23 points 26 points 30 points 34 points	
CE1.B.3 Off-site Renewable Energy Project	<p>The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing residential or existing commercial/industrial. These off-site renewable energy retrofit project proposals will be determined on a case-by-case basis accompanied by a detailed plan documenting the quantity of renewable energy the proposal will generate. Point values will be based upon the energy generated by the proposal.</p>	TBD	

**CEQA THRESHOLDS AND SCREENING TABLES**

<b>Feature</b>	<b>Description</b>	<b>Assigned Point Values</b>	<b>Project Points</b>
CE1.A.4 Other Renewable Energy Generation	The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed will be decided based upon engineering data documenting the ability to generate electricity.	TBD	
<b>Reduction Measure R2-W2: Exceed Water Efficiency Standards</b>			
<b>W2.D Irrigation and Landscaping</b>			
W2.D.1 Water Efficient Landscaping	<ul style="list-style-type: none"> <li>Eliminate conventional turf from landscaping</li> <li>Only moderate water using plants</li> <li>Only low water using plants</li> <li>Only California Native landscape that requires no or only supplemental irrigation</li> </ul>	0 points 2 points 3 points 5 points	
W2.D.2 Water Efficient Irrigation Systems	<ul style="list-style-type: none"> <li>Low precipitation spray heads &lt; .75"/hr or drip irrigation</li> <li>Weather based irrigation control systems combined with drip irrigation (demonstrate 20% reduced water use)</li> </ul>	1 point 3 points	
W2.D.3 Stormwater Reuse Systems	Innovative on-site stormwater collection, filtration, and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon design and engineering data documenting the water savings.	TBD	
<b>W2.E Potable Water</b>			
W2.E.1 Showers	Water Efficient Showerheads (2.0 gpm)	2 points	
W2.E.2 Toilets	<ul style="list-style-type: none"> <li>Water Efficient Toilets/Urinals (1.5 gpm)</li> <li>Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points)</li> </ul>	3 points 3 points	
W2.E.3 Faucets	Water Efficient faucets (1.28 gpm)	2 points	
W2.E.4 Commercial Dishwashers	Water Efficient dishwashers (20% water savings)	2 points	
W2.E.5 Commercial Laundry Washers	<ul style="list-style-type: none"> <li>Water Efficient laundry (15% water savings)</li> <li>High Efficiency laundry Equipment that captures and reuses rinse water (30% water savings)</li> </ul>	2 points 4 points	
W2.E.6 Commercial Water Operations Program	Establish an operational program to reduce water loss from pools, water features, etc., by covering pools, adjusting fountain operational hours, and using water treatment to reduce draw down and replacement of water. Point values for these types of plans will be determined based upon design and engineering data documenting the water savings.	TBD	
<b>W2.F Increase Commercial/Industrial Reclaimed Water Use</b>			
W2.F.1 Recycled Water	Graywater (purple pipe) irrigation system on site	5 points	



**CEQA THRESHOLDS AND SCREENING TABLES**

<b>Feature</b>	<b>Description</b>	<b>Assigned Point Values</b>	<b>Project Points</b>
<b>Reduction Measure R2-T3: Ride-Sharing and Bike-to-Work Programs within Businesses</b>			
T3.A.1 Alternative Scheduling	Encouraging telecommuting and alternative work schedules reduces the number of commute trips and therefore VMT traveled by employees. Alternative work schedules could take the form of staggered starting times, flexible schedules, or compressed work weeks. <ul style="list-style-type: none"> <li>Provide flexibility in scheduling such that at least 30% of employees participate in 9/80 work week, 4-day/40-hour work week, or telecommuting 1.5 days/week.</li> </ul>	5 points	
T3.A.2 Car/Vanpools	<ul style="list-style-type: none"> <li>Car/vanpool program</li> <li>Car/vanpool program with preferred parking</li> <li>Car/vanpool with guaranteed ride home program</li> <li>Subsidized employee incentive car/vanpool program</li> </ul> <i>Note: combine all applicable points for total value</i>	1 point 2 points 3 points 5 points	
T3.A.3 Employee Bicycle/ Pedestrian Programs	<ul style="list-style-type: none"> <li>Complete sidewalk to residential within ½ mile</li> <li>Complete bike path to residential within 3 miles</li> <li>Bike lockers and secure racks</li> <li>Showers and changing facilities</li> <li>Subsidized employee walk/bike program</li> </ul> <i>Note: combine all applicable points for total value</i>	1 point 1 point 1 point 2 points 3 points	
T3.A.4 Shuttle/Transit Programs	<ul style="list-style-type: none"> <li>Local transit within ¼ mile</li> <li>Light rail transit within ½ mile</li> <li>Shuttle service to light rail transit station</li> <li>Guaranteed ride home program</li> <li>Subsidized Transit passes</li> </ul> <i>Note: combine all applicable points for total value</i>	1 point 3 points 5 points 1 points 2 points	
T3.A.5 Commute Trip Reduction	Employer based Commute Trip Reduction (CTR). CTRs apply to commercial, offices, or industrial projects that include a reduction of vehicle trip or VMT goal using a variety of employee commutes trip reduction methods. The point value will be determined based upon a TIA that demonstrates the trip/VMT reductions. Suggested point ranges: <ul style="list-style-type: none"> <li>Incentive based CTR Programs (1–8 points)</li> <li>Mandatory CTR programs (5–20 points)</li> </ul>	TBD	
T3.A.6 Other Trip Reduction Measures	Point values for other trip or VMT reduction measures not listed above may be calculated based on a TIA and/or other traffic data supporting the trip and/or VMT reductions.	TBD	
<b>Reduction Measure R2-T1: Alternative Transportation Options</b>			
<b>T1.E Mixed-Use Development</b>			
T1.E.1 Mixed-Use	Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of mixed-use projects will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled.	TBD	
T1.E.2 Local Retail Near Residential (Commercial only Projects)	Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled. The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled.	TBD	

**CEQA THRESHOLDS AND SCREENING TABLES**

<b>Feature</b>	<b>Description</b>	<b>Assigned Point Values</b>	<b>Project Points</b>
<b>T1.F Preferential Parking</b>			
T1.F.1 Parking	<ul style="list-style-type: none"> <li>Provide reserved preferential parking spaces for car-share, carpool, and ultra-low or zero emission vehicles.</li> <li>Provide larger parking spaces that can accommodate vans used for ride-sharing programs and reserve them for vanpools and include adequate passenger waiting/loading areas.</li> </ul>	<p>1 point</p> <p>1 point</p>	
<b>T1.G Signal Synchronization and Intelligent Traffic Systems</b>			
T1.G.1 Signal Improvements	<p>Techniques for improving traffic flow include: traffic signal coordination to reduce delay, incident management to increase response time to breakdowns and collisions, Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions, and speed management to reduce high free-flow speeds.</p> <ul style="list-style-type: none"> <li>Synchronize signals along arterials used by project.</li> <li>Connect signals along arterials to existing ITS.</li> </ul>	<p>1 point/signal</p> <p>3 points/signal</p>	
<b>T1.H Increase Public Transit</b>			
T1.H.1 Public Transit	<p>The point value of a projects ability to increase public transit use will be determined based upon a Transportation Impact Analysis (TIA) demonstrating decreased use of private vehicles and increased use of public transportation.</p> <ul style="list-style-type: none"> <li>Increased transit accessibility (1-15 points)</li> </ul>	TBD	
<b>Reduction Measure R2-T2: Adopt and Implement a Bicycle Master Plan to Expand Bike Routes around the County</b>			
T2.B.1 Sidewalks	<ul style="list-style-type: none"> <li>Provide sidewalks on one side of the street (required)</li> <li>Provide sidewalks on both sides of the street</li> <li>Provide pedestrian linkage between commercial and residential land uses within 1 mile</li> </ul>	<p>0 points</p> <p>1 point</p> <p>3 points</p>	
T2.B.2 Bicycle Paths	<ul style="list-style-type: none"> <li>Provide bicycle paths within project boundaries</li> <li>Provide bicycle path linkages between commercial and other land uses</li> <li>Provide bicycle path linkages between commercial and transit</li> </ul>	<p>1 point</p> <p>2 points</p> <p>5 points</p>	
<b>Reduction Measure R2-T4: Electrify the Fleet</b>			
T4.B.1 Electric Vehicle Recharging	<ul style="list-style-type: none"> <li>Provide circuit and capacity in garages/parking areas for installation of electric vehicle charging stations.</li> <li>Install electric vehicle charging stations in garages/parking areas</li> </ul>	<p>2 points/area</p> <p>8 points/station</p>	
T4.B.2 Neighborhood Electric Vehicle (NEV) Infrastructure	<p>NEVs are electric vehicles usually built to have a top speed of 25 miles per hour, and a maximum loaded weight of 3,000 pounds.</p> <ul style="list-style-type: none"> <li>Provide NEV safe routes within the project site.</li> <li>Provide NEV safe routes between the project site and other land uses.</li> </ul>	<p>3 points</p> <p>5 points</p>	
<b>Reduction Measure R2-S1: Reduce Waste to Landfills</b>			
S1.B.1 Recycling	<p>County initiated recycling program diverting 80% of waste requires coordination with commercial development to realize this goal. The following recycling features will help the County fulfill this goal:</p> <ul style="list-style-type: none"> <li>Provide separated recycling bins within each commercial building/floor and provide large external recycling collection bins at central location for collection truck pick-up</li> <li>Provide commercial/industrial recycling programs that fulfills an on-site goal of 80% diversion of solid waste</li> </ul>	<p>2 points</p> <p>5 points</p>	

**CEQA THRESHOLDS AND SCREENING TABLES**

Feature	Description	Assigned Point Values	Project Points
<b>Other GHG Reduction Feature Implementation</b>			
O.B.1 Other GHG Emissions Reduction Features	This allows innovation by the applicant to provide commercial design features that the GHG emissions from construction and/or operation of the project not provided in the table. Note that engineering data will be required documenting the GHG reduction amount and point values given based upon emission reductions calculations using approved models, methods, and protocols.	TBD	
<b>Total Points Earned by Commercial/Industrial Project:</b>			

# Appendix B

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Biological Resources Technical Report



**Rincon Consultants, Inc.**

250 East 1<sup>st</sup> Street  
Suite 1400  
Los Angeles, CA 90012

213-788-4842

info@rinconconsultants.com  
www.rinconconsultants.com

February 22, 2022  
Project No: 21-12119

Jeff LeGrand, Vice-President  
CSL Engineering, Inc.  
3410 La Sierra Avenue, #F1190  
Riverside, California 92503  
Via email: [jefflegrand@sbcglobal.net](mailto:jefflegrand@sbcglobal.net)

**Subject: Biological Resources Technical Report to update previous Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the Morningstar Loop Convenience Store and Gas Station and Loop Rapid Car Wash Project, Winchester, California**

Dear Mr. LeGrand:

This Biological Resources Technical Report (BRTR) was prepared for the Morningstar Loop Convenience Store and Gas Station and Loop Rapid Car Wash Project (project) to confirm consistency with the original Joint Project Review (JPR) from the Regional Conservation Authority (RCA), which administers the Western Riverside Multispecies Habitat Conservation Plan (MSHCP). Specifically, the report documents existing conditions to confirm that onsite habitats have not changed and that the project is still consistent with the Western Riverside MSHCP as documented in the MSHCP Compliance Report prepared by Kidd Biological Consulting in 2006 (Attachment 1).

## Project Location

The project site consists of approximately eight acres of proposed development on four parcels (study area) that span 20.26-acres which is part of a larger vacant lot located north of the intersection of Pourroy Road and Highway 79 (Winchester Road) within the census-designated place Winchester, Riverside County, California (Figure 1). The lot has been subject to mechanical disturbance since 1996 (Google Earth 2022) and is vegetated with annual grassland as a result of historic activities. The site encompasses Assessor's Parcel Numbers (APNs) 476-010-081, -082, -083, and -084 and is located within Township 6 South, Range 2 West, and Section 28, San Bernardino baseline and meridian of the United States Geological Survey (USGS) *Bachelor Mountain, California* 7.5-minute topographic quadrangle (Figure 2). Adjacent land uses include low-density residential development to the north and west, Abelia Sports Park and high-density residential to the south, and an area currently under development to the east. Highway 79 borders the vacant lot to the east and south, low-density residential borders the north, and Pourroy Road borders the west.



## Project Description

The project would involve the development of a 6,100 square foot convenience store and a 4,800 square foot car wash with an equipment room on a total of 8 acres. The project would also include six new gas pumping stations and 12 pumps with canopy.

## Western Riverside County MSHCP

The Western Riverside County MSHCP (Dudek and Associates 2003) is a comprehensive, multijurisdictional habitat conservation planning program for western Riverside County, California. The purpose of the Western Riverside County MSHCP is to preserve native habitats, and to this end, the plan focuses upon the habitat needs of multiple species rather than one species at a time. The Western Riverside County MSHCP provides coverage/take authorization for some species listed under the federal or state Endangered Species Act (ESA) as well as non-listed special-status plant and wildlife species. It also provides mitigation for impacts to special-status species and their associated habitats.

Through agreements with the USFWS and California Department of Fish and Wildlife (CDFW), 146 listed and special-status plant and animal species receive some level of coverage under the Western Riverside County MSHCP. Of the 146 covered species, the majority have no additional survey needs or conservation requirements. Furthermore, the Western Riverside County MSHCP provides mitigation for project-specific impacts to these species, thereby reducing the degree of impact to below a level of significance, pursuant to the California Environmental Quality Act (CEQA).

Several of the species covered under the Western Riverside County MSHCP have additional survey requirements. These include the riparian communities and associated species addressed in Section 6.1.2 of the Western Riverside County MSHCP document ("Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools"), plants identified in Section 6.1.3 ("Narrow Endemic Plant Species"); and plants and animal species addressed in Section 6.3.2 ("Additional Survey Needs and Procedures").

## Project Relationship to the Western Riverside County MSHCP

The project site is located within the Southwest Area Plan of the Western Riverside County MSHCP. The Southwest Area Plan is divided into seven Subunits. The project site is located within Criteria Cell 5275 of Subunit (SU5) French Valley/Lower Sedco Hills.

The Regional Conservation Authority (RCA) MSHCP information tool was queried using the parcel information for the project site to determine potential MSHCP sensitive species survey and conservation requirements for the project. The proposed project does not occur within a survey area for amphibians or mammals but it does occur within a survey area for burrowing owl (*Athene cunicularia*) (BUOW), Narrow Endemic Plant Species, and Criteria Area Species. The Narrow Endemic Plant Species include: Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*). The Criteria Area Species include: Parish's brittle scale (*Atriplex parishii*), Davidson's salt scale (*Atriplex serenana* var. *davidsonii*), thread-leaved brodiaea (*Brodiaea filifolia*), round-leaved filaree (*California macrophylla*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), little mousetail



(*Myosurus minimus*), and mud nama (*Nama stenocarpum*). In addition, this BRTR also includes assessments for riparian/riverine habitat, riparian/riverine species, and vernal pool/fairy shrimp habitat as well as the urban/wildlands interface.

## Methods

### Field Survey

A field reconnaissance survey of the study area was conducted to document existing site conditions and the potential presence of sensitive biological resources, including sensitive plant and wildlife species, sensitive plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. The study area is defined as the entire plot of land (20.26-acre area) and an additional 500-foot buffer for the BUOW habitat assessment. Rincon biologist Christian Nordal conducted the reconnaissance survey on January 12, 2022. The biologist surveyed the study area on foot and visually inspected the buffer area with the aid of binoculars (8 x 36) as necessary. During the survey, the biologist noted general site characteristics, documented vegetation, and took representative photographs.

### Vegetation Mapping

Vegetation communities observed on site were mapped on a site-specific aerial photograph. All accessible portions of the study area were covered on foot; inaccessible portions of the 500-foot buffer area on private property were surveyed from the property boundary with binoculars. Vegetation was generally classified using the systems provided in the *Preliminary Descriptions of the Terrestrial Communities of California* (Holland 1986), and modified using *A Manual of California Vegetation, Second Edition* (MCV) (Sawyer et al. 2009) as necessary to reflect the existing site conditions.

### Flora

All plant species observed in the study area were noted, and plants that could not be identified in the field were identified later using taxonomic keys. The reconnaissance survey included a directed search for sensitive plants that would have been apparent at the time of the survey. Floral nomenclature for native and non-native plants follows Baldwin et al. (2012) as updated by *The Jepson Online Interchange for California Floristics* (Jepson Herbarium 2014). For ornamental plants, nomenclature follows the PLANTS Database (United States Department of Agriculture 2022b), and for special-status plants follows Baldwin et al. (2012) and California Natural Plant Society (CNPS 2022).

### Fauna

Animal species observed directly or detected from calls, tracks, scat, nests, or other signs in the study area were noted. The survey was performed during the day; therefore, the identification of nocturnal animals was limited to signs (if present). Zoological nomenclature for birds is in accordance with the American Ornithologists' Union Checklist (2022) and for mammals, Wilson & Reeder (2005).

### Riparian/Riverine Habitat Assessment

MSHCP Section 6.1.2, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools, describes the process through which protection of riparian/riverine areas, vernal pools, and fairy shrimp species will occur within the MSHCP Area. Protection of these resources is important for a number of



MSHCP conservation objectives. An assessment of a project's potentially significant effects on riparian/riverine areas, vernal pools, and fairy shrimp habitat is required. Guidelines for determining whether or not these resources exist on site are described as follows:

- **Riparian/Riverine Areas** are described by the MSHCP as "lands which contain habitat dominated by trees, shrubs, persistent emergent, or emergent mosses and lichens which occur close to or which depend upon soil moisture from a nearby fresh water source or areas with fresh water flow during all or a portion of the year." Riparian/riverine areas under the MSHCP also include drainage areas that are vegetated or have upland (non-riparian/riverine) vegetation that drain directly into an area that is described for conservation under the MSHCP (or areas already conserved).
- **Vernal Pools** are described by the MSHCP as "seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and /or vegetation during the drier portion of the growing season."
- **Listed Fairy Shrimp Habitat** is described in the MSHCP as habitat for Riverside fairy shrimp (*Streptocephalus woottoni*), vernal pool fairy shrimp (*Branchinecta lynchi*), or Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*), and includes ephemeral pools, artificially created habitat, and/or other features determined appropriate by a qualified biologist.

In addition, Section 6.1.2 of the MSHCP states:

"With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions."

If found, riparian/riverine habitat and vernal pools within the study area were identified, mapped, and recorded during the field reconnaissance survey. Identification of potentially jurisdictional aquatic resources during the reconnaissance survey also included potential wetlands and non-wetland waters that may constitute waters of the U.S., waters of the State, streambeds, and/or riparian/riverine or vernal pool resources.

## BUOW Habitat Assessment

The BUOW habitat assessment was conducted on January 12, 2022 concurrent with the field reconnaissance survey. Rincon biologist, Christian Nordal, walked the entire study area (i.e., the project site and 500-foot buffer, where accessible) to identify potential burrows and BUOW sign. Areas of particular interest included all topographic relief areas characterized by low growing vegetation, grasslands, shrub lands with low density shrub cover, earthen berms, and any large debris piles. Access to adjacent residential properties to the north was not granted. Therefore, these areas were surveyed with binoculars to the maximum extent feasible from the edge of the project site. The survey included a systematic search for burrows and BUOW sign by walking through potential habitat within the study area. Survey transects were spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines did not exceed 30 meters (approximately 100 feet) and were reduced to account for differences in terrain, vegetation density, and ground surface visibility. Burrow openings large enough to provide entry for BUOWs were carefully checked for prey remains, cast pellets, white-wash, feathers, or any other indication of BUOW presence. Potential burrows, BUOW





individuals, and/or sign (if observed) were recorded and mapped using Global Positions System (GPS) coordinates.

## Literature Review

The following literature was reviewed to establish the environmental and regulatory setting of the project:

- Western Riverside County Multiple Species Habitat Conservation Plan<sup>1</sup> and
- Riverside County Planning Department Letter dated August 26, 2021
- MSHCP Species Accounts<sup>2</sup>
- MSHCP Compliance Report Including; General Biological Analysis and Focused Habitat Assessment For the Burrowing Owl and 13 Sensitive Plant Species Field Reconnaissance Surveys (Attachment 2; Kidd Biological Consulting 2006)
- Focused Survey Report for Burrowing Owl and Rare Plants (Kidd Biological 2006)
- RCA Joint Project Review (JPR # 06-07-26-03)

Additionally, aerial photographs, topographic maps, and soil survey maps were examined.

## Results/Existing Conditions

The conditions observed on site at the time of the January 2022 field reconnaissance survey conducted by Rincon were consistent with those described in the 2006 Kidd Biological MSHCP Compliance Report. Survey conditions on January 12, 2022, included a temperature of 57 degrees Fahrenheit (°F), 80% cloud cover, and winds of 0-3 miles per hour (mph).

## Environmental Setting

The project site consists of four vacant parcels that have been previously graded and subject to periodic mechanical disking since as late as 1996. The vacant lot is bordered by Highway 79 and additional vacant land on the east and by residential development on the north, south, and west.

The study area is within the approximate 2,650-square mile Santa Ana River Watershed. The Santa Ana River Watershed originates in the San Bernardino Mountains and continues south through the Santa Ana mountains via the Santa Ana Canyon before draining into the Pacific Ocean.

The site is relatively level with elevations on site range from 1,398 to 1,422 feet above mean sea level (msl).

## Soils

The National Resources Conservation Service (NRCS) Web Soil Survey identifies six soil map units within the project site (Figure 3) (NRCS 2021a). These soil units are from the USDA NRCS Soil Survey of Riverside County, California, which was conducted on a broader scale than this study and did not necessarily include on site observations. The physical characteristics of the soil units, as described

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<sup>1</sup> Available at: <http://rctlma.org/Portals/0/mshcp/volume1/index.html>

<sup>2</sup> Available at: <http://rctlma.org/Portals/0/mshcp/volume2/index.html>



below, are general and not necessarily indicative of characteristics currently present within the project site. None of these soils are considered hydric. The descriptions of the soil map units (NRCS 2021c) are presented below.

### **Altamont Soils**

Altamont clay, 25 to 50 percent slopes (AaF) is mapped in the northwestern corner of the project site. The Altamont Series consists of well drained soils formed from weathered fine-grained sandstone and shale.

### **Buchenau Soils**

Buchenau silt loam, 2 to 8 percent slopes (BkC2) is mapped starting from the middle of the parcel south to the southwest corner of the project site. The Buchenau series are very dark gray, moderately alkaline, and made from calcareous medium.

### **Escondido Soils**

Escondido fine sandy loam, 8 to 15 percent slopes (EcD2) is mapped in the middle of the project site. The Escondido Series consists of very fine sandy loams that are slightly acidic and are often dark brown.

### **Friant Soils**

Friant fine sandy loam, 5 to 25 percent slopes (FwE2) is mapped in the eastern half of the project site. The Friant Series consists of well drained soils that formed in material weathered from mica schist, quartz schist, and gneiss.

### **Lodo Soils**

Lodo gravelly loam, 15 to 50 percent slopes (LaC) is mapped in the northeastern corner of the project site. The Lodo Series consists of shallow, somewhat excessively drained soils that formed in material weathered from hard shale and fine-grained sandstone.

### **Porterville Soils**

Porterville clay, moderately deep, slightly saline-alkali, 0 to 5 percent slopes (PtB) is mapped in the western/northwestern edge of the project site. The Porterville Series consists of deep, well drained soils that formed in fine textured alluvial material from basic and metabasic igneous rocks. Porterville soils are on fans and foothills with low slopes.

## **Vegetation Communities**

One vegetation community/land cover type occurs within the project site: Annual Grassland.

### **Annual Grassland**

Annual grassland habitat consists of areas which have been subject to repeated disturbance to the point where perennial species are rare or uncommon. The entire study area consists of annual grassland composed primarily of nonnative species with a single patch (0.06 acre) of California buckwheat (*Eriogonum fasciculatum*) with no other coastal scrub-affiliated species observed in the northwest portion of the site. Species observed composing the annual grassland habitat include common



fiddleneck (*Amnsinckia menziessii*), mustard (*Brassica nigra*), pineapple weed (*Matricaria matricarioides*), red-stemmed filaree (*Erodium* sp.), curley dock (*Rumex crispus*), wild radish (*Raphanus sativus*), milkweed (*Asclepias* sp.), goldfields (*Lasthenia* sp.), brome (*Bromus diandrus*), and wild oat (*Avena* sp.).

## Wildlife

The study area provides limited habitat for sensitive species and those wildlife species observed commonly occur within urban communities in Riverside County. Common urban-adapted avian species such as American kestrel (*Falco sparverius*), Bewick's wren (*Thryomanes bewickii*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), California towhee (*Melospiza crissalis*) and Anna's hummingbird (*Calypte anna*) were observed on or around the site during the survey. Several small mammal burrows likely belonging to California ground squirrel (*Otospermophilus beecheyi*) were observed throughout the entire study area.

## Western Riverside County MSHCP Consistency Analysis

### MSHCP Conservation Requirements

Conservation within Cell 5275 focuses on riparian scrub, woodland and forest habitat, and adjacent agricultural land. Areas conserved within this Cell will be connected to riparian scrub, woodland and forest habitat and agricultural land proposed for conservation in Criteria Cell 5376 to the south and to agricultural land proposed for conservation in Criteria Cell 5279 to the east. Conservation within this Cell will range from 10%-20% of the Cell focusing in the southern portion of the Cell. Conservation within this cell contributes to Proposed Constrained Linkage 18. The riparian habitat in Cell 5275 is approximately 200 feet south of the project site and will not be impacted by construction activities with mitigation measures implemented for indirect impacts.

Due to the location of the project site within an annual grassland, the proposed project impacts are not anticipated to impede the conservation goals of Cell 5275 or cause fragmentation of conserved habitats. Additionally, the JPR completed in 2006 states that the project will not conflict with the conservation goals of Cell 5275. Since the project has remained the same since 2006, the project remains in compliance with the original JPR issued in 2006.

### Riparian/Riverine/Vernal Pool Resources

The conditions observed on site at the time of Rincon's field survey were consistent with those described in the 2006 MSHCP Compliance Report. No riparian/riverine areas or vernal pools were identified during the 2006 or 2022 surveys.

Two culverts are present in the southern portion of the parcel to facilitate occasional sheet flow after rain, but no evidence of regular flow occurs at these locations. Additionally, soil and vegetation within this area are indistinguishable from adjacent upland areas. Clay soils in the northwestern portion of the site support higher levels of soil moisture, as evidenced by moss growing, but the topography is not conducive to pooling and is unlikely to support vernal pool species. Therefore, as concluded in the 2006 MSHCP Compliance Report, the project is not expected to impact riparian/riverine or vernal pool resources.



## BUOW

The project site is located within the Western Riverside County MSHCP BUOW survey area pursuant to Section 6.3.2 of the MSHCP. The original habitat assessment determined that the site provides suitable habitat for burrowing owl. Focused burrowing owl surveys conducted in 2006 determined that the site was not occupied. The general conditions observed on site at the time of Rincon's 2022 field survey were consistent with those described in the 2006 MSHCP Compliance Report and Rincon confirmed that the site remains unoccupied as no BUOW or sign thereof were observed. Therefore, as concluded in the 2006 MSHCP Compliance Report, the project is not expected to impact BUOW. However, pursuant to the MSHCP, due to the presence of suitable BUOW habitat, a preconstruction BUOW would be required within 30 days prior to the commencement of project activities.

## Narrow Endemic and Criteria Area Plant Species

The project site is located within the Western Riverside County MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA) and Criteria Area Plant Species Survey Area (CAPSSA) pursuant to Sections 6.1.3 and Section 6.3.2 of the MSHCP. Of these species, spreading navarretia, San Diego ambrosia, Coulter's goldfields, little mousetail, and California Orcutt grass were determined to have low to moderate potential to occur on site due to clay soils on site (2006 MSHCP Compliance Report). Focused rare plant surveys conducted in 2006 did not identify any NEPS or CAPS on site (Kidd Biological Consulting 2006). None of these species were observed during the 2006 focused rare plant surveys. The general conditions observed on site at the time of Rincon's 2022 field survey were consistent with those described in the 2006 MSHCP Compliance Report and the project remains consistent with the 2006 JPR.

## Urban/Wildlands Interface Guidelines

The project site is not adjacent to any MSHCP Conserved Lands or Public Quasi Public Lands. Therefore, the Urban/Wildlands Interface Guidelines (Section 6.14 of the MSHCP) are not applicable to the project.

## Conclusion

The general conditions observed on site at the time of Rincon's 2022 field survey were consistent with those described in the 2006 MSHCP Compliance Report and JPR and therefore, the findings presented therein including the project's consistency with the MSHCP remain valid.

### **Attachments**

- Attachment 1 MSHCP Compliance Report (Kidd Biological 2006)
- Attachment 2 Focused Survey Report for BUOW and Rare Plants (Kidd Biological 2006)
- Attachment 3 Figures
- Attachment 4 Representative Site Photographs
- Attachment 5 RCA JPR # 06-07-26-03 issued 9/1/2006

# Attachment 1

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MSHCP Compliance Report (Kidd Biological 2006)

**MSHCP COMPLIANCE REPORT INCLUDING;  
GENERAL BIOLOGICAL ANALYSIS &  
FOCUSED HABITAT ASSESSMENT  
FOR THE BURROWING OWL AND 13 SENSITIVE PLANT SPECIES**

**APN# 467-170-070, -071, & -072**

**PAR # 00902**

**A 23.0 ACRE PROPERTY, TOTAL AREA SURVEYED: ~23.0 ACRES**

**PROJECT SITE LOCATION: IN SECTION 28 OF TOWNSHIP 6 SOUTH, RANGE 2  
WEST OF THE BACHELOR MOUNTAIN, USGS 7.5 MIN. TOPOGRAPHIC MAP**

**Prepared for:**

Pinnacle Winchester, LP  
c/o GMX - Gary Missirian  
15335 Morrison Street, STE 305  
Sherman Oaks, CA 91403

**Prepared by:**

Jeff W. Kidd Biological Consulting  
18562 Frantz Road  
Perris, Ca 92570

Contact: Jeff W. Kidd  
(951) 776.0304



**SURVEY DATE: APRIL 26, 2006**

**REPORT DATE: MAY 9, 2006**

## **SECTION I: GENERAL BIOLOGICAL ANALYSIS & HABITAT ASSESSMENT**

### **INTRODUCTION**

This report describes the findings of a general biological assessment conducted by Jeff W. Kidd Biological Consulting on April 26, 2006. This biological assessment is intended to provide information about the *potential* for sensitive resources to occur on site based on the current site conditions. If there is a moderate to high potential for sensitive resources to occur, additional focused surveys *may* be necessary since focused surveys are not part of this initial habitat based site assessment.

### **PROJECT DESCRIPTION**

The applicant proposes to develop the site as a commercial development. The development would include fast food, gas stations, retail and possibly storage. As described to us the applicant will dedicate a 40 foot easement along the entire eastern boundary to Cal Trans for Highway 79.

### **SITE LOCATION**

The subject property (APN#'s 467-170-070, 071, & 072) is located in the French Valley area of western Riverside County. The site is bounded to the south by Highway 79 – Winchester Road, the west by Pourroy Road, the north by Koon Road, and the south by Pat Road. The project location can also be described as being in the Bachelor Mountain CA U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map in Section 28 of Township 6 South, Range 2 West (Exhibits 1-4).

Surrounding land uses include rural residential, highways, high-density residential and croplands. An adjacent, un-named, blue line stream to the south and east were conserved (Exhibit 2).

### **LITERATURE REVIEW**

A compilation of sensitive biological resources occurring in this area was derived from the California Department of Fish and Game (CDFG) Natural Diversity Database (CNDDDB 2006) and the Riverside County Multiple Species Habitat Conservation Plan (MSHCP 2003). This information was used to help determine if sensitive resource were previously reported on or directly adjacent to the subject property. This information also allows us to better predict presence/absence or probabilities, of specific sensitive resources occurring onsite if they were not detected during the biological investigation. The literature review also focuses on Western Riverside County's MSHCP goals and conservation criteria to determine if the proposed project complies with the plan and if mitigation measures may be necessary.

### **SENSITIVE RESOURCES**

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The CDFG, U.S. Fish and Wildlife Service (USFWS), and groups like the California Native Plant Society (CNPS) maintain special watch lists of such resources. Once the field

survey was conducted, it was determined from several criteria, which sensitive resources have a low, moderate or high potential to occur on site. Criteria used to determine potentials of occupancy include, but are not limited to, soil types and conditions, habitat types and quality, disturbance, site history, adjacent land uses and proximity to nearest known extant populations of each respective species.

## **FIELD SURVEY**

This biological study focused on four primary objectives: conducting the required general biological assessment, documenting adjacent land use(s), documenting detected species (Appendix A – Species Compendium) and commenting on any other sensitive species or habitat(s) found on-site. Typical habitats found throughout the subject parcels were photographed for reference (Appendix B – Site Photos).

The survey was conducted on April 26, 2006 between the hours of 1000 and 1300. Weather conditions were mild with gusts up to 6 mph and temperatures ranging from 61°-66°f. Sky was clear with little to no cloud cover.

## **RESULTS**

### **LITERATURE REVIEW**

The CNDDDB identified 37 sensitive resources (25 animals, 10 plants, & 2 habitats) as having been previously reported within the Bachelor Mtn., CA USGS topographic quadrangle. A discussion of the potential for these species to occur onsite is included below.

The MSHCP has designated this entire site (22.68 acres) as occurring within conservation cell 5275, cell group Independent of the Southwest area Plan of Sub Unit 5 (SU5- French Valley / Lower Sedco Hills).

According to the Riverside County GIS information associated with this parcel, there is a conservation area southeast of the site (HANS 00429). Additionally there at least 1 large parcel to the southeast of the site pending a HANS conclusion and may be conserved at a later date (HANS case Number 00185). Because this site occurs adjacent to a conservation area, an Urban/Wildlands Interface Guideline (UWIG) report may required under Section 6.1.4 of the MSHCP however the drainage feature that is conserved in the two aforementioned HANS cases does not flow on site hence this project may not require a UWIG since no large tracts of land are being conserved nearby, conservation is restricted to a unnamed blue-line stream.

### **SITE CONDITIONS AND NATURAL COMMUNITIES**

Currently the site support a variety of habitats including non-native grassland, buckwheat scrub, and disturbed developed. The site has been heavily disturbed due to a history of farming and disking hence only a small patch of buckwheat scrub is located within a rock outcropping in the northwestern portion of the project (Appendix B, photos 1-4). In addition to the disturbance from farming, the southern end of the project site is subject to a significant amount of disturbance from the Abelia Street road construction which is located



in the southern half of the proposed project. The parcel in question is relatively flat with elevations ranging from 1375-1417 feet above sea level. Numerous burrows were observed throughout this project site. Adjacent land uses include residential to the southwest, rural residential to the west and north, Highway 79 and residential to the east.

Soils onsite appear to include the following types:

- Southern portion of project = (BkC2) Buchenau silty loam, 2-8% slopes, eroded
- Center portion of project = (EcD2) Escondido fine sandy loam, 8-15% slopes
- Extreme northwest corner only = (AaF) Altamont clay, 25-50% slopes
- North and East portion of project = (FwE2) Friant fine sandy loam, 5-25% slopes
- Center of project along HWY 79 = (LoF2) Lodo gravelly loam, 15-25% slopes

### **BURROWING OWL**

The burrowing owl is a small, pale, buffy-brown owl that is unique in its habit of nesting in subterranean burrows. It occurs in grassland and other open habitats throughout much of the western United States, with a disjunct population in Florida. In California, the species is often found in areas containing California Ground Squirrels (*Spermophilus beecheyi*), whose burrows are used by the owls. It is opportunistic in its use of burrow sites, and can use pipes or other suitable cavities at or below ground level. Burrows can be up to 10 feet long, and enlarged nesting chambers are constructed at the terminus. The entrances to burrows are often decorated with bits of animal dung, feathers, litter, and other objects. Clutches of up to 12 eggs are laid, primarily from February to May.

Typical habitats suitable for the burrowing owl consist of two parts. First, the overall habitat type can vary significantly but would fall under some of these major habitat types: annual and perennial grasslands, deserts, scrublands and agricultural or range lands with low growing, sparse vegetation. Second, and most importantly, the site would support burrows which are the most essential component of burrowing owl habitat. Burrows provide protection from predators, shelter from adverse weather and critical nest sites. Since the burrowing owl does not typically create its own burrows, it relies on the burrows made by fossorial mammals and reptiles such as ground squirrels, badgers, foxes, coyotes and the desert tortoise. Artificial burrows made by humans such as pipes, rock piles, agricultural ditches and canals also provide suitable burrows.

Suitable foraging and nesting habitat occurs onsite and several burrows were found during the habitat assessment. It should be noted that the adjacent development to the southwest had supported approximately 3-5 pairs of burrowing owls prior to 2005 when the site was cleared for development. The applicant in this case was not asked to mitigate as their biologist and the County of Riverside EPD accepted a report suggesting there were no owls despite the fact that 3-5 pairs were reported earlier that year. Since the owls were not actively relocated there is a chance some may now reside on this and other adjacent parcels where suitable burrows are present.

**SENSITIVE PLANT SPECIES**

Under the MSHCP, at a minimum seven (7) criteria area species and nine (6) narrow endemic plant species require addressing for this parcel. After having conducted the site assessment it was determined that 3 of 13 sensitive plant species had a low-moderate potential to occur on site (Table 1). Species having a moderate or high potential to occur may require focused surveys during the appropriate blooming period to determine if the species is present on site. Focused surveys for species having a low or no potential to occur *ARE NOT* recommended. Although some of the plant species have no formal status, impacts to these species could be considered potentially significant under CEQA and could therefore require additional surveys and/or mitigation to offset impacts.

**TABLE 1 – Narrow Endemic and Criteria Area Plant Species**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Prob. of occurring</b>
<i>Allium munzii</i>	Munz's onion	Very Low
<i>Ambrosia pumila</i>	San Diego Ambrosia	Low-Moderate
<i>Atriplex parishii</i>	Parish's brittlescale	Absent
<i>Atriplex serenana var. davidsonii</i>	Davidson's saltscale	Absent
<i>Brodiaea filifolia</i>	Thread-leaved brodiaea	Very Low
<i>Centromadia pungens</i>	Smooth Tarplant	Absent
<i>Dudleya multicaulis</i>	Many-stemmed dudleya	Absent
<i>Erodium macrophyllum</i>	Round-leaved filaree	Absent
<i>Lasthenia glabrata ssp. coulteri</i>	Coulter's goldfields	Low-Moderate
<i>Myosurus minimus ssp. apus</i>	Little mousetail	Very Low
<i>Navarretia fossalis</i>	spreading navarretia	Very Low
<i>Orcuttia californica</i>	California Orcutt grass	Low- Moderate
<i>Satureja chandleri</i>	San Miguel savory	Absent
<i>Trichocoronis wrightii var. wrightii</i>	Wright's trichocoronis	Absent

**Munz's Onion**

This annual bulb is listed as State endangered and federally threatened. It is known from fewer than 15 locations. It is found in mesic (moist) clay soils within chaparral, cismontane woodlands coastal scrub and grasslands. It blooms from March-May. Critical habitat for this species was designated in 2005 in the Cleveland National forest near Lake Elsinore.

*This species was not observed onsite. A very small area of clay soils is mapped as occurring in the northwest corner of the site. However, because this species is a bulb, the regular disturbance of the site makes it very unlikely that this species could survive years of agricultural disturbance. This species has a very low potential to occur and no further studies are recommended.*

**San Diego Ambrosia**

This perennial herb blooms from May-September. It spreads by rhizomes and can be found in chaparral, coastal scrubs, grasslands and vernal pools. It is often found in disturbed areas with mesic soils. It is proposed endangered by the federal government. *This species was not observed onsite. Marginal habitat for this species occurs onsite. This species has a low-moderate potential to occur.*

**Davidson's saltscale**

This is a low growing annual that blooms from May to October. It can be found in association with vernal pools, annual grasslands, playas, scrub and vernal plains when alkali soils are present. This is a CNPS 1B listed species. *The soils on site are not suitable for this species, therefore this species is not expected to occur. Additionally, the heavy disturbance onsite makes this species have no potential to occur.*

**Parish's brittlescale**

This low growing annual typically flowers from June to October and is associated with alkali habitats along Salt Creek and the SJR from Mystic Lake to Railroad Canyon. This plant is listed as a CNPS 1B species. Suitable habitats vary from vernal pools, annual grasslands, playas, scrub and vernal plains but they all have alkali soils. *The soils on site are not suitable for this plant therefore this species is not expected to occur. Additionally, the heavy disturbance onsite makes this species have no potential to occur.*

**Thread-leaved brodiaea**

This is a perennial bulb which blooms from March until June. It is listed as State endangered and federally threatened. Although it is most commonly associated with clay soils and vernal pools, it can be found in opening of chaparral, cismontane woodlands, coastal scrubs, and grasslands. This species is found on the Santa Rosa Plateau. *Although a very small area of clay soils is mapped as occurring in the northwest corner of the site, no vernal pool was observed. Additionally, because this species is a bulb, the regular disturbance of the site makes it very unlikely that this species could survive years of agricultural disturbance. This species has a very low potential to occur and no further studies are recommended.*

**Smooth tarplant**

This annual herb is listed as 1B by the CNPS. It blooms from April-September and can be found in numerous habitat with alkali soils. *The soils on site are not suitable for this species, therefore this species is not expected to occur. Additionally, the heavy disturbance onsite makes this species have no potential to occur.*

**Many-stemmed dudleya**

This species is a perennial herb that typically blooms from April through July. It is most often associated with clay soils in rocky areas and ridgelines as well as thin openings in coastal sage scrub and chaparral habitats. Extant populations of this species are known to occur in the Santa Ana Mountains and San Mateo Wilderness. *Although clay soils occur onsite, this species was not observed and is considered absent from the site as it would have been seen during the field survey.*

**Round-leaved filaree**

This annual herb which blooms from March through May is typically found in clay soils in Cismontane woodlands and valley and foothill grasslands. This species is generally associated with vernal pools, however not required for presence. It is listed as a 2 by CNPS. *This species was not observed onsite. However, regular disturbance of the site makes it very unlikely that this species could survive years of agricultural disturbance. This species has a low potential to occur and no further studies are recommended.*

**Coulter's goldfields**

This annual herb which blooms from February through June is found in marshes, swamps, playas and vernal pools. The literature clearly identifies the San Jacinto River (SJR) flood plain from Lakeview to Railroad Canyon as a critical area for this species. Suitable habitats for this species found along the flood plain are alkali scrub, alkali playas, vernal pools and alkali grasslands.

*Clay soils are mapped as occurring onsite. This small sunflower produces numerous seeds and theoretically could survive agricultural disturbances such as disking on an annual basis, however, the site was surveyed during the blooming period and this species was not observed, therefore this species has a low-moderate potential to occur.*

**Little mousetail**

This annual herb blooms from March- June in grasslands and vernal pools with alkali soils. *The soils on site are not suitable for this species therefore this species is not expected to occur. Additionally, the heavy disturbance onsite makes this species have no-low potential to occur.*

**Spreading navarretia**

This small, herbaceous annual that blooms from May through June is listed as Federally Threatened and CNPS 1B. Spreading navarretia is associated with vernal pools, depressions and ditches in areas that once supported vernal pools. Floodplains dominated by annual alkali grasslands or alkali playas are considered suitable habitats. Extant populations are documented on the Santa Rosa Plateau, Hemet and along the San Jacinto River from Mystic Lake south to the Perris Valley Airport.

*Although a very small area of clay soils is mapped as occurring in the northwest corner of the site, no vernal pool was observed. Additionally, the regular disturbance of the site makes it very unlikely that this species could survive years of agricultural disturbance. This species has a very low potential to occur and no further studies are recommended.*

**California Orcutt grass**

The California Orcutt grass is also a sensitive plant species that is listed Federal and State Endangered and CNPS 1B. This species is a low, obscure annual grass that blooms from April through June and appears to be strongly adapted to wind pollination. This species is known to occur primarily in three vernal pool sites in Riverside County however this species has also been found in grasslands, meadows, marshes, agricultural lands and playas supporting adequate hydrology and appropriate soils. Extant populations have been found in southern basaltic claypan vernal pools at the Santa Rosa Plateau and alkaline vernal pools at Skunk Hollow and at Salt Creek west of Hemet.

*Clay soils occur onsite and because this species has been found in agricultural fields, there is a possibility that this species could occur onsite despite the heavy disturbance. Therefore this species has a moderate potential to occur.*

### **San Miguel savory**

This species is a fragrant perennial herb which typically blooms from March through July. Potential habitat for this species includes, but is not limited to, areas supporting rocky substrates in chaparral and cismontane woodlands up to 1,075 meters elevation.

*The lack of appropriate soils and habitats makes this species have no potential to occur and is considered absent from the site.*

### **Wright's trichocoronis**

This is a low, slightly succulent sub-aquatic annual that blooms from May through September. It is commonly associated with alkali vernal plains and alkali playas, alkali annual grasslands, and alkali vernal pool habitats. The nearest known populations occur along the San Jacinto River near Romona Expressway and the northern shore of Mystic Lake. Wright's trichocoronis may occur on the Santa Rosa Plateau (Mesa de Burro) however it has not been reported to the CNDDDB.

*Soils on site are not suitable for this species therefore this species is not expected to occur. Additionally, the heavy disturbance onsite makes this species have no-low potential to occur.*

### **OTHER SENSITIVE OR PROTECTED SPECIES**

From the original list of 37 sensitive resources that have been reported to occur within the vicinity of the site, five have at least a moderate potential to occur within the subject property. These include:

Northwest San Diego pocket mouse (*Chaetodipus fallax fallax*)

Ferruginous hawk (*Buteo regalis*) (winter foraging only)

Northern harrier (*Circus cyaneus*) (foraging only)

White-tailed kite (*Elanus leucurus*) (foraging only)

Quino checkerspot butterfly (*Euphydryas editha quino*) (Nectaring only)

### **JURISDICTIONAL WATERS/ RIPARIAN, RIVERINE OR VERNAL POOLS**

The site does not support riparian vegetation or a blue-line stream. There is however a blue-line stream to the east of Highway 79 (Exhibits 3-4). This intermittent stream has been conserved in places through the HANS process as shown in Exhibit 2 and it appears as though any standing water on site would ultimately flow into the drain under Hwy 79 and connect with this blue line stream as discussed below. Additionally, a detention pond is proposed immediately south of the project site (illustrated as purple in Exhibit 3). Along the eastern boundary with HYW 79 there is a drain pipe under Highway 79 (Photo 4). This feature is located within the Cal Trans Right-of-Way and since the project applicant must dedicate an additional 40 feet along the eastern boundary to Cal Trans, the project will avoid at least 40-50 feet of land between the development and the drain. Soils in this location are gravelly and not clay hence any ponded water in this area is not expected to be considered a vernal pool but none the less may be considered suitable habitat for the fairy shrimp.

## CONCLUSIONS

This parcel supports suitable habitats for the burrowing owl, San Diego Ambrosia, Coulter's goldfields, and California Orcutt Grass therefore additional focused surveys for these species may be required by the County of Riverside Environmental Programs Department (EPD).

## RECOMMENDATIONS / MITIGATION

Below are listed recommended mitigation/minimization measures in addition to previously stated mitigation measures to reduce impacts to levels less than significant.

**RM-1-Burrowing owl.** Focused surveys for the burrowing owl are recommended prior to issuance of grading permits. If the burrowing owl is not present, an additional preconstruction survey will be required no more than 30 days prior to grading. If owls are in fact present they would be actively relocated to the San Jacinto Wildlife Area (DFG) where an existing relocation program is taking place with the County of Riverside.

**RM-2- Sensitive Plants.** Focused surveys for the California Orcutt grass, Coulter's goldfields and San Diego ambrosia are recommended prior to issuance of grading permit. If any of these species are found on site, additional mitigation may be necessary including restoration and/or avoidance.

**RM-3- Fairy Shrimp Analysis.** A certified fairy-shrimp biologist should assess the site to determine if the standing water onsite is suitable for endangered fairy shrimp. If this area is determined to be suitable, focused surveys may be required.

## SECTION II: MSHCP COMPLIANCE ANALYSIS

The site (APN #'s 467-170-070, 071, & 072) is located entirely within Criteria Cell 5275 of sub-unit (SU5) French Valley/Lower Sedco Hills. This area is within the Southwest Area Plan. Since the subject property is situated within at least one Criteria Cell the Habitat Acquisition and Negotiation Strategy (HANS) will be required. During this process the County may have conflicts with your proposed project and impose further mitigation or provisions.

The following discussion will outline conservation objectives described in the MSHCP for the subject parcel and analyze whether the proposed project will be considered consistent with the conservation strategy.

## BACKGROUND

In table 3-16 of the MSHCP, and page 3-427, Cell number 5275 will contribute to the assembly of proposed constrained linkage 18. Conservation within this cell is to concentrate on riparian scrub, woodlands and forest habitats and adjacent agricultural land proposed for conservation in Cell 5376 and 5279. Conservation of lands within this cell group range from 10-20% and focus primarily on the southern portion of the cell.

The proposed project site falls within the constrained linkage and contains agricultural lands however the site is within the north-central portion of the cell adjacent to Winchester Road (Highway 79).

The following species are listed as species intended for conservation within Southwestern Planning Area (Sub Unit 5):

- Bell's sage sparrow
- California horned lark\*
- California gnatcatcher
- White-tailed kite\*
- Swainson's hawk\*
- Grasshopper sparrow\*
- southern California rufous-crowned sparrow
- Quino checkerspot butterfly\*
- Los Angeles pocket mouse
- Western pond turtle
- Long-spined spineflower
- Munz's onion
- Palmer's grappling hook

From this list of 13 species, 5 have a potential to occur onsite based on habitat requirements of each individual species and current site conditions. These are indicated in the list above with an asterisk. None of these species were observed during the site visit. It should be noted that only suitable foraging habitat is present onsite for the Quino checkerspot butterfly (nectar sources onsite, no larval host plants observed), white-tailed kite, or Swainson's hawk.

#### **AREA PLAN GOALS AND CONSIDERATIONS**

This criteria cell has specific conservation goals. Below are listed the conservation goals (italicized) as well as the impacts construction of this site would have on those goals. The MSHCP has listed eight (8) criteria for consideration when proposing to conserve lands within Core Area 2. Below are listed the conservation objectives (abbreviated) as well as whether or not the proposed project interferes with the conservation goals:

1. Conserve clay soil supporting long-spined spineflower, munz's onion and Palmer's grapplinghook. *Although a small area of clay soils occur within the northwestern corner of the site, these species are not expected to occur due to the long standing disturbance to the site and the lack of clay soils on all but a small portion of the site. The development of this site is not expected to interfere with this conservation goal.*
2. Conserve a large block of habitat generally east of I-215 and south of Scott Road for Narrow endemic species. *The project site is surrounded by development therefore this site would not contribute to a large block of habitat and thus the development of this site will not interfere with this conservation goal.*

3. Provide connection to the SW Riverside County Multi-species Reserve. *Highway 79 separates this site from the preserve therefore there is no connection and development of this site will not interfere with this conservation objective.*
4. Determine presence of potential core area for the LA pocket mouse along Warm Springs Creek. *This site is not adjacent to Warm Springs Creek and the site unlikely supports LA Pocket mouse due to a lack of appropriate habitats and heavy disturbance.*
5. Maintain Core and Linkage Habitat for QCB. *Although the site is not considered "core" habitat for this species, it could provide foraging habitat which could enable QCB to access areas of higher quality breeding and larval habitats. Development of this site could impact this conservation goal.*
6. Maintain core linkage for bobcat. *Although this site provides foraging habitat for the bobcat, there is no denning habitat for this species. Additionally because the site is adjacent to Highway 79, any linkage may be considered a mortality sink for this species. It is unlikely that the development of this site will interfere with this conservation goal.*
7. Maintain core area for Western pond turtle. *No suitable habitat for the pond turtle occurs onsite. No impacts to this conservation objective will occur from the development of this site.*
8. Maintain core area for the Riverside Fairy shrimp. *Suitable habitat for the Fairy shrimp may occur onsite. No impacts to this conservation objective shall be permitted..*

## CONCLUSIONS

This site supports disturbed agricultural fields/non-native grasslands. There is a small area of the site which contains clay soils at the very northwestern corner of the site. There is also a small rock outcropping with buckwheat scrub in the center of the site (See exhibit 3). The development of this site will only have an impact on one of the eight conservation goals and impacts are not expected to be significant.

**CERTIFICATION:** *I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.*

Date: 5/9/06

Signed: 



Exhibit 1. General Site Location.

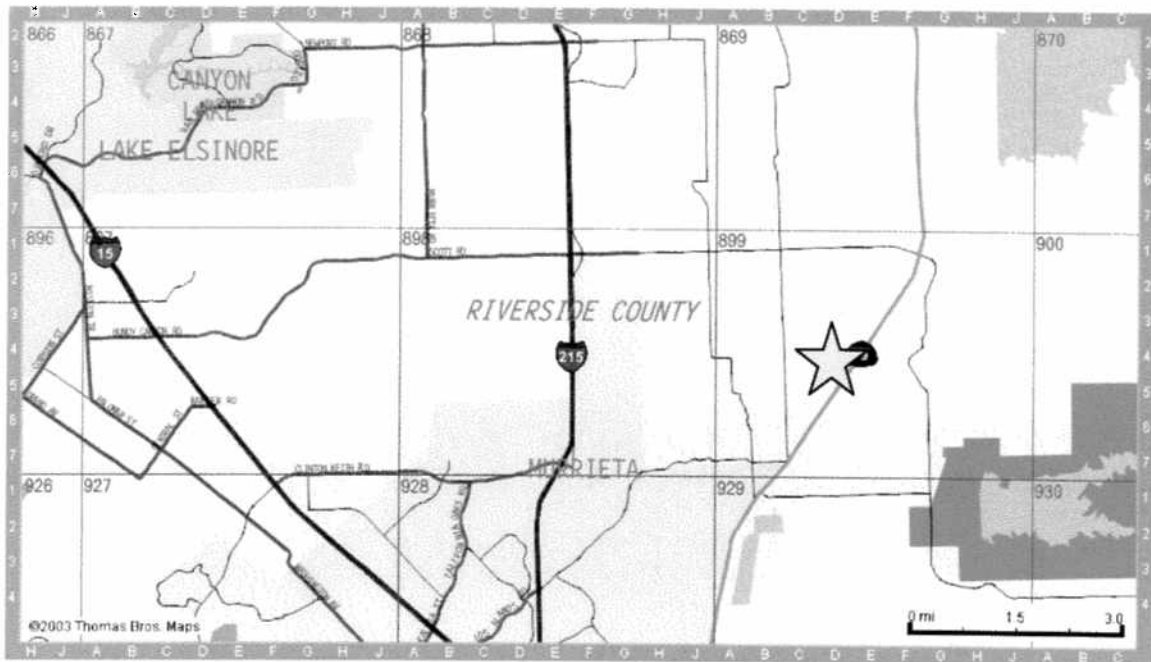
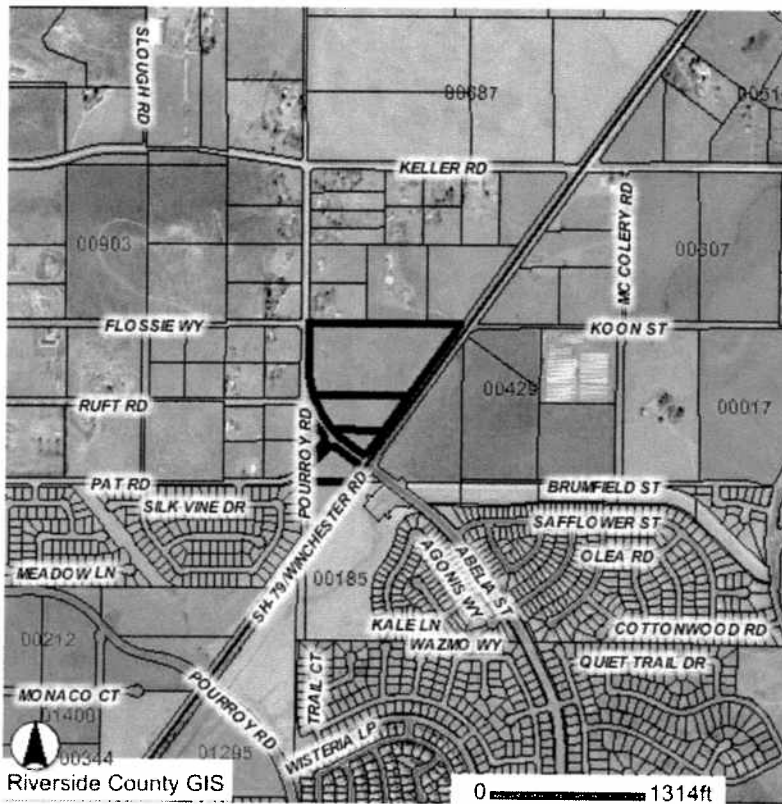
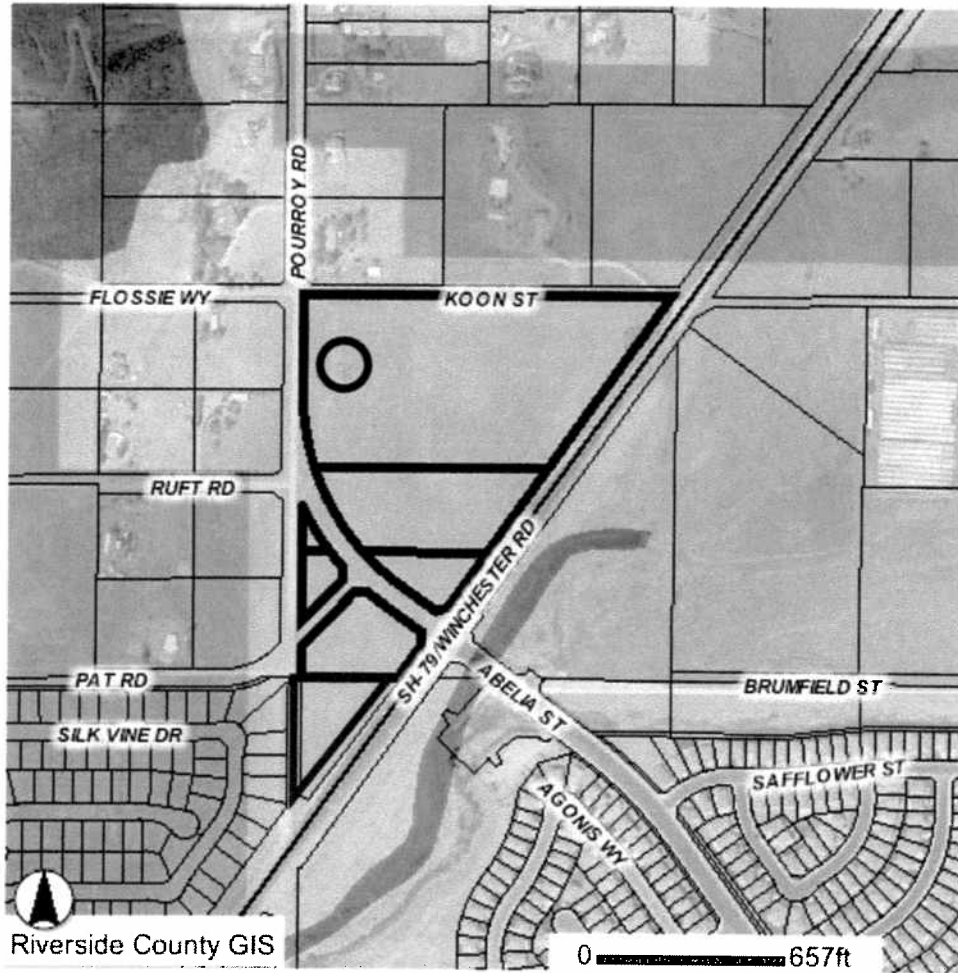


Exhibit 2. Site in relation to existing conserved lands shown in Green



**Exhibit 3. Aerial Photo showing parcel boundaries and habitat types.**








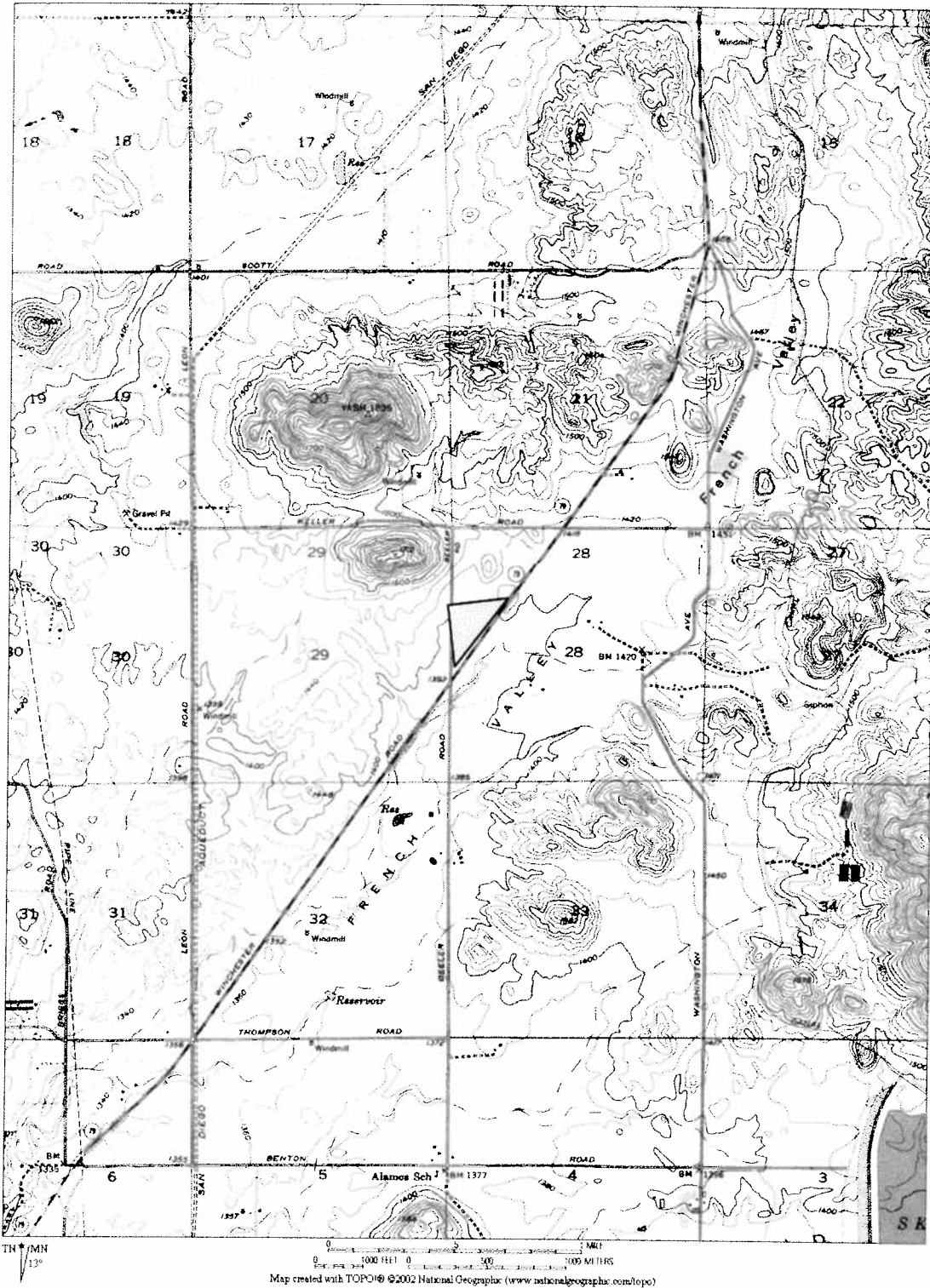
-  Grassland
-  Buckwheat scrub and rock outcrop
-  Blueline stream
-  Parcel boundaries
-  Proposed Detention pond

Exhibit 4. Site on topo map



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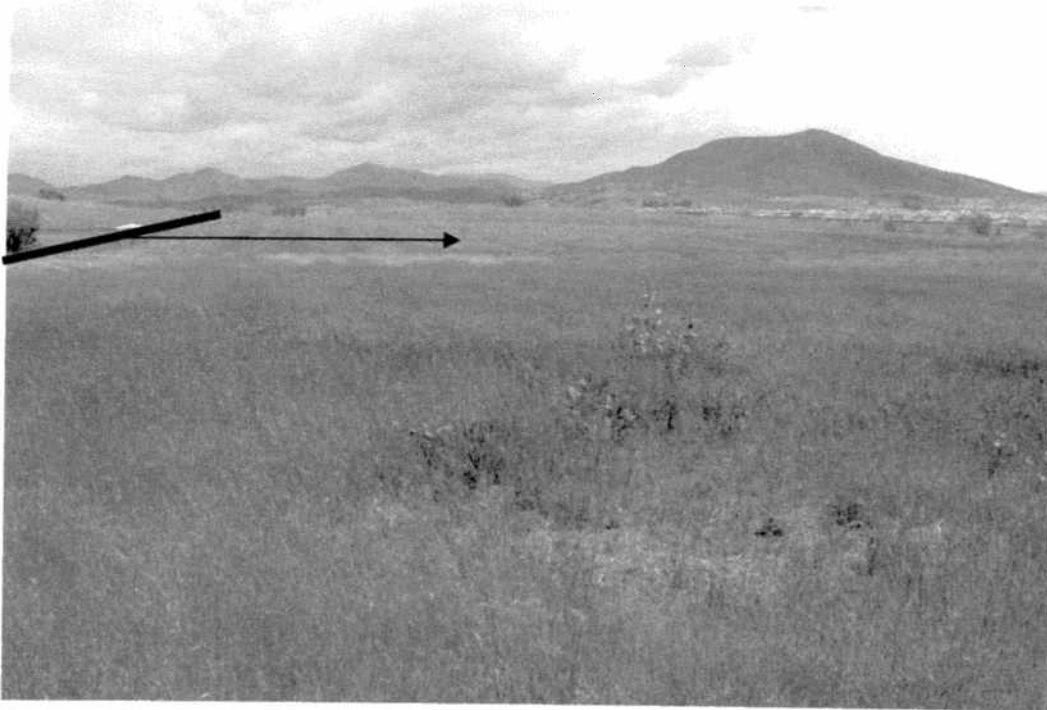
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## APPENDIX A FLORAL AND FAUNAL COMPENIUM

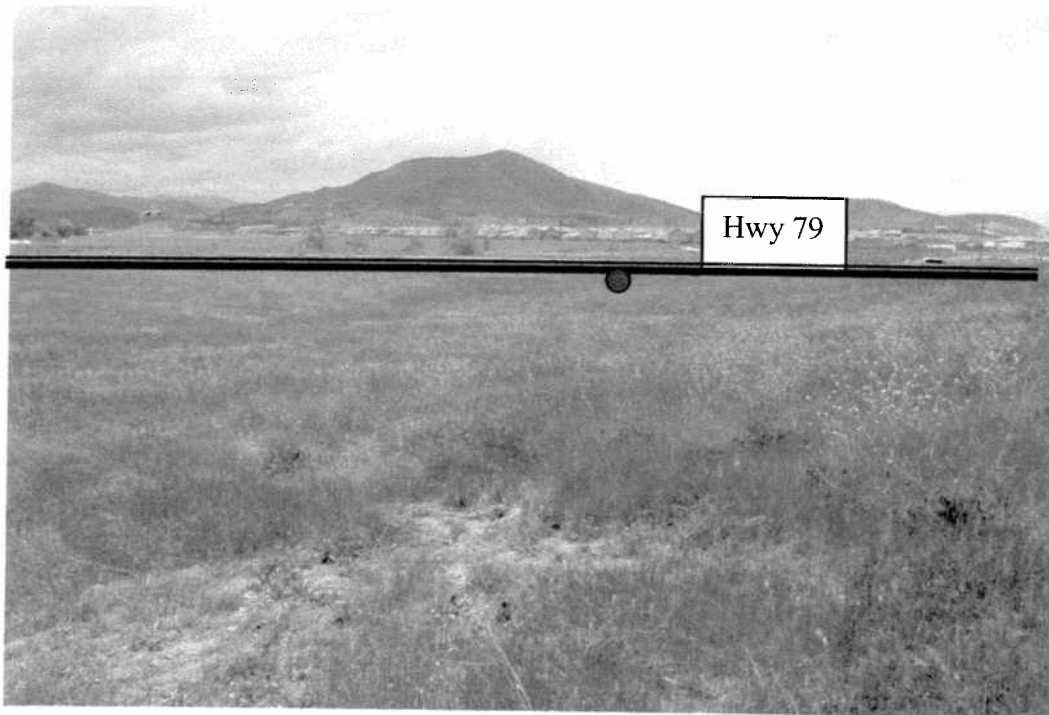
Scientific Names	Common Names
<b>PLANTS</b>	
<i>Amsinckia menziesii</i>	common fiddleneck
<i>Brassica sp.</i>	mustard
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Taraxacum officioanle</i>	Dandelion
<i>Matracaria matricarioides</i>	Pineapple weed
<i>Erodium sp.</i>	Red-stemmed filaree
<i>Rumex crispus</i>	Curley dock
<i>Raphanus sativus</i>	Wild radish
<i>Asclepias sp.</i>	Milkweed
<i>Lasenthia sp.</i>	Goldfields
<i>Avena sp.</i>	Foxtail grass
<b>WILDLIFE</b>	
<i>Gryllus sp.</i>	field cricket
<i>Tyrannus verticalis</i>	western kingbird
<i>Corvus corax</i>	common raven
<i>Canis latrans</i>	Coyote
<i>Sylvilagus audubonii</i>	Cottontail rabbit
<i>Buteo jamaicensis</i>	Red-tailed hawk
<i>Sturnella neglecta</i>	Meadow lark

**APPENDIX B – SITE PHOTOS**

**Photo 1. From NW corner looking east along northern half of project.**



**Photo 2. From center of site looking east at HWY 79 and ~location of drain pipe.**



**APPENDIX B – SITE PHOTOS**

**Photo 3. Typical burrow found on site (suitable for burrowing owl).**



**Photo 4. Drain located in Cal Trans Easement under HWY 79 along eastern boundary.**





# Attachment 2

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Focused Survey Report for Burrowing Owl and Rare Plants (Kidd Biological 2006)

**FOCUSED SURVEYS FOR THE  
BURROWING OWL, CALIFORNIA ORCUTT GRASS, COULTER'S  
GOLDFIELDS, LITTLE MOUSETAIL, SPREADING NAVARRETIA AND  
SAN DIEGO AMBROSIA.**

**APN# 467-170-070, -071, & -072**

**PAR # 00902**

**A 23.0 ACRE PROPERTY, TOTAL AREA SURVEYED: ~23.0 ACRES**

**PROJECT SITE LOCATION: IN SECTION 28 OF TOWNSHIP 6 SOUTH, RANGE 2  
WEST OF THE BACHELOR MOUNTAIN, USGS 7.5 MIN. TOPOGRAPHIC MAP**

**Prepared for:**

Pinnacle Winchester, LP  
c/o GMX - Gary Missirian  
15335 Morrison Street, STE 305  
Sherman Oaks, CA 91403

**Prepared by:**

Jeff W. Kidd Biological Consulting  
18562 Frantz Road  
Perris, Ca 92570

Contact: Jeff W. Kidd  
(951) 776.0304



**SURVEY DATES: JUNE 16, 23, JULY 7, & 12, 2006**

**REPORT DATE: JULY 16, 2006**

## INTRODUCTION

This report describes the findings of focused surveys for the burrowing owl (*Athene cunicularia*), California Orcutt Grass (*Orcuttia californica*), Coulter's goldfields (*Lasthenia glabrata* ssp. *Coulteri*), San Diego Ambrosia (*Ambrosia pumila*), Spreading navarretia (*Navarretia fossalis*), and Little mouseltail (*Myosurus minimus* ssp. *apus*). All work was conducted by Jeff W. Kidd Biological Consulting. It was determined during the initial habitat based site assessment, dated May 9, 2006, that suitable habitat(s) for the aforementioned species occur on site. Since suitable habitat(s) occur onsite, the County of Riverside EPD required focused surveys for these 6 sensitive resources to determine their presence or absence.

## PROJECT DESCRIPTION

The applicant proposes to develop the site as a commercial development. The development would include fast food, gas stations, retail and possibly storage. As described to us the applicant will dedicate a 40 foot easement along the entire eastern boundary to Cal Trans for Highway 79.

## SITE LOCATION

The subject property (APN#'s 467-170-070, 071, & 072) is located in the French Valley area of western Riverside County. The site is bounded to the south by Highway 79 – Winchester Road, the west by Pourroy Road, the north by Koon Road, and the south by Pat Road. The project location can also be described as being in the Bachelor Mountain CA U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map in Section 28 of Township 6 South, Range 2 West (Exhibits 1-4). Surrounding land uses include rural residential, highways, high-density residential and croplands. An adjacent, un-named, blue line stream to the south and east were conserved (Exhibit 2).

## LITERATURE REVIEW

A compilation of sensitive biological resources, including these six sensitive species, occurring in this area was derived from the California Department of Fish and Game (CDFG) Natural Diversity Database (CNDDB 2006) and the Riverside County Multiple Species Habitat Conservation Plan (MSHCP 2003). This information was used to help determine if and when these sensitive resources were previously reported on or directly adjacent to this project.

## SENSITIVE RESOURCES

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The CDFG, U.S. Fish and Wildlife Service (USFWS), and groups like the California Native Plant Society (CNPS) maintain special watch lists of such resources. Once the field survey was conducted, it was determined from several criteria, which sensitive resources have a low, moderate or high potential to occur on site. Criteria used to determine potentials of occupancy include, but are not limited to, soil types and conditions, habitat types and quality, disturbance, site history, adjacent land uses and proximity to nearest known extant populations of each respective species.

### **BURROWING OWL**

The burrowing owl is a small, pale, buffy-brown owl that is unique in its habit of nesting in subterranean burrows. It occurs in grassland and other open habitats throughout much of the western United States, with a disjunct population in Florida. In California, the species is often found in areas containing California Ground Squirrels (*Spermophilus beecheyi*), whose burrows are used by the owls. It is opportunistic in its use of burrow sites, and can use pipes or other suitable cavities at or below ground level. Burrows can be up to 10 feet long, and enlarged nesting chambers are constructed at the terminus. The entrances to burrows are often decorated with bits of animal dung, feathers, litter, and other objects. Clutches of up to 12 eggs are laid, primarily from February to May.

Typical habitats suitable for the burrowing owl consist of two parts. First, the overall habitat type can vary significantly but would fall under some of these major habitat types: annual and perennial grasslands, deserts, scrublands and agricultural or range lands with low growing, sparse vegetation. Second, and most importantly, the site would support burrows which are the most essential component of burrowing owl habitat. Burrows provide protection from predators, shelter from adverse weather and critical nest sites. Since the burrowing owl does not typically create its own burrows, it relies on the burrows made by fossorial mammals and reptiles such as ground squirrels, badgers, foxes, coyotes and the desert tortoise. Artificial burrows made by humans such as pipes, rock piles, agricultural ditches and canals also provide suitable burrows.

### **SAN DIEGO AMBROSIA**

This perennial herb blooms from May-September. It spreads by rhizomes and can be found in chaparral, coastal scrubs, grasslands, and adjacent to vernal pools. It is often found in disturbed areas with mesic soils. It is proposed endangered by the federal government.

### **COULTER'S GOLDFIELDS**

This annual herb which blooms from February through June is found in marshes, swamps, playas and vernal pools. The literature clearly identifies the San Jacinto River (SJR) flood plain from Lakeview to Railroad Canyon as a critical area for this species. Suitable habitats for this species found along the flood plain are alkali scrub, alkali playas, vernal pools and alkali grasslands.

### **CALIFORNIA ORCUTT GRASS**

The California Orcutt grass is also a sensitive plant species that is listed Federal and State Endangered and CNPS 1B. This species is a low, obscure annual grass that blooms from April through June and appears to be strongly adapted to wind pollination. This species is known to occur primarily in three vernal pool sites in Riverside County however this species has also been found in grasslands, meadows, marshes, agricultural lands and playas supporting adequate hydrology and appropriate soils. Extant populations have been found in southern basaltic claypan vernal pools at the Santa Rosa Plateau and alkaline vernal pools at Skunk Hollow and at Salt Creek west of Hemet.

**LITTLE MOUSETAIL**

This annual herb blooms from March- June in grasslands and vernal pools with alkali or clay soils. It is most often associated with other Alkali-dependant species such as saltscale, vernal barley and smooth tarplant. It is known from three core populations: Salt Creek in Hemet, and two populations on the Santa Rosa Plateau. It is also known to occur in Harford Springs Park in the Gavilan Hills and from a recent observance in French Valley (D. Bramlet 2001).

**SPREADING NAVARRETIA**

This small, herbaceous annual that blooms from May through June is listed as Federally Threatened and CNPS 1B. Spreading navarretia is associated with vernal pools, depressions and ditches in areas that once supported vernal pools. Floodplains dominated by annual alkali grasslands or alkali playas are considered suitable habitats. Extant populations are documented on the Santa Rosa Plateau, Hemet and along the San Jacinto River from Mystic Lake south to the Perris Valley Airport.

**FOCUSED SURVEY METHODS****BURROWING OWL SURVEYS**

Protocol survey methods followed detailed procedures provided in the MSHCP Burrowing Owl Survey Instructions dated March 29, 2006. Focused burrow and burrowing owl surveys were conducted to determine if the subject property supports nesting burrowing owls.

Since burrowing owls are crepuscular, surveys are conducted during early mornings and or late evenings when they are most active above ground. A series of four protocol surveys (on separate days) were conducted during times lacking rain, high winds, and temperatures over 90 degrees. Since we experienced temperatures in the 100's during the survey period, surveys were conducted when temperatures were below 80 degrees. Pedestrian surveys involved walking 20 foot transects across the entire site including adjacent lands when accessible (Exhibit 3). All lands within 150 meters of the subject property that were not accessible were surveyed using binoculars and 60X spotting scopes. All burrows, suitable refuge sites, owl sign (feathers, excrement, pellets, nest material, tracks), and owls detected during the surveys were photographed and mapped on the 7.5 min USGS Map (Exhibit 3, Photo 3).

Surveys were conducted on the evenings of June 16, 23, and the mornings of July 7 and 12, 2006. Weather conditions during these surveys were all mild with no extreme wind, heat, cold or precipitation.

**PLANT SURVEYS**

The entire site was surveyed by foot by biologist Jeff W. Kidd on June 16 & 23, 2006 between 1400 and 1730 hours (prior to owl surveys). Approximately 20-foot transects were walked from west to east starting at the northwest corner of the site. All plants were identified and recorded in a field notebook. Any plants that were not identified in the

field were collected to be identified in the office using references such as field guides and the Jepson Manual (Hickman 1993). One area of the site which was mapped as containing clay soils was surveyed more intensely than the remainder of the site as four of the plants being surveyed for are known to occur in clay soils or within vernal pools which often occur in clay soils.

## **RESULTS**

### **LITERATURE REVIEW**

The CNDDDB (2006) identified the burrowing owl, San Diego Ambrosia, California Orcutt Grass, and Spreading navarretia as having been previously reported within the Bachelor Mtn., CA USGS topographic quadrangle. These locations were however some distance away from the subject parcel. A fairly large colony of burrowing owl was known to previous nest directly adjacent to this parcel prior to 2005 however these owls were displaced from a recent housing development (J. Kidd personal research). Coulter's goldfields and Little mousetail were not previously reported as occurring in this vicinity.

### **RAINFALL**

According to Riverside County Flood Control district's web site, average rainfall for Hemet-Ryan airport (nearest gauging station) is 12.55 inches per year. During the first six months of the year they have accumulated 6.3 inches therefore they are on-track for an average or slightly below-average rainfall.

### **SITE CONDITIONS AND NATURAL COMMUNITIES**

Currently the site support a variety of habitats including non-native grassland, buckwheat scrub, and disturbed developed. The site has been heavily disturbed due to a history of farming and disking hence only a small patch of buckwheat scrub is located within a rock outcropping in the northwestern portion of the project (Appendix B, photos 1-4). In addition to the disturbance from farming, the southern end of the project site is subject to a significant amount of disturbance from the Abelia Street road construction which is located in the southern half of the proposed project. The parcel in question is relatively flat with elevations ranging from 1375-1417 feet above sea level. Numerous burrows were observed throughout this project site. Adjacent land uses include residential to the southwest, rural residential to the west and north, Highway 79 and residential to the east.

### **SOILS**

Soils were based on USDA Soils Conservation Service Maps (USDA 1968) and the Natural Resources Conservation Service – Web Soil Survey (2006). Soils onsite are mostly disturbed from a long standing history of disking and some recent road construction activities on site. The soils are predominantly classified as loams however 1.4 acres located in the extreme northwest corner of the project supports clay soils. Soils on site include the following types (Exhibit 2):

- Southern portion of project = (BkC2) Buchenau silty loam, 2-8% slopes, eroded
- Center portion of project = (EcD2) Escondido fine sandy loam, 8-15% slopes

- Extreme northwest corner only = (AaF) Altamont clay, 25-50% slopes
- North and East portion of project = (FwE2) Friant fine sandy loam, 5-25% slopes
- Center of project along HWY 79 = (LoF2) Lodo gravelly loam, 15-25% slopes

### **BURROWING OWL**

Numerous burrows were observed on site during the initial habitat assessment and again during the focused surveys. These burrows were concentrated around a rock outcrop with buckwheat scrub (Exhibit 3). However, no burrowing owls or their sign were detected on site during the 4 protocol surveys. Additionally, no owls were observed on the adjacent parcels to the north or west where surveys were conducted with binoculars and 60x spotting scopes since access was not permitted. The adjacent parcel to the west supported one nesting pair during 2004 however this pair is no longer nesting on site.

### **SENSITIVE PLANTS**

After having conducted two focused surveys, none of the 5 sensitive plant species were observed on site.

### **CONCLUSIONS**

No burrowing owls or sensitive plants were observed within the subject property during the 2006 field season. No direct impacts are expected to occur to the burrowing owl or to the five sensitive plant species by the development of this property.

### **CONCLUSION STATEMENT**

Implementation of this project while following the recommendations identified below will reduce the potential for significant adverse impacts to those below a level of significance.

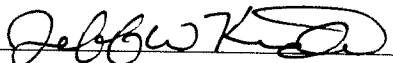
### **RECOMMENDATIONS / MITIGATION**

**RM 1** - All native breeding birds, regardless of their listing status, are protected under the Migratory Bird Treaty Act (MBTA). Potential impacts to the breeding birds are considered significant under the California Environmental Quality Act (CEQA). Since nesting birds, including the California horned lark, occur on site it is important that you comply with the MBTA and the California Dept. of Fish and Game (CDFG) Code Regulations 3500 and 3800 which protect nesting birds. In order to comply with these state and federal regulations all future clearing and grubbing should be conducted outside the bird nesting season.

**RM 2** – Conduct a pre-construction survey for the burrowing owl no more than 30 days prior to construction to ensure owls have not dispersed on site since the time of this survey.

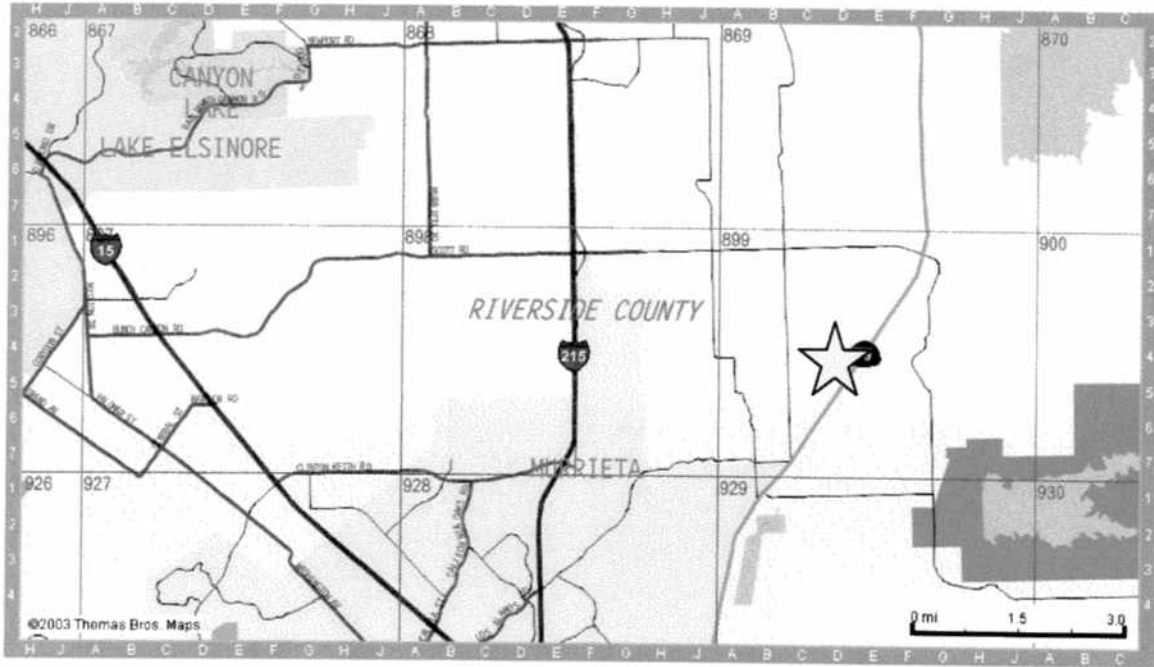
**CERTIFICATION:** *I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.*

Date: 7-16-06

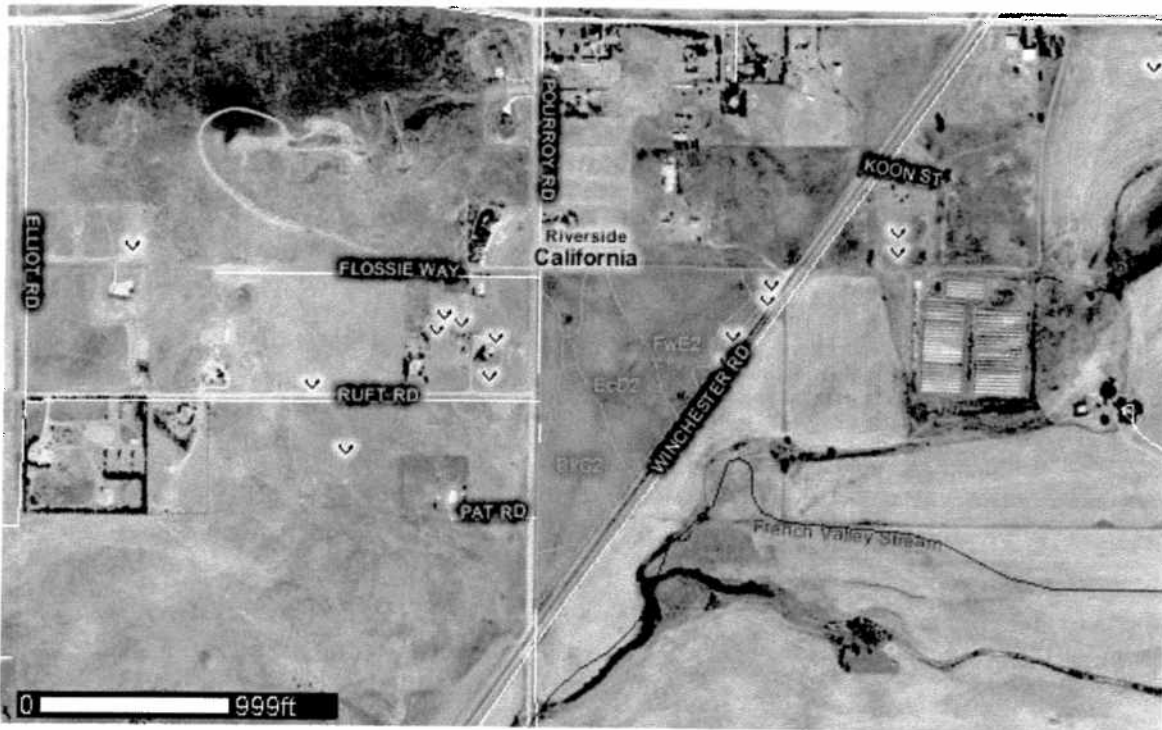
Signed: 



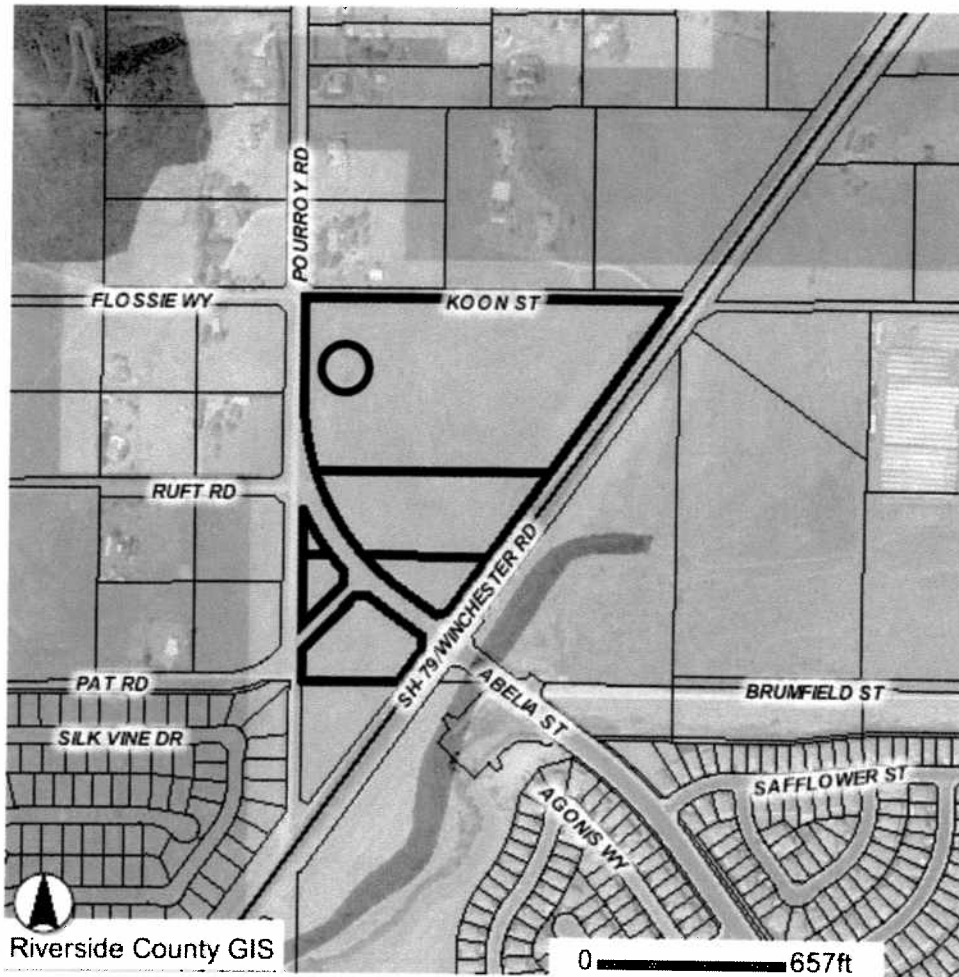
**Exhibit 1. General Site Location.**



**Exhibit 2. On-site Soils**



**Exhibit 3. Aerial Photo showing parcel boundaries and habitat types.**







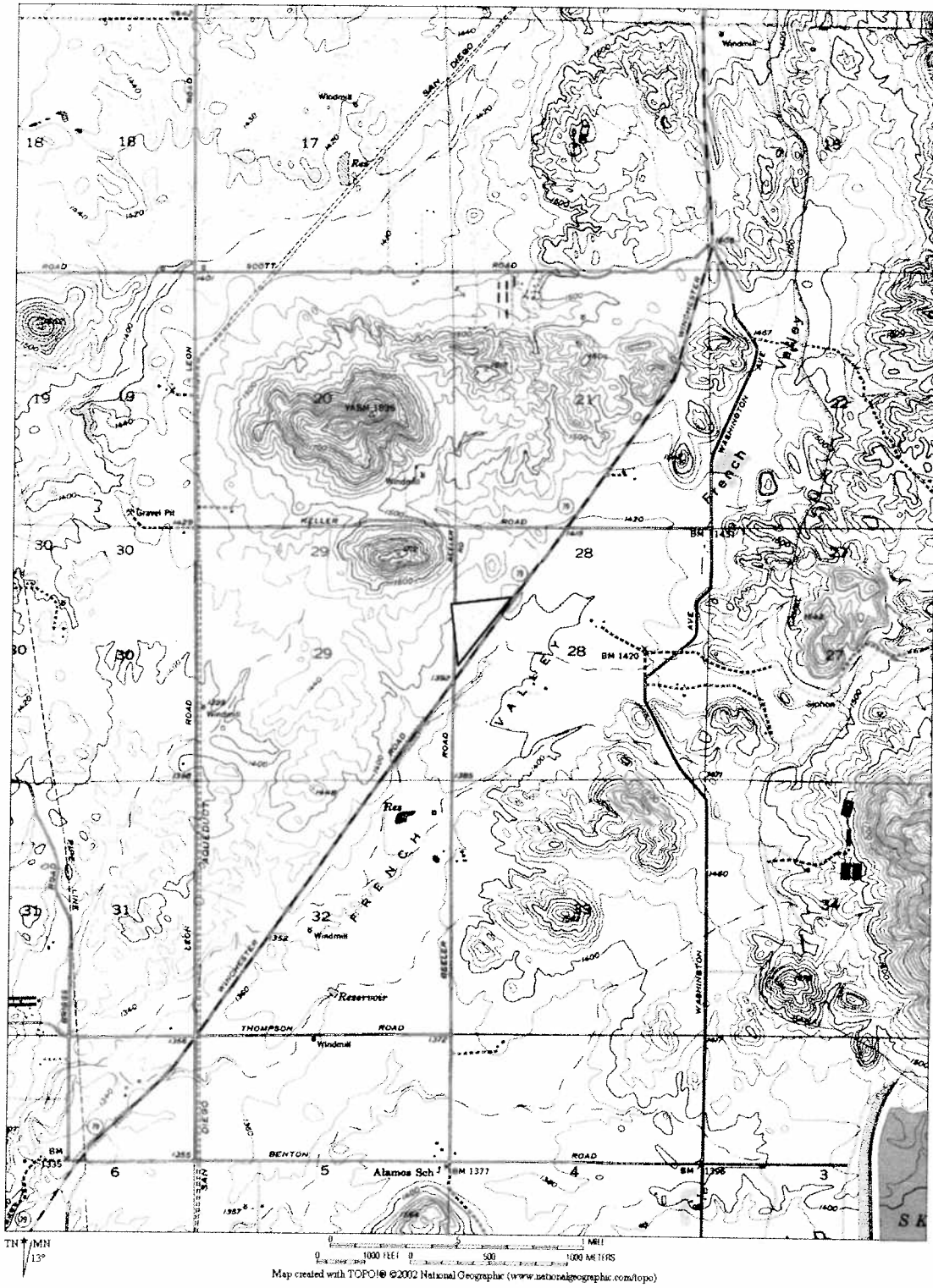
-  Grassland
-  Blueline stream
-  Buckwheat scrub and rock outcrop  
(location of suitable burrows)
-  Parcel boundaries

Exhibit 4. Site on topo map



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## APPENDIX A FLORAL AND FAUNAL COMPENIUM

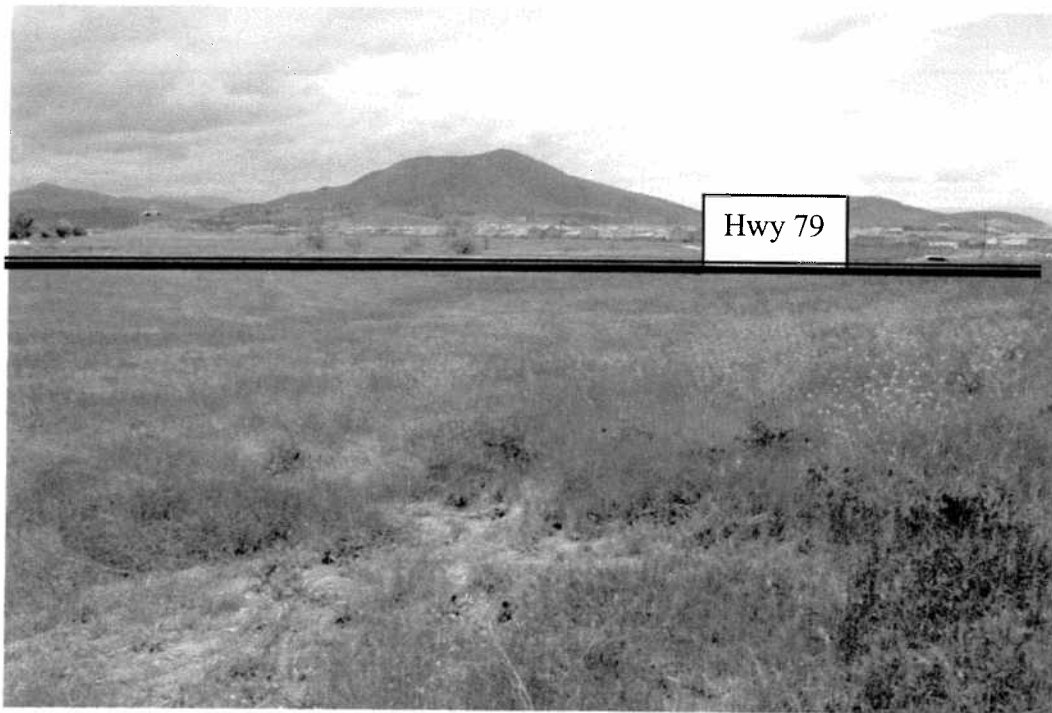
Scientific Names	Common Names
<b>PLANTS</b>	
<i>Amsinckia menziesii</i>	common fiddleneck
<i>Brassica sp.</i>	mustard
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Taraxacum officioanle</i>	Dandelion
<i>Matracaria matricarioides</i>	Pineapple weed
<i>Erodium sp.</i>	Red-stemmed filaree
<i>Rumex crispus</i>	Curley dock
<i>Raphanus sativus</i>	Wild radish
<i>Asclepias sp.</i>	Milkweed
<i>Lasenthia sp.</i>	Goldfields
<i>Avena sp.</i>	Foxtail grass
<b>WILDLIFE</b>	
<i>Gryllus sp.</i>	field cricket
<i>Tyrannus verticalis</i>	western kingbird
<i>Corvus corax</i>	common raven
<i>Canis latrans</i>	Coyote
<i>Sylvilagus audubonii</i>	Cottontail rabbit
<i>Buteo jamaicensis</i>	Red-tailed hawk
<i>Sturnella neglecta</i>	Meadow lark

**APPENDIX B – SITE PHOTOS**

**Photo 1. From NW corner looking east along northern half of project.**



**Photo 2. From center of site looking east at HWY 79**



**APPENDIX B – SITE PHOTOS**

**Photo 3. Typical burrow found on site (suitable for burrowing owl).**



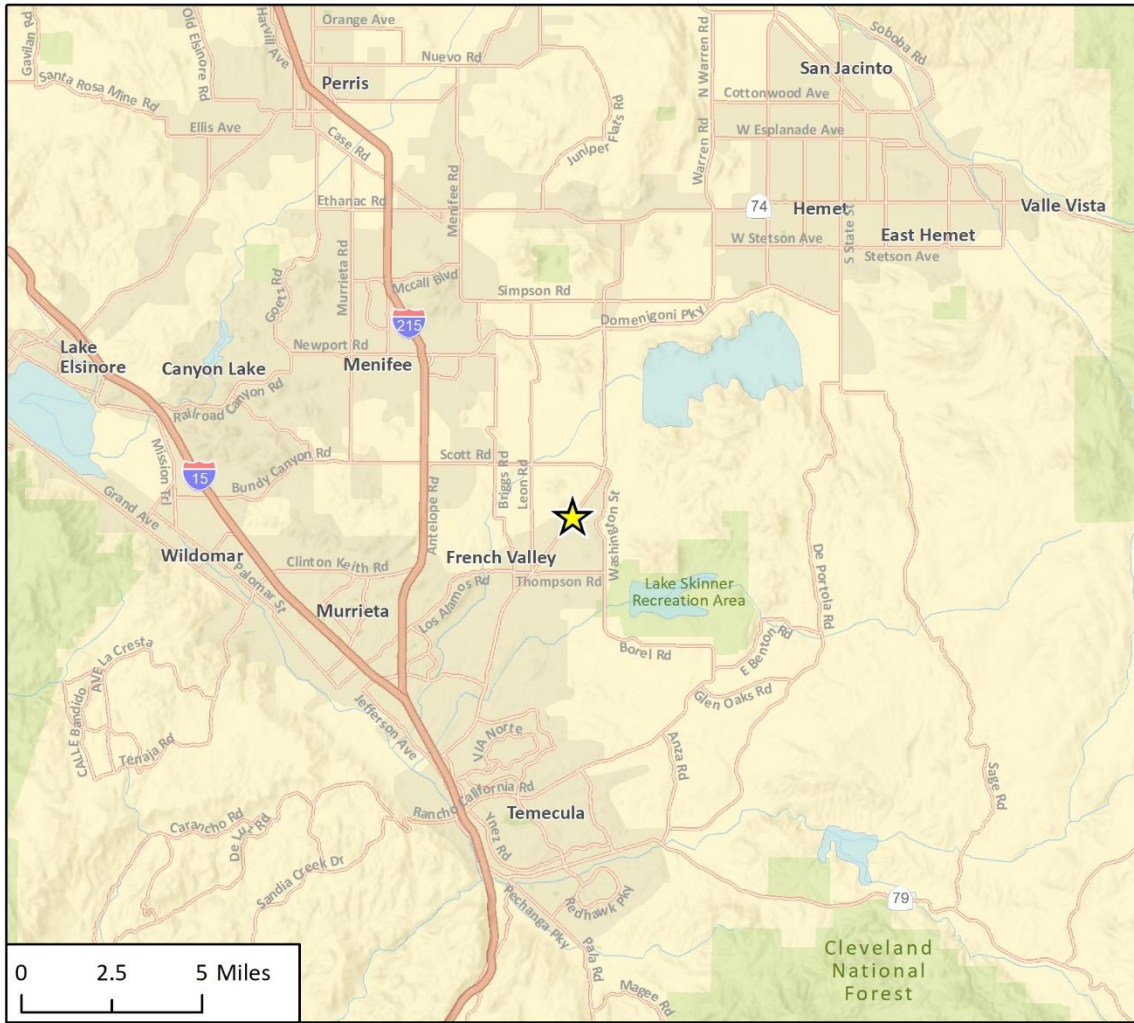


# Attachment 3

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Figures

**Figure 1 Regional Location**



Imagery provided by Esri and its licensors © 2021.

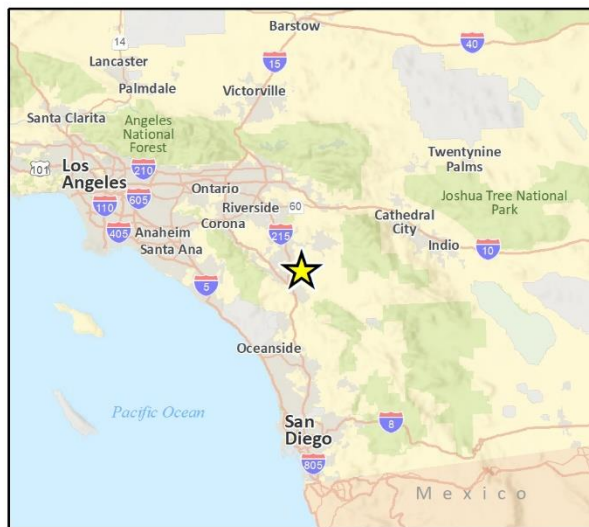


Fig. 1. Regional Location

Figure 2 Project Location – Site Plan



Imagery provided by Microsoft Bing, Esri and their licensors © 2022.

Fig. X Project Location - Site Plan

Figure 3 Project Location with 500 ft Buffer

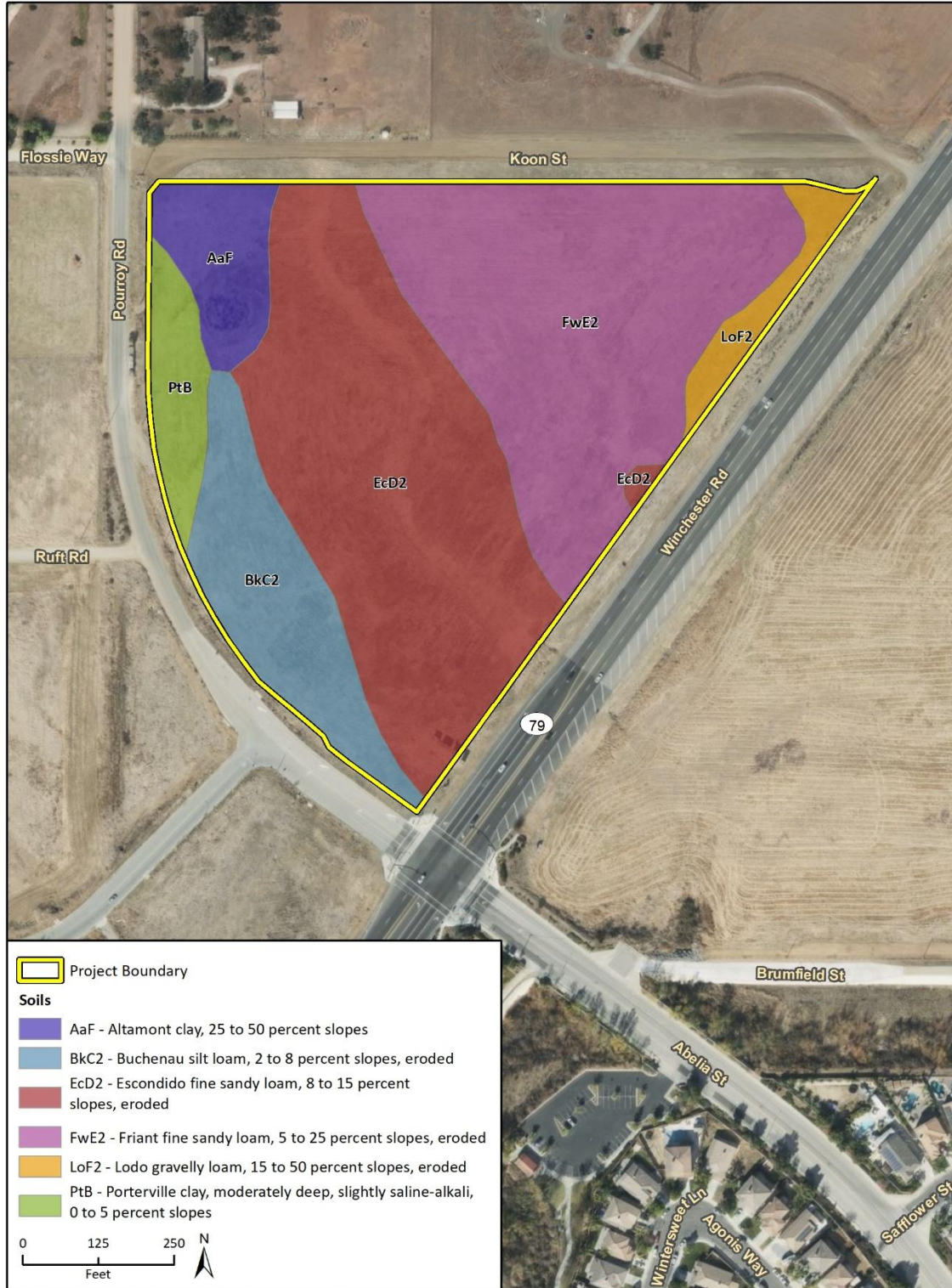


Figure 4 Site Topographic Map



Basemap provided by National Geographic Society, Esri, and their licensors © 2022. Bachelor Mtn. Quadrangle, T06.05 R02.0W S28. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

**Figure 5 Soils Map**



Imagery provided by Microsoft Bing, Esri and their licensors © 2022.  
 Additional data provided by USDA, 2022

Fig. X Soils

# Attachment 4

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Representative Site Photographs



**Photograph 1.** Culvert entrance under Pourroy Road near the Pat Road intersection.



**Photograph 2.** View of the project site facing east from the intersection at Pourroy Road and Ruft Road.





**Photograph 3.** Facing north at the patch of California buckwheat in the northwest portion of the site.



**Photograph 4.** View of clay soils on site that show evidence of retained moisture.



**Photograph 5.** Facing north from the center of the site.



**Photograph 6.** Culvert under Highway 79 (Winchester Road) northeast of the intersection with Pourroy Road/Abelia Street.

# Attachment 5

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RCA JPR # 06-07-26-03 issued 9/1/2006



# RCA Joint Project Review (JPR)

JPR #: 06 07 26 03

Date: 9/1/06

## Project Information

Permittee:	<b>Riverside County</b>
Case Information:	<b>HANS 1512</b>
Site Acreage:	<b>20 acres</b>
Portion of Site Proposed for MSHCP Conservation Area:	<b>0 acres</b>

## Criteria Consistency Review

**Consistency Conclusion:** *The project demonstrates compliance with both Criteria and other Plan requirements.*

### Data:

Applicable Core/Linkage: Proposed Constrained Linkage 18  
 Area Plan: Southwest Area Plan

APN	Sub-Unit	Cell Group	Cell
467170070	SU5 - French Valley/Lower Sedco Hills	Independent	5275
467170071			
467170072			

### Comments:

- a. Proposed Constrained Linkage 18 consists of an unnamed drainage located in the south-central region of the Plan Area. This Constrained Linkage connects Proposed Core 2 (Antelope Valley) to the west with Proposed Extension of Existing Core 7 (Lake Skinner/Diamond Valley Lake Extension). Existing agricultural use constrains the Linkage, and planned land uses surrounding the Linkage are limited nearly entirely to community Development. The Linkage also has a relatively high proportion of land affected by edge (approximately 250 acres of the total 310 acres) and will also be subject to Edge Effects also due to the widening or extension of several facilities, including Washington Street, Briggs Road, and SR-79. The dimensional data provided for the Proposed Constrained Linkage indicate a width ranging from 600 to 800 feet.
- b. Conservation within Cell 5275 will contribute to assembly of Proposed Constrained Linkage 18. Conservation within this Cell will focus on riparian scrub, woodland and forest habitat, and adjacent agricultural land. Areas conserved within this Cell will be connected to riparian scrub, woodland and forest habitat, and agricultural land proposed for conservation in Cell 5376 to the south and to agricultural land proposed for conservation in Cell 5279 to the east. Conservation within this Cell will range from 10%-20% of the Cell focusing in the southern portion of the Cell.



## RCA Joint Project Review (JPR)

JPR #: 06 07 26 03

Date: 9/1/06

- c. The applicant is planning to develop the site with a commercial development that will include a fast food restaurant, gas station, retail, and possibly storage. The Applicant is not planning to contribute land to conservation under the MSHCP but is planning to set aside a narrow strip of land associated with a drain pipe under highway 79 as a Cal Trans right-of-way. The configuration and size of the proposed development is consistent with the Reserve Assembly objectives for this area, as it is located on the northwest side of Winchester Road, away from the area described for conservation for Proposed Constrained Linkage 18. Therefore, it is not anticipated that implementation of the project would conflict with Reserve Assembly in this area.

### Other Plan Requirements

#### ***Data:***

Section 6.1.2 – Riparian/Riverine/Vernal Pool Mapping Provided:

Yes. Information was provided.

Section 6.1.3 – Narrow Endemic Plant Species Surveys Provided:

Yes. The project site is located within Narrow Endemic Plant Species Survey Area 4.

Section 6.3.2 – Additional Species Surveys Provided:

Yes. The project site is located within Criteria Area Species Survey Area 4, as well as the burrowing owl survey area.

Section 6.1.4 – Guidelines Pertaining to Urban/Wildland Interface:

No. Project design features were not included in the application materials.

#### ***Comments:***

- a. Based on the *MSHCP Compliance Report Including General Biological Analysis and Focused Habitat Assessment* conducted by Jeff W. Kidd, May 9, 2006, and based on a site visit by EPD biologists Jared Bond and Michael Richard in May 2006, the site does not include riparian/riverine areas, areas of ponding, vernal pools, or fairy shrimp habitat. The property is relatively flat and has been heavily disturbed due to a history of farming and disking and nearby road construction activities. The project demonstrates compliance with Section 6.1.2 of the MSHCP.
- b. The project site is located within Narrow Endemic Plant Species Survey Area 4, which includes Munz's onion, San Diego ambrosia, many-stemmed dudleya, spreading navarretia, California Orcutt grass, and Wright's trichocoronis. According to the *MSHCP Compliance Report Including General Biological*



## RCA Joint Project Review (JPR)

JPR #: 06 07 26 03

Date: 9/1/06

*Analysis and Focused Habitat Assessment* conducted by Jeff W. Kidd, April 26, 2006, and the *Focused Surveys for the Burrowing Owl, California Orcutt Grass, Coulter's Goldfields, Little Mouseling, Spreading Navarretia and San Diego Ambrosia*, conducted by Jeff Kidd on June 16 and 23, 2006, and July 7 and 12, 2006, the site does not include habitat for San Diego ambrosia, many-stemmed dudleya, or San Miguel savory. Very low to low-moderate habitat exists on the site for San Diego ambrosia, spreading Navarretia, and California Orcutt grass; however, the focused surveys of the site, conducted by Jeff Kidd on June 16 and 23, 2006, revealed that none of the NEPSSA 4 plants are present on the site. Though the Jeff Kidd biological report dated July 16, 2006, did not specifically address Munz's onion on the site, a follow-up letter to Michael Richard of the EPD clarifies that, while there is a very low probability of Munz's onion occurring on the clay soils in the northwest corner of the site, the plant was not found during the April 2006 survey. The project demonstrates compliance with Section 6.1.3 of the MSHCP.

- c. The project site is located within the burrowing owl survey area and within Criteria Area Species Survey Area 4, which includes Davidson's saltscale, parish's brittlescale, thread-leaved brodiaea, smooth tarplant, round-leaved filaree, Coulter's goldfields, and little mouseling. Focused surveys were conducted for the burrowing owl by Jeff Kidd on June 16 and 23, 2006, and July 7 and 12, 2006, which revealed that no burrowing owls or their signs were detected on the site. The project is required to conduct burrowing owl surveys prior to construction. According to the biological reports, the site does not include habitat for parish's brittlescale, Davidson's saltscale, smooth tarplant, or round-leaved filaree, based on a lack of suitable soils and the heavy disturbance of the site. Though there is a low-moderate probability of thread-leaved brodiaea, Coulter's goldfields, and little mouseling, none of these species were detected on the site during the June 16 and 23, 2006, focused plant surveys conducted by Jeff Kidd. No other surveys were required. Based on the information provided, the project demonstrates compliance with Section 6.3.2 of the MSHCP.
- d. To preserve the integrity of area dedicated as MSHCP Conservation Areas, which is proposed to occur adjacent to development, the guidelines contained in Section 6.1.4 related to controlling adverse effects for development adjacent to the MSHCP Conservation Area should be considered by the Permittee in their actions relative to the project. Specifically, the Permittee should include as project conditions of approval the following measures:
  - i. Incorporate measures to control the quantity and quality of runoff from the site entering the MSHCP Conservation Area. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Conservation Area. The greatest risk is to riparian habitats north of the project site.
  - ii. Land uses proposed in proximity to the MSHCP Conservation Area that use chemicals or generate bioproducts such as manure, which are potentially toxic or may adversely affect wildlife species, habitat, or water quality, shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area. The greatest risk is from landscaping fertilization overspray and run-off.



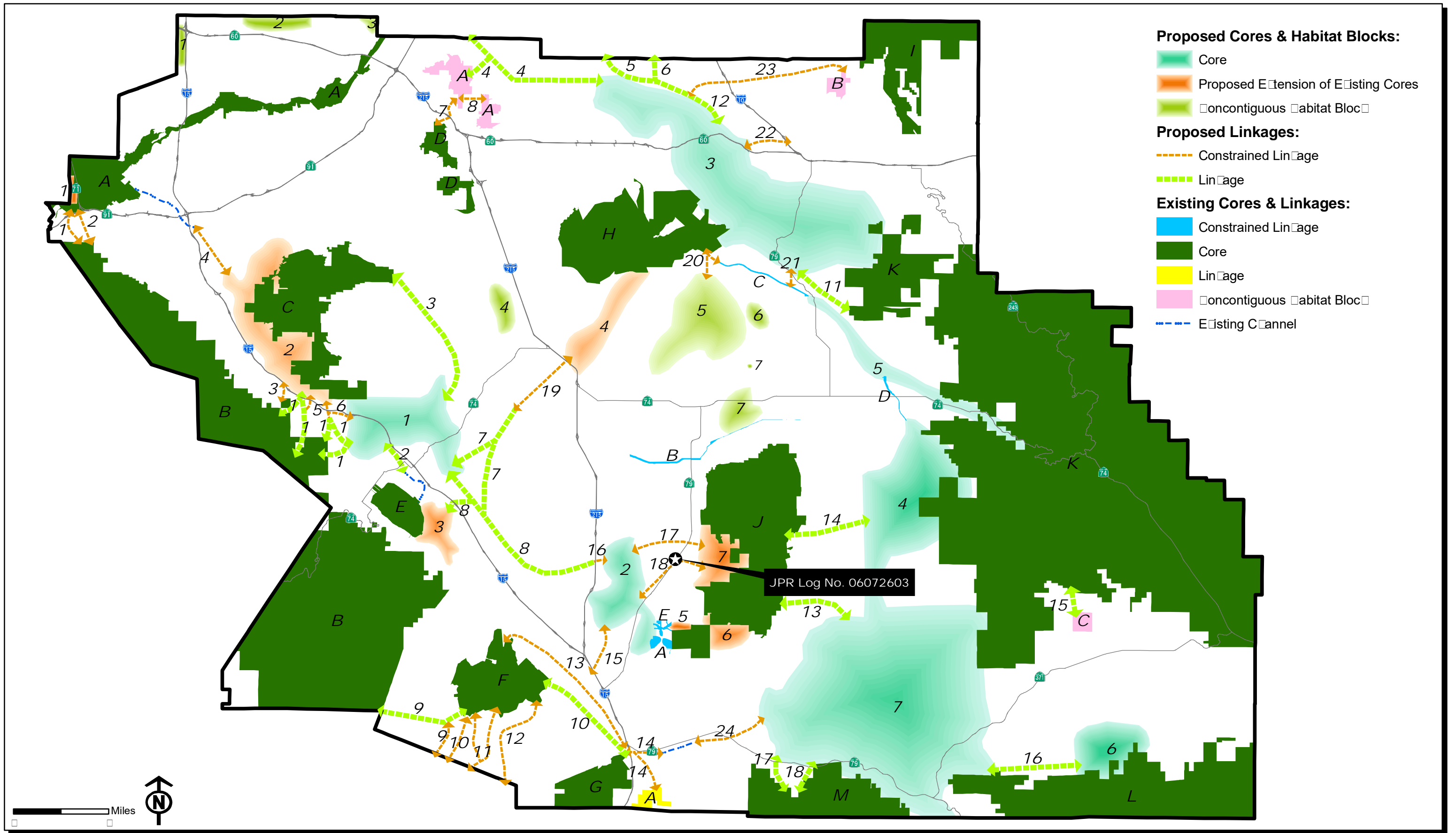
## RCA Joint Project Review (JPR)

JPR #: 06 07 26 03

Date: 9/1/06

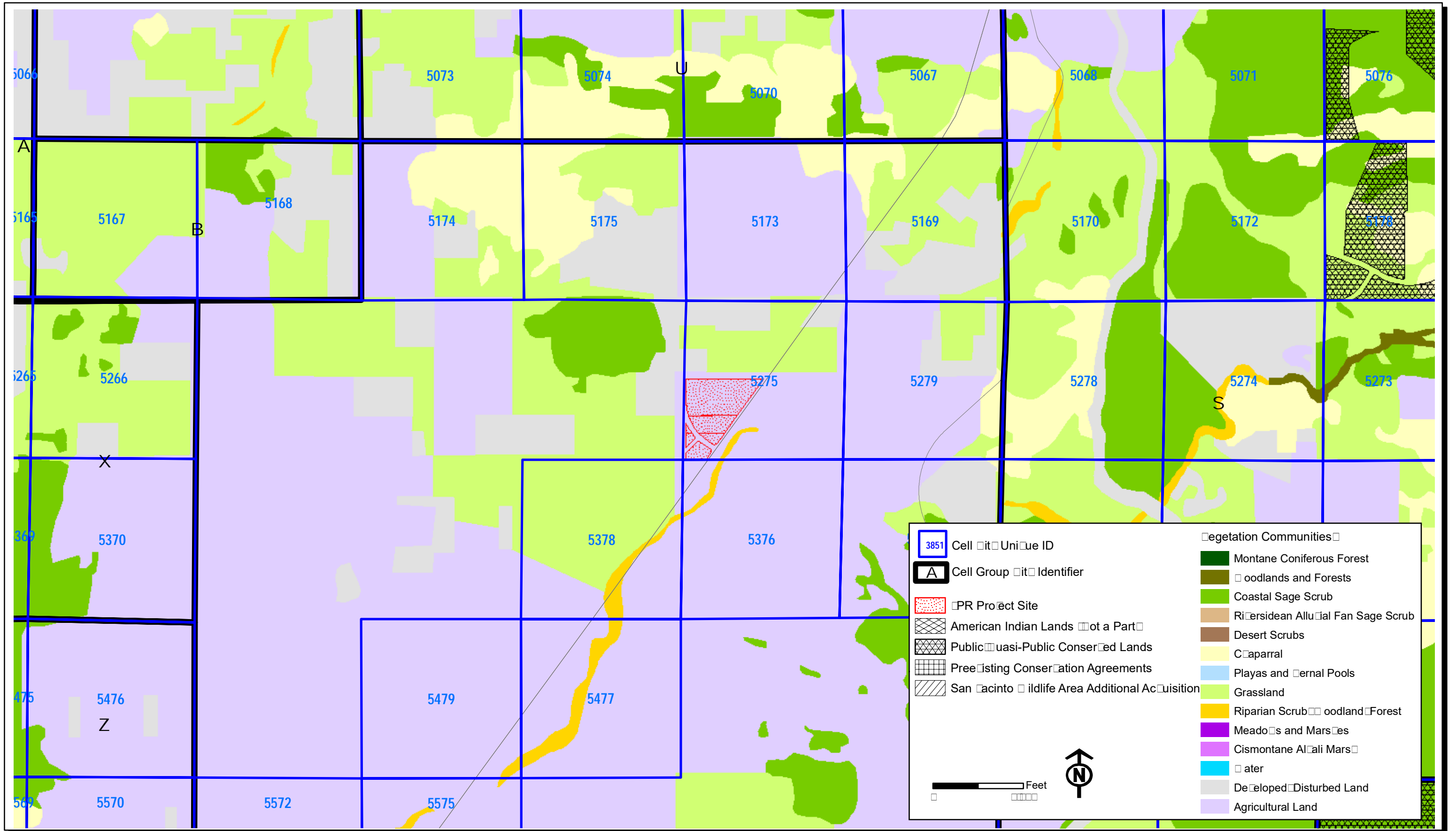
- iii. Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding shall be incorporated in project designs to ensure ambient lighting in the MSHCP Conservation Area is not increased. In this instance, focused habitat occurs in close proximity to the west, south, and southeast; shielding should focus on these areas.
- iv. Proposed noise-generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms, or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards.
- v. Consider the invasive, non-native plant species listed in *Table 6-2* of the MSHCP in approving landscape plans to avoid the use of invasive species for the portions of the project that are adjacent to the MSHCP Conservation Area. Considerations in reviewing the applicability of this list shall include proximity of planting areas to the MSHCP Conservation Areas, species considered in the planting plans, resources being protected within the MSHCP Conservation Area and their relative sensitivity to invasion, and barriers to plant and seed dispersal, such as walls, topography, and other features.
- vi. Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate, in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping into the MSHCP Conservation Areas. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage, and/or appropriate mechanisms.
- vii. Manufactured slopes associated with the proposed site development shall not extend into the MSHCP Conservation Area.

EAL



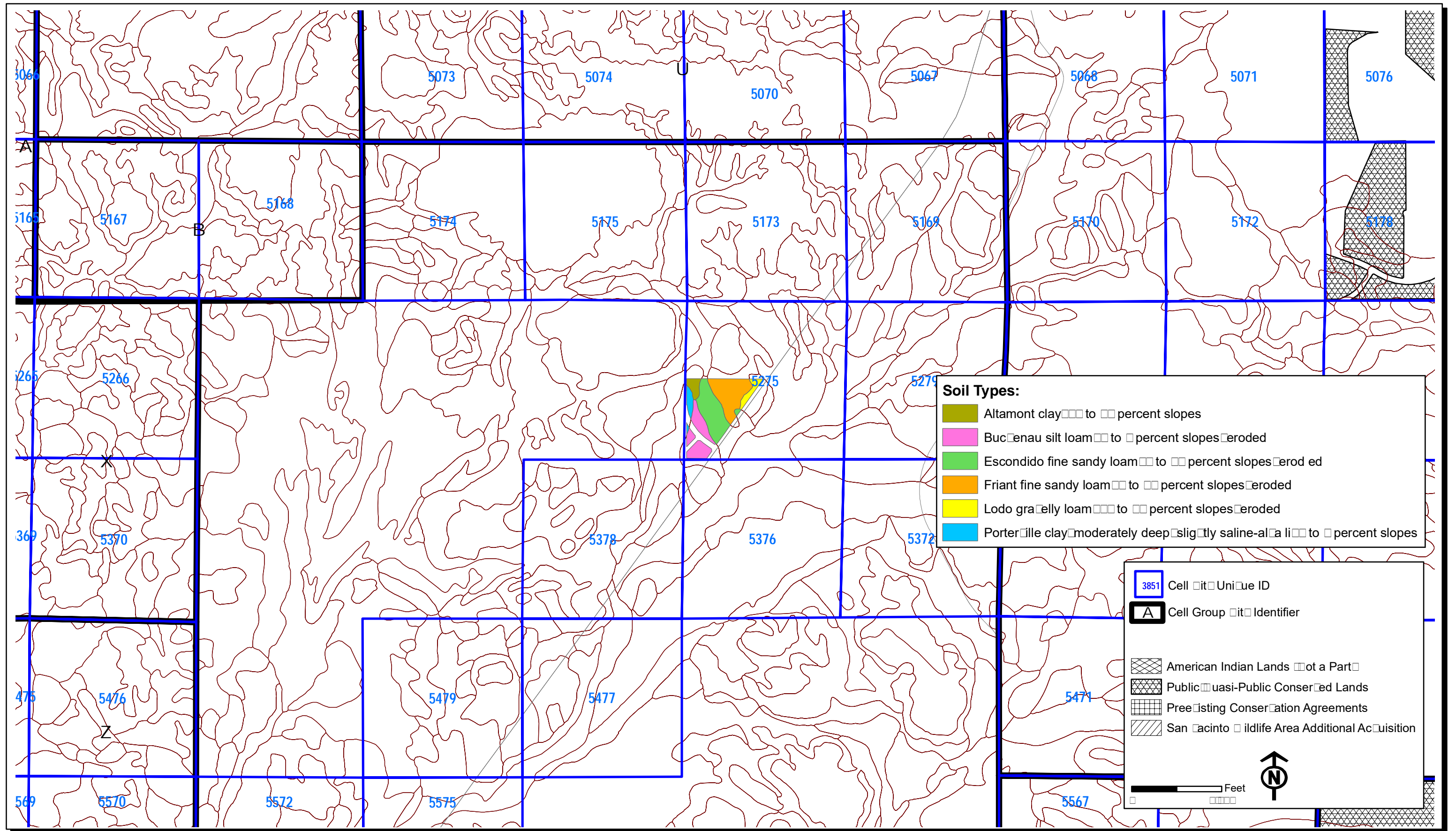
JPR Log No. 06072603  
 Vicinity Map with MSHCP Schematic Cores and Linkages



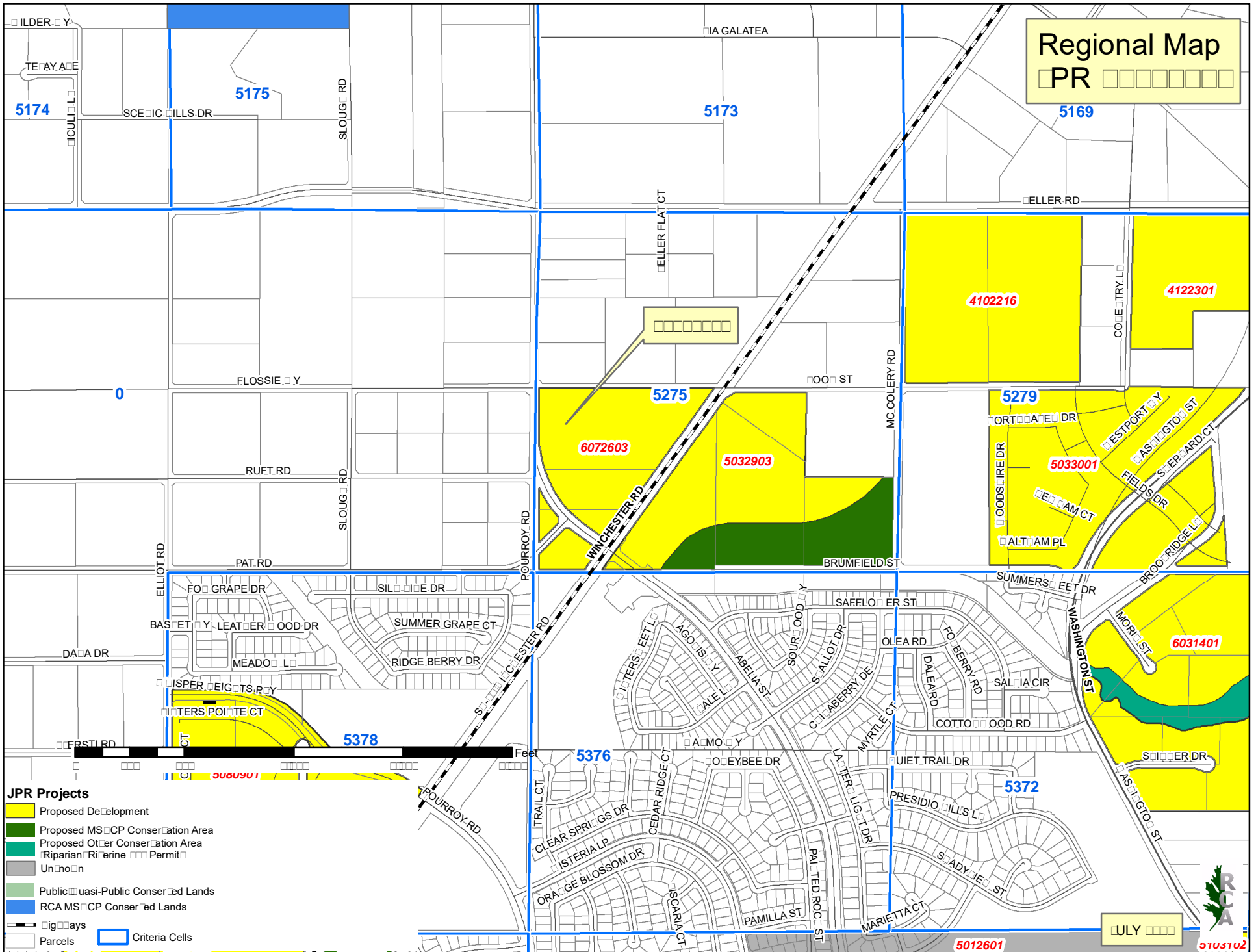


JPR Log No. 06072603  
**Criteria Area Cells with MSHCP Vegetation and Project Location**

**EXHIBIT  
 B**



JPR Log No. 06072603  
**Criteria Area Cells with MSHCP Soils and Project Location**



Regional Map  
 PR [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

**JPR Projects**

- Proposed Development
- Proposed MS/CP Conservation Area
- Proposed Other Conservation Area
- Riparian/Riparian
- Un
- Public/Private/Public Conservation Lands
- RCA MS/CP Conservation Lands
- Highways
- Parcels
- Criteria Cells

JULY [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]



010102

# Appendix C

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Cultural Resources Memo



**Rincon Consultants, Inc.**

250 East 1st Street  
Suite 1400  
Los Angeles, California 90012

213-788-4842

info@rinconconsultants.com  
www.rinconconsultants.com

May 6, 2022  
Project No: 21-12119

Jeff LeGrand, Vice President  
CSL Engineering, Inc.  
3410 La Sierra Avenue, #F1190  
Riverside, California 92503  
Submitted via email: [philiplegrand@sbcglobal.net](mailto:philiplegrand@sbcglobal.net)

**Subject: Cultural Resources Assessment for the Morningstar Loop Convenience Store and Gas Station and the Loop Rapid Car Wash, Winchester, Riverside County, California**

Dear Mr. LeGrand:

This letter report presents the findings of a cultural resources assessment completed in support of the Morningstar Loop Convenience Store and Gas Station and the Loop Rapid Car Wash (proposed project) located at 34410 Pourroy Road in Winchester, Riverside County, California. CSL Engineering, Inc. retained Rincon Consultants, Inc. (Rincon) to support the proposed project's compliance with the California Environmental Quality Act (CEQA). This report documents the results of the tasks performed by Rincon, specifically a cultural resources records search, sacred lands file search, archival and background research, and field survey. All work was completed in accordance with CEQA. The County of Riverside is the lead agency under CEQA.

## Project Site and Description

The project site is located at 34410 Pourroy Road in the community of Winchester in unincorporated Riverside County. It is located at the northwestern corner of the intersection of Pourroy Road 9 and Winchester Road/State Route 79 (SR-79) and identified by Assessor's Parcel Numbers (APNs) 476-010-081 through 476-010-084. Specifically, the proposed project encompasses portions of Sections 28 and 29 of Township 6 South, Range 2 West on the *Bachelor Mtn., California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle (attachment 1: Figure 1). The site is regionally accessible by Interstate 215 (I-215), and locally accessible by Winchester Road (to the south and east), Pourroy Road/Abelia Street, Ruft Road and Pat Road (to the west) (Attachment 1: Figure 2).

The following project description was provided by CSL Engineering, Inc. The proposed project is a commercial development on an approximate 17.37-acre site that would involve the construction of an approximate 3,500-square-foot (sf) 24 pump fuel station and a 6,100-sf convenience store with a 1,000-sf restaurant, as well as a 4,800-sf rapid pass car-wash and 20 car vacuum stalls. The gas station component of the project will include six pumping stations with four pumps at each station, a 10,000-gallon underground storage tank (UST) for diesel fuel, a 20,000-gallon unleaded gasoline UST, a 12,000-gallon premium gasoline UST, and an aboveground propane storage tank (AST) to serve a propane filling station. The car wash portion of the site will accommodate one car wash lane with three queuing lanes and 20 canopied car vacuum stalls. Drought-tolerant landscaping would be installed throughout the project site, as well as a 13,000-sf detention basin and 56,000-sf detention basin, both in the northern



portion of the site. In total, 90,300 sf of the site would be paved. One trash enclosure will be located at the southeast corner of the gas station and one trash enclosure would be located at the northwest corner of the carwash. The project site will connect to existing water, sewer, electrical, telephone, and gas utilities in the Pourroy Road right-of-way.

The project will require lot line adjustments in the southern portion of the site, a Conditional Use Permit and Plot Plan to permit a vehicle fueling station with off-site consumption of beer and wine and the car wash, a California Department of Transportation (Caltrans) encroachment permit for proposed improvements to Winchester Road, and all necessary design review and building permits in accordance with current California Building Codes and County of Riverside Ordinances.

## Methods

### Background and Archival Research

Rincon completed background and archival research in support of this assessment between December 2021 to April 2022. A variety of primary and secondary source materials were consulted. Sources included, but were not limited to, historical maps, aerial photographs, and written histories of the area. The following sources were utilized to develop an understanding of the project site and its context:

- Riverside County Assessor's Office
- Historical aerial photographs accessed via NETR Online
- Historical aerial photographs obtained from Environmental Data Resources, Inc.
- Historical aerial photographs accessed via University of California, Santa Barbara Library FrameFinder
- Sanborn Fire Insurance Company Maps accessed through the Los Angeles County Public Library
- Sanborn Fire Insurance Company Maps obtained from Environmental Resources Data, Inc.
- Historical USGS topographic maps
- Historical city directories obtained from Environmental Resources Data, Inc.

### California Historical Resources Information System Records Search

On March 17, 2022, Rincon received California Historical Resources Information System (CHRIS) records search results from the Eastern Information Center (EIC) (Attachment 2). The EIC is the official state repository for cultural resources records and reports for the county in which the proposed project falls. The purpose of the records search was to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a 0.5-mile radius surrounding it. Rincon also reviewed the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Historical Landmarks list, and the Built Environment Resources Directory (BERD), as well as its predecessor the California State Historic Property Data (HPD) File. Additionally, Rincon reviewed the Archaeological Determination of Eligibility (ADOE) list.



## Sacred Lands File Search

Rincon contacted the Native American Heritage Commission (NAHC) on December 20, 2021, to request a search of the Sacred Lands File (SLF), as well as a contact list of Native Americans culturally affiliated with the project site vicinity (Attachment 3).

## Field Survey

Rincon Archaeologist Rachel Bilchak, B.A., Registered Archaeologist, conducted a pedestrian survey of the project site on March 29, 2022. Rincon conducted a pedestrian survey using transect intervals spaced 10 meters and oriented generally from north to south. Exposed ground surfaces were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances such as burrows and drainages were also visually inspected. Survey accuracy was maintained using a handheld Global Positioning Satellite unit and a georeferenced map of the project site. Site characteristics and survey conditions were documented using field records and a digital camera. Copies of the survey notes and digital photographs are maintained at our Rincon San Diego office.

## Findings

### Known Cultural Resources Studies

The CHRIS records search and background research identified 26 cultural resources studies within 0.5 miles of the project site (Attachment 2). Of these studies, two include a portion of the project site. Approximately 90 percent of the project site has been studied within the last 15 years. Known studies that occurred within or adjacent to the project site are discussed in further detail below.

#### **Study RI-06775**

Stacey Jordan of Jones & Stokes prepared study RI-06775, *Archaeological Survey Report for Southern California Edison Company DSP-Appaloosa 12KV O/O Auld Substation Project, Riverside County, California, (WO#6077-5388, AI#5-5335)*, in 2007. The study consisted of five project areas within Riverside County, including a small portion of the current project site along Blecher Road (now Pourroy Road). The study included a Phase I intensive survey, review of records from the EIC, background and archival review, and review of site records. The pedestrian survey consisted of transects spaced no more than 15 meters apart across all study areas. In addition, during the pedestrian survey, no previously recorded archaeological resources were identified due to construction (Jordan 2007). No further cultural resources studies were recommended for the project, and standard measures for unanticipated discoveries were identified.

#### **Study RI-08156**

Bai Tang and Michael Hogan of CRM Tech conducted study RI-08156, *Phase I Archaeological Assessment Tentative Parcel Map No. 36161 Winchester Plaza Project French Valley Area, Riverside County, California*, in 2008. The study included the approximately 90 percent of the current project site



throughout the central and northern portions. The study included a pedestrian survey of the study area, background and historical research, and Native American outreach (Tang and Hogan 2008). The study identified resource P-33-017628, two isolated metate fragments, within the study area and the current project site. No other historic-period built environment resources, or archaeological (historic-period and prehistoric) resources were identified within the study area. Recommendations were provided for repatriation of the metate fragments identified during the pedestrian survey; however, no further update as to if the fragments were repatriated was included in the study. No additional cultural resources studies were recommended for the project, and standard measures for unanticipated discoveries were identified.

## Known Cultural Resources

The CHRIS records search and background research identified 18 cultural resources within 0.5-mile of the project site. Resources recorded in the search radius are listed in Table 1 below. Of these resources, one is recorded within the project site. The resource recorded within the project site is discussed in further detail below.

**Table 1 Known Cultural Resources**

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	Eligibility Status	Relationship to Project Site
P-33-001270	CA-RIV-1270	Prehistoric Site	Metavolcanic rocks and decomposing granite	1978 ( <i>S. Bouscaren</i> ); 1980 ( <i>Scroth</i> ); 1990 ( <i>C. Drover &amp; D. Smith</i> ); 1999 ( <i>L. J. Pierson</i> )	7*	Outside
P-33-003843	CA-RIV-3843	Prehistoric Site	Slicks, mortars, couple, petroglyph	1990 ( <i>C. Drover &amp; D. Smith</i> ); 2011 ( <i>S. Kremkau</i> )	Unevaluated	Outside
P-33-003844	CA-RIV-3844	Historic-Period Site	1890 Era Dwelling with foundations	1990 ( <i>C. Drover &amp; D. Smith</i> ); 1999 ( <i>L. J. Pierson</i> )	7	Outside
P-33-007799	–	Historic Site	Farmstead with 10 features	1983 ( <i>J. Warner</i> )	3CS**	Outside
P-33-008932	CA-RIV-6339	Prehistoric Site	Milling Slick	1999 ( <i>J. Keller</i> )	Unevaluated	Outside
P-33-008933	CA-RIV-6340	Prehistoric Site	Milling Slicks	1999 ( <i>J. Keller</i> )	Unevaluated	Outside
P-33-009478	CA-RIV-6378H	Historic-Period Site	Fieldstone Foundation and Adobe Remnants	1999 ( <i>K. Hunt</i> )	Unevaluated	Outside
P-33-011224	–	Prehistoric Site	Milling slicks and bedrock mortar	2001 ( <i>W. Sawyer &amp; C. Braker</i> ); 2009 ( <i>A. Glover</i> )	Unevaluated	Outside





Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	Eligibility Status	Relationship to Project Site
P-33-011229	–	Prehistoric Isolate	Single Metate	2001 (W. Sawyer & C. Braker)	Unevaluated	Outside
P-33-011230	–	Prehistoric Isolate	Metate Fragment	2001 (W. Sawyer & C. Braker); 2011 (S. Kremkau)	Unevaluated	Outside
P-33-011231	–	Prehistoric Isolate	Metate Fragment	2001 (W. Sawyer & C. Braker); 2011 (S. Kremkau)	Unevaluated	Outside
P-33-011232	–	Prehistoric Isolate	Mano Fragment, Hammerstone	2001 (W. Sawyer & C. Braker)	Unevaluated	Outside
P-33-011233	–	Historic-Period Foundation	Isolated cobblestone retention wall	2001 (W. Sawyer & C. Braker); 2005 (M. Robinson); 2011 (S. Kremkau)	Site destroyed by 2005	Outside
P-33-011234	–	Historic-Period Structure	Metal Water Tank	2001 (W. Sawyer and C. Braker); 2005 (M. Robinson); 2012 (S. Wilson & S. Klock)	Site destroyed by 2012	Outside
P-33-013871	CA-RIV-11964	Historic-Period Site	Winchester Road	2002 (R. Goodwin); 2003 (R. Goodwin); 2007 (T. Cooley & J. Patterson); 2008 (A. Bursan); 2012 (S. Wilson & J. Gibson); 2013 (J. Smallwood)	Recommended ineligible for listing on NRHP	Outside
P-33-014715	–	Prehistoric Isolate	Basalt flake	2003 (M. Aislin-Kay)	Unevaluated	Outside
P-33-017628	–	Prehistoric Isolate	Groundstone Fragments	2008 (D. Ballester)	Unevaluated	<b>Within</b>
P-33-020545	CA-RIV-10446	Historic-Period Site	Keller Road	2011 (P. Stanton)	Unevaluated	Outside

Source: EIC 2022

\*7: Not Evaluated for NRHP or CRHR or Needs Reevaluation

\*\*3CS: Appears eligible for CRHR as an individual property through survey evaluation.

## Resource P-33-017628

Daniel Ballester of CRM Tech recorded resource P-33-017628 as a prehistoric isolate consisting of two groundstone fragments in 2008. The fragments were believed to be part of the same metate, and both showed high levels of polish. No other information regarding the fragments were provided. Due to the lack of context and therefore integrity, the resource was recommended ineligible for listing on the NRHP (Tang and Hogan 2008).



## Aerial Imagery and Historical Topographic Maps Review

Rincon completed a review of historical topographic maps and aerial imagery to ascertain the development history of the project site. Historical topographic maps from 1901 to 1942 depict the project site as undeveloped land within French Valley bound by unnamed roads to the west and north, as well as an unidentified water source to the south (USGS 2022). By 1954, the project site is vacant, and Winchester Road (SR-79) is identified as a built highway south of the project site with Keller Road identified to the north and Bleecher Road to the west (NETR Online 2022; USGS 2022). This image is carried out through the current 2018 topographic map (NETR Online 2022; USGS 2022). Aerial imagery from 1938 to 1967 confirm topographic map depictions (NETR Online 2022). Imagery from 1978 to 2005 show a dirt road through the central portion of the project site, with a structure to the northwestern corner of the project site (NETR Online 2022). From 2009 show the development of Pourroy Road to the southwest (NETR Online 2022). Imagery from 2010 depicts the project site is depicted in its current condition (NETR Online 2022).

## Sacred Land File Search

On April 4, 2022, the NAHC responded to Rincon's AB 52 contacts and SLF request, stating that the results of the SLF search were negative. See Attachment 2 for the NAHC response, including Tribal contacts list(s).

## Survey Results

The following section summarizes the results of all background research and fieldwork as they pertain to archaeological resources that may qualify as historical resources and/or unique archaeological resources.

No archaeological resources were identified during the field survey. Ground visibility was poor to fair (0 to 60 percent) with approximately 25 to 60 percent exposure. Tall wild grasses (*Bouteloua gracilis*) and wildflowers (approximately 1 to 2 feet high) obscured surface visibility along the majority of the project area (Attachment 1: Figure 3). Patches of exposed soil were scattered throughout the project area and were centralized around a gathering of large boulders in the northwest (Attachment 1: Figure 4). The boulders were inspected for human modification as a result of occupational use; however, no evidence of cultural modification was identified on any boulder. The soil is a compacted light to medium brown loam, intermixed with chert and gravel stone. The area is undeveloped although there did appear to be signs of vehicles (tire tracks) driving through the area. The property slopes downward at a 30 degree angle into a basin in the center of the project area, within the basin the property then slopes back upwards to form a small hill (Attachment 1: Figure 5). The previously recorded isolated groundstone fragments were not relocated during the survey efforts.

## Conclusions and Recommendations

The impact analysis included here is organized based on the cultural resources thresholds included in CEQA Guidelines Appendix G: Environmental Checklist Form:

- a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?



- b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?
- c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Threshold A broadly refers to historical resources. To more clearly differentiate between archaeological and built environment resources, we have chosen to limit analysis under Threshold A to built environment resources. Archaeological resources, including those that may be considered historical resources pursuant to Section 15064.5 and those that may be considered unique archaeological resources pursuant to Section 21083.2, are considered under Threshold B.

## Historical and Unique Archaeological Resources

This assessment identified one previously recorded prehistoric archaeological resource within the project site. The SLF was returned with negative results. The pedestrian survey did not identify any archaeological resources or archaeological deposits in the project site. Furthermore, many of the previously recorded prehistoric isolates within 0.5 miles of the project site were not relocated or were identified as erroneously identified resources. Although prehistoric archaeological resources were identified within 0.5 miles of the project site, no evidence of prehistoric archaeological materials were identified during the pedestrian survey. The lack of surface evidence of archaeological materials does not preclude their subsurface existence. However, the absence of substantial prehistoric or historic-period archaeological remains within the immediate vicinity, along with the existing level of disturbance in the project site, suggest there is a low potential for encountering intact subsurface archaeological deposits. Rincon presents the following recommended mitigation measure for unanticipated discoveries during construction. With adherence to this measure, Rincon recommends a finding of ***less than significant impact with mitigation for archaeological resources*** under CEQA.

## Recommended Mitigation

### *Unanticipated Discovery of Cultural Resources*

In the unlikely event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archeology (National Park Service 1983) should be contacted immediately to evaluate the find. If the find is prehistoric, then a Native American representative should also be contacted to participate in the evaluation of the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be eligible for the CRHR and cannot be avoided by the proposed project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical resources.

### Human Remains

No human remains are known to be present within the project site. However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources



Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, Rincon recommends a finding of less than significant impact to human remains under CEQA.

Should you have any questions concerning this study, please do not hesitate to contact the undersigned at (213) 279-2701 or aharvey@rinconconsultants.com.

Sincerely,

**Rincon Consultants, Inc.**

Courtney Montgomery, MA  
Archaeologist/Assistant Project Manager

Amanda Harvey, PhD., RPA  
Senior Archaeologist/Project Manager

Andrew Pulcheon, MA, RPA, AICP, CEP  
Principal/ Senior Archaeologist

## **Attachments**

- Attachment 1 Figures
- Attachment 2 Eastern Information Center Records Search Results
- Attachment 3 Sacred Lands File Search Results



## References

Ballester, Daniel

2008 Department of Parks and Recreation Series 523 Form for Resource P-33-017628. On file at the Eastern Information Center.

NETR Online

2022 *Historic Aerials*. <https://www.historicaerials.com/viewer> Accessed February 2022.

United States Geological Survey (USGS)

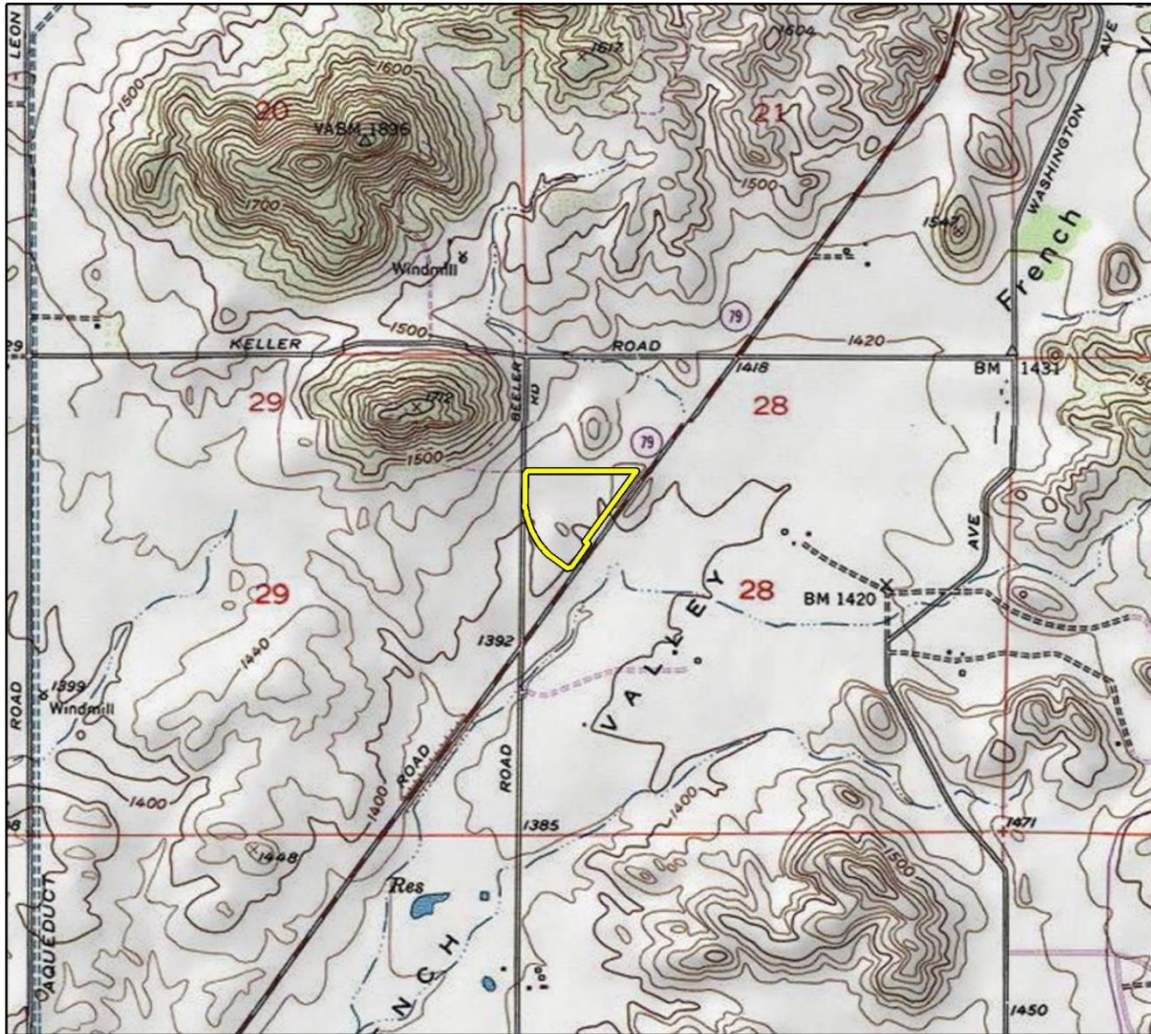
2022 Topo View. [online map database]. <https://ngmdb.usgs.gov/topoview/> Accessed February 2022.

# Attachment 1

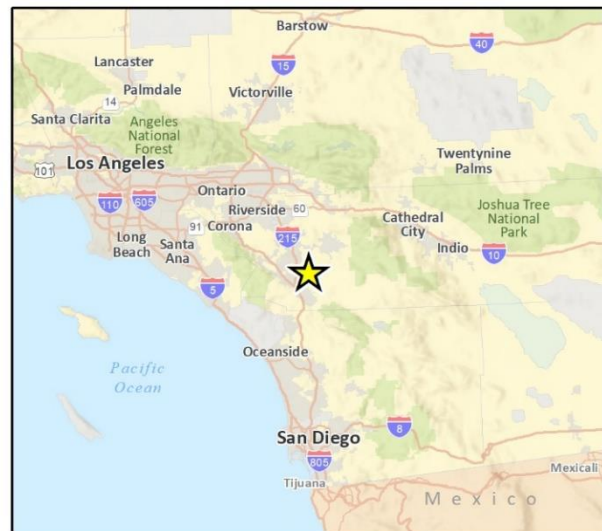
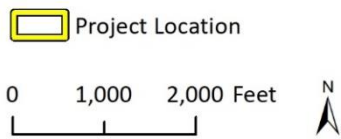
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Figures

Figure 1 Regional Project Location Map

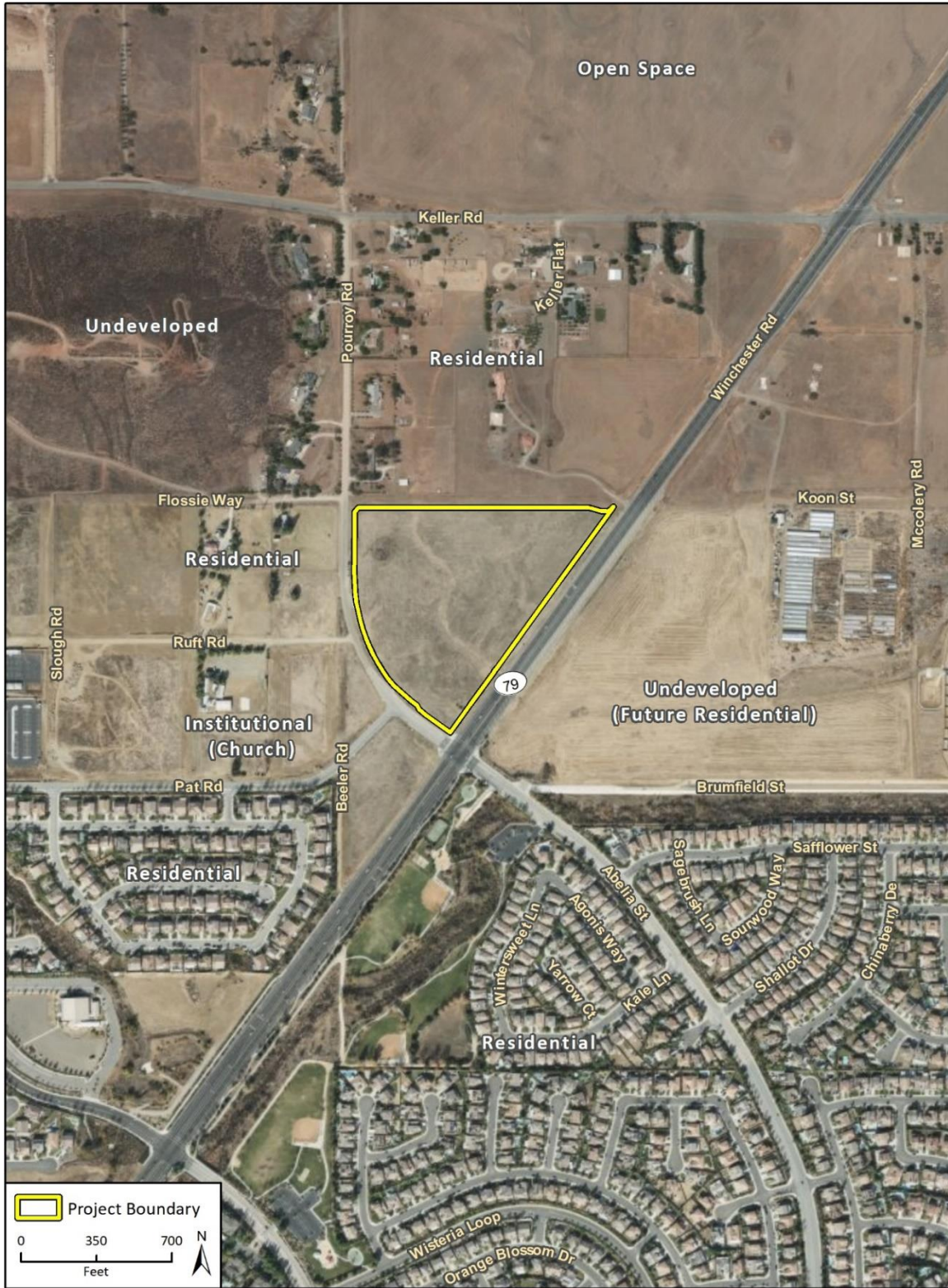


Basemap provided by National Geographic Society, Esri and their licensors © 2021. Bachelor Mtn. Quadrangle. T06S R02W S28,29. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.



ORFig 1 Proj Locn Map

Figure 2 Project Vicinity Map





**Figure 3 Overview of grasses obscuring ground visibility facing south**



**Figure 4 Overview of boulders on northwestern hill facing south**



**Figure 5 Overview of project area topography facing southwest**



# Attachment 2

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Eastern Information Center Records Search Results

**CHRIS Data Request Form**

ACCESS AND USE AGREEMENT NO.: 56 IC FILE NO.: \_\_\_\_\_

To: Eastern Information Center

Print Name: Amanda Harvey Date: December 17, 2021

Affiliation: Rincon Consultants, Inc.

Address: 180 N. Ashwood Avenue

City: Ventura State: CA Zip: 93003

Phone: 805-644-4455 Fax: 805-644-4455 Email: aharvey@rinconconsultants.com

Billing Address (if different than above): \_\_\_\_\_

Billing Email: ap@rinconconsultants.com Billing Phone: 805-644-4455

Project Name / Reference: 21-12119 Morningstar Village

Project Street Address: At the southern corner of Winchester and Pourroy Rd

County or Counties: Riverside

Township/Range/UTMs: See attached maps

USGS 7.5' Quad(s): Bachelor Mtn. & Winchester Quadrangles. T06S R02W S20,21,28,29

PRIORITY RESPONSE (Additional Fee): yes  / no

TOTAL FEE NOT TO EXCEED: \$ 1000

(If blank, the Information Center will contact you if the fee is expected to exceed \$1,000.00)

Special Instructions:

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**Information Center Use Only**

Date of CHRIS Data Provided for this Request: \_\_\_\_\_

Confidential Data Included in Response: yes  / no

Notes: \_\_\_\_\_

## CHRIS Data Request Form

Mark the request form as needed. Attach a PDF of your project area (with the radius if applicable) mapped on a 7.5' USGS topographic quadrangle to scale 1:24000 ratio 1:1 neither enlarged nor reduced and include a shapefile of your project area, if available. Shapefiles are the current CHRIS standard for submitting digital spatial data for your project area or radius. **Check with the appropriate IC for current availability of digital data products.**

- Documents will be provided in PDF format. Paper copies will only be provided if PDFs are not available at the time of the request or under specially arranged circumstances.
- Location information will be provided as a digital map product (Custom Maps or GIS data) unless the area has not yet been digitized. In such circumstances, the IC may provide hand drawn maps.
- In addition to the \$150/hr. staff time fee, client will be charged the Custom Map fee when GIS is required to complete the request [e.g., a map printout or map image/PDF is requested and no GIS Data is requested, or an electronic product is requested (derived from GIS data) but no mapping is requested].

For product fees, see the CHRIS IC Fee Structure on the [OHP website](#).

### 1. Map Format Choice:

Select One: Custom GIS Maps  GIS Data  Custom GIS Maps and GIS Data  No Maps

**Any selection below left unmarked will be considered a "no."**

#### Location Information:

	Within project area	Within <u>0.5</u> mi. radius
<b>ARCHAEOLOGICAL Resource Locations<sup>1</sup></b>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>NON-ARCHAEOLOGICAL Resource Locations Report Locations<sup>1</sup></b>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>"Other" Report Locations<sup>2</sup></b>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>

### 3. Database Information:

(contact the IC for product examples, or visit the [SSJVIC website](#) for examples)

	Within project area	Within <u>0.5</u> mi. radius
<b>ARCHAEOLOGICAL Resource Database<sup>1</sup></b>		
List (PDF format)	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Detail (PDF format)	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Excel Spreadsheet	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>NON-ARCHAEOLOGICAL Resource Database</b>		
List (PDF format)	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Detail (PDF format)	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Excel Spreadsheet	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Report Database<sup>1</sup></b>		
List (PDF format)	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Detail (PDF format)	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Excel Spreadsheet	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
Include "Other" Reports <sup>2</sup>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>

### 4. Document PDFs (paper copy only upon request):

	Within project area	Within <u>0.5</u> mi. radius
ARCHAEOLOGICAL Resource Records <sup>1</sup>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
NON-ARCHAEOLOGICAL Resource Records Reports <sup>1</sup>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>
"Other" Reports <sup>2</sup>	yes <input type="checkbox"/> / no <input type="checkbox"/>	yes <input type="checkbox"/> / no <input type="checkbox"/>

**CHRIS Data Request Form**

**5. Eligibility Listings and Documentation:**

Within project area                      Within 0.5 mi.                      radius

**OHP Built Environment Resources Directory<sup>3</sup>:**

Directory listing only (Excel format)  
Associated documentation<sup>4</sup>

yes  / no   
yes  / no

yes  / no   
yes  / no

**OHP Archaeological Resources Directory<sup>1,5</sup>:**

Directory listing only (Excel format)  
Associated documentation<sup>4</sup>

yes  / no   
yes  / no

yes  / no   
yes  / no

**California Inventory of Historic Resources (1976):**

Directory listing only (PDF format)  
Associated documentation<sup>4</sup>

yes  / no   
yes  / no

yes  / no   
yes  / no

**6. Additional Information:**

The following sources of information may be available through the Information Center. However, several of these sources are now available on the [OHP website](#) and can be accessed directly. The Office of Historic Preservation makes no guarantees about the availability, completeness, or accuracy of the information provided through these sources. Indicate below if the Information Center should review and provide documentation (if available) of any of the following sources as part of this request.

<b>Caltrans Bridge Survey</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Ethnographic Information</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Historical Literature</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Historical Maps</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Local Inventories</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>GLO and/or Rancho Plat Maps</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Shipwreck Inventory</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>
<b>Soil Survey Maps</b>	yes <input type="checkbox"/> / no <input type="checkbox"/>

<sup>1</sup> In order to receive archaeological information, requestor must meet qualifications as specified in Section III of the current version of the California Historical Resources Information System Information Center Rules of Operation Manual and be identified as an Authorized User or Conditional User under an active CHRIS Access and Use Agreement.

<sup>2</sup> "Other" Reports GIS layer consists of report study areas for which the report content is almost entirely non-fieldwork related (e.g., local/regional history, or overview) and/or for which the presentation of the study area boundary may or may not add value to a record search.

<sup>3</sup> Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Includes, but not limited to, information regarding National Register of Historic Places, California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and historic building surveys. Previously known as the HRI and then as the HPD, it is now known as the Built Environment Resources Directory (BERD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

<sup>4</sup> Associated documentation will vary by resource. Contact the IC for further details.

<sup>5</sup> Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Previously known as the Archaeological Determinations of Eligibility, now it is known as the Archaeological Resources Directory (ARD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

# Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-00000	ADB-R - 000000000 oided - MF-0000	0000	Stephen Bouscaren	Environmental Impact Evaluation Archaeological Assessment of a Portion of the Lancaster Area Riverside County California	Archaeological Research Unit UC Riverside	
RI-00000	ADB-R - 000000000 Submitter - RCT-000- 00 oided - MF-0000	0000	Deborah McLean	Negative Archaeological Survey Report Replacement of Existing Timber- Stringer Bridge at Washington Street and French Valley Stream Crossing	LSA Associates	
RI-00000	ADB-R - 000000000 oided - MF-0000	0000	SALPAS EA A	AN ARCHAEOLOGICAL ASSESSMENT OF PARCEL 00000	AUTORS	
RI-00000	ADB-R - 000000000 oided - MF-0000	0000	DROER CRISTOPHER E	A CULTURAL RESOURCE ASSESSMENT DUTCH VILLAGE PROJECT FRESCO VALLEY RIVERSIDE COUNTY CALIFORNIA	AUTORS	00-00000000-00000000-00000000 00-00000000-00000000-00000000 00-00000000-00000000-00000000 00-00000000-00000000
RI-00000	ADB-R - 000000000 oided - MF-0000	0000	DROERCE	A CULTURAL RESOURCE ASSESSMENT LANCASTER FRESCO VALLEY RIVERSIDE COUNTY CALIFORNIA	AUTOR	00-00000000-00000000-00000000 00-00000000-00000000-00000000 00-00000000-00000000
RI-00000	ADB-R - 000000000 oided - MF-0000	0000	ELLER EA A	PHASE I ARCHAEOLOGICAL ASSESSMENT OF COMPREHENSIVE GENERAL PLAN AMENDMENT ACRES OF LAND NEAR TEMECULA RIVERSIDE COUNTY CA	AUTOR	
RI-00000	ADB-R - 000000000 oided - MF-0000	0000	AN OFFTAYA	ROUTE 0000 IDEIG PROJECT ELLER ROAD TO THE PORT ROAD RIVERSIDE COUNTY CALIFORNIA	CALTRANS	
RI-00000	ADB-R - 000000000	0000	SMIT BRIA F and LARRY PIERSON	AN ARCHAEOLOGICAL HISTORICAL STUDY FOR THE LUSIG PROJECT FRESCO VALLEY COUNTY OF RIVERSIDE TM-000000	BRIA F SMIT AND ASSOCIATES	00-00000000-00000000-00000000 00-00000000
RI-00000	ADB-R - 000000000 Submitter - 0000-0000	0000	TEYSON MATT E	CULTURAL RESOURCES RECOGNITION OF THE HERECOE PROPERTY LANCASTER HILLS RIVERSIDE COUNTY CALIFORNIA	SACAEIRO METAL CONSULTANTS	
RI-00000	Other - 000000000	0000	Jordan Stacey C	Archaeological Survey Report for Southern California Edison Company DSP-Appaloosa 0000 O.O Auld Substation Project Riverside County California 0000 0000-0000AI- 00000	Jones Stores	00-00000000

# Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-00000		0000	McLean, Debora	Negative SPR Report: Bridge Replacement on Washington Street over French Valley Stream, Riverside County	LSA Associates, Inc.	
RI-00000		0000	Lord, Bennett	Phase I Cultural Resources Survey: Mona Road III Project, A 100-Acre Property, AP 000-000-0000, In French Valley Area of Unincorporated Riverside County, California	MBA	
RI-00000		0000	Aislin, Day, Marnie and Lord, Bennett	Phase I Cultural Resources Assessment: Granite Homes Project Tract, French Valley, County of Riverside, California	Michael Brandman Associates	
RI-00000		0000	Michael Dice and Marnie Cianna	An Archaeological Resource Evaluation and Paleontological Records Search on AP 0000-000-00000000-000-0000 and 0000-000-0000 Tentative Tract, Riverside County of California	Michael Brandman Associates	00-000000
RI-00000	Submitter - 0000	0000	Bai Tang and Michael Logan	Phase I Archaeological Assessment: Tentative Parcel Map 00000000, Inc. Ester Plaza Project, French Valley Area, Riverside County, California	CRM Tech, Colton, California	
RI-00000		0000	Matt, Peter, et al.	Phase I Archaeological Resources Assessment of the Proposed Anna- Inc. Ester Project, Riverside County, California	PCR Services Corporation, Irvine, CA	00-000000
RI-00000	Caltrans - District 0-RI-00-0P R0000R0000 PM R000R0000EA 00-000000 Caltrans - District 0-RI-00-0P R0000R0000 PM R000R0000EA 00-000000	0000	Ricard, Star, Coelle, Storey, and Mar Robinson	Historic Property Survey Report: State Route SR 000, Identifying between Thompson Road and Domenigoni Parkway in the County of Riverside, California	ICF Jones & Stoes	00-000000
RI-00000	Caltrans - EA 00-000000 Other - EA 00-000000	0000	Mar Robinson	Supplemental Archaeological Survey Report: State Route 00, Identifying Report Between Thompson Road and Domenigoni Parkway, Riverside County, California	ICF Jones & Stoes	



# Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
RI-00000	Submitter - CRM TEC Contract 00000000	0000	Bai "Tom" Tang and Michael Logan	Phase I Archaeological Assessment Technical Plan AME/DMEOT CASE 00000000 Assessor's Parcel 000000-0000-0000 French Valley Area Riverside County California	CRM Tec	00-00000000-00000000
RI-00000		0000	Bai "Tom" Tang and Michael Logan	Phase I Archaeological Assessment Tentative Tract Map 00000000 Washington Street French Valley Area Riverside County California	CRM Tec	00-00000000
RI-00000		0000	Bai "Tom" Tang Terri MacQuemain and Daniel Ballester	Mitigation Historical Resource Recordation Jean Nicolas Earl Fric Ranch Washington Street French Valley Area Riverside County California	CRM TEC	00-00000000
RI-00000		0000	Brian F Smit	Cultural Resources Monitoring Report for the Blessed Teresa of Calcutta Catholic Parish Project 00000000 inc 000000 Riverside County California	Brian F Smit and Associates Inc	
RI-00000	PUP - 000000	0000	Deanne A McEnna	A Phase Cultural Resources Investigation for the Temecula Valley Charter School Located in the inc 000000 Area of the French Valley Riverside County California	McEnna et Al	00-00000000-00000000-00000000 00-00000000-00000000-00000000 00-00000000-00000000-00000000 00-00000000-00000000-00000000 00-00000000-00000000-00000000 00-00000000-00000000-00000000 00-00000000-00000000-00000000 00-00000000
RI-00000		0000	Jennifer M Sanza William R Gillean and Leslie Day Iris	Phase Cultural Resources Assessment for the Keller and Pourroy Roads Project 0000 00 Acres in the inc 000000 East Menifee Area Riverside County California	L L Environmental Inc	
RI-00000		0000	Serri Gust and Amy Gloer	Phase I Cultural Resources Assessment Report for the Blessed Teresa of Calcutta Catholic Church Project in Riverside County California	Cogstone	00-00000000
RI-00000	Other - Project 0000 00-0000-0000 EA 000000	0000	Joan George and Vanessa Mirro	Archaeological Monitoring Report State Route 00 00 Widening Project 00-RI-00-00-P R0000R0000 PM R0000R0000 Riverside County California	Applied Earthworks Inc	

# Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-00-000000	CA-RI-000000	Other - The Lusling Project		Prehistoric		0000 [S]Bouscaren 0000 [S]crot[Arc]aeological Resource Management Corp 0000 [C]E[Dro]er and [D]M[Smit] Cristopher Droer 0000 Malena DrTustin Ca 000000 0000 [L]arry [P]ierson[Brian F] Smit and Associates	RI-000000RI-000000 RI-000000RI-000000 RI-000000
P-00-000000	CA-RI-000000	Other - SRI-000000 Other - D 0	Site	Prehistoric		0000 [C]E[Dro]er and [D]M[Smit] Cristopher DroerTustinCA 0000 [S]cott [rem]au[SRI]	RI-000000RI-000000 RI-000000
P-00-000000	CA-RI-000000	National Register - 00 Other - D 0	Site	Historic	A0000A0000A0000 A0000A000	0000 [C]E[Dro]er and [D]M[Smit] Cristopher DroerTustinCA 0000 [L]arry [P]ierson[Brian F] Smit AssociatesSan DiegoCA	RI-000000RI-000000 RI-000000RI-000000
P-00-000000				Historic		0000 0000 arnerRiverside County Historical Comm	RI-000000RI-000000
P-00-000000	CA-RI-000000	Other - [inc]ester 00-0	Site	Prehistoric	AP00	0000 [M]ean [A]eller[Cultural Resources Consultant	
P-00-000000	CA-RI-000000	Other - [inc]ester 00-0	Site	Prehistoric	AP00	0000 [M]ean [A]eller[Cultural Resources Consultant	
P-00-000000	CA-RI-000000	Other - D 0-0	Site	Historic	A0000A0000A0000	0000 [M]eIn P00untBFS0	RI-000000RI-000000
P-00-000000			Site	Prehistoric	AP00	0000 [M]illiam Sa0yerCaroline BraerLSA AssociatesInc	RI-000000RI-000000
P-00-000000		Other - CETAP 0-s-0	Other	Prehistoric	AP00	0000 [M]illiam Sa0yerCaroline BraerLSA AssociatesInc	RI-000000
P-00-000000		Other - SRI-000000 Other - CETAP 0-I-0	Other	Prehistoric	AP00	0000 [M]illiam Sa0yer and Caroline BraerLSA AssociatesInc 0000 [S]cott [rem]au[SRI]	RI-000000
P-00-000000		Other - SRI-000000 Other - CETAP 0-I-0	Other	Prehistoric	AP00	0000 [M]illiam Sa0yerCaroline BraerLSA AssociatesInc 0000 [S]cott [rem]au[SRI]	RI-000000
P-00-000000		Other - SRI-000000 Other - CETAP 0-I-0	Other	Prehistoric	AP00	0000 [M]illiam Sa0yerCaroline BraerLSA AssociatesInc	RI-000000
P-00-000000		Other - CETAP 0-I-0 00 Other - SRI-000000	Other	Historic	A0000	0000 [M]Sa0yer[C]BraerLSA Associates 0000 [M]Robinson00nes 0 Sto0es 0000 [S]cott [rem]au[SRI]	

# Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-00-000000		Other - CETAP 0-1-0	Other	Historic	A000	0000 00 0Sa0yer0C0Bra0er0LSA Associates00 0000 0M0Robinson00ones 0 Sto0es00 0000 0Stacie 0 ilson and Step0anie 0loc00SRI0	
P-00-000000	CA-RI-000000	ational Register - 000 Other - segment of 0 inc0ester Road:SR000 Other - LSA-RLM000-R-00 Other - State Route 0000 inc0ester Road	Site	Historic	A00000P00	0000 0Good0in0Riordan0LSA Associates0Inc000 0000 0Good0in0Riordan0LSA Associates0Inc000 0000 0Cooley0T0eodore and Patterson00os0ua00ones 0 Sto0es00 0000 0Andre0 Bursan0CF 0ones and Sto0es00 0000 0 ilson0Stacie and Gibson0 0000 0 ilson0Stacie and Gibson0 0000 0os0 Small0ood0Applied Eart00 or0s0Inc000	RI-000000RI-000000 RI-000000RI-000000 RI-000000RI-000000 RI-000000
P-00-000000				Prehistoric		0000 0Aislin-0ay0Marnie0Mic0ael Brandman Associates0	RI-000000
P-00-000000		Other - CRM TEC0 0000-Iso-0	Other	Prehistoric	AP00	0000 0Daniel Ballester0CRM TEC000	
P-00-000000	CA-RI-000000	Other - SRI-0000		Historic		0000 0Patric0 Stanton0Statistical Researc00Inc00	RI-000000RI-000000

# Attachment 3

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Sacred Lands File Search Results

**Local Government Tribal Consultation List Request**

**Native American Heritage Commission**

1550 Harbor Blvd, Suite 100  
West Sacramento, CA 95691  
916-373-3710  
916-373-5471 – Fax  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)

**Type of List Requested**

**CEQA Tribal Consultation List (AB 52)** – *Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2*

**General Plan (SB 18)** - *Per Government Code § 65352.3.*

**Local Action Type:**

General Plan     General Plan Element     General Plan Amendment

Specific Plan     Specific Plan Amendment     Pre-planning Outreach Activity

**Required Information**

**Project Title:** Morningstar Loop Convenience Store, Gas Station, and the Loop Rapid Car Wash IS

**Local Government/Lead Agency:** County of Riverside

**Contact Person:** Amanda Harvey, on behalf of County of Riverside

**Street Address:** 7080 N. Whitney Avenue, Suite 101

**City:** Fresno      **Zip:** 93720

**Phone:** 559-558-5875      **Fax:** \_\_\_\_\_

**Email:** aharvey@rinconconsultants.com

**Specific Area Subject to Proposed Action**

**County:** Riverside      **City/Community:** Winchester

**Project Description:**

The project site is located on approximately 20.26 acres, at the south corner of Pourroy Road and Winchester Road, in the community of Winchester. The project will involve the development of a 6,100 square foot convenience store and a 4,800 square foot car wash with an equipment room. The project would also include six new gas pumping stations and 12 pumps with canopy. The project would conform to the existing zoning and designated land use.

**Additional Request**

**Sacred Lands File Search - Required Information:**

**USGS Quadrangle Name(s):** Bachelor Mtn. & Winchester Quadrangles

**Township:** 06s      **Range:** 02 W      **Section(s):** 20, 21, 28, 29

## NATIVE AMERICAN HERITAGE COMMISSION

February 23, 2022

Amanda Harvey  
Rincon Consultants

Via Email to: [aharvey@rinconconsultants.com](mailto:aharvey@rinconconsultants.com)

**Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Morningstar Loop Convenience Store, Gas Station, and the Loop Rapid Car Wash IS Project, Riverside County**

Dear Ms. Harvey:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

*Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.*

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:



CHAIRPERSON  
**Laura Miranda**  
Luiseño

VICE CHAIRPERSON  
**Reginald Pagaling**  
Chumash

PARLIAMENTARIAN  
**Russell Atebery**  
Karuk

SECRETARY  
**Sara Dutschke**  
Miwok

COMMISSIONER  
**William Mungary**  
Paiute/White Mountain  
Apache

COMMISSIONER  
**Isaac Bojorquez**  
Ohlone-Costanoan

COMMISSIONER  
**Buffy McQuillen**  
Yokayo Pomo, Yuki,  
Nomlaki

COMMISSIONER  
**Wayne Nelson**  
Luiseño

COMMISSIONER  
**Stanley Rodriguez**  
Kumeyaay

EXECUTIVE SECRETARY  
**Christina Snider**  
Pomo

**NAHC HEADQUARTERS**  
1550 Harbor Boulevard  
Suite 100  
West Sacramento,  
California 95691  
(916) 373-3710  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)  
[NAHC.ca.gov](http://NAHC.ca.gov)

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: [Andrew.Green@nahc.ca.gov](mailto:Andrew.Green@nahc.ca.gov).

Sincerely,



Andrew Green  
Cultural Resources Analyst

Attachment

**Native American Heritage Commission  
Tribal Consultation List  
Riverside County  
2/23/2022**

**Agua Caliente Band of Cahuilla  
Indians**

Jeff Grubbe, Chairperson  
5401 Dinah Shore Drive                      Cahuilla  
Palm Springs, CA, 92264  
Phone: (760) 699 - 6800  
Fax: (760) 699-6919

**Campo Band of Diegueno  
Mission Indians**

Ralph Goff, Chairperson  
36190 Church Road, Suite 1                      Diegueno  
Campo, CA, 91906  
Phone: (619) 478 - 9046  
Fax: (619) 478-5818  
rgoff@campo-nsn.gov

**Agua Caliente Band of Cahuilla  
Indians**

Patricia Garcia-Plotkin, Director  
5401 Dinah Shore Drive                      Cahuilla  
Palm Springs, CA, 92264  
Phone: (760) 699 - 6907  
Fax: (760) 699-6924  
ACBCI-THPO@aguacaliente.net

**Ewiaapaayp Band of Kumeyaay  
Indians**

Robert Pinto, Chairperson  
4054 Willows Road                                      Diegueno  
Alpine, CA, 91901  
Phone: (619) 368 - 4382  
Fax: (619) 445-9126  
ceo@ebki-nsn.gov

**Augustine Band of Cahuilla  
Mission Indians**

Amanda Vance, Chairperson  
P.O. Box 846    Cahuilla  
Coachella, CA, 92236  
Phone: (760) 398 - 4722  
Fax: (760) 369-7161  
hhaines@augustinetribe.com

**Ewiaapaayp Band of Kumeyaay  
Indians**

Michael Garcia, Vice Chairperson  
4054 Willows Road                                      Diegueno  
Alpine, CA, 91901  
Phone: (619) 933 - 2200  
Fax: (619) 445-9126  
michaelg@leaningrock.net

**Cabazon Band of Mission  
Indians**

Doug Welmas, Chairperson  
84-245 Indio Springs Parkway                      Cahuilla  
Indio, CA, 92203  
Phone: (760) 342 - 2593  
Fax: (760) 347-7880  
jstapp@cabazonindians-nsn.gov

**La Posta Band of Diegueno  
Mission Indians**

Javaughn Miller, Tribal  
Administrator  
8 Crestwood Road                                      Diegueno  
Boulevard, CA, 91905  
Phone: (619) 478 - 2113  
Fax: (619) 478-2125  
jmiller@LPtribe.net

**Cahuilla Band of Indians**

Daniel Salgado, Chairperson  
52701 U.S. Highway 371                              Cahuilla  
Anza, CA, 92539  
Phone: (951) 763 - 5549  
Fax: (951) 763-2808  
Chairman@cahuilla.net

**La Posta Band of Diegueno  
Mission Indians**

Gwendolyn Parada, Chairperson  
8 Crestwood Road                                      Diegueno  
Boulevard, CA, 91905  
Phone: (619) 478 - 2113  
Fax: (619) 478-2125  
LP13boots@aol.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Morningstar Loop Convenience Store, Gas Station, and the Loop Rapid Car Wash IS Project, Riverside County.



**Native American Heritage Commission  
Tribal Consultation List  
Riverside County  
2/23/2022**

**Los Coyotes Band of Cahuilla  
and Cupeño Indians**

Ray Chapparosa, Chairperson  
P.O. Box 189 Cahuilla  
Warner Springs, CA, 92086-0189  
Phone: (760) 782 - 0711  
Fax: (760) 782-0712

**Pala Band of Mission Indians**

Shasta Gaughen, Tribal Historic  
Preservation Officer  
PMB 50, 35008 Pala Temecula Cupeno  
Rd. Luiseno  
Pala, CA, 92059  
Phone: (760) 891 - 3515  
Fax: (760) 742-3189  
sgaughen@palatribe.com

**Manzanita Band of Kumeyaay  
Nation**

Angela Elliott Santos, Chairperson  
P.O. Box 1302 Diegueno  
Boulevard, CA, 91905  
Phone: (619) 766 - 4930  
Fax: (619) 766-4957

**Pechanga Band of Luiseno  
Indians**

Mark Macarro, Chairperson  
P.O. Box 1477 Luiseno  
Temecula, CA, 92593  
Phone: (951) 770 - 6000  
Fax: (951) 695-1778  
epreston@pechanga-nsn.gov

**Mesa Grande Band of Diegueno  
Mission Indians**

Michael Linton, Chairperson  
P.O. Box 270 Diegueno  
Santa Ysabel, CA, 92070  
Phone: (760) 782 - 3818  
Fax: (760) 782-9092  
mesagrandeband@msn.com

**Quechan Tribe of the Fort Yuma  
Reservation**

Jill McCormick, Historic  
Preservation Officer  
P.O. Box 1899 Quechan  
Yuma, AZ, 85366  
Phone: (760) 572 - 2423  
historicpreservation@quechantribe.com

**Morongo Band of Mission  
Indians**

Robert Martin, Chairperson  
12700 Pumarra Road Cahuilla  
Banning, CA, 92220 Serrano  
Phone: (951) 755 - 5110  
Fax: (951) 755-5177  
abrierty@morongo-nsn.gov

**Ramona Band of Cahuilla**

Joseph Hamilton, Chairperson  
P.O. Box 391670 Cahuilla  
Anza, CA, 92539  
Phone: (951) 763 - 4105  
Fax: (951) 763-4325  
admin@ramona-nsn.gov

**Morongo Band of Mission  
Indians**

Ann Brierty, THPO  
12700 Pumarra Road Cahuilla  
Banning, CA, 92220 Serrano  
Phone: (951) 755 - 5259  
Fax: (951) 572-6004  
abrierty@morongo-nsn.gov

**Rincon Band of Luiseno Indians**

Cheryl Madrigal, Tribal Historic  
Preservation Officer  
One Government Center Lane Luiseno  
Valley Center, CA, 92082  
Phone: (760) 297 - 2635  
crd@rincon-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Morningstar Loop Convenience Store, Gas Station, and the Loop Rapid Car Wash IS Project, Riverside County.

**Native American Heritage Commission  
Tribal Consultation List  
Riverside County  
2/23/2022**

***Rincon Band of Luiseno Indians***

Bo Mazzetti, Chairperson  
One Government Center Lane      Luiseno  
Valley Center, CA, 92082  
Phone: (760) 749 - 1051  
Fax: (760) 749-5144  
bomazzetti@aol.com

***Santa Rosa Band of Cahuilla Indians***

Lovina Redner, Tribal Chair  
P.O. Box 391820                      Cahuilla  
Anza, CA, 92539  
Phone: (951) 659 - 2700  
Fax: (951) 659-2228  
lsaul@santarosa-nsn.gov

***Soboba Band of Luiseno Indians***

Joseph Ontiveros, Cultural  
Resource Department  
P.O. BOX 487                         Cahuilla  
San Jacinto, CA, 92581           Luiseno  
Phone: (951) 663 - 5279  
Fax: (951) 654-4198  
jontiveros@soboba-nsn.gov

***Soboba Band of Luiseno Indians***

Isaiah Vivanco, Chairperson  
P. O. Box 487                         Cahuilla  
San Jacinto, CA, 92581           Luiseno  
Phone: (951) 654 - 5544  
Fax: (951) 654-4198  
ivivanco@soboba-nsn.gov

***Torres-Martinez Desert Cahuilla Indians***

Thomas Tortez, Chairperson  
P.O. Box 1160                         Cahuilla  
Thermal, CA, 92274  
Phone: (760) 397 - 0300  
Fax: (760) 397-8146  
tmchair@torresmartinez.org

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This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Morningstar Loop Convenience Store, Gas Station, and the Loop Rapid Car Wash IS Project, Riverside County.

# Appendix D

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Updated Geotechnical and Infiltration Evaluation

**UPDATED GEOTECHNICAL AND INFILTRATION EVALUATION  
PROPOSED CONVENIENCE STORE, GAS STATION, CAR WASH  
AND ASSOCIATED ROAD/BASIN IMPROVEMENTS  
ADJUSTED PARCEL 3 OF PM 36161 - C.U.P. 210119  
WINCHESTER, RIVERSIDE COUNTY, CALIFORNIA**

**PREPARED FOR**

**MORNINGSTAR VILLAGE LLC  
41805 ALBRAE STREET  
FREMONT, CALIFORNIA 94538**

**PREPARED BY**

**GEOTEK, INC.  
1548 NORTH MAPLE STREET  
CORONA, CALIFORNIA 92878**



**GeoTek, Inc.**  
1548 North Maple Street, Corona, California 92878  
(951) 710-1160 Office (951) 710-1167 Fax www.geotekusa.com

December 15, 2021  
Project No. 1888-CR

**Morningstar Village LLC**

41805 Albrae Street  
Fremont, California 94538

Attention: Mr. Sunny Goyal

Subject: Updated Geotechnical and Infiltration Evaluation  
Proposed Convenience Store, Gas Station, Car Wash  
And Associated Road/Basin Improvements  
Adjusted Parcel 3 of PM 36161 - C.U.P. 210119  
Winchester, Riverside County, California

Dear Mr. Goyal:

GeoTek, Inc. (GeoTek) is pleased to provide the results of our updated geotechnical and infiltration evaluation for the subject project located in the Winchester area of Riverside County, California. This report presents a discussion of our evaluation and provides preliminary geotechnical recommendations for earthwork, foundation design, and construction. It is GeoTek's opinion that the site development is feasible from a geotechnical viewpoint provided that the recommendations presented in this report are incorporated into the design and construction phases of the project.

The opportunity to be of service is sincerely appreciated. If you have any questions, please do not hesitate to call GeoTek's office.

Respectfully submitted,  
**GeoTek, Inc.**

Edward H. LaMont  
CEG 1892, Exp. 07/31/22  
Principal Geologist



Gaby M. Bogdanoff  
GE 3133, Exp. 06/30/22  
Project Engineer



Distribution: (1) Addressee via email (one PDF file)

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### ENCLOSURES

Figure 1 – Site Location Map

Figure 2 – Exploration Location Map

Appendix A – Boring Logs and Laboratory Data by Coleman Geotechnical (2005)

Appendix B – Logs of Exploratory Borings by GeoTek

Appendix C – Laboratory Test Results

Appendix D – Infiltration Test Results

Appendix E – General Earthwork and Grading Guidelines

## **I. PURPOSE AND SCOPE OF SERVICES**

The purpose of this study was to evaluate the existing geotechnical conditions of the site with respect to the currently anticipated site development. Services provided for this study included the following:

- Research and review of readily available geologic data and general information pertinent to the site,
- A site reconnaissance,
- Logging and sampling of two exploratory borings to supplement the data obtained from previous site borings (Coleman, 2005 and GeoTek, 2018), particularly within the newly incorporated car wash area,
- Logging and percolation testing of four borings excavated within the planned BMP basins “A” and “B”,
- Laboratory testing of selected soil and bedrock samples collected from the site,
- Review and evaluation of site seismicity,
- Compilation of this updated geotechnical and infiltration report which presents our preliminary recommendations for site development.

The intent of this report is to aid in the evaluation of the site for future proposed development from a geotechnical perspective. The professional opinions and geotechnical information contained in this report may need to be updated based upon our review of the final site development plans. These plans should be provided to GeoTek, Inc. (GeoTek) for review when available.

## **2. SITE DESCRIPTION AND PROPOSED DEVELOPMENT**

### **2.1 SITE DESCRIPTION**

The project site consists of adjusted Parcel 3 of Parcel Map (PM) 36161 which is located southeast of the intersection of Koon Street and Pourroy Road in the Winchester area of Riverside County,





California. Adjusted Parcel 3 is an irregular-shaped property consisting of about 5.08 acres of vacant land and is located northwest of Winchester Road (Highway 79) and northeast Pourroy Road. The site topography is relatively flat with the highest elevation of approximately 1408 feet above mean sea level (amsl) towards the north-central portion of the site and the lowest elevation of 1395 feet amsl towards the southeastern region. Surface drainage is to the south-southeast.

At the time of our site investigation, the project area had a thick cover of tall weeds and grasses. There is a small drainage trending and draining north to south through the center of PM 36161 site. Bedrock outcrops were noticed during our investigation in the southwestern and eastern portions of the PM 36161 site. Multiple large signs are posted near the corner of Highway 79 and Pourroy Road.

The project site is bounded by vacant land of Parcels 4 and 6 of PM 36161 to the north, Winchester Road followed by vacant land to the southeast, and Pourroy Road and vacant land of Parcels 1 and 2 of PM 36161 to the southwest. The general site location is shown in Figure 1.

## **2.2 PROPOSED DEVELOPMENT**

According to the *Conditional Use Permit Exhibit*, prepared by CSL Engineering, Inc. and date plotted October 18, 2021, the project will entail the earthwork and construction necessary for building a convenience store, gas station pumps and canopy, a car wash, propane distribution, electric vehicle charging stations, drive/parking areas, underground utilities, and other improvements. The project will also include the improvement of various existing perimeter roads (Winchester Road, Pourroy Road, and Pat Road) and construction of interior streets (Drive Aisles “A”, “B”, and “C”). BMP basins “A” and “B” is also planned to be built within the southeastern and north-central portions of Parcel 3.

The proposed site structures are anticipated to be single-story masonry or wood-framed buildings with concrete slab-on-grade floors and conventional shallow foundations.

The review of the *Preliminary Grading and Drainage Plan* (CSL Engineering, 2021) also suggests that cuts and fills required to achieve proposed grades will be mostly up to 5 feet, with a few local areas requiring up to 10 feet. Cut and fill slopes are planned to be constructed at gradients of 2:1 (h:v) or flatter and up to 5 to 10 feet in height. Retaining walls are also anticipated to have maximum heights of less than 6 feet.

If the site development differs from the information provided in this report, the recommendations should be subject to further review and evaluation by GeoTek. Final site development plans should be reviewed by GeoTek when they become available.

### **3. FIELD EXPLORATION, LABORATORY TESTING, AND PERCOLATION TESTING**

#### **3.1 FIELD EXPLORATION**

A previous field exploration was conducted by Coleman Geotechnical in May of 2004 for the entire PM 36161 (formerly PM 11539), as documented in the referenced *Geotechnical Investigation* report (Coleman, 2005). Their field work included eight borings (B-4, B-5, B-6, B-7, B-8, B-23, B-24, and B-25) to depths ranging from 3 to 16 feet below the existing ground surface within the currently proposed Parcel 3 area.

In 2018, GeoTek investigated the project site by means of drilling three exploratory borings (B-1 through B-3) within the intended building and road areas. The borings were drilled to depths ranging between 6.5 and 20.5 feet below the existing ground surface. In addition, three borings (I-1 through I-3) were drilled to depths of 2 to 5 feet within the basin areas planned at that time by the project civil engineer.

On November 16, 2021, GeoTek conducted a supplemental exploration to assess the subsurface conditions within the newly proposed car wash area and potential infiltration rates within the currently proposed BMP basins "A" and "B". The supplemental exploration consisted of two borings (B-4 and B-5) drilled within the car wash zone to refusal depths of about 9.5 to 10.5 feet below the existing ground surface and four borings (I-4 through I-8) excavated to 3 to 8 feet below the existing ground surface within the basins. All borings were drilled with a truck-mounted hollow stem auger drill rig.

The approximate locations of GeoTek's previous and recent borings and the borings by Coleman (2005) are shown in the Exploration Location Map, Figure 2. The logs of the exploratory borings by Coleman Geotechnical are included in Appendix A. Appendix B presents detailed logs of borings performed by GeoTek.

### 3.2 LABORATORY TESTING

Laboratory testing was performed on selected soil and bedrock samples collected during our field exploration. The purpose of the laboratory testing was to confirm the field classification of the soil materials encountered and to evaluate the physical properties of the soils for use in the engineering design and analysis. Laboratory testing included moisture-density determinations, maximum dry density-optimum moisture content, remolded direct shear, consolidation, expansion index, Atterberg limits, sieve analysis, R-value, and corrosion testing. Our test results are presented in Appendix C. Results of laboratory testing conducted by Coleman Geotechnical (2005) are included in Appendix A.

### 3.3 PERCOLATION TESTING

At the request of the project civil engineer, percolation testing was performed in the newly planned BMP basins “A” and “B”. Two tests were performed at each basin location (I-4 and I-5 in Basin B and I-6 and I-7 in Basin A) at the approximate basin bottom level. Testing was performed using the Riverside County Percolation Test Method. The percolation tests consisted of drilling an eight-inch diameter test hole to the desired depth and installing about two inches of gravel in the bottom of the hole. A three-inch diameter perforated PVC pipe, wrapped in filter sock, was placed in the boring excavation and the annular space was filled with gravel to prevent caving within the boring. Water was then placed in the borings to presoak the holes and the percolation testing was performed on the following day. The logs of these borings are presented in Appendix B. Test locations are shown on Figure 2.

The percolation rates obtained were then converted to a “raw” infiltration rate using the Porchet Method. The infiltration rates estimated are indicated in the following table. For reference, the infiltration rates estimated at previous basin locations are also presented in the table below.

<b>SUMMARY OF RAW INFILTRATION RATES</b>			
Boring	Depth of Test (Feet)	Material Encountered at Depth of Test	“Raw” Infiltration Rate (Inches per Hour)
I-1 (GeoTek, 2018)	5.0	Hard, un-weathered bedrock	0.14
I-2 (GeoTek, 2018)	2.5	Soft, weathered bedrock	1.32
I-3 (GeoTek, 2018)	2.0	Older Alluvium	1.20
I-4 (this evaluation)	8.0	Hard, un-weathered bedrock	0.02
I-5 (this evaluation)	6.0	Hard, un-weathered bedrock	0.04
I-6 (this evaluation)	3.0	Hard, un-weathered bedrock	0.07
I-7 (this evaluation)	3.0	Hard, un-weathered bedrock	0.07

Our field observations noted that the planned areas of BMP basins “A” and “B” are underlain by metasedimentary bedrock. This is consistent with the negligible infiltration rates estimated at all four tested locations.

In addition, over the lifetime of the infiltration area, the infiltration rates may be affected by silt build up and biological activities, as well as local variations in near surface soil conditions. A suitable factor of safety should be applied to the “raw” rates to design the infiltration systems. Detailed infiltration data is included in Appendix D.

## **4. GEOLOGIC AND SOILS CONDITIONS**

### **4.1 REGIONAL SETTING**

The property is situated in the Peninsular Ranges geomorphic province. The Peninsular Ranges province is one of the largest geomorphic units in western North America. It extends approximately 975 miles from the north and northeasterly adjacent the Transverse Ranges geomorphic province to the tip of Baja California. This province varies in width from about 30 to 100 miles. It is bounded on the west by the Pacific Ocean, on the south by the Gulf of California and on the east by the Colorado Desert Province.

The Peninsular Ranges are essentially a series of northwest-southeast oriented fault blocks. Several major fault zones are found in this province. The Elsinore Fault zone and the San Jacinto Fault zone trend northwest-southeast and are found near the middle of the province. The San Andreas Fault zone borders the northeasterly margin of the province.

More specific to the property, the is located in an area geologically mapped to be underlain by older alluvium and Mesozoic aged Phyllite (Morton, D.M., et al, 2003).

### **4.2 GENERAL SOIL/GEOLOGIC CONDITIONS**

A brief description of the earth materials encountered in the project area is presented in the following sections.

#### **4.2.1 Older Alluvium**

Older alluvial deposits were encountered at the ground surface of the site and extended depths up to 18 feet below the existing ground surface. As noted by our borings and previous

explorations by Coleman Geotechnical (2005), the older alluvium is shallow within the southern-most portion of Parcel 3 and tends to be deeper towards the northern and center regions. The older alluvium consisted of sandy clay, clayey sand, sandy silt, and silty clay which were damp to moist and very stiff/hard in-situ conditions, based on our field observations, in-place density tests, and blow counts. Laboratory testing conducted during the evaluation indicated “low” potential for expansion of the alluvium (EI = 45-50). Coleman Geotechnical (2005) reported results of expansion index tests of “low” to “medium” for the alluvium (EI = 32 to 76).

#### **4.2.2 Bedrock**

Bedrock materials were encountered in all our excavations below the older alluvium at depths ranging from 2 to 18 feet. These materials consist of metasedimentary bedrock. The on-site bedrock was soft and weathered when first encountered and was recovered as clayey silt to silty clay with trace fine grained sand. Below the upper one to three feet, the on-site bedrock becomes very hard and is difficult to excavate. Laboratory testing conducted during this evaluation indicated “low” potential for expansion for the on-site bedrock (EI = 25). Coleman Geotechnical reported “medium” expansion potential for the on-site bedrock (EI = 56).

Detailed logs of the borings are presented in Appendices A and B. The approximate locations of the above described geologic units as well as the locations of the previous and recent site explorations are shown in Figure 2.

### **4.3 SURFACE WATER AND GROUNDWATER**

#### **4.3.1 Surface Water**

Surface water was not observed on the site during our subsurface exploration or site reconnaissance. If encountered during earthwork operations, surface water on this site is the result of precipitation or surface run-off from surrounding areas. Overall surface drainage is generally to the south-southeast.

#### **4.3.2 Groundwater**

Groundwater was not encountered in our exploratory excavations drilled to a maximum depth of 20.5 feet at the site. Previous site explorations performed by Coleman Geotechnical (2005) did not report the presence of groundwater. Therefore, groundwater is not anticipated to be a factor for the site development, although the possibility of encountering localized seepages in the bedrock cannot be ruled out.

## 4.4 FAULTING AND SEISMICITY

### 4.4.1 Faulting

The geologic structure of the entire southern California area is dominated mainly by northwest-trending faults associated with the San Andreas system. The site is in a seismically active region. No active or potentially active fault is presently known to exist at this site nor is the site situated within an “Alquist-Priolo” Earthquake Fault Zone or the County of Riverside. The nearest zoned fault is the Wildomar fault in the Elsinore Fault Zone located approximately 7.6 miles to the southwest.

Being that the site is located 7.6 miles from the nearest known active fault zone, the potential for surface fault rupture is considered negligible. However, the site and most of southern California is in a seismically active region where moderate to strong ground shaking is possible. Therefore, the potential of ground shaking during a strong earthquake from the Elsinore Fault Zone or other nearby active fault zones is considered moderate to high. Industry standard level consideration should be given by the project structural engineer to account for ground shaking as outlined in the 2019 *California Building Code (CBC)*.

### 4.4.2 Seismic Design Parameters

The site is located at approximately 33.6209° Latitude and -117.0997° Longitude. Site spectral accelerations ( $S_a$  and  $S_1$ ), for 0.2 and 1.0 second periods for a Class “C” site, were determined from the SEAOC/OSHPD web interface that utilizes the USGS web services and retrieves the seismic design data and presents that information in a report format.

The results, based on the 2019 CBC, are presented in the following table:

<b>SITE SEISMIC PARAMETERS</b>	
Mapped 0.2 sec Period Spectral Acceleration, $S_s$	1.365g
Mapped 1.0 sec Period Spectral Acceleration, $S_1$	0.507g
Site Coefficient for Site Class "C", $F_a$	1.2
Site Coefficient for Site Class "C", $F_v$	1.493
Maximum Considered Earthquake Spectral Response Acceleration for 0.2 Second, $S_{MS}$	1.636g
Maximum Considered Earthquake Spectral Response Acceleration for 1.0 Second, $S_{M1}$	0.757g
5% Damped Design Spectral Response Acceleration Parameter at 0.2 Second, $S_{DS}$	1.092g
5% Damped Design Spectral Response Acceleration Parameter at 1 second, $S_{D1}$	0.505g
Site Modified Peak Ground Acceleration ( $PGAM$ )	0.669g
Seismic Design Category	D

Final selection of the appropriate seismic design coefficients should be made by the project structural engineer based upon the local practices and ordinances, expected building response and desired level of conservatism.

#### 4.5 LIQUEFACTION AND SEISMICALLY INDUCED SETTLEMENT

The County of Riverside ([https://gis.countyofriverside.us/Htm15Viewer/?viewer=MMC\\_Public](https://gis.countyofriverside.us/Htm15Viewer/?viewer=MMC_Public)) places the project site within an area with "low" liquefaction potential. In addition, the site lacks a regional groundwater table and is underlain by very stiff/hard alluvial soils and metasedimentary bedrock at depths. Based on these conditions, the site is considered to possess a nil potential for soil liquefaction.

The site rough grading is anticipated to remove all unsuitable natural materials and replace them with engineered compacted fill. Therefore, seismically-induced settlement of the surficial dry sandy sediments at the site is anticipated to be nil.

#### 4.6 OTHER SEISMIC HAZARDS

The project site is relatively flat to gently sloping, and evidence of ancient landslides or slope instabilities at this site was not observed during our site reconnaissance. Thus, the potential for landslides or slope instability is considered negligible for design purposes.

As previously mentioned, the site has a very gentle to flat topography. Rock fall or debris flows hazards are not design considerations.

The potential for secondary seismic hazard such as a tsunami is considered negligible due to site elevation and great distance to the ocean.

Diamond Valley Lake is located approximately 3.5 miles northeast from the site. This man-made lake was designed for a maximum water elevation 1756 feet msl, which is about 250 feet above the elevation of Parcel 3. However, the design and construction of the lake's three dams was recently completed (2002) and included dam safety for a strong seismic event. It is our opinion that the risk of a seiche associated with Diamond Valley Lake is minor.

Lake Skinner is situated at about 2.5 miles southeast from the site. This is also a man-made reservoir with maximum water level of 1500 feet msl which is about 100 feet above the elevation of Parcel 3. Because of the significant distance to the site, the hazard of seiche related to this lake is considered low.

Fissures related to groundwater withdrawal were not noted onsite during our site investigation. Additionally, no evidence of fissures was visible in Google Earth Pro aerial imagery of the site and surrounding areas dating back to 1996. Moreover, no fissures were noted on the regional geologic map of the site and vicinity (Morton, D.M., Kennedy, M.P., Bovard, K.R., and Burns, Diane, 2003). Due to the lack of recent geologic evidence and shallow bedrock, the potential for fissures on the subject site is considered negligible.

#### **4.7 EXPANSIVE/COLLAPSIBLE SOILS AND SUBSIDENCE**

Results of laboratory testing indicates that the on-site earth materials have "low" to "medium" expansion potential. Thus, measures to counteract soil expansiveness (such as additional reinforcement, presaturation, and others) are provided in the recommendation section of this report.

Site borings indicate that the surficial soils are very stiff to hard, with in-place dry densities on the order of 110 pcf or higher and in-place moisture contents of at least 8.0 percent. In addition, a test conducted on a relatively undisturbed sample of the older alluvium showed a negligible potential for collapse (less than 1 percent). Furthermore, the site remedial grading is anticipated to remove all loose/soft, disturbed soils within the proposed development areas prior to placing fills. Therefore, soil collapse is not anticipated to be a design consideration.

The entire Parcel 3 is underlain by bedrock at relatively shallow depths. Thus, subsidence is not an issue.



## **4.8 EROSION**

The site surficial soils are relatively sandy and are susceptible to wind and water erosion. Therefore, it is GeoTek's recommendation that all slopes be planted immediately at the completion of grading. Positive drainage away from building pads and slopes should be maintained during the lifetime of the project.

# **5 CONCLUSIONS AND RECOMMENDATIONS**

## **5.1 GENERAL**

The anticipated site development appears feasible from a geotechnical viewpoint provided that the following recommendations, and those provided by this firm at a later date are properly incorporated into the design of the project. Final site development and grading plans should be reviewed by GeoTek when they become available.

## **5.2 EARTHWORK CONSIDERATIONS**

### **5.2.1 General**

Earthwork and grading should be performed in accordance with the applicable grading ordinances of Riverside County, the 2019 California Building Code (CBC), and recommendations contained in this report. The Grading Guidelines included in Appendix E outline general procedures and do not anticipate all site-specific situations. In the event of conflict, the recommendations presented in the text of this report should supersede those contained in Appendix E.

### **5.2.2 Site Clearing**

The site should be cleared of existing vegetation, roots, and debris. These materials should be properly disposed of off-site.

### **5.2.3 Remedial Grading**

The upper, loose/soft and weathered portions of the older alluvium and bedrock are generally unsuitable for support of the proposed structures and improvements.

In areas where fill placements are required to achieve design grades, the approximate upper two to four feet of the underlying alluvial soils or weathered bedrock are recommended to be removed prior to replacing these materials with engineered compacted fill.

Building pads in cut should be overexcavated to a minimum depth of three feet below proposed grade, or a minimum of two feet below deepest foundation depth, whichever is deeper.

Transition (i.e. cut/fill) pads should be overexcavated a minimum of three feet below proposed grades or to a depth of one-half of the maximum fill thickness.

The bottom of removals/over-excavations should expose firm bedrock or competent older alluvial materials. Competent alluvium is relatively non-porous materials with in-place compaction of at least 85 percent of the soil's maximum dry density as determined per ASTM D 1557. A representative of this firm should observe the bottom of all excavations.

Removal of unsuitable materials should include building and hardscape areas, retaining wall and screen wall footings, and driveway and street areas.

The horizontal extent of removals/over-excavations should be at least five feet outside the perimeter of the footings and floor-slabs, or a distance equal to the depth of over-excavation below the bottom of the structural elements, whichever is greater.

A minimum 24 inches of engineered fill should be provided below the bottom of the proposed footings.

A minimum of 12 inches of engineered fill should be provided below asphaltic concrete pavement and Portland cement concrete hardscape areas. The horizontal extent of removals should extend at least two feet beyond the edge.

#### **5.2.4 Preparation of Areas to Receive Engineered Fill**

Upon approval by a representative of this firm, the material exposed in the removal/over-excavation bottoms should be scarified to a depth of approximately 6 inches, moistened to slightly above the optimum moisture content, and compacted to a minimum relative compaction of 90 percent (ASTM D 1557).

### **5.2.5 Engineered Fills**

On-site soils are generally considered suitable for reuse as engineered fill provided they are free from vegetation, roots, and other deleterious material. Rock fragments greater than six inches in maximum dimension should not be incorporated into engineered fill.

Engineered fill materials should be placed in horizontal lifts not exceeding eight inches in loose thickness, moisture conditioned to at least the optimum moisture content, and compacted to a minimum relative compaction of 90 percent (ASTM D 1557). Import soils, if required, should possess a “very low” to “low” expansion potential ( $EI < 50$ ) and should be approved by the geotechnical engineer prior to importing to the site.

### **5.2.6 Excavation Characteristics**

Excavation in the on-site subsurface materials is expected to be feasible utilizing heavy-duty grading equipment in good operating condition. All temporary excavations for grading purposes and installation of underground utilities should be constructed in accordance with local and Cal-OSHA guidelines. Temporary excavations within the on-site materials should be stable at 1:1 (h:v) inclinations for cuts less than 10 feet in height. Cuts in excess of 10 feet in height should be performed at maximum gradient of 1.5:1 (h:v) inclination.

### **5.2.7 Slopes**

Fill and cut slopes constructed at maximum gradients of 2:1 (h:v) or flatter, in accordance with industry standards, are anticipated to be both grossly and surficially stable. Fill placed on slopes should be properly benched into competent soils per the soils engineer.

### **5.2.8 Shrinkage & Subsidence**

Several factors will impact earthwork balancing on the site, including shrinkage, subsidence, trench spoil from utilities and footing excavations, as well as the accuracy of topography.

Shrinkage is primarily dependent upon the degree of compactive effort achieved during construction. For planning purposes, a shrinkage factor of up to 10 percent may be considered for the alluvial materials requiring removal and/or recompaction. Bulking of up to 10 percent is anticipated for cuts into bedrock. Subsidence is estimated to be up to 0.1 feet for localized non-bedrock areas. Subsidence within bedrock areas which comprise the majority of the site is anticipated to be nil.

### **5.2.9 Trench Excavations and Backfill**

Trench and temporary excavations for grading purposes and installation of underground utilities should conform to Cal-OSHA regulations. The contractor should have a competent person, per OSHA requirements, on site during construction to observe conditions and to make the appropriate recommendations.

Temporary excavations within the on-site materials should be stable at 1:1 (h:v) inclinations for cuts less than 10 feet in height.

Utility trench backfill should be compacted to at least 90 percent relative compaction (ASTM D 1557).

Compaction should be achieved with a mechanical compaction device. Jetting of trench backfill is not recommended. If soils to be used as backfill have dried out, they should be thoroughly moisture conditioned prior to placement in trenches.

## **5.3 DESIGN CONSIDERATIONS**

### **5.3.1 Foundation Design Criteria**

Foundation design criteria for a conventional foundation system are presented in general conformance with the 2019 CBC. These are typical design criteria and are not intended to supersede the design by the structural engineer.

This investigation and previous studies at the site (Coleman, 2005 and GeoTek, 2018) indicate that the on-site materials have “low” to “medium” expansion potential.

A summary of our preliminary foundation design recommendations is presented in the table below. These recommendations should be verified after the site is rough graded.

<b>GEOTECHNICAL RECOMMENDATIONS FOR DESIGN OF CONVENTIONALLY REINFORCED FOUNDATIONS</b>		
Design Parameter	“Low” Expansion Potential ( $21 \leq EI \leq 50$ )	“Medium” Expansion Potential ( $51 \leq EI \leq 90$ )
Foundation Depth (Inches below lowest adjacent grade)	One-story – 12	One-story – 18
Minimum Foundation Width (Inches)*	One-story – 12	One-story – 12
Minimum Slab Thickness (Inches)	4 – Actual	4 – Actual
Minimum Slab Reinforcing	6” x 6” – W2.9/2.9 welded wire fabric placed in middle of slab	No. 3 rebar 18 inches on-center, each way, placed in middle of slab
Effective Plasticity Index**	12	18
Minimum Reinforcement for Continuous Footings, Grade Beams, and Retaining Wall and Screen Wall Footings	Two No. 4 reinforcing bars, one placed near the top and one near the bottom	Four No. 4 reinforcing bars, two placed near the top and two near the bottom
Presaturation of Subgrade Soil (Percent of Optimum/Depth in Inches)	Minimum of 110% of the optimum moisture content to a depth of at least 12 inches prior to placing concrete	Minimum of 120% of the optimum moisture content to a depth of at least 18 inches prior to placing concrete

\*Code minimums per Table 1809.7 of the 2019 CBC should be complied with.

\*\*To be confirmed after the site is rough graded.

It should be noted that the above recommendations are based on soil support characteristics only. The structural engineer should design the slab and beam reinforcement based on actual loading conditions.

An allowable bearing capacity of 1,800 psf may be used for design of continuous footings 12 inches deep and 12 inches wide, and pad footings 24 inches square and 12 inches deep. This value may be increased by 400 psf for each additional 12 inches of embedment depth and by 200 psf for each additional 12 inches in width to a maximum of 3,500 psf. The allowable bearing capacity may be increased by one-third when considering short-term wind and seismic loads.

The recommended allowable bearing capacity is based on an estimated maximum post-construction settlement of 1-inch. Differential settlement of about one-half of the total settlement over a horizontal distance of 40 feet could result. Seismically-induced settlement is also expected to be minimal.

The passive earth pressure may be computed as an equivalent fluid having a density of 245 psf per foot of depth, to a maximum earth pressure of 2500 psf for footings founded on engineered

fill. A coefficient of friction between soil and concrete of 0.40 may be used with dead load forces. The upper one foot of soil below the adjacent grade should not be used in calculating passive pressure. When combining passive and frictional resistance, the passive pressure component should be reduced by one-third.

A moisture and vapor retarding system should be placed below slabs-on-grade where moisture migration through the slab is undesirable. Guidelines for these are provided in the *2019 California Green Building Standards Code (CALGreen)* Section 4.505.2 and the *2019 CBC* Section 1907.1 and *ACI 360R-10*. The vapor retarder design and construction should also meet the requirements of ASTM E1643. A portion of the vapor retarder design should be the implementation of a moisture vapor retardant membrane.

It should be realized that the effectiveness of the vapor retarding membrane can be adversely impacted as a result of construction related punctures (e.g. stake penetrations, tears, punctures from walking on the aggregate layer, etc.). These occurrences should be limited as much as possible during construction. Thicker membranes are generally more resistant to accidental puncture than thinner ones. Products specifically designed for use as moisture/vapor retarders may also be more puncture resistant. Although the CBC specifies a six-mil vapor retarder membrane, it is GeoTek's opinion that a minimum 10-mil thick membrane with joints properly overlapped and sealed should be considered, unless otherwise specified by the slab design professional. The membrane should consist of Stego wrap or the equivalent.

Moisture and vapor retarding systems are intended to provide a certain level of resistance to vapor and moisture transmission through the concrete, but do not eliminate it. The acceptable level of moisture transmission through the slab is to a large extent based on the type of flooring used and environmental conditions. Ultimately, the vapor retarding system should be comprised of suitable elements to limit migration of water and reduce transmission of water vapor through the slab to acceptable levels. The selected elements should have suitable properties (i.e., thickness, composition, strength, and permeability) to achieve the desired performance level. Consideration should be given to consulting with an individual possessing specific expertise in this area for additional evaluation.

Moisture retarders can reduce, but not eliminate, moisture vapor rise from the underlying soils up through the slab. Moisture retarders should be designed and constructed in accordance with applicable American Concrete Institute, Portland Cement Association, ASTM and California Building Code requirements and guidelines.

GeoTek recommends that a qualified person, such as the flooring contractor, structural engineer, and/or architect be consulted to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction.

In addition, the recommendations in this report and our services in general are not intended to address mold prevention, since we along with geotechnical consultants in general, do not practice in areas of mold prevention. If specific recommendations are desired, a professional mold prevention consultant should be contacted.

### **5.3.2 Miscellaneous Foundation Recommendations**

- To reduce moisture penetration beneath the slab on grade areas, utility trenches should be backfilled with engineered fill, lean concrete, or concrete slurry where they intercept the perimeter footing or thickened slab edge.
- Soils from the footing excavations should not be placed in the slab-on-grade areas unless properly compacted and tested. The excavations should be free of loose/sloughed materials and be neatly trimmed at the time of concrete placement.
- Under-slab utility trenches should be compacted to project specifications. Compaction should be achieved with a mechanical compaction device. If soils to be used as backfill have dried out, they should be thoroughly moisture conditioned prior to placement in trenches.

### **5.3.3 Foundation Setbacks**

Minimum setbacks for all foundations should comply with the *2019 CBC* or County of Riverside requirements, whichever is more stringent. Improvements not conforming to these setbacks are subject to the increased likelihood of excessive lateral movements and/or differential settlements. If large enough, these movements can compromise the integrity of the improvements.

- The outside bottom edge of all footings should be set back a minimum of  $H/2$  (where  $H$  is the slope height) from the face of any ascending slope. The setback should be at least 5 feet and need not to exceed 15 feet. Where a retaining wall is constructed at the toe of the slope, the height of the slope should be measured from top of the wall to the top of the slope.
- The outside bottom edge of all footings should be set back a minimum of  $H/3$  from the face of any descending slope. The setback should be at least 7 feet and need not to exceed 40 feet.

- The bottom of any foundations for structures should be deepened so as to extend below a 1:1 projection upward from the bottom of the nearest excavation.
- The bottom of all footings for new structures near retaining walls should be deepened so as to extend below a 1:1 projection upward from the bottom inside edge of the wall stem.

### **5.3.4 Retaining and Garden Wall Design and Construction**

#### **5.3.4.1 General Design Criteria**

Recommendations presented in this report apply to typical masonry or concrete vertical walls with a maximum retained height of six feet. Additional review and recommendations should be requested for higher walls. These are typical design criteria and are not intended to supersede the design by the structural engineer.

Retaining wall foundations should be designed in accordance with Section 5.3 of this report. Structural needs may govern and should be evaluated by the project structural engineer.

All earth retention structure plans, as applicable, should be reviewed by this office prior to finalization.

Earthwork considerations, site clearing and remedial earthwork for all earth retention structures should meet the requirements of this report, unless specifically provided otherwise, or more stringent requirements or recommendations are made by the designer. The backfill material placement for all earth retention structures should meet the requirement of Section 5.3.4.4 in this report.

In general, cantilever earth retention structures, which are designed to yield at least  $0.001H$ , where  $H$  is equal to the height of the wall to the base of the footing, may be designed using the active condition. Rigid earth retention structures (including but not limited to rigid walls, and walls braced at top, such as typical basement walls) should be designed using the at-rest condition.

In addition to the design lateral forces due to retained earth, surcharges due to improvements, such as an adjacent building or traffic loading, should be considered in the design of the earth retention structures. Loads applied within a 1:1 (h:v) projection from the surcharge on the stem and footing of the earth retention structure should be considered in the design. Final selection



of the appropriate design parameters should be made by the designer of the earth retention structures.

### 5.3.4.2 Cantilevered Walls

The recommendations presented below are for cantilevered walls retaining up to six feet of compacted soil. Active earth pressure may be used for retaining wall design, provided the top of the wall is not restrained from minor deflections. An equivalent fluid pressure approach may be used to compute the horizontal pressure against the wall. Appropriate fluid unit weights are given below for specific slope gradients of the retained material. These do not include other superimposed loading conditions such as traffic, structures, seismic events, or adverse geologic conditions.

<b>ACTIVE EARTH PRESSURES</b>		
Surface Slope of Retained Materials (h:v)	Equivalent Fluid Pressure (pcf) Onsite Materials*	Equivalent Fluid Pressure (pcf) Imported Materials**
Level	45	37
2:1	75	53

\*The design pressures assume the backfill consists of native materials with an expansion index less than or equal to 50. Backfill zone includes area between the back of the wall and footing to a plane (1:1 h:v) up from the bottom of the wall foundation to the ground surface.

\*\* The design pressures assume the backfill consists of imported granular materials with a friction angle of approximately 34 degrees and an expansion index less than or equal to 20. Backfill zone includes area between the back of the wall and footing to a plane (1:1 h:v) up from the bottom of the wall foundation to the ground surface.

### 5.3.4.3 Restrained Retaining Walls

Retaining walls that will be restrained prior to placing and compacting backfill material or that have reentrant or male corners should be designed for an at-rest equivalent fluid pressure of 67 pcf for level native backfill or 57 pcf for level imported backfill, plus any applicable surcharge loading. For areas of male or reentrant corners, the restrained wall design should extend a minimum distance of twice the height of the wall laterally from the corner, or a distance otherwise determined by the project structural engineer.

#### 5.3.4.4 Retaining Wall Backfill and Drainage

Retaining wall backfill should consist of native materials with  $EI \leq 50$  or imported granular soils with  $EI \leq 20$  and free of deleterious and/or oversized materials. The wall backfill should also include a minimum 1-foot wide section of  $\frac{3}{4}$ - to 1-inch clean crushed rock (or approved equivalent). The rock should be placed immediately adjacent to the back of wall and extend up from the back drain to within approximately 12 inches of finish grade. The upper 12 inches should consist of compacted onsite materials. Presence of other materials might necessitate revision to the parameters provided and modification of wall designs. The backfill materials should be placed in lifts no greater than 8-inches in thickness and compacted to a minimum of 90 percent relative compaction in accordance with ASTM Test Method D 1557. Proper surface drainage needs to be provided and maintained. Bracing of the walls during backfilling and compaction may also be necessary.

All earth retention structures should be provided with an adequate pipe and gravel back drain system to reduce the potential for hydrostatic pressure build up. As a minimum, backdrains should consist of a 4-inch diameter perforated collector pipe (Schedule 40, SDR 35, or approved equivalent) embedded in a minimum of one cubic foot per lineal foot of  $\frac{3}{4}$ - to 1-inch clean crushed rock or equivalent, wrapped in filter fabric (Mirafi 140N or approved equivalent). The drain system should be connected to a suitable outlet, as determined by the civil engineer. Drain outlets should be maintained over the life of the project and should not be obstructed or plugged by adjacent improvements. Waterproofing of site walls should be performed where moisture migration through the wall is undesirable.

Proper surface drainage needs to be provided and maintained. Water should not be allowed to pond behind retaining walls. Waterproofing of site walls should be performed where moisture migration through the wall is undesirable.

#### 5.3.4.5 Other Design Considerations

- Retaining and garden wall foundation elements should be designed in accordance with building code setback requirements.
- Wall design should consider the additional surcharge loads from superjacent slopes and/or footings, where appropriate.
- No backfill should be placed against concrete until minimum design strengths are evident by compression tests of cylinders.
- The retaining wall footing excavations, backcuts, and backfill materials should be approved by the project geotechnical engineer or their authorized representative.

- Positive separations should be provided in garden walls at horizontal distances not exceeding 20 feet.

### **5.3.5 Soil Corrosivity**

Corrosivity test results on two samples obtained from the project site (GeoTek, 2018) indicate that the on-site materials are “highly corrosive” to “corrosive” (1,809 and 4,020 Ohm-cm) to buried ferrous metals (Roberge, 2005). Consideration should be given to consulting with a corrosion engineer. Corrosion test results are included in Appendix C.

### **5.3.6 Soil Sulfate Content**

Sulfate test results on two samples obtained from the project site (GeoTek, 2018) indicate that the sulfate concentrations of less than 0.1 percent by weight (0.0030% for both samples). The soluble sulfate contents of this level are considered to be “negligible” per Table 4.2.1 of ACI 318. Based on the test results and Table 4.3.1 of ACI 318, special concrete mix design is not necessary. However, additional soluble sulfate testing should be performed during site grading to assess the sulfate levels within the as-graded soils. The results of these tests are presented in Appendix C.

### **5.3.7 Pavement Design**

GeoTek collected various samples of the potential subgrade soils from planned on-site and off-site pavement improvement areas. The samples were taken to the laboratory for determination of their R-value properties. The results of these tests indicate highly variable materials exist within the pavement areas with R-values ranging from 5 to 34. Detailed test results are provided in Appendix C, and approximate R-value sample locations are shown on Figure 2.

Based on the above R-values and using Traffic Indices (TIs) of 5.5 to 10.0, required by County of Riverside based on the street category, the following preliminary structural sections are recommended for the project:

<b>PRELIMINARY ON-SITE AND OFF-SITE PAVEMENT SECTIONS</b>			
Area	Traffic Index (TI)	Design R-value	Thickness of Asphalt Concrete/Aggregate Base (Inches)
Convenience Store/Gas Station/Carwash Parking areas	5.5	32	3.0/7.0
Convenience Store/Gas Station/Carwash Drive areas	7.0	32	4.0/9.0
Drive Aisles "A", "B", and "C"	7.0	32	4.0/9.0
Pat Road	7.0	19	4.0/12.0
Pourroy Road (From approx. Pat Road to Koon Street)	8.5	5	6.0/18.0
Pourroy Road (From approx. Winchester Road to Pat Road)	8.5	19	6.0/14.0
Winchester Road (Highway 79)	10.0	26	7.0/14.0

Traffic Indices (TIs) used in our pavement design are considered reasonable values for the proposed development and should provide a pavement life of approximately 20 years with a normal amount of flexible pavement maintenance. Irrigation adjacent to pavements, without a deep curb or other cutoff to separate landscaping from the paving will result in premature pavement failure. Traffic parameters used for design were selected based upon engineering judgment and not upon information furnished to us such as an equivalent wheel load analysis or a traffic study.

The recommended pavement sections provided are intended as a minimum guideline and final selection of pavement cross section parameters should be made by the project civil engineer, based upon the local laws and ordinances, expected subgrade and pavement response, and desired level of conservatism. If thinner or highly variable pavement sections are constructed, increased maintenance and repair could be expected. Final pavement design should be checked by testing of soils exposed at subgrade (the upper foot) after final grading has been completed.

Asphalt concrete and aggregate base should conform to current Caltrans Standard Specifications Section 39 and 26-1.02, respectively. As an alternative, asphalt concrete can conform to Section 203-6 of the current Standard Specifications for Public Work (Green Book). Crushed aggregate base or crushed miscellaneous base can conform to Section 200-2.2 and 200-2.4 of the Green



Book, respectively. Pavement base should be compacted to at least 95 percent of the ASTM D1557 laboratory maximum dry density (modified proctor).

All pavement installation, including preparation and compaction of subgrade, compaction of base material, placement and rolling of asphaltic concrete, should be done in accordance with the County of Riverside specifications, and under the observation and testing of GeoTek and a County inspector where required. Jurisdictional minimum compaction requirements in excess of the aforementioned minimums may govern.

Deleterious material, excessive wet or dry pockets, oversized rock fragments, and other unsuitable yielding materials encountered during grading should be removed. Once existing compacted fill are brought to the proposed pavement subgrade elevations, the subgrade should be proof-rolled in order to check for a uniform and unyielding surface. The upper 12 inches of pavement subgrade soils should be scarified, moisture conditioned at or near optimum moisture content, and recompacted to at least 95 percent of the laboratory maximum dry density (ASTM D1557). Rock fragments over six inches in one dimensions should not be placed within the upper 12 inches of the subgrade. If loose or yielding materials are encountered during construction, additional evaluation of these areas should be carried out by GeoTek. All pavement section changes should be properly transitioned.

### **5.3.8 Concrete Flatwork**

#### **5.3.8.1 Exterior Slabs, Sidewalks, and Driveways**

Exterior slabs, sidewalks, and driveways should be designed using a four-inch minimum thickness. No specific reinforcement is required from a geotechnical perspective. However, flatwork resting on a subgrade with a “medium” potential for expansion is recommended to be reinforced with 6” x 6” – W2.9/W2.9 welded wire fabric or equivalent placed in middle of slab. Some shrinkage and cracking of the concrete should be anticipated as a result of typical mix designs and curing practices commonly utilized in educational construction.

Exterior slabs, sidewalks, and driveways may be under the jurisdiction of the governing agency. If so, jurisdictional design and construction criteria would apply, if more restrictive than the recommendations presented in this report.

Subgrade soils should be pre-moistened prior to placing concrete. The subgrade soils below exterior slabs, sidewalks, and driveways with “low” expansion potential should be pre-saturated to a minimum of 110 percent of optimum moisture content to a depth of at least 12 inches. Soils

with “medium” expansion potential should be pre-saturated to a minimum of 120 percent of optimum moisture content to a depth of at least 12 inches.

All concrete installation, including preparation and compaction of subgrade, should be done in accordance with the County of Riverside specifications, and under the observation and testing of GeoTek and a County inspector, if necessary.

### **5.3.8.2 Concrete Performance**

Concrete cracks should be expected. These cracks can vary from sizes that are essentially unnoticeable to more than 0.125-inch in width. Most cracks in concrete, while unsightly, do not significantly impact long-term performance. While it is possible to take measures (proper concrete mix, placement, curing, control joints, etc.) to reduce the extent and size of cracks that occur, some cracking will occur despite the best efforts to minimize it. Concrete can also undergo chemical processes that are dependent upon a wide range of variables, which are difficult, at best, to control. Concrete, while seemingly a stable material, is subject to internal expansion and contraction due to external changes over time.

One of the simplest means to control cracking is to provide weakened control joints for cracking to occur along. These do not prevent cracks from developing; they simply provide a relief point for the stresses that develop. These joints are a widely accepted means to control cracks but are not always effective. Control joints are more effective the more closely spaced they are. GeoTek suggests that control joints be placed in two orthogonal directions and located a distance apart approximately equal to 24 to 36 times the slab thickness.

Exterior concrete flatwork (walkways, driveways, etc.) is often some of the most visible aspects of site development. They are typically given the least level of quality control, being considered “non-structural” components. We suggest that the same standards of care be applied to these features as to the structures themselves.

## **5.4 POST CONSTRUCTION CONSIDERATIONS**

### **5.4.1 Landscape Maintenance and Planting**

Water has been shown to weaken the inherent strength of soil, and slope stability is significantly reduced by overly wet conditions. Positive surface drainage away from graded slopes should be maintained and only the amount of irrigation necessary to sustain plant life should be provided for planted slopes. Controlling surface drainage and runoff and maintaining a suitable vegetation

cover can minimize erosion. Plants selected for landscaping should be lightweight, deep-rooted types that require little water and are capable of surviving the prevailing climate.

Overwatering should be avoided. An abatement program to control ground-burrowing rodents should be implemented and maintained. This is critical as burrowing rodents can decreased the long-term performance of slopes.

It is common for planting to be placed adjacent to structures in planter or lawn areas. This will result in the introduction of water into the ground adjacent to the foundations. This type of landscaping should be avoided.

#### **5.4.2 Drainage**

Positive site drainage should be maintained at all times. Drainage should not flow uncontrolled down any descending slope. Water should be directed away from foundations and not allowed to pond or seep into the ground adjacent to the footings. Paved areas should be sloped at two-percent away from the structures. Downspouts should discharge onto paved surfaces sloping away from the structures or into a closed pipe system which outfalls to the street gutter or directly to the storm drain system. Pad drainage should be directed toward approved areas and not be blocked by other improvements.

It is the owner's responsibility to maintain and clean drainage devices. In order to be effective, maintenance should be conducted on a regular and routine schedule and necessary corrections made prior to each rainy season.

### **5.5 PLAN REVIEW AND CONSTRUCTION OBSERVATIONS**

We recommend that site grading, specifications and foundation plans be reviewed by this office prior to construction to check for conformance with the recommendations of this report. We also recommend that GeoTek representatives be present during site grading and foundation construction to observe and document proper implementation of the geotechnical recommendations. The owner/developer should verify that GeoTek representatives perform at least the following duties:

- Observe site clearing and grubbing operations for proper removal of unsuitable materials.
- Observe and test bottom of removals prior to fill placement.
- Evaluate the suitability of on-site and import materials for fill placement and collect soil samples for laboratory testing where necessary.

- Observe the fill for uniformity during placement, including utility trench backfill. Also, perform field density testing of the fill materials.
  - Observe and probe foundation excavations to confirm suitability of bearing materials.
- If requested, a construction observation and compaction report can be provided by GeoTek, which can comply with the requirements of the governmental agencies having jurisdiction over the project. We recommend that these agencies be notified prior to commencement of construction so that necessary grading permits can be obtained.

## **6 INTENT**

It is the intent of this report to aid in the design and construction of the proposed development. Implementation of the advice presented in this report is intended to reduce risk associated with construction projects. The professional opinions and geotechnical advice contained in this report are not intended to imply total performance of the project or guarantee that unusual or variable conditions will not be discovered during or after construction.

The scope of our evaluation is limited to the boundaries of the subject property. This report does not and should in no way be construed to encompass any areas beyond the specific area of the proposed construction as indicated to us by our client. Further, no evaluation of any existing site improvements is included. The scope is based on our understanding of the project and the client's needs, our fee estimate (Proposal No. P-1007721-CR) dated October 25, 2021 and geotechnical engineering standards normally used on similar projects in this locality at the present.

## **7 LIMITATIONS**

Our findings are based on site conditions observed and the stated sources. Thus, our comments are professional opinions that are limited to the extent of the available data.

GeoTek has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the engineering and science professions currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this report.



Since our recommendations are based on the site conditions observed and encountered, and laboratory testing, our conclusions and recommendations are professional opinions that are limited to the extent of the available data. Observations during construction are important to allow for any change in recommendations found to be warranted. These opinions have been derived in accordance with current standards of practice and no warranty of any kind is expressed or implied. Standards of care/practice are subject to change with time.

## 8 SELECTED REFERENCES

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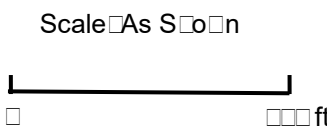
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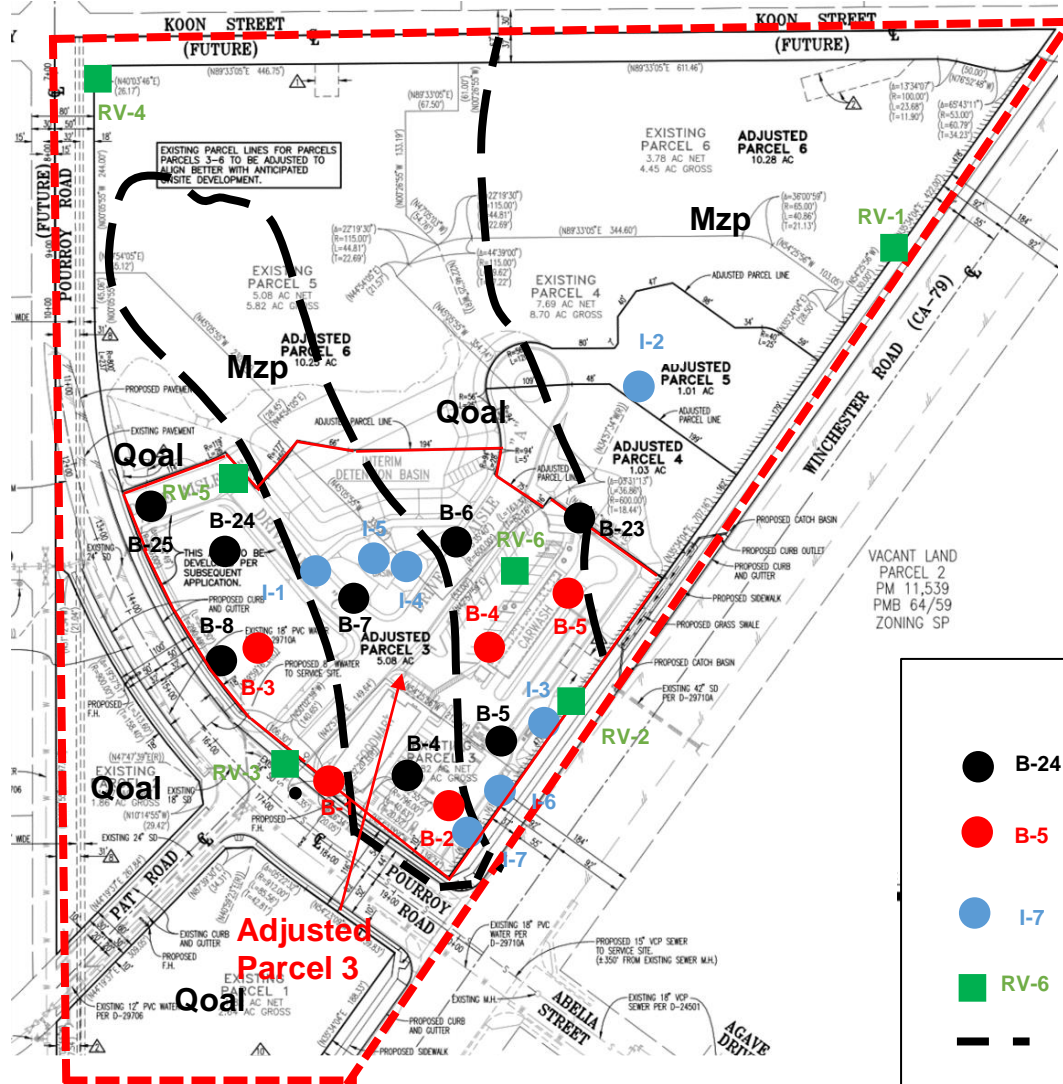
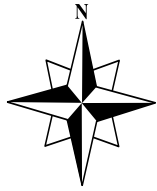
**Morningstar Village LLC**  
 Adjusted Parcel 3 of PM 36161 – C.U.P. 210119  
 Winchester, Riverside County, California

Project No. 1888-CR



**Figure 1**  
 Site Location Map





**PM 36161**

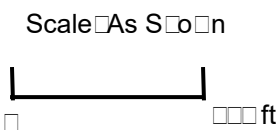
**LEGEND**

Locations are Approximate

- **B-24** Exploratory Borings by Coleman
- **B-5** Exploratory Borings by GeoTek and this evaluation
- **I-7** Percolation Testing by GeoTek and this evaluation
- **RV-6** Re-value Sample
- Approximate Geologic Contact
- Goal** Very Old Alluvial Deposits
- Mzp** Metasedimentary Bedrock

**Morningstar Village LLC**  
 Adjusted Parcel 3 of PM 36161 – C.U.P. 210119  
 Winchester, Riverside County, California

Project No. 1888-CR



**Figure 2**  
**Exploration Location Map**



# **APPENDIX A**

**BORING LOGS AND LABORATORY DATA BY  
COLEMAN GEOTECHNICAL (2005)**

**Updated Geotechnical and Infiltration Evaluation  
C.U.P. 210119, Winchester, California**

**Project No. 1888-CR**



COLEMAN GEOTECHNICAL SUBSURFACE LOG									
CLIENT: Developers Investments Group, LLC					JOB NO: 2362			DATE: 5/26/2004	
TEST BORING NO. B-4					EQUIPMENT: <input checked="" type="checkbox"/> HOLLOW STEM <input type="checkbox"/> BACKHOE <input type="checkbox"/> HAND PIT <input type="checkbox"/> BUCKET AUGER			DIAMETER: 8"	
ADDRESS: Winchester Road, between Koon & Abelia, Riverside Co., CA					LOGGED BY: A.A.				
LABORATORY DATA				DEPTH (feet)	FIELD DATA			UNIFIED SOIL CLASSIFICATION	SOIL/BEDROCK DESCRIPTION
DRY DENSITY (pcf)	MAX. DENSITY (pcf)	RELATIVE COMPACTION%	MOISTURE CONTENT (%)		BULK SAMPLE	DRIVE SAMPLE	"N" VALUE		
			3.0	2'				ML	ALLUVIUM: Sandy SILT, dry to damp, brown, soft
						R			M <sub>g</sub>
				5'					Bottom of Boring @ 3.0 Feet due to Drilling Refusal No Groundwater or Seepage Noted

COLEMAN GEOTECHNICAL SUBSURFACE LOG									
CLIENT: Developers Investments Group, LLC					JOB NO: 2362			DATE: 5/26/2004	
TEST BORING NO. B-5					EQUIPMENT: <input checked="" type="checkbox"/> HOLLOW STEM <input type="checkbox"/> BACKHOE <input type="checkbox"/> HAND PIT <input type="checkbox"/> BUCKET AUGER			DIAMETER: 8"	
ADDRESS: Winchester Road, between Koon & Abelia, Riverside Co., CA					LOGGED BY: A.A.				
LABORATORY DATA				DEPTH (feet)	FIELD DATA			UNIFIED SOIL CLASSIFICATION	SOIL/BEDROCK DESCRIPTION
DRY DENSITY (pcf)	MAX. DENSITY (pcf)	RELATIVE COMPACTION%	MOISTURE CONTENT (%)		BULK SAMPLE	DRIVE SAMPLE	"N" VALUE		
			4.5	2'				ML	ALLUVIUM: Sandy SILT, trace of gravel, dry to damp, brown
			3.3			S	>50		M <sub>g</sub>
				5'					Bottom of Boring @ 5.0 Feet No Groundwater Noted

This log is a representation of conditions at the time and place of excavation. With the passage of time and at other locations, conditions may vary. DRIVE SAMPLER: S = Standard Penetration Test, R = Ring Sampler, M = Moisture  
 SHEET 1 OF 1  
 APPENDIX PAGE D-5

COLEMAN GEOTECHNICAL SUBSURFACE LOG									
CLIENT: Developers Investments Group, LLC					JOB NO: 2362			DATE: 5/26/2004	
TEST BORING NO. B-6					EQUIPMENT: <input checked="" type="checkbox"/> HOLLOW STEM <input type="checkbox"/> BACKHOE <input type="checkbox"/> HAND PIT <input type="checkbox"/> BUCKET AUGER			DIAMETER: 8"	
ADDRESS: Winchester Road, between Koon & Abelia, Riverside Co., CA									
LOGGED BY: A.A.									
LABORATORY DATA				DEPTH (feet)	FIELD DATA			UNIFIED SOIL CLASSIFICATION	SOIL/BEDROCK DESCRIPTION
DRY DENSITY (pcf)	MAX. DENSITY (pcf)	RELATIVE COMPACTION%	MOISTURE CONTENT (%)		BULK SAMPLE	DRIVE SAMPLE	"N" VALUE		
				2'				ML	ALLUVIUM: Sandy SILT, trace of gravel, dry to damp, brown
102		8.8			R				
				5'				M <sub>zp</sub>	BEDROCK: Phyllite, fine grained, gray, very hard, damp
118		9.6			R				
			8.0	10'					Bottom of Boring @ 10.0 Feet No Groundwater Noted
					R				

COLEMAN GEOTECHNICAL SUBSURFACE LOG									
CLIENT: Developers Investments Group, LLC					JOB NO: 2362			DATE: 5/26/2004	
TEST BORING NO. B-7					EQUIPMENT: <input checked="" type="checkbox"/> HOLLOW STEM <input type="checkbox"/> BACKHOE <input type="checkbox"/> HAND PIT <input type="checkbox"/> BUCKET AUGER			DIAMETER: 8"	
ADDRESS: Winchester Road, between Koon & Abelia, Riverside Co., CA									
LOGGED BY: A.A.									
LABORATORY DATA				DEPTH (feet)	FIELD DATA			UNIFIED SOIL CLASSIFICATION	SOIL/BEDROCK DESCRIPTION
DRY DENSITY (pcf)	MAX. DENSITY (pcf)	RELATIVE COMPACTION%	MOISTURE CONTENT (%)		BULK SAMPLE	DRIVE SAMPLE	"N" VALUE		
				2'				ML	ALLUVIUM: Clayey SILT, brown, damp
		11.1			S	28			
				5'				M <sub>zp</sub>	Weathered BEDROCK: Phyllite, fine grained, gray, very hard
		7.5			S	>50			
				10'					Bottom of Boring @ 9.0 Feet due to Drilling Refusal No Groundwater Noted

This log is a representation of conditions at the time and place of excavation. With the passage of time and at other locations, conditions may vary. DRIVE SAMPLER: S = Standard Penetration Test, R = Ring Sampler, M = Moisture

SHEET 1 OF 1

APPENDIX PAGE D-6

## COLEMAN GEOTECHNICAL SUBSURFACE LOG

**CLIENT:** Developers Investments Group, LLC

**JOB NO:** 2362

**DATE:** 5/26/2004

**TEST BORING NO.** B-8

**EQUIPMENT:**  
 HOLLOW STEM  BACKHOE  
 HAND PIT  BUCKET AUGER

**DIAMETER:** 8"

**ADDRESS:** Winchester Road, between Koon & Abelia, Riverside Co., CA

**LOGGED BY:** A.A.

LABORATORY DATA				DEPTH (feet)	FIELD DATA			UNIFIED SOIL CLASSIFICATION	SOIL/BEDROCK DESCRIPTION
DRY DENSITY (pcf)	MAX. DENSITY (pcf)	RELATIVE COMPACTION%	MOISTURE CONTENT (%)		BULK SAMPLE	DRIVE SAMPLE	"N" VALUE		
				2'		R		ML	ALLUVIUM: Clayey SILT, reddish brown, damp, stiff
No Recovery									
			10.1	5'		R		GW	- Sandy GRAVEL, reddish brown, damp, dense, poor sample  - possible Bedrock contact(?)
				10'					
				15'					Bottom of Boring @ 8.5 Feet due to Drilling Refusal No Groundwater Noted
				20'					
				25'					
				30'					
				35'					

This log is a representation of conditions at the time and place of excavation. With the passage of time and at other locations, conditions may vary. DRIVE SAMPLER: S = Standard Penetration Test, R = Ring Sampler, M = Moisture



### COLEMAN GEOTECHNICAL SUBSURFACE LOG

**CLIENT:** Developers Investments Group, LLC

**JOB NO:** 2362

**DATE:** 5/26/2004

**TEST BORING NO.** B-23

**EQUIPMENT:**  
 HOLLOW STEM     BACKHOE  
 HAND PIT     BUCKET AUGER

**DIAMETER:** 8"

**ADDRESS:** Winchester Road, between Koon & Abelia, Riverside Co., CA

**LOGGED BY:** LAS

LABORATORY DATA				DEPTH (feet)	FIELD DATA			UNIFIED SOIL CLASSIFICATION	SOIL/BEDROCK DESCRIPTION
DRY DENSITY (pcf)	MAX. DENSITY (pcf)	RELATIVE COMPACTION%	MOISTURE CONTENT (%)		BULK SAMPLE	DRIVE SAMPLE	"N" VALUE		
		3.2		2'				SM ML	ALLUVIUM: Silty SAND and Sandy SILT, brown, very
				5'	S	>50		M <sub>R</sub>	Bedrock: Phyllite, brown gray, moderately hard, very weathered, fine to medium grained
		4.1			S	>50			- hard
				10'					Bottom of Boring @ 6.0 Feet No Groundwater Noted
				15'					
				20'					
				25'					
				30'					
				35'					

This log is a representation of conditions at the time and place of excavation. With the passage of time and at other locations, conditions may vary. DRIVE SAMPLER: S = Standard Penetration Test, R = Ring Sampler, M = Moisture  
 SHEET 1 OF 1  
 APPENDIX PAGE D-20

**COLEMAN GEOTECHNICAL SUBSURFACE LOG**

<b>CLIENT:</b> Developers Investments Group, LLC	<b>JOB NO:</b> 2362	<b>DATE:</b> 5/26/2004
<b>TEST BORING NO.</b> B-24	<b>EQUIPMENT:</b> <input checked="" type="checkbox"/> HOLLOW STEM <input type="checkbox"/> BACKHOE <input type="checkbox"/> HAND PIT <input type="checkbox"/> BUCKET AUGER	<b>DIAMETER:</b> 8"
<b>ADDRESS:</b> Winchester Road, between Koon & Abelia, Riverside Co., CA		<b>LOGGED BY:</b> LAS

LABORATORY DATA				DEPTH (feet)	FIELD DATA		UNIFIED SOIL CLASSIFICATION	SOIL/BEDROCK DESCRIPTION
DRY DENSITY (pcf)	MAX. DENSITY (pcf)	RELATIVE COMPACTION%	MOISTURE CONTENT (%)		BULK SAMPLE	DRIVE SAMPLE "N" VALUE		
		6.1		2'	S	49	SM ML	ALLUVIUM: Silty SAND and Sandy SILT, some gravel light brown, damp, very stiff
		4.9		5'	S	28	SM	- Silty SAND, trace of gravel, grayish brown, moist, very stiff
		9.5		10'	S	>50	M <sub>zp</sub>	Bedrock: Phyllite, brown gray, moderately hard to hard moderately weathered, damp to moist
		9.5		15'	S	>50		
				20'				Bottom of Boring @ 16.0 Feet No Groundwater Noted
				25'				
				30'				
				35'				

This log is a representation of conditions at the time and place of excavation. With the passage of time and at other locations, conditions may vary. DRIVE SAMPLER: S = Standard Penetration Test, R = Ring Sampler, M = Moisture  
 SHEET 1 OF 1  
 APPENDIX PAGE D-21

### COLEMAN GEOTECHNICAL SUBSURFACE LOG

**CLIENT:** Developers Investments Group, LLC

**JOB NO:** 2362

**DATE:** 5/26/2004

**TEST BORING NO.** B-25

**EQUIPMENT:**  
 HOLLOW STEM  BACKHOE  
 HAND PIT  BUCKET AUGER

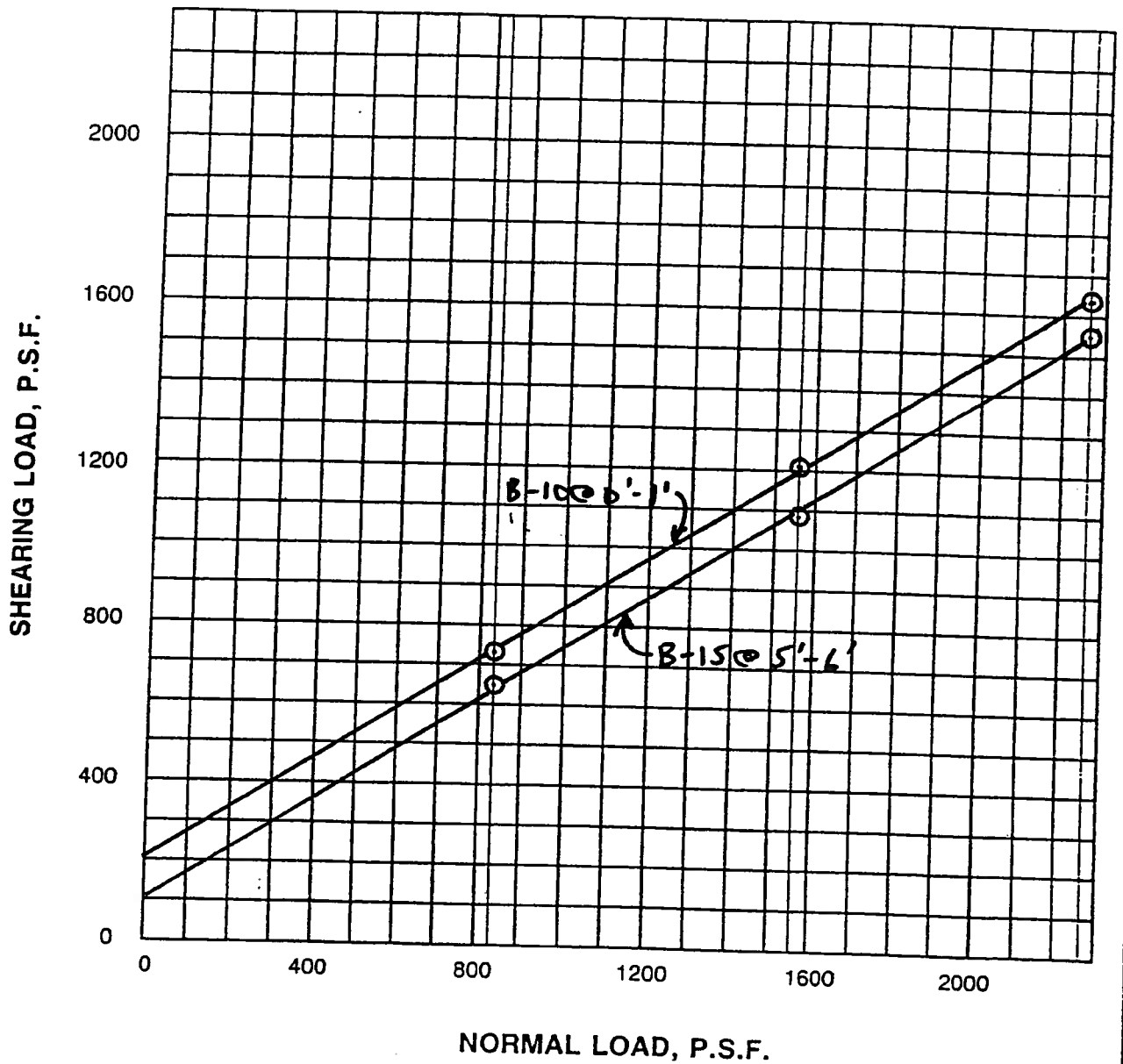
**DIAMETER:** 8"

**ADDRESS:** Winchester Road, between Koon & Abelia, Riverside Co., CA

**LOGGED BY:** LAS

LABORATORY DATA				DEPTH (feet)	FIELD DATA			UNIFIED SOIL CLASSIFICATION	SOIL/BEDROCK DESCRIPTION
DRY DENSITY (pcf)	MAX. DENSITY (pcf)	RELATIVE COMPACTION%	MOISTURE CONTENT (%)		BULK SAMPLE	DRIVE SAMPLE	"N" VALUE		
				2'				SC	ALLUVIUM: Clayey SAND, some gravel, moist, dense grayish brown  - Clayey SAND, trace of gravel, brownish gray, moist, dense
116			7.0		R				
				5'				M <sub>zp</sub>	Bedrock: Phyllite, brown gray, hard moderately weathered, damp to moist
119			8.4		R				
				10'					Bottom of Boring @ 11.0 Feet No Groundwater Noted
118			7.1		R				
				15'					
				20'					
				25'					
				30'					
				35'					

This log is a representation of conditions at the time and place of excavation. With the passage of time and at other locations, conditions may vary. DRIVE SAMPLER: S = Standard Penetration Test, R = Ring Sampler, M = Moisture  
 SHEET  1  OF  1   
 APPENDIX PAGE  D-22



**SAMPLE INFORMATION**  
 Boring No. *As NOTED*  
 Sample Depth: *As NOTED*

**TEST INFORMATION**

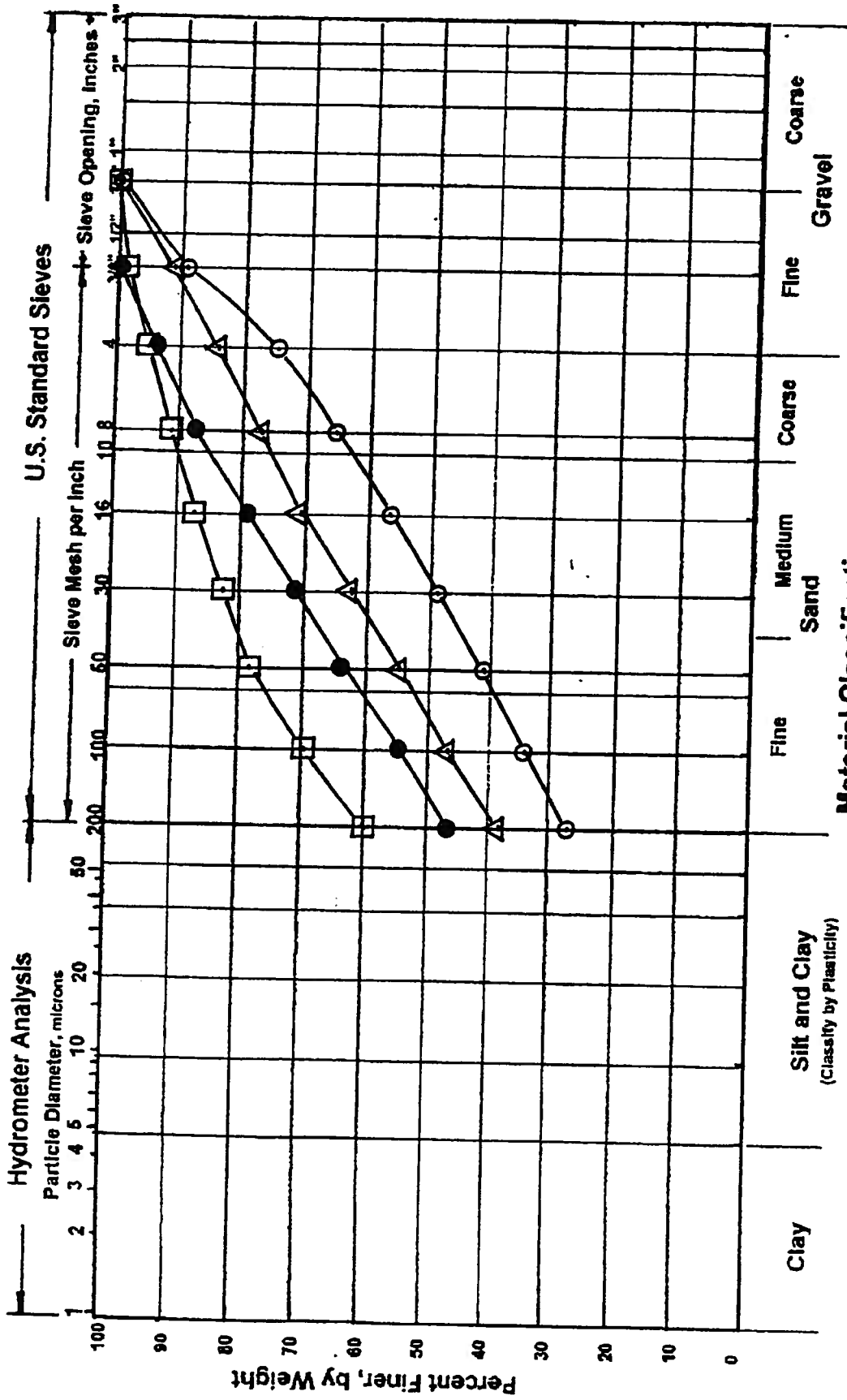
- Undisturbed      ○ Remolded
- Moisture Content    ☒ Saturated      □ Natural
- Remolded Density    ☒ 90% of Max.   □ Natural

**COLEMAN GEOTECHNICAL**

9272 JERONIMO ROAD, SUITE 104  
 IRVINE, CA 92618  
 PHONE (949) 461-5260 FAX (949) 461-5262

**DIRECT SHEAR  
 SUMMARY**

JOB NO.	DATE	DRAWN BY	APPENDIX
2362	7/04	JRC	Page E



**Material Classification**

**Sample Information:**

Symbol	Boring	Depth	Liquid Limit	Plastic Limit	Plasticity Index
○	B-1	20'-21'			
□	B-1	30'-31'			
△	B-1	40'-41'			
●	B-1	50'-51'			

**COLEMAN GEOTECHNICAL**  
 9272 JERONIMO ROAD, SUITE 104, IRVINE, CA 92618  
 PHONE (949) 461-5260 FAX (949) 461-5262

**GRADATION TESTS**

JOB NUMBER	DATE	DRAWN BY	APPENDIX PAGE
2362	7/04	TRC	F

# **APPENDIX B**

## **LOGS OF EXPLORATORY BORINGS BY GEOTEK**

**Updated Geotechnical and Infiltration Evaluation  
C.U.P. 210119, Winchester, California  
Project No. 1888-CR**



## A - FIELD TESTING AND SAMPLING PROCEDURES

### The Modified Split-Barrel Sampler (Ring)

The ring sampler is driven into the ground in accordance with ASTM Test Method D 3550. The sampler, with an external diameter of 3.0 inches, is lined with 1-inch long, thin brass rings with inside diameters of approximately 2.4 inches. The sampler is typically driven into the ground 12 or 18 inches with a 140-pound hammer free falling from a height of 30 inches. Blow counts are recorded for every 6 inches of penetration as indicated on the logs of borings. The samples are removed from the sample barrel in the brass rings, sealed, and transported to the laboratory for testing.

### Bulk Samples (Large)

These samples are normally large bags of earth materials over 20 pounds in weight collected from the field by means of hand digging or exploratory cuttings.

### Bulk Samples (Small)

These are plastic bag samples which are normally airtight and contain less than 5 pounds in weight of earth materials collected from the field by means of hand digging or exploratory cuttings. These samples are primarily used for determining natural moisture content and classification indices.

## B – BORING LOG LEGEND

The following abbreviations and symbols often appear in the classification and description of soil and rock on the logs of borings:

### SOILS

USCS            Unified Soil Classification System

f-c             Fine to coarse

f-m             Fine to medium

### GEOLOGIC

B: Attitudes    Bedding: strike/dip

J: Attitudes    Joint: strike/dip

C: Contact line

.....        Dashed line denotes USCS material change

————     Solid Line denotes unit / formational change

————     Thick solid line denotes end of boring

(Additional denotations and symbols are provided on the logs of borings)

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Morningstar Village LLC  
**PROJECT NAME:** Parcel 3 of PM 36161  
**PROJECT NO.:** 1888-CR  
**LOCATION:** See Exploration Location Map

**DRILLER:** 2R Drilling  
**DRILL METHOD:** Hollow Stem Auger  
**HAMMER:** 140lbs/30in.

**LOGGED BY:** DRW  
**OPERATOR:**  
**RIG TYPE:** CME 75  
**DATE:** 5/7/2018

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: B-1	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
MATERIAL DESCRIPTION AND COMMENTS								
<b>OLD ALLUVIAL DEPOSITS (Qoal)</b>								
5		32 50/6"		CL	F-c sandy CLAY, brown, slightly moist, hard, some gravel	13.7	115.8	
		29 50/6"			Same as above	14.7	111.6	
		25 25 30		SC	Clayey f-c SAND, brown to grayish brown, moist, medium dense, trace gravel	6.4	120.8	HC
10		11 23 33		SC/CL	Clayey f-c SAND to f-c sandy CLAY, brownish gray, moist, medium dense/very stiff, some gravel	10.8	129.3	
15		27 38 38			Same as above, becomes dense	10.8	123.4	
<b>METASEDIMENTARY BEDROCK (Mzp)</b>								
20		50/5"			Weathered within the upper foot  SCHIST/GNEISS, dark bluish gray, fine-grained, thinly laminated	13.5	95.3	
<b>BORING TERMINATED AT 20.5 FEET</b>								
25					No groundwater encountered Boring backfilled with soil cuttings			
30								

<b>LEGEND</b>	<b>Sample type:</b> <span style="display: inline-block; width: 10px; height: 10px; background-color: gray; border: 1px solid black;"></span> ---Ring <span style="display: inline-block; width: 10px; height: 10px; background-color: #ccc; border: 1px solid black;"></span> ---SPT <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-style: dashed;"></span> ---Small Bulk <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-style: dotted;"></span> ---Large Bulk <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; background-color: white;"></span> ---No Recovery <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; border-style: dashed; border-bottom: none;"></span> ---Water Table						
	<b>Lab testing:</b> AL = Atterberg Limits SR = Sulfate/Resistivity Test		EI = Expansion Index SH = Shear Test		SA = Sieve Analysis HC = Consolidation		RV = R-Value Test MD = Maximum Density



**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Morningstar Village LLC  
**PROJECT NAME:** Parcel 3 of PM 36161  
**PROJECT NO.:** 1888-CR  
**LOCATION:** See Exploration Location Map

**DRILLER:** 2R Drilling  
**DRILL METHOD:** Hollow Stem Auger  
**HAMMER:** 140lbs/30in.

**LOGGED BY:** DRW  
**OPERATOR:**  
**RIG TYPE:** CME 75  
**DATE:** 5/7/2018

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: B-2  MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
5				ML	<b>OLD ALLUVIAL DEPOSITS (Qoal)</b> F sandy SILT, brown, dry, some rootlets			
5		50/3"			<b>METASEDIMENTARY BEDROCK (Mzp)</b> SCHIST/GNEISS, dark bluish gray, fine-grained, thinly laminated, weathered  Becomes very hard to excavate			MD, EI, SH, SR
5		50/2"						
10					<b>BORING TERMINATED AT 6.5 FEET (REFUSAL)</b>  No groundwater encountered Boring backfilled with soil cuttings			
15								
20								
25								
30								

<b>LEGEND</b>	<b>Sample type:</b>	---Ring	---SPT	---Small Bulk	---Large Bulk	---No Recovery	---Water Table	
	<b>Lab testing:</b>	AL = Atterberg Limits	EI = Expansion Index	SA = Sieve Analysis	RV = R-Value Test	SR = Sulfate/Resistivity Test	SH = Shear Test	HC = Consolidation

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Morningstar Village LLC  
**PROJECT NAME:** Parcel 3 of PM 36161  
**PROJECT NO.:** 1888-CR  
**LOCATION:** See Exploration Location Map

**DRILLER:** 2R Drilling  
**DRILL METHOD:** Hollow Stem Auger  
**HAMMER:** 140lbs/30in.

**LOGGED BY:** DRW  
**OPERATOR:**  
**RIG TYPE:** CME 75  
**DATE:** 5/7/2018

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: B-3  MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
5		50/6"		CL	<b>OLD ALLUVIAL DEPOSITS (Qoal)</b>  Silty CLAY with f-c SAND, brown, slightly moist, hard, trace gravel, trace rootlets	9.9	121.1	MD, EI, SH, SR
		28 50/4"		CL	F-m sandy CLAY, brown, moist, hard	10.6	120.4	
		24 50/6"			Same as above, some gravel	8.9	124.7	
10		32 50/3"			<b>METASEDIMENTARY BEDROCK (Mzp)</b>  Weathered within the upper foot  SCHIST/GNEISS, dark gray, fine-grained, thinly laminated			
15		50/5"			Same as above, becomes indurated			
20					<b>BORING TERMINATED AT 17 FEET (REFUSAL)</b>  No groundwater encountered Boring backfilled with soil cuttings			
25								
30								

<b>LEGEND</b>	<b>Sample type:</b>	---Ring	---SPT	---Small Bulk	---Large Bulk	---No Recovery	---Water Table	
	<b>Lab testing:</b>	AL = Atterberg Limits	EI = Expansion Index	SA = Sieve Analysis	RV = R-Value Test	SR = Sulfate/Resistivity Test	SH = Shear Test	HC= Consolidation

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Morningstar Village LLC  
**PROJECT NAME:** Parcel 3 of PM 36161  
**PROJECT NO.:** 1888-CR  
**LOCATION:** Winchester, CA

**DRILLER:** 2R Drilling  
**DRILL METHOD:** Hollow Stem Auger  
**HAMMER:** 140lbs/30in.

**LOGGED BY:** JD  
**OPERATOR:** Jerry  
**RIG TYPE:** CME 75  
**DATE:** 11/16/2021

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: B-4	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
<b>MATERIAL DESCRIPTION AND COMMENTS</b>								
5		15 18 26	R1	CL	<b>OLD ALLUVIAL DEPOSITS (Qoa1)</b> Sandy CLAY, brown, moist, very stiff	6.4	110.5	MD, EI, AL
		28	R2		same as above			
		50-4"			<b>METASEDIMENTARY BEDROCK (Mzp) excavates as:</b> Silty f-c SAND with gravel, grey-brown, slightly moist, very dense	11.6	114.4	
		50-5"	R3		same as above			
		50-6"	R4		same as above			
10		50-4"	R5		same as above			
<b>PRACTICAL REFUSAL AT 10.5 FEET</b>								
15	No groundwater encountered Boring backfilled with soil cuttings							
20								
25								
30								

<b>LEGEND</b>	<b>Sample type:</b>	---Ring	---SPT	---Small Bulk	---Large Bulk	---No Recovery	---Water Table	
	<b>Lab testing:</b>	AL = Atterberg Limits	EI = Expansion Index	SA = Sieve Analysis	RV = R-Value Test	SR = Sulfate/Resistivity Test	SH = Shear Test	HC = Consolidation

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Morningstar Village LLC  
**PROJECT NAME:** Parcel 3 of PM 36161  
**PROJECT NO.:** 1888-CR  
**LOCATION:** Winchester, CA

**DRILLER:** 2R Drilling  
**DRILL METHOD:** Hollow Stem Auger  
**HAMMER:** 140lbs/30in.

**LOGGED BY:** JD  
**OPERATOR:** Jerry  
**RIG TYPE:** CME 75  
**DATE:** 11/16/2021

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: B-5  MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
5		37	R1	ML	<b>OLD ALLUVIAL DEPOSITS (Qoal)</b>  Sandy SILT, brown, moist, very stiff			
		50-4"			<b>METASEDIMENTARY BEDROCK (Mzp) excavates as:</b> Silty f-c SAND with gravel, grey-brown, slightly moist, very dense	6.2	101.1	
		50-6"	R2		No Recovery			
		50-2"			No Recovery			
		50-1"			No Recovery			
10					<b>PRACTICAL REFUSAL AT 9.5 FEET</b>  No groundwater encountered Boring backfilled with soil cuttings			
15								
20								
25								
30								

<b>LEGEND</b>	<b>Sample type:</b>	---Ring	---SPT	---Small Bulk	---Large Bulk	---No Recovery	---Water Table	
	<b>Lab testing:</b>	AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Morningstar Village LLC  
**PROJECT NAME:** Parcel 3 of PM 36161  
**PROJECT NO.:** 1888-CR  
**LOCATION:** See Exploration Location Map

**DRILLER:** 2R Drilling  
**DRILL METHOD:** Hollow Stem Auger  
**HAMMER:** 140lbs/30in.

**LOGGED BY:** DRW  
**OPERATOR:**  
**RIG TYPE:** CME 75  
**DATE:** 5/7/2018

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: I-I  MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
5				ML	<b>OLD ALLUVIAL DEPOSITS (Qoal)</b> F sandy SILT, brown, dry, some rootlets			
					<b>METASEDIMENTARY BEDROCK (Mzp)</b> SCHIST/GNEISS, dark bluish gray, fine-grained, thinly laminated, weathered			
10					<b>BORING TERMINATED AT 5 FEET (REFUSAL)</b> No groundwater encountered Boring backfilled with soil cuttings			
15								
20								
25								
30								

<b>LEGEND</b>	<b>Sample type:</b>	<input type="checkbox"/> ---Ring	<input type="checkbox"/> ---SPT	<input type="checkbox"/> ---Small Bulk	<input checked="" type="checkbox"/> ---Large Bulk	<input type="checkbox"/> ---No Recovery	<input type="checkbox"/> ---Water Table	
	<b>Lab testing:</b>	AL = Atterberg Limits	EI = Expansion Index	SA = Sieve Analysis	RV = R-Value Test	SR = Sulfate/Resistivity Test	SH = Shear Test	HC= Consolidation

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Morningstar Village LLC  
**PROJECT NAME:** Parcel 3 of PM 36161  
**PROJECT NO.:** 1888-CR  
**LOCATION:** See Exploration Location Map

**DRILLER:** 2R Drilling  
**DRILL METHOD:** Hollow Stem Auger  
**HAMMER:** 140lbs/30in.

**LOGGED BY:** DRW  
**OPERATOR:**  
**RIG TYPE:** CME 75  
**DATE:** 5/7/2018

Depth (ft)	SAMPLES				USCS Symbol	BORING NO.: I-2	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number				Water Content (%)	Dry Density (pcf)	Others
MATERIAL DESCRIPTION AND COMMENTS									
5						<b>METASEDIMENTARY BEDROCK (Mzp)</b>  SCHIST/GNEISS, dark gray, fine-grained, thinly laminated, weathered			
10						<b>BORING TERMINATED AT 2.5 FEET</b>  No groundwater encountered Boring backfilled with soil cuttings			
15									
20									
25									
30									

<b>LEGEND</b>	<b>Sample type:</b>	<input type="checkbox"/> ---Ring	<input type="checkbox"/> ---SPT	<input type="checkbox"/> ---Small Bulk	<input type="checkbox"/> ---Large Bulk	<input type="checkbox"/> ---No Recovery	<input type="checkbox"/> ---Water Table	
	<b>Lab testing:</b>	AL = Atterberg Limits	EI = Expansion Index	SA = Sieve Analysis	RV = R-Value Test	SR = Sulfate/Resistivity Test	SH = Shear Test	HC = Consolidation

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Morningstar Village LLC  
**PROJECT NAME:** Parcel 3 of PM 36161  
**PROJECT NO.:** 1888-CR  
**LOCATION:** See Exploration Location Map

**DRILLER:** 2R Drilling  
**DRILL METHOD:** Hollow Stem Auger  
**HAMMER:** 140lbs/30in.

**LOGGED BY:** DRW  
**OPERATOR:**  
**RIG TYPE:** CME 75  
**DATE:** 5/7/2018

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: I-3  MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
5				ML	<b>OLD ALLUVIAL DEPOSITS (Qoal)</b> F sandy SILT with CLAY, brown, dry, some rootlets			
10					<b>BORING TERMINATED AT 2 FEET</b> No groundwater encountered Boring backfilled with soil cuttings			
15								
20								
25								
30								

<b>LEGEND</b>	<b>Sample type:</b>														
	<input type="checkbox"/>	---Ring	<input type="checkbox"/>	---SPT	<input type="checkbox"/>	---Small Bulk	<input checked="" type="checkbox"/>	---Large Bulk	<input type="checkbox"/>	---No Recovery	<input type="checkbox"/>	---Water Table			
<b>Lab testing:</b>															
AL = Atterberg Limits				EI = Expansion Index				SA = Sieve Analysis				RV = R-Value Test			
SR = Sulfate/Resistivity Test				SH = Shear Test				HC = Consolidation				MD = Maximum Density			

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Morningstar Village LLC  
**PROJECT NAME:** Parcel 3 of PM 36161  
**PROJECT NO.:** 1888-CR  
**LOCATION:** Winchester, CA

**DRILLER:** 2R Drilling  
**DRILL METHOD:** Hollow Stem Auger  
**HAMMER:** 140lbs/30in.

**LOGGED BY:** JD  
**OPERATOR:** Jerry  
**RIG TYPE:** CME 75  
**DATE:** 11/16/2021

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: I-4  MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
5				ML	<p><b>OLD ALLUVIAL DEPOSITS (Qoal)</b> Sandy SILT, brown, moist</p> <p><b>METASEDIMENTARY BEDROCK (Mzp) excavates as:</b> Silty f-c SAND with gravel, grey-brown, slightly moist</p>			
10					<p><b>BORING TERMINATED AT 8 FEET</b> No groundwater encountered Boring set with pipe, sock, and gravel</p>			
15								
20								
25								
30								

<b>LEGEND</b>	<b>Sample type:</b>	<input type="checkbox"/> ---Ring	<input type="checkbox"/> ---SPT	<input type="checkbox"/> ---Small Bulk	<input type="checkbox"/> ---Large Bulk	<input type="checkbox"/> ---No Recovery	<input type="checkbox"/> ---Water Table	
	<b>Lab testing:</b>	AL = Atterberg Limits	EI = Expansion Index	SA = Sieve Analysis	RV = R-Value Test	SR = Sulfate/Resistivity Test	SH = Shear Test	HC = Consolidation



**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Morningstar Village LLC  
**PROJECT NAME:** Parcel 3 of PM 36161  
**PROJECT NO.:** 1888-CR  
**LOCATION:** Winchester, CA

**DRILLER:** 2R Drilling  
**DRILL METHOD:** Hollow Stem Auger  
**HAMMER:** 140lbs/30in.

**LOGGED BY:** JD  
**OPERATOR:** Jerry  
**RIG TYPE:** CME 75  
**DATE:** 11/16/2021

Depth (ft)	SAMPLES				USCS Symbol	BORING NO.: I-5  MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number	Water Content (%)			Dry Density (pcf)	Others	
5				ML	<p><b>OLD ALLUVIAL DEPOSITS (Qoal)</b> Sandy SILT, brown, moist</p> <p><b>METASEDIMENTARY BEDROCK (Mzp) excavates as:</b> Silty F-c SAND with gravel, grey-brown, slightly moist</p>				
10					<p style="text-align: center;"><b>BORING TERMINATED AT 6 FEET</b></p> <p>No groundwater encountered Boring set with pipe, sock, and gravel</p>				
15									
20									
25									
30									

<b>LEGEND</b>	<b>Sample type:</b>											
	<input type="checkbox"/>	---Ring	<input type="checkbox"/>	---SPT	<input type="checkbox"/>	---Small Bulk	<input type="checkbox"/>	---Large Bulk	<input type="checkbox"/>	---No Recovery	<input type="checkbox"/>	---Water Table
<b>Lab testing:</b>												
AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test	MD = Maximum Density					

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Morningstar Village LLC  
**PROJECT NAME:** Parcel 3 of PM 36161  
**PROJECT NO.:** 1888-CR  
**LOCATION:** Winchester, CA

**DRILLER:** 2R Drilling  
**DRILL METHOD:** Hollow Stem Auger  
**HAMMER:** 140lbs/30in.

**LOGGED BY:** JD  
**OPERATOR:** Jerry  
**RIG TYPE:** CME 75  
**DATE:** 11/16/2021

Depth (ft)	SAMPLES				USCS Symbol	BORING NO.: I-6  MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number				Water Content (%)	Dry Density (pcf)	Others
5					ML	<b>OLD ALLUVIAL DEPOSITS (Qoal)</b> Sandy SILT, brown, moist <b>METASEDIMENTARY BEDROCK (Mzp) excavates as:</b> Silty f-c SAND with gravel, grey-brown, slightly moist			
10						<b>BORING TERMINATED AT 3 FEET</b>			
15						No groundwater encountered Boring set with pipe, sock, and gravel			
20									
25									
30									

<b>LEGEND</b>	<b>Sample type:</b>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test	MD = Maximum Density

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Morningstar Village LLC  
**PROJECT NAME:** Parcel 3 of PM 36161  
**PROJECT NO.:** 1888-CR  
**LOCATION:** Winchester, CA

**DRILLER:** 2R Drilling  
**DRILL METHOD:** Hollow Stem Auger  
**HAMMER:** 140lbs/30in.

**LOGGED BY:** JD  
**OPERATOR:** Jerry  
**RIG TYPE:** CME 75  
**DATE:** 11/16/2021

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: I-7  MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
5				ML	<b>OLD ALLUVIAL DEPOSITS (Qoal)</b> Sandy SILT, brown, moist <b>METASEDIMENTARY BEDROCK (Mzp) excavates as:</b> Silty f-c SAND with gravel, grey-brown, slightly moist			
10					<b>BORING TERMINATED AT 3 FEET</b>			
15					No groundwater encountered Boring set with pipe, sock, and gravel			
20								
25								
30								

<b>LEGEND</b>	<b>Sample type:</b>							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test	MD = Maximum Density

# **APPENDIX C**

## **LABORATORY TEST RESULTS**

**Updated Geotechnical and Infiltration Evaluation  
C.U.P. 310119, Winchester, California  
Project No. 1888-CR**



## SUMMARY OF LABORATORY TESTING

### Classification

Soils were classified visually in general accordance to the Unified Soil Classification System (ASTM Test Method D 2487). The soil classifications are shown on the log of test borings in Appendix B.

### Moisture-Density Rings

The in-situ moisture content and density of the soils were determined for several samples in general accordance with ASTM D 2937. The results are shown on the logs of test borings in Appendix B.

### Moisture-Density Relationship

Laboratory testing was performed on three samples collected during the subsurface exploration. The laboratory maximum dry density and optimum moisture content was determined in general accordance with ASTM D 1557. The results are presented herein.

### Direct Shear

Direct shear testing was performed on samples collected from the site and remolded to approximately 90 percent of the soil's maximum dry density as determined per ASTM D 1557. The samples were tested saturated. The results are presented herein.

### Expansion Index

The expansion potential of the soils was determined by performing expansion index tests on three samples collected from the site in general accordance with ASTM D 4829. The results of these tests are presented herein.

### Atterberg Limits

A representative sample of the on-site fine-grained soils was tested for its Atterberg limits in general accordance with ASTM D 4318. The result of this test is presented herein.

### Sieve Analysis (Percent Finer than #200 Sieve)

The amount of soil finer than No. 200 sieve was estimated on a selected soil sample in general accordance with ASTM D 1140. The result of this test is presented herein.

### Consolidation

The potential for consolidation of the soils was determined by performing a consolidation test on a soil sample collected from the site, in general accordance with ASTM D 2435. The results are presented herein.

### R-Value

Pavement subgrade soils were sampled and tested for their R-values in general accordance with CAL 301. The results of these tests are presented herein.

### Corrosion

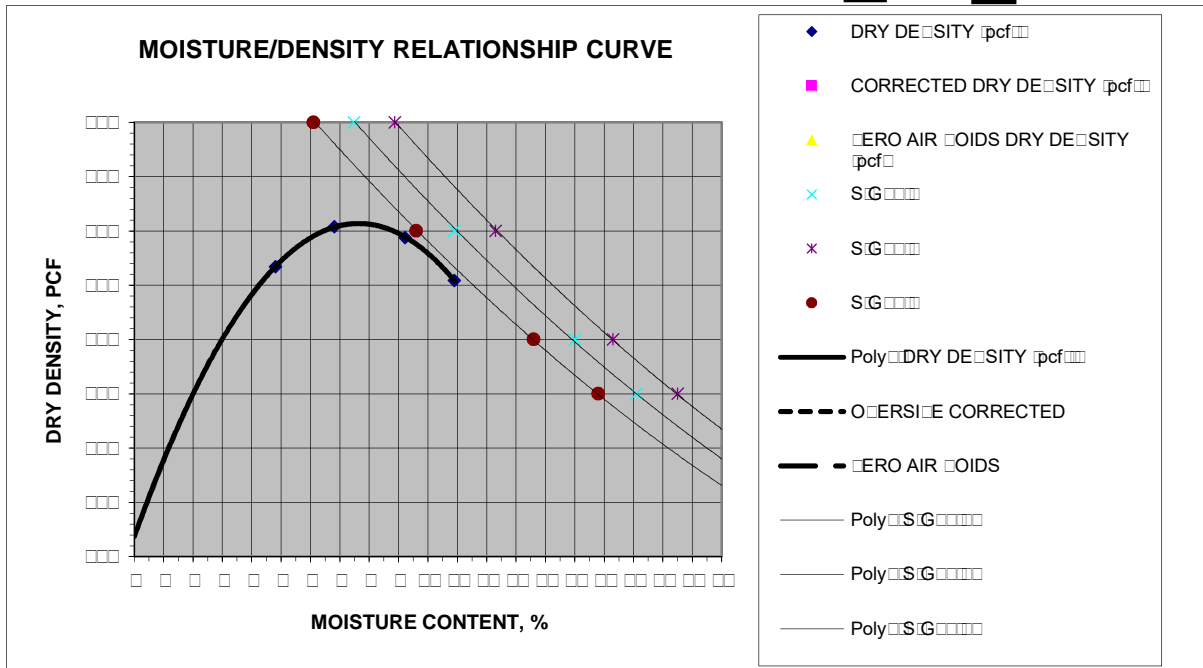
Chemical lab testing was performed on two samples collected during the subsurface exploration in general accordance with ASTM G51 (pH), ASTM D 512B (Chloride), ASTM D516 (Sulfate) and ASTM G187 (Resistivity). The results of these tests are presented herein.



## MOISTURE/DENSITY RELATIONSHIP

<b>Client:</b> The Back Group <b>Project:</b> Morning Star <b>Location:</b> _____ <b>Material Type:</b> Dark Gray Silty F - C Sand Gravel <b>Material Supplier:</b> _____ <b>Material Source:</b> _____ <b>Sample Location:</b> B-00 - 0 ft	<b>Job No.:</b> 0000-CR <b>Lab No.:</b> Corona  <b>Date Sampled:</b> 0-May-00 <b>Date Received:</b> 0-May-00 <b>Date Tested:</b> 0-May-00 <b>Date Reviewed:</b> _____
<b>Sampled By:</b> DR <b>Received By:</b> DA <b>Tested By:</b> DA <b>Reviewed By:</b> _____	

**Test Procedure:** ASTM 0000      **Method:** C  
**Oversized Material (%):** 0000      **Correction Required:**  yes  no



### MOISTURE DENSITY RELATIONSHIP VALUES

Maximum Dry Density, pcf	0000	@ Optimum Moisture, %	00
Corrected Maximum Dry Density, pcf	0000	@ Optimum Moisture, %	00

### MATERIAL DESCRIPTION

#### Grain Size Distribution:

	Gravel Retained on 0.075mm
	Sand Passing 0.075mm Retained on 0.425mm
	Silt and Clay Passing 0.075mm

#### Classification:

Unified Soils Classification \_\_\_\_\_  
 AASHTO Soils Classification \_\_\_\_\_

#### Atterberg Limits:

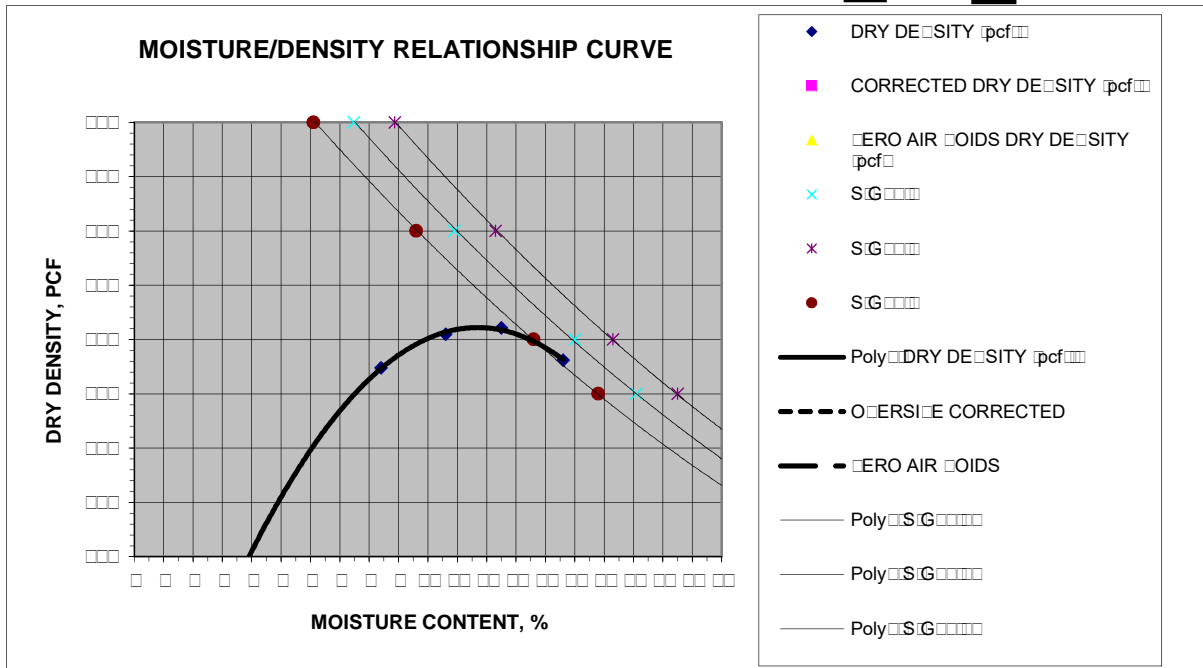
	Liquid Limit
	Plastic Limit
	Plasticity Index



## MOISTURE/DENSITY RELATIONSHIP

<b>Client:</b> The Back Group <b>Project:</b> Morning Star <b>Location:</b> _____ <b>Material Type:</b> Brown Silty F - C Sand <input type="checkbox"/> Clay <b>Material Supplier:</b> _____ <b>Material Source:</b> _____ <b>Sample Location:</b> B-____ - ____ ft	<b>Job No.:</b> _____-CR <b>Lab No.:</b> Corona
<b>Sampled By:</b> DR <b>Received By:</b> DLI <b>Tested By:</b> DLI <b>Reviewed By:</b> _____	<b>Date Sampled:</b> ____-May-____ <b>Date Received:</b> ____-May-____ <b>Date Tested:</b> ____-May-____ <b>Date Reviewed:</b> _____

**Test Procedure:** ASTM \_\_\_\_\_ **Method:** A  
**Oversized Material (%):** \_\_\_\_\_ **Correction Required:**  yes  no



### MOISTURE DENSITY RELATIONSHIP VALUES

Maximum Dry Density, pcf	_____	@	Optimum Moisture, %	_____
Corrected Maximum Dry Density, pcf	_____	@	Optimum Moisture, %	_____

### MATERIAL DESCRIPTION

#### Grain Size Distribution:

	<input type="checkbox"/> Gravel Retained on #10
	<input type="checkbox"/> Sand Passing #10 Retained on #40
	<input type="checkbox"/> Silt and Clay Passing #40

#### Classification:

Unified Soils Classification \_\_\_\_\_  
 AASHTO Soils Classification \_\_\_\_\_

#### Atterberg Limits:

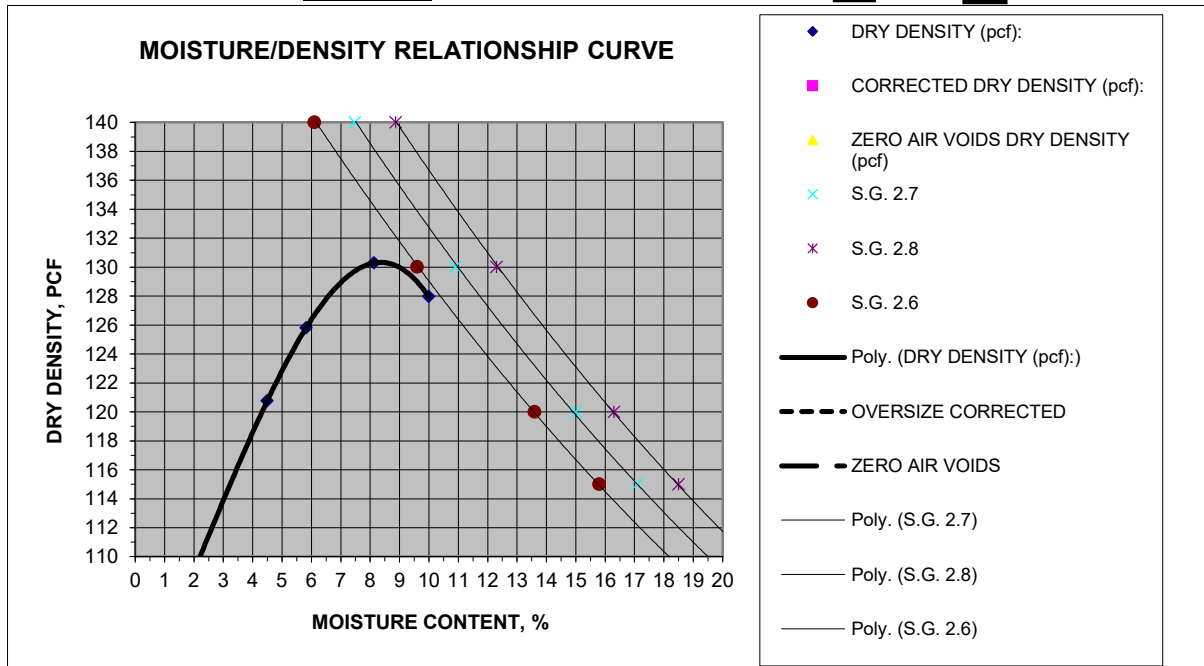
	Liquid Limit
	Plastic Limit
	Plasticity Index



## MOISTURE/DENSITY RELATIONSHIP

<b>Client:</b> <u>Morningstar Village</u>	<b>Job No.:</b> <u>1888-CR</u>
<b>Project:</b> <u>Chevron Service Station Site</u>	<b>Lab No.:</b> <u>Corona</u>
<b>Location:</b> <u>Winchester</u>	
<b>Material Type:</b> <u>Gray brown silty sand with some clay</u>	
<b>Material Supplier:</b> <u>-</u>	
<b>Material Source:</b> <u>-</u>	
<b>Sample Location:</b> <u>B-4 @ 0-5 feet</u>	
<b>Sampled By:</b> <u>JD</u>	<b>Date Sampled:</b> <u>-</u>
<b>Received By:</b> <u>ADLC</u>	<b>Date Received:</b> <u>11/16/2021</u>
<b>Tested By:</b> <u>JD/RD</u>	<b>Date Tested:</b> <u>12/1/2021</u>
<b>Reviewed By:</b> <u>DA</u>	<b>Date Reviewed:</b> <u>12/2/2021</u>

**Test Procedure:** ASTM D1557      **Method:** A  
**Oversized Material (%):** 5.8      **Correction Required:**  **yes**     **no**



### MOISTURE DENSITY RELATIONSHIP VALUES

<b>Maximum Dry Density, pcf</b> <u>130.5</u>	<b>@ Optimum Moisture, %</b> <u>8.5</u>
<b>Corrected Maximum Dry Density, pcf</b> <u>          </u>	<b>@ Optimum Moisture, %</b> <u>          </u>

### MATERIAL DESCRIPTION

**Grain Size Distribution:**

	% Gravel (retained on No. 4)
	% Sand (Passing No. 4, Retained on No. 200)
	% Silt and Clay (Passing No. 200)

**Atterberg Limits:**

	Liquid Limit, %
	Plastic Limit, %
	Plasticity Index, %

**Classification:**

Unified Soils Classification: \_\_\_\_\_  
AASHTO Soils Classification: \_\_\_\_\_

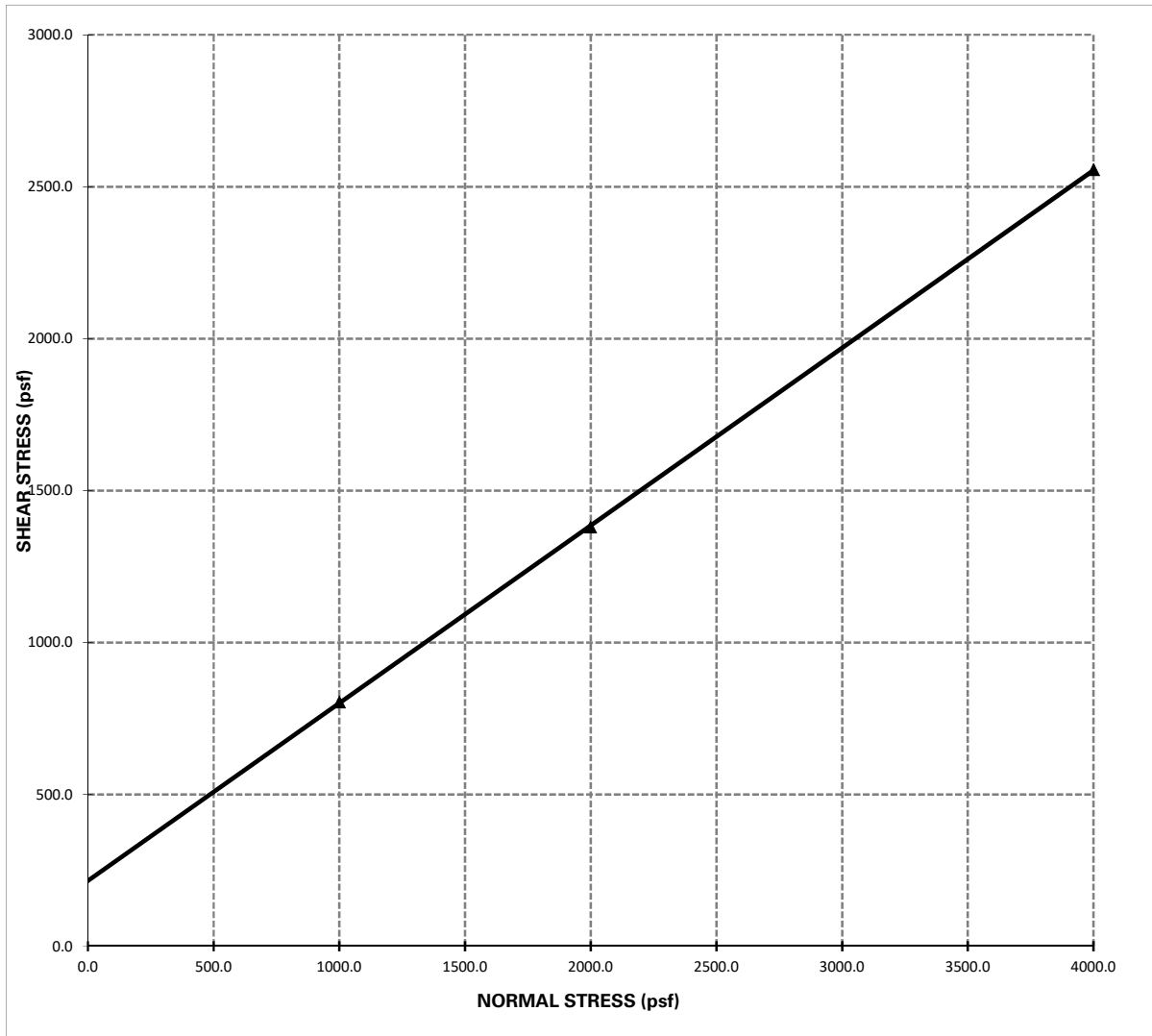




## DIRECT SHEAR TEST

**Project Name:** Morning Star Village  
**Project Number:** 1888-CR

**Sample Location:** B-2 @ 1 - 5 ft  
**Date Tested:** 5/21/2018



**Shear Strength:**  $\Phi = 30.3^\circ$  ; **C = 216.00 psf**

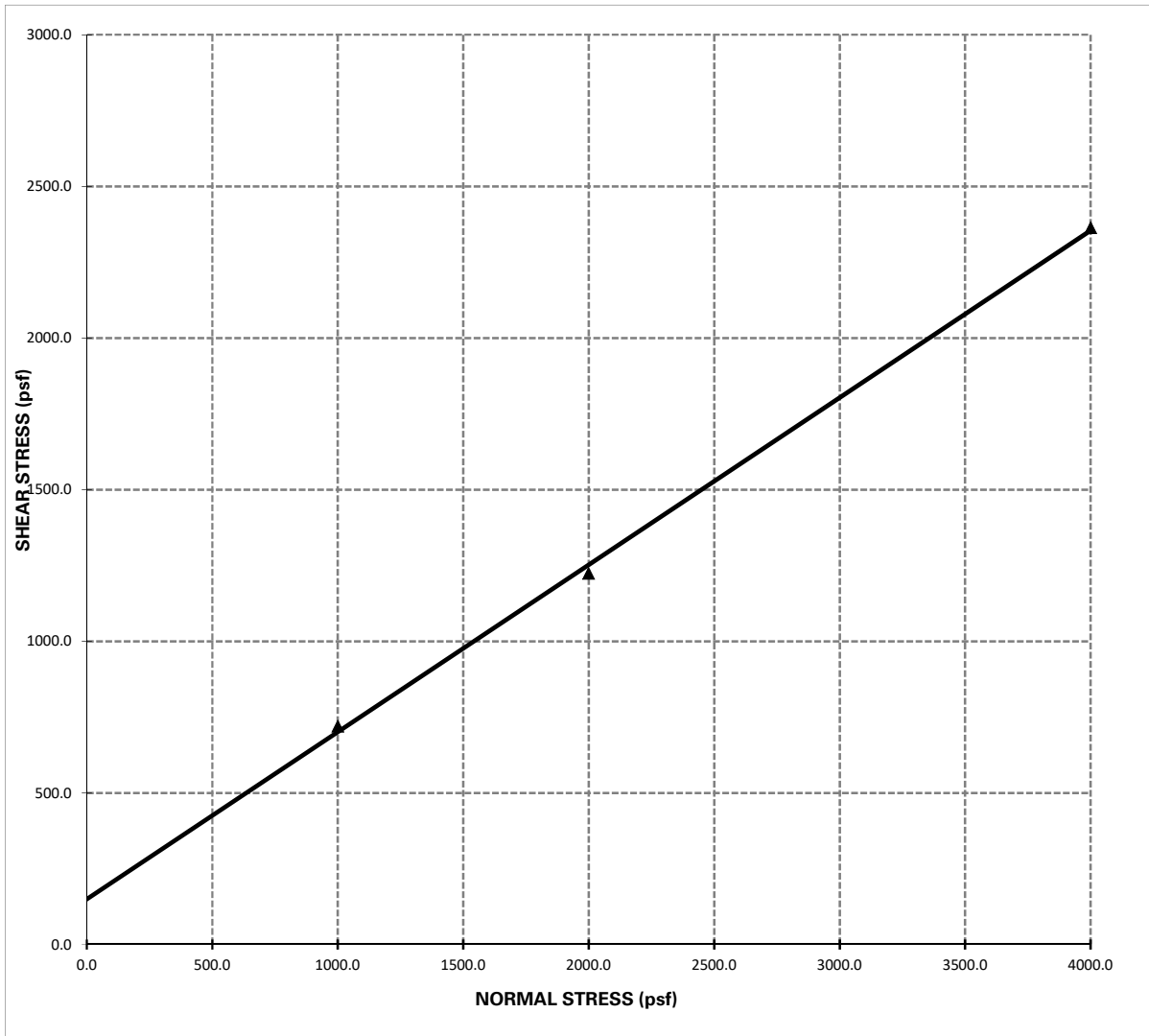
- Notes:**
- 1 - The soil specimen used in the shear box was a ring sample remolded to approximately 90% relative compaction from a bulk sample collected during the field investigation.
  - 2 - The above reflect direct shear strength at saturated conditions.
  - 3 - The tests were run at a shear rate of 0.035 in/min.



## DIRECT SHEAR TEST

**Project Name:** Morning Star Village  
**Project Number:** 1888-CR

**Sample Location:** B-3 @ 1 - 5 ft  
**Date Tested:** 5/21/2018



**Shear Strength:**  $\Phi = 28.9^\circ$  ; **C = 150.00 psf**

- Notes:**
- 1 - The soil specimen used in the shear box was a ring sample remolded to approximately 90% relative compaction from a bulk sample collected during the field investigation.
  - 2 - The above reflect direct shear strength at saturated conditions.
  - 3 - The tests were run at a shear rate of 0.035 in/min.



# EXPANSION INDEX TEST

(ASTM D4829)

**Client:** Tee Bac Group  
**Project Number:** 0000-CR  
**Project Location:** Morning Star Millage

**Tested/ Checked By:** DI Lab Co Corona  
**Date Tested:** 00000000  
**Sample Source:** B-00 0-0 ft  
**Sample Description:** \_\_\_\_\_

Ring 00 Ring Dia 00 0000" Ring 0t00"

### DENSITY DETERMINATION

<b>A</b>	Weight of compacted sample in ring (gm)	00000
<b>B</b>	Weight of ring (gm)	00000
<b>C</b>	Net weight of sample (gm)	<b>410.1</b>
<b>D</b>	Net Density (lb/ft <sup>3</sup> ) (C/00000000)	<b>123.7</b>
<b>E</b>	Dry Density (lb/ft <sup>3</sup> ) (D/00F)	<b>113.5</b>

### SATURATION DETERMINATION

<b>F</b>	Moisture Content (%)	00
<b>G</b>	Specific Gravity (assumed)	<b>2.70</b>
<b>H</b>	Unit weight of water (pcf) (00°C)	<b>62.4</b>
<b>I</b>	W <sub>p</sub> Saturation	<b>50.1</b>

READINGS		
DATE	TIME	READING
00000000	0000	000000
	0000	000000
00000000	0000	000000

Initial  
 00 min Dry  
 Final

FINAL MOISTURE	
Final weight of wet sample - tare	Moisture
00000	<b>16.2</b>

<b><u>EXPANSION INDEX = 25</u></b>
------------------------------------



# EXPANSION INDEX TEST

(ASTM D4829)

**Client:** Tee Bac Group  
**Project Number:** 0000-CR  
**Project Location:** Morning Star Millage

**Tested/ Checked By:** DI Lab Co Corona  
**Date Tested:** 00000000  
**Sample Source:** B-00 0-0 ft  
**Sample Description:** \_\_\_\_\_

Ring 00 Ring Dia 00 0000" Ring 0t00"

### DENSITY DETERMINATION

<b>A</b>	Weight of compacted sample in ring (gm)	00000
<b>B</b>	Weight of ring (gm)	00000
<b>C</b>	Net weight of sample (gm)	<b>395.1</b>
<b>D</b>	Net Density (lb/ft <sup>3</sup> ) (C/00000000)	<b>119.2</b>
<b>E</b>	Dry Density (lb/ft <sup>3</sup> ) (D/00F)	<b>107.7</b>

### SATURATION DETERMINATION

<b>F</b>	Moisture Content (%)	0000
<b>G</b>	Specific Gravity (assumed)	<b>2.70</b>
<b>H</b>	Unit weight of water (pcf) (°C)	<b>62.4</b>
<b>I</b>	Saturation	<b>50.8</b>

READINGS		
DATE	TIME	READING
00000000	0000	000000
	0000	000000
00000000	0000	000000

Initial  
 00 min Dry  
 Final

FINAL MOISTURE	
Final weight of wet sample - tare	Moisture
00000	<b>20.9</b>

<b><u>EXPANSION INDEX = 45</u></b>
------------------------------------



## EXPANSION INDEX TEST

(ASTM D4829)

**Client:** Morningstar Village  
**Project Number:** 1888-CR  
**Project Location:** Chevron Service Station, Winchester

**Tested/ Checked By:** ADLC Lab No Corona  
**Date Tested:** 11/29/2021  
**Sample Source:** B-4 @ 0-5 feet  
**Sample Description:** \_\_\_\_\_

Ring #: \_\_\_\_\_ Ring Dia. : 4.01" Ring Ht. .1"

### DENSITY DETERMINATION

<b>A</b>	Weight of compacted sample & ring (gm)	775.3
<b>B</b>	Weight of ring (gm)	364.0
<b>C</b>	Net weight of sample (gm)	<b>411.3</b>
<b>D</b>	Wet Density, lb / ft3 (C*0.3016)	<b>124.0</b>
<b>E</b>	Dry Density, lb / ft3 (D/1.F)	<b>114.0</b>

### SATURATION DETERMINATION

<b>F</b>	Moisture Content, %	8.8
<b>G</b>	Specific Gravity, assumed	<b>2.70</b>
<b>H</b>	Unit Wt. of Water @ 20 °C, (pcf)	<b>62.4</b>
<b>I</b>	% Saturation	<b>49.7</b>

READINGS		
DATE	TIME	READING
11/29/2021		0.8410
11/29/2021		0.8410
11/30/2021		0.8910

Initial  
10 min/Dry  
  
  
  
Final

FINAL MOISTURE	
Final Weight of wet sample & tare	% Moisture
816.6	<b>18.8</b>

**EXPANSION INDEX = 50**

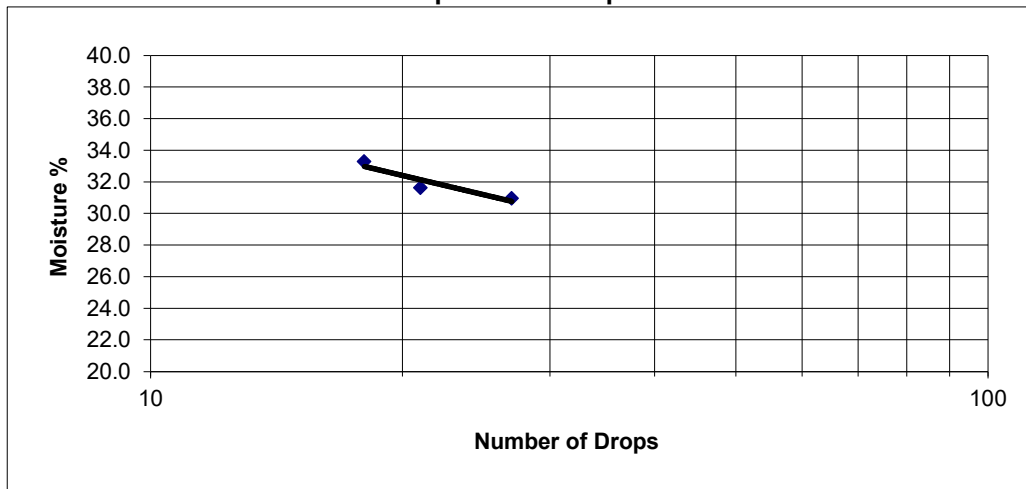


### ATTERBERG LIMITS DATA

Field Classification	_____	Job No.	1888-CR
Sample Number	B-4 @ 0-5 feet	Client	Morningstar Village, LLC
Sample Type	_____	Project	Chevron Service Station
Location	_____		
Tested by:	ADLC		

	Plastic Limit		Liquid Limit		
Number of Blows			27	21	18
Wt. of Dish + Wet Soil	36.96	37.15	15.65	15.39	16.30
Wt. of Dish + Dry Soil	35.87	36.09	13.39	13.16	13.74
Wt. of Moisture	1.09	1.06	2.26	2.23	2.56
Wt. of Dish	30.45	30.61	6.09	6.11	6.05
Wt. of Dry Soil	5.42	5.48	7.30	7.05	7.69
Moisture Content %	20.1	19.3	31.0	31.6	33.3

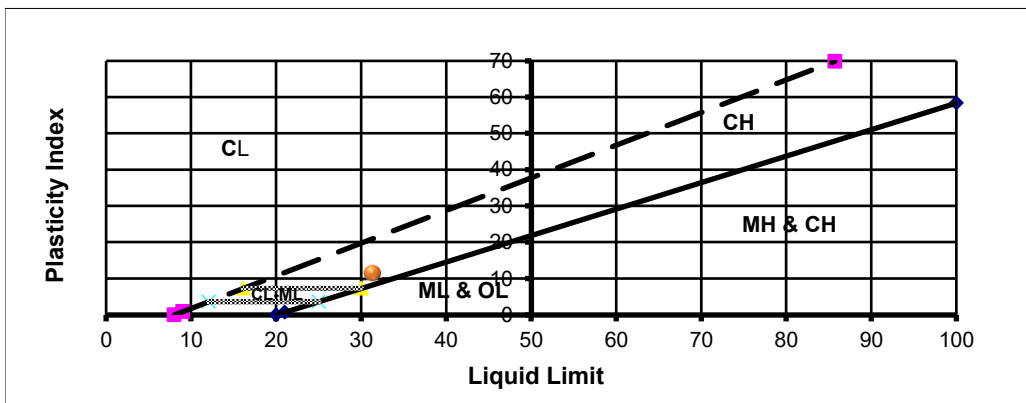
Liquid Limit Graph



Liquid Limit  
31

Plastic Limit  
20

Plasticity Index  
12

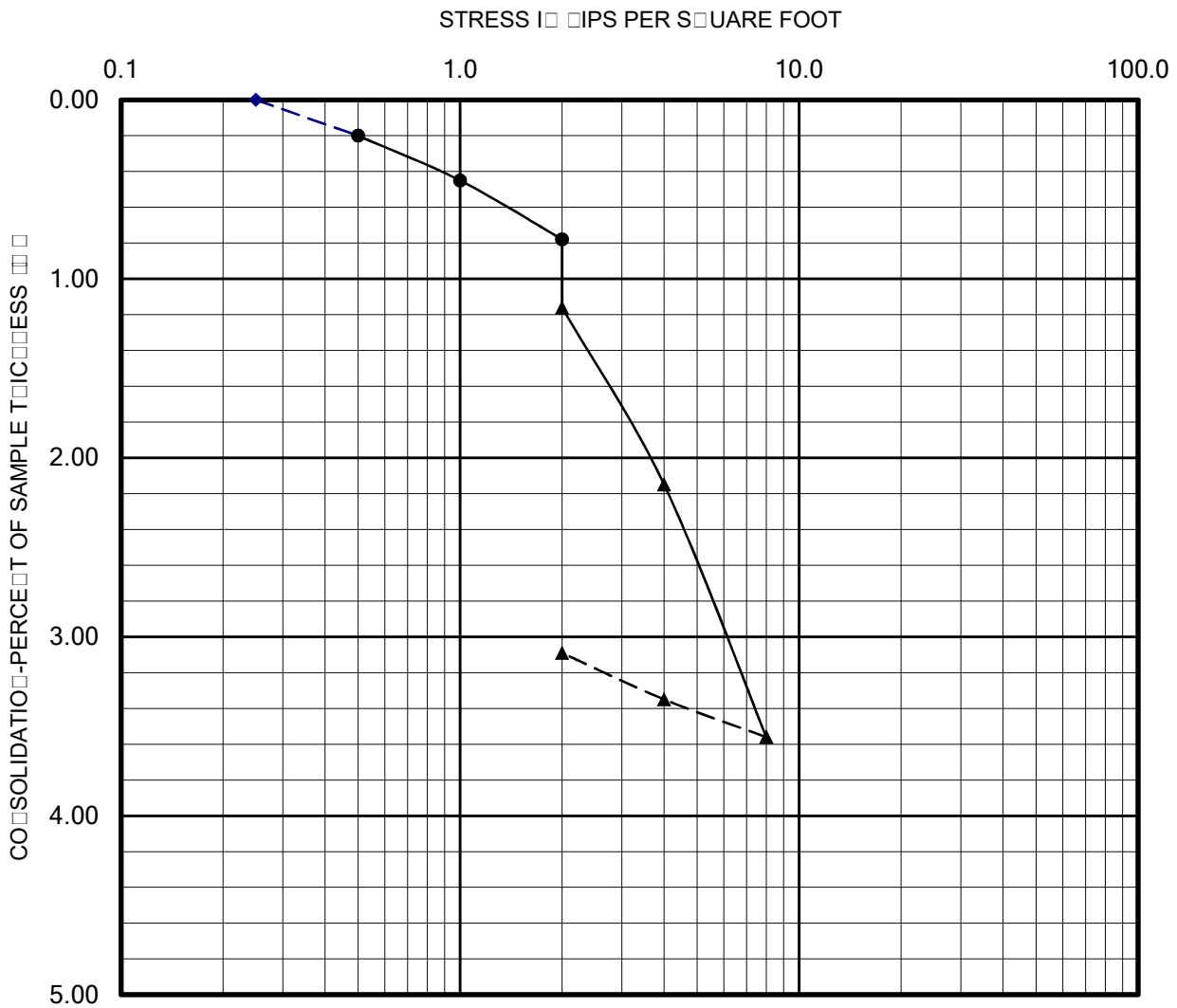




## -200 WASH

Date: \_\_\_\_\_  
W.O.: 1888-CR sample ID B-4  
Client: Morningstar Village, LLC depth 0-5 feet  
Project: Chevron Service Station

Sieve Size	Particle Diameter		Wt. Retained	Wt. Passing	% Passing	Specs
	in.	mm.				
#200	0.0029	0.074	139.3	149.8	51.8%	
Dry Weight	_____ 289.1					
Soak Time	_____ 1440 _____ Minutes					



- Seating Cycle
- Loading Prior to Inundation
- ▲— Loading After Inundation
- ▲--- Rebound Cycle

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 1586



## CONSOLIDATION REPORT

**Sample:**

**B-1 @ 7 ft**

CREATED BY	Lab/DI
PROJECT NUMBER-CR	Date



November 19, 2021

**Ms. Anna Scott**

**GeoTek Inc.**

1548 North Maple Street  
Corona, California 92880

Project No. 47783

Attention Ms. Scott:

Laboratory testing of the bulk soil samples delivered to our laboratory on 11/10/2021 has been completed.

Reference: W.O. # 1888-CR  
Project: Morningstar Village, LLC. Chevron Service Station, Winchester  
Samples: RV-1  
RV-2  
RV-3  
RV-4  
RV-5  
RV-6

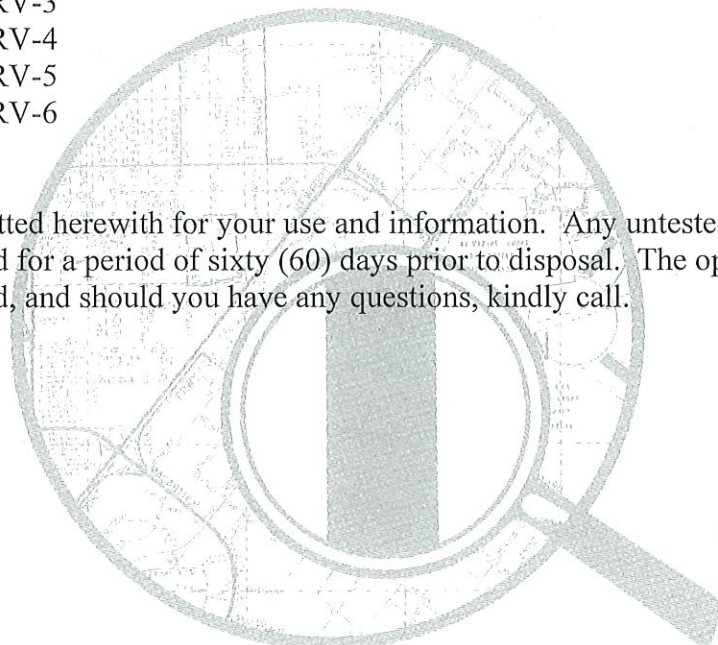
Data sheets are transmitted herewith for your use and information. Any untested portion of the samples will be retained for a period of sixty (60) days prior to disposal. The opportunity to be of service is appreciated, and should you have any questions, kindly call.

Very truly yours,



**Steven R. Marvin**  
**RCE 30659**

SRM:tw  
Enclosures





# R - VALUE DATA SHEET

PROJECT No. 47783  
 DATE: 11/19/2021


BORING NO. RV-1  
Morningstar Village, LLC, Chevron Service Station, Winchester  
W.O.# 1888-CR

SAMPLE DESCRIPTION: Brown Silty Sand

R-VALUE TESTING DATA   CA TEST 301			
	SPECIMEN ID		
	a	b	c
Mold ID Number	7	8	9
Water added, grams	55	35	42
Initial Test Water, %	11.9	9.9	10.6
Compact Gage Pressure, psi	105	350	280
Exudation Pressure, psi	249	678	451
Height Sample, Inches	2.57	2.49	2.55
Gross Weight Mold, grams	3097	3073	2921
Tare Weight Mold, grams	1951	1947	1770
Sample Wet Weight, grams	1146	1126	1151
Expansion, Inches x 10exp-4	38	87	63
Stability 2,000 lbs (160psi)	31 / 67	20 / 40	24 / 50
Turns Displacement	4.73	3.85	4.23
R-Value Uncorrected	42	66	57
R-Value Corrected	44	66	57
Dry Density, pcf	120.8	124.6	123.6

### DESIGN CALCULATION DATA

Traffic Index	Assumed:	4.0	4.0	4.0
G.E. by Stability		0.57	0.35	0.44
G. E. by Expansion		1.27	2.90	2.10

<b>Equilibrium R-Value</b>		<b>26</b>	Examined & Checked: 11 /19/ 21
		by EXPANSION	
REMARKS:	Gf = <u>1.25</u>		 Steven R. Marvin, RCE 30659
	5.0% Retained on the <u>3/4" Sieve.</u>		

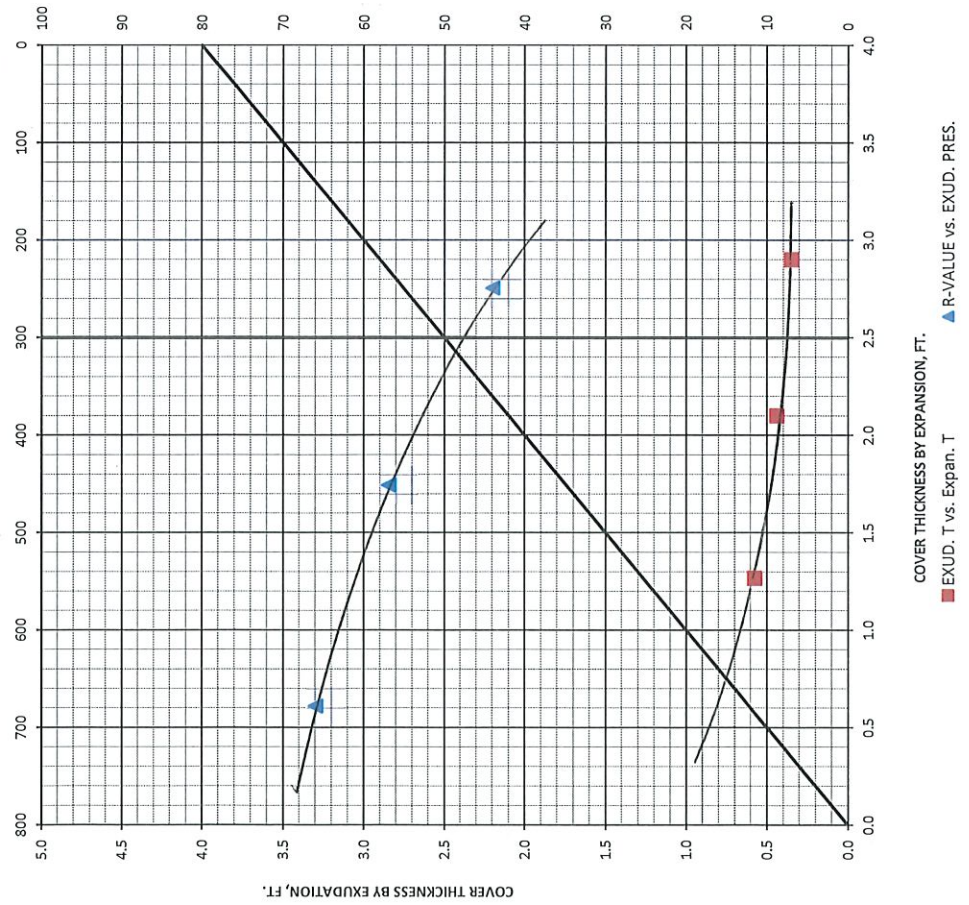
The data above is based upon processing and testing samples as received from the field. Test procedures in accordance with latest revisions to Department of Transportation, State of California, Materials & Research Test Method No. 301.



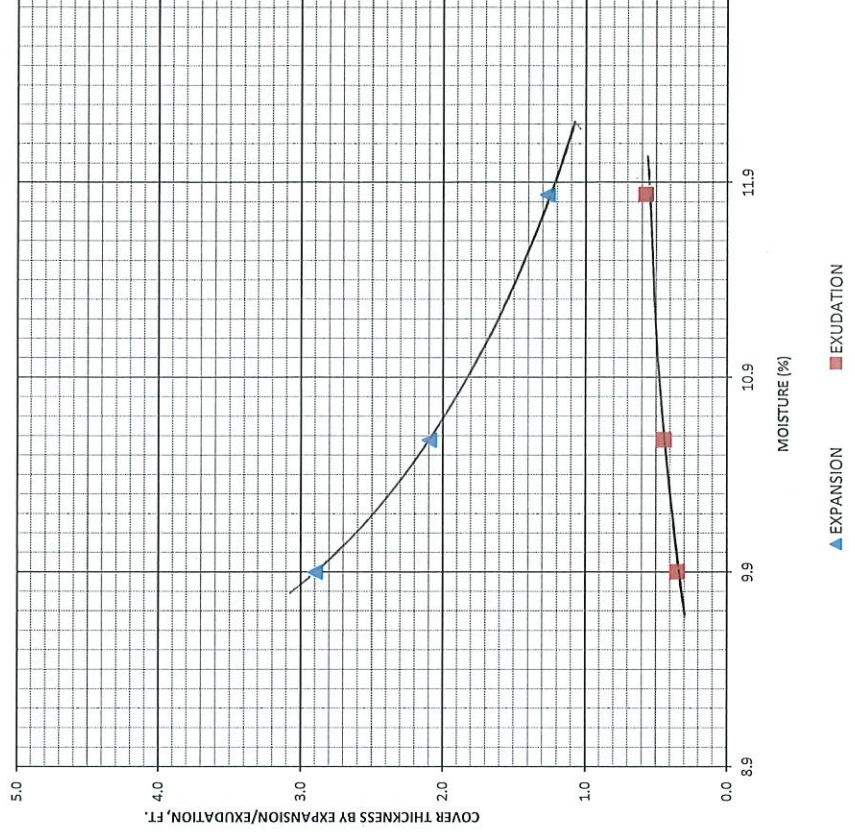
# R-VALUE GRAPHICAL PRESENTATION

PROJECT NO. 47783  
 DATE: 11 /19/ 2021  
 REMARKS:  
 BORING NO. RV-1  
 Morningstar Village, LLC, Chevron Service Station, Winchester  
 W.O.# 1888-CR

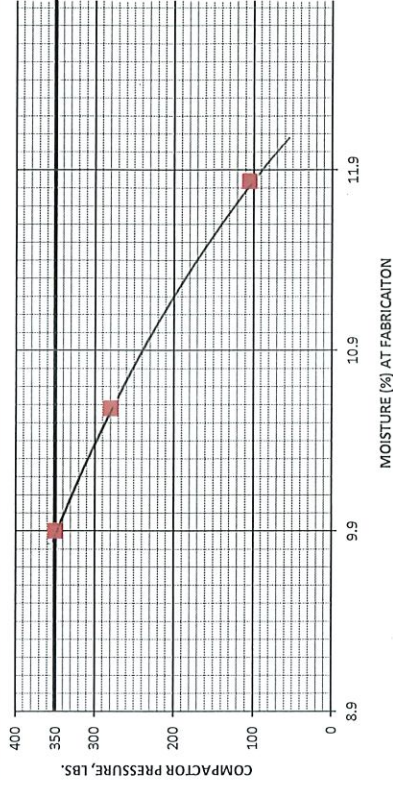
## COVER THICKNESS BY EXUDATION vs COVER THICKNESS BY EXPANSION



## COVER THICKNESS vs MOISTURE %



## COMPACTOR PRESSURE vs MOISTURE %





# R - VALUE DATA SHEET

PROJECT No. 47783  
 DATE: 11/17/2021


BORING NO. RV-2  
Morningstar Village, LLC, Chevron Service Station, Winchester  
W.O.# 1888-CR

SAMPLE DESCRIPTION: Brown Sandy Silt

R-VALUE TESTING DATA   CA TEST 301			
	SPECIMEN ID		
	a	b	c
Mold ID Number	13	14	15
Water added, grams	30	4	9
Initial Test Water, %	12.1	9.5	10.0
Compact Gage Pressure, psi	70	350	250
Exudation Pressure, psi	202	680	434
Height Sample, Inches	2.56	2.42	2.48
Gross Weight Mold, grams	3085	3034	3043
Tare Weight Mold, grams	1966	1937	1941
Sample Wet Weight, grams	1119	1097	1102
Expansion, Inches x 10exp-4	23	62	57
Stability 2,000 lbs (160psi)	37 / 80	20 / 38	25 / 49
Turns Displacement	5.93	4.38	4.75
R-Value Uncorrected	30	65	54
R-Value Corrected	31	63	54
Dry Density, pcf	118.1	125.4	122.4

### DESIGN CALCULATION DATA

Traffic Index	Assumed:	4.0	4.0	4.0
G.E. by Stability		0.71	0.38	0.47
G. E. by Expansion		0.77	2.07	1.90

<b>Equilibrium R-Value</b>	<b>31</b> by <b>EXPANSION</b>	Examined & Checked: 11 /17/ 21
REMARKS:	Gf = <u>1.25</u>	 Steven R. Marvin, RCE 30659
	2.0% Retained on the <u>3/4" Sieve.</u>	

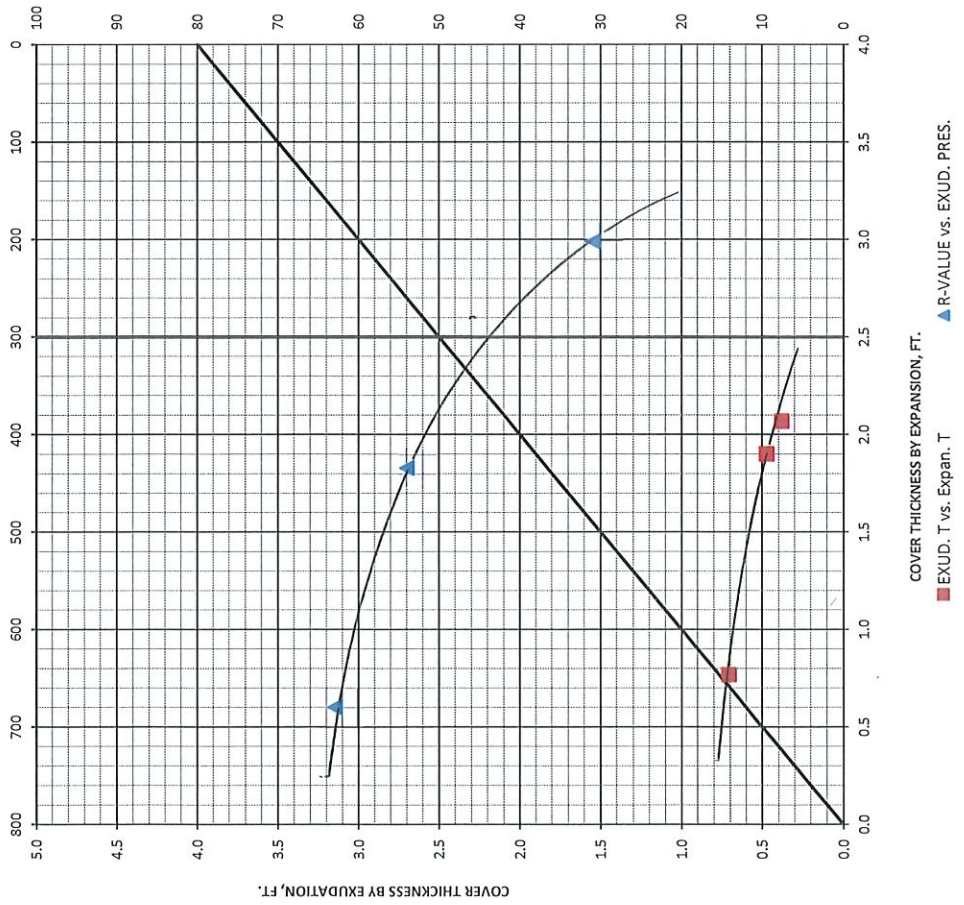
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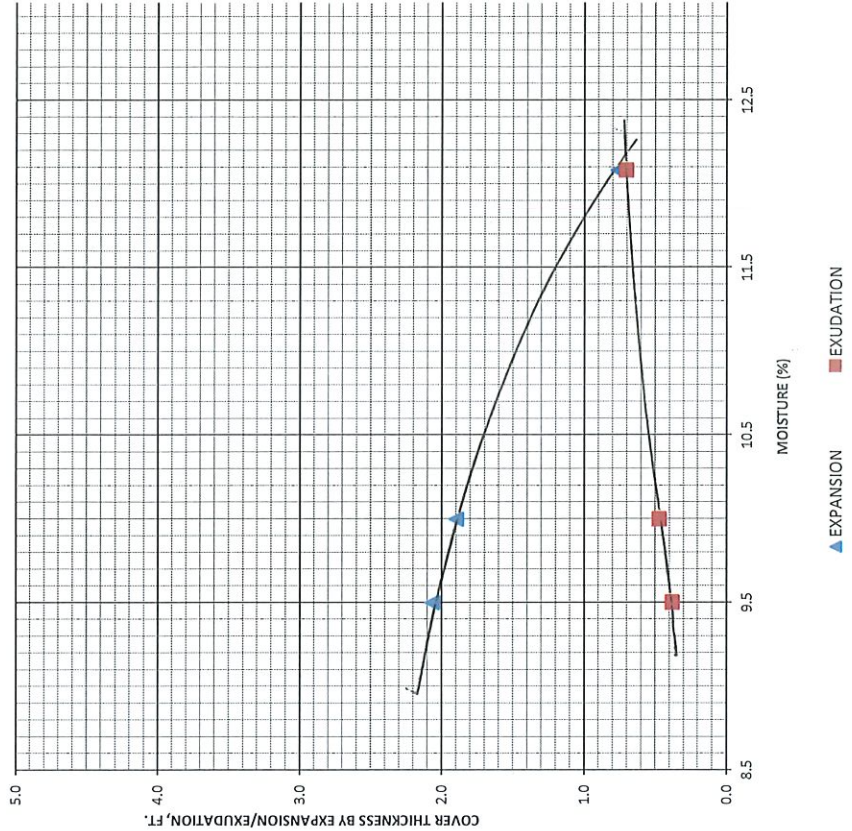
# R-VALUE GRAPHICAL PRESENTATION

PROJECT NO. 47783      REMARKS: \_\_\_\_\_  
 DATE: 11 /17/ 2021      \_\_\_\_\_  
 BORING NO. RV-2      \_\_\_\_\_  
Morningside Village, LLC, Chevron Service Station, Winchester  
W.O.# 1888-CR

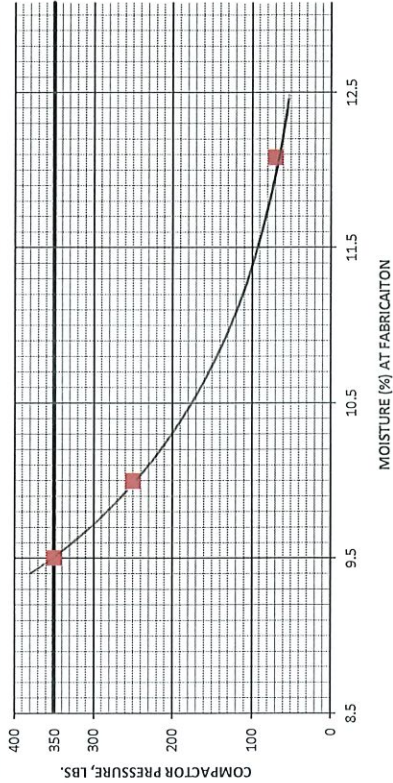
## COVER THICKNESS BY EXUDATION vs COVER THICKNESS BY EXPANSION



## COVER THICKNESS vs MOISTURE %



## COMPACTOR PRESSURE vs MOISTURE %





# R - VALUE DATA SHEET

PROJECT No. 47783  
 DATE: 11/17/2021


BORING NO. RV-3  
Morningstar Village, LLC, Chevron Service Station, Winchester  
W.O.# 1888-CR

SAMPLE DESCRIPTION: Brown Sandy Silt

R-VALUE TESTING DATA   CA TEST 301			
	SPECIMEN ID		
	a	b	c
Mold ID Number	16	17	18
Water added, grams	60	40	26
Initial Test Water, %	13.3	11.3	9.9
Compact Gage Pressure, psi	65	180	315
Exudation Pressure, psi	163	370	671
Height Sample, Inches	2.62	2.48	2.40
Gross Weight Mold, grams	3074	3047	3045
Tare Weight Mold, grams	1945	1939	1953
Sample Wet Weight, grams	1129	1108	1092
Expansion, Inches x 10exp-4	35	58	105
Stability 2,000 lbs (160psi)	39 / 91	29 / 63	23 / 51
Turns Displacement	5.72	4.73	4.07
R-Value Uncorrected	25	45	57
R-Value Corrected	27	45	55
Dry Density, pcf	115.2	121.6	125.4

### DESIGN CALCULATION DATA

Traffic Index	Assumed:	4.0	4.0	4.0
G.E. by Stability		0.75	0.56	0.46
G. E. by Expansion		1.17	1.93	3.50

<b>Equilibrium R-Value</b>	<b>19</b> by <b>EXPANSION</b>	Examined & Checked: 11 /17/ 21
REMARKS:	Gf = 1.25	 Steven R. Marvin, RCE 30659
	2.0% Retained on the 3/4" Sieve.	

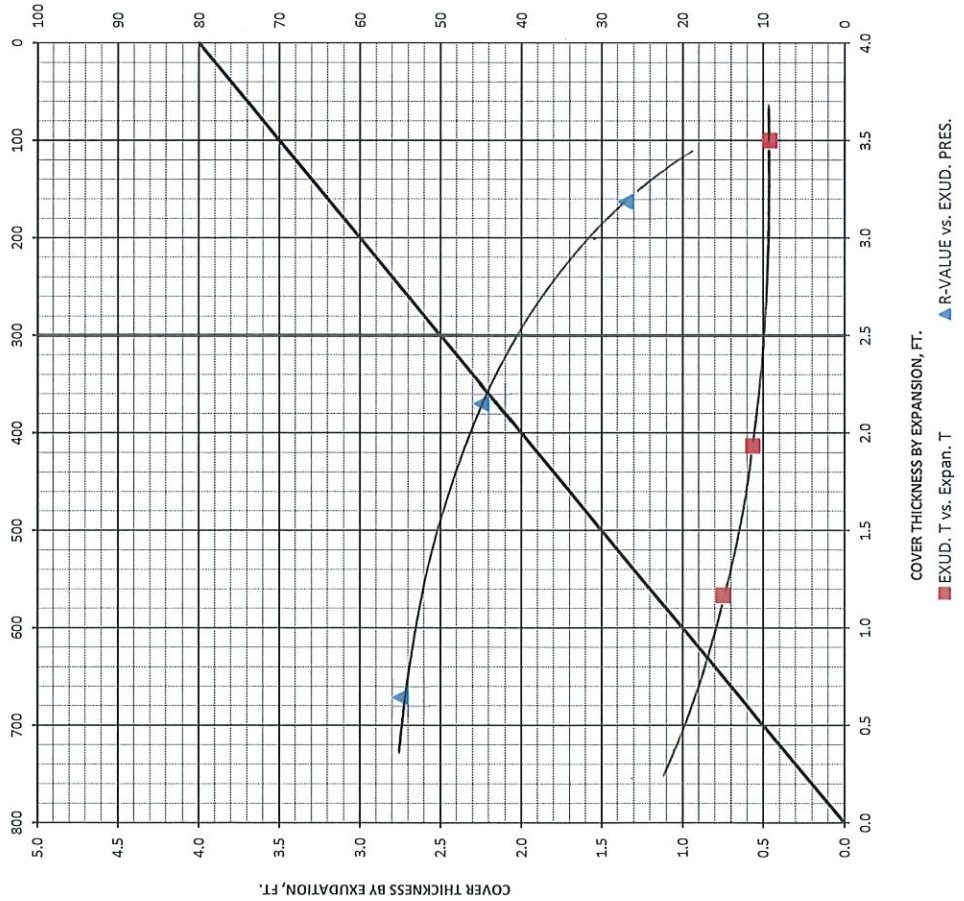
The data above is based upon processing and testing samples as received from the field. Test procedures in accordance with latest revisions to Department of Transportation, State of California, Materials & Research Test Method No. 301.



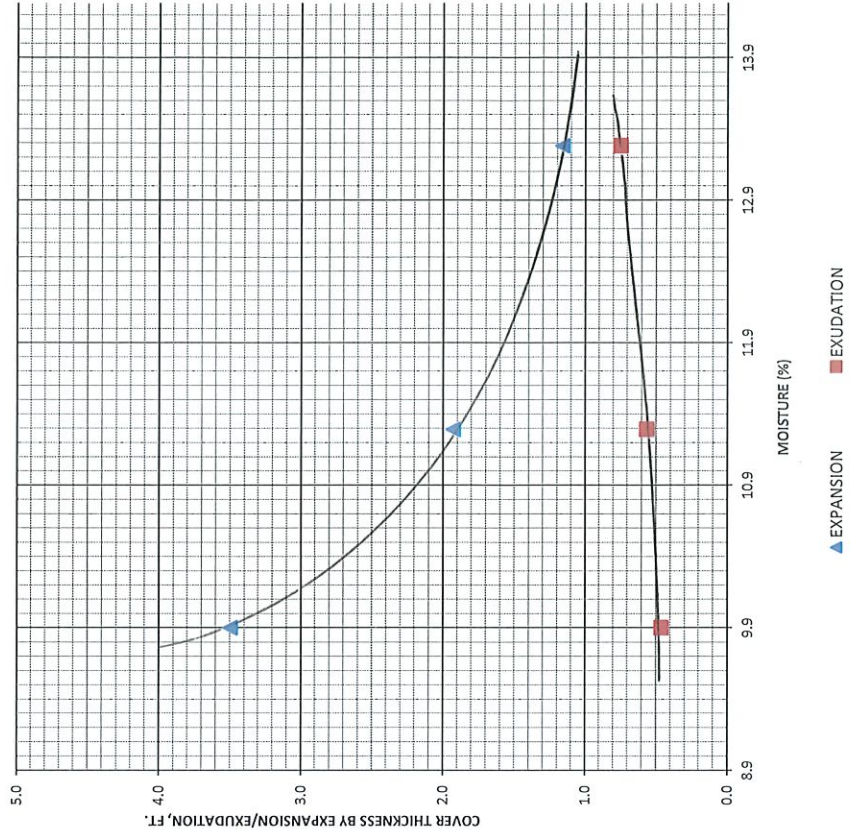
# R-VALUE GRAPHICAL PRESENTATION

PROJECT NO. 47783  
 DATE: 11 /17/ 2021 REMARKS: \_\_\_\_\_  
 BORING NO. RV-3  
Morningstar Village, LLC, Chevron Service Station, Winchester  
W.O.# 1888-CR

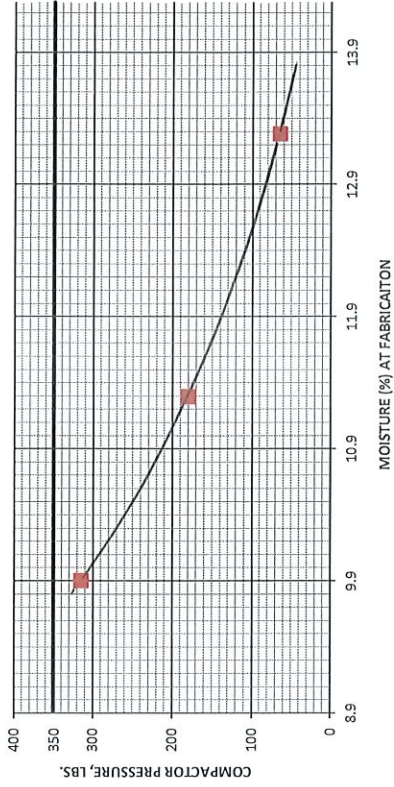
## COVER THICKNESS BY EXUDATION vs COVER THICKNESS BY EXPANSION



## COVER THICKNESS vs MOISTURE %



## COMPACTOR PRESSURE vs MOISTURE %





# R - VALUE DATA SHEET

PROJECT No. 47783  
 DATE: 11/19/2021


BORING NO. RV-4  
Morningstar Village, LLC, Chevron Service Station, Winchester  
W.O.# 1888-CR

SAMPLE DESCRIPTION: Brown Clay

R-VALUE TESTING DATA   CA TEST 301			
Item	a	b	c
Mold Number	17		
Water added, grams	100		
Initial Test Water, %	22.0		
Compact Gage Pressure,psi	45		
Exudation Pressure, psi	555		
Height Sample, Inches	2.41		
Gross Weight Mold, grams	2927		
Tare Weight Mold, grams	1942		
Sample Wet Weight, grams	985		
Expansion, Inches x 10exp-4	23		
Stability 2,000 lbs (160psi)	58 / 138		
Turns Displacement	3.61		
R-Value Uncorrected	10		
R-Value Corrected	10		
Dry Density, pcf	101.5		

### DESIGN CALCULATION DATA

Traffic Index	Assumed:	4.0		
G.E. by Stability		0.92		
G. E. by Expansion		0.77		

Equilibrium R-Value	5 or less by EXUDATION	Examined & Checked: 11 /19/ 21
REMARKS:	<u>Gf = 1.25</u> <u>Sample Exuded</u> <u>@ 555 psi.</u>	 <u>Steven R. Marvin, RCE 30659</u>

The data above is based upon processing and testing samples as received from the field. Test procedures in accordance with latest revisions to Department of Transportation, State of California, Materials & Research Test Method No. 301.





# R - VALUE DATA SHEET

PROJECT No. 47783  
 DATE: 11/19/2021


BORING NO. RV-5  
Morningstar Village, LLC, Chevron Service Station, Winchester  
W.O.# 1888-CR

SAMPLE DESCRIPTION: Brown Sandy Silt

R-VALUE TESTING DATA   CA TEST 301			
	SPECIMEN ID		
	a	b	c
Mold ID Number	10	11	12
Water added, grams	50	30	35
Initial Test Water, %	11.9	9.9	10.4
Compact Gage Pressure, psi	55	280	210
Exudation Pressure, psi	242	680	375
Height Sample, Inches	2.42	2.46	2.51
Gross Weight Mold, grams	3084	3071	3069
Tare Weight Mold, grams	1944	1949	1944
Sample Wet Weight, grams	1140	1122	1125
Expansion, Inches x 10exp-4	9	33	32
Stability 2,000 lbs (160psi)	43 / 90	22 / 43	23 / 46
Turns Displacement	6.28	4.60	4.90
R-Value Uncorrected	24	60	56
R-Value Corrected	23	60	56
Dry Density, pcf	127.6	125.7	123.0

### DESIGN CALCULATION DATA

Traffic Index	Assumed:	4.0	4.0	4.0
G.E. by Stability		0.79	0.41	0.45
G. E. by Expansion		0.30	1.10	1.07

<b>Equilibrium R-Value</b>	<b>34</b> by <b>EXPANSION</b>	Examined & Checked: <u>11 /19/ 21</u>
REMARKS:	Gf = <u>1.25</u>	
	<u>5.8% Retained on the</u> <u>3/4" Sieve.</u>	
		Steven R. Marvin, RCE 30659

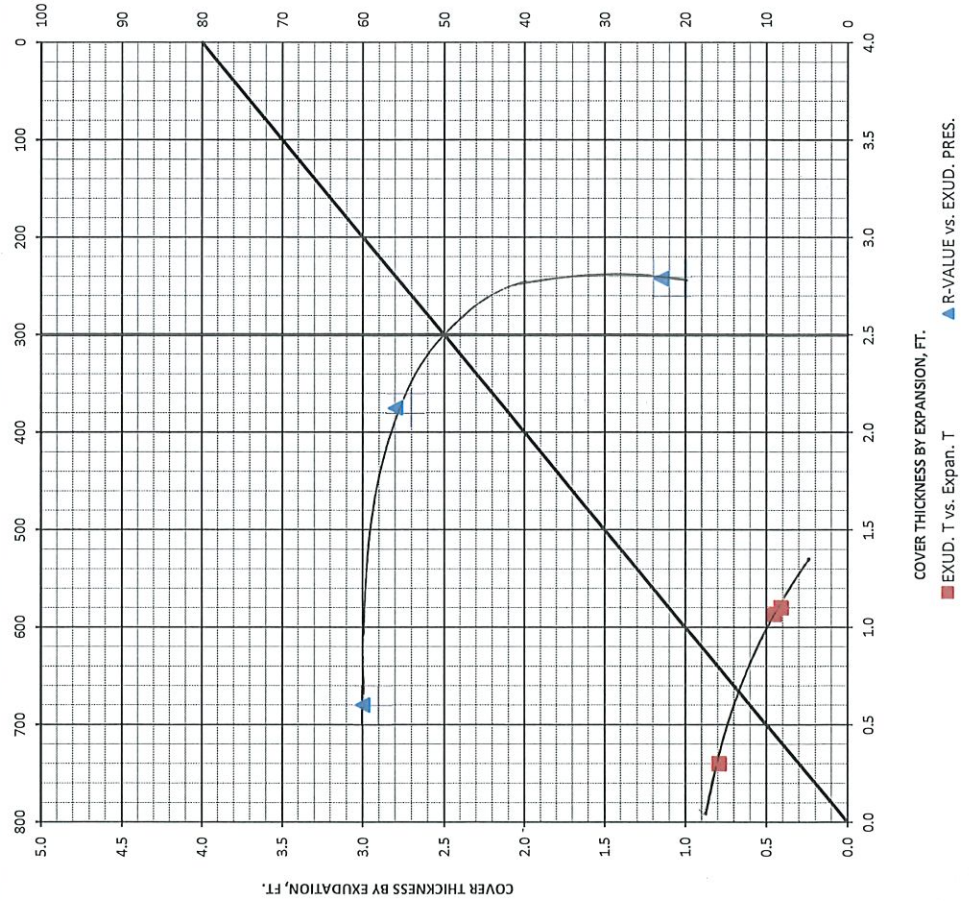
The data above is based upon processing and testing samples as received from the field. Test procedures in accordance with latest revisions to Department of Transportation, State of California, Materials & Research Test Method No. 301.



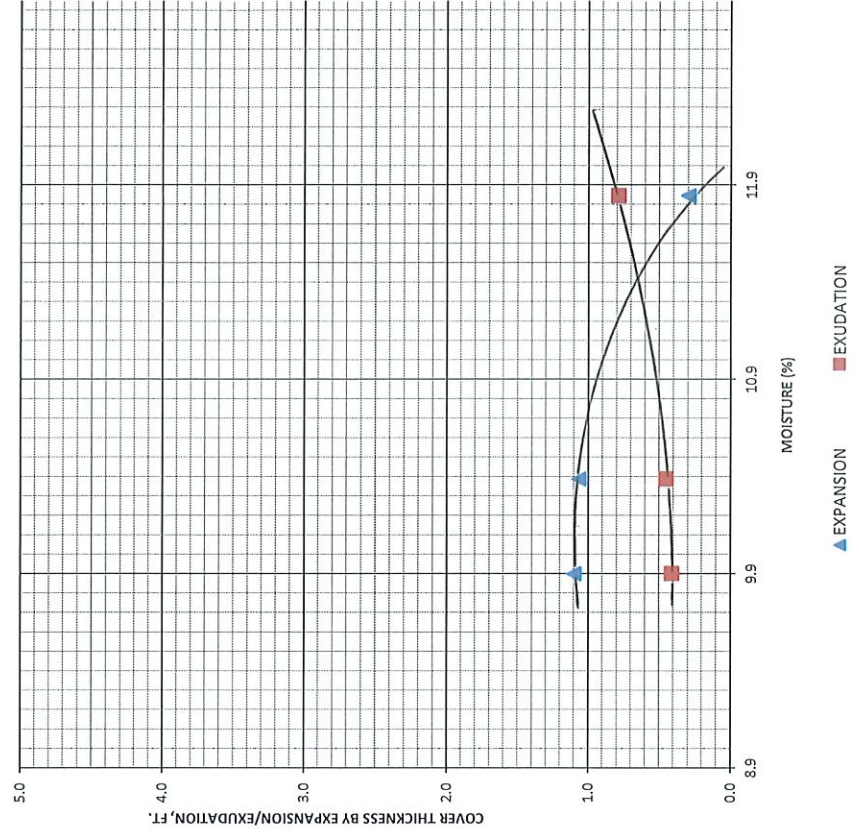
# R-VALUE GRAPHICAL PRESENTATION

PROJECT NO. 47783  
 DATE: 11 /19/ 2021  
 REMARKS:  
 BORING NO. RV-5  
 Morningstar Village, LLC, Chevron Service Station, Winchester  
 W.O.# 1888-CR

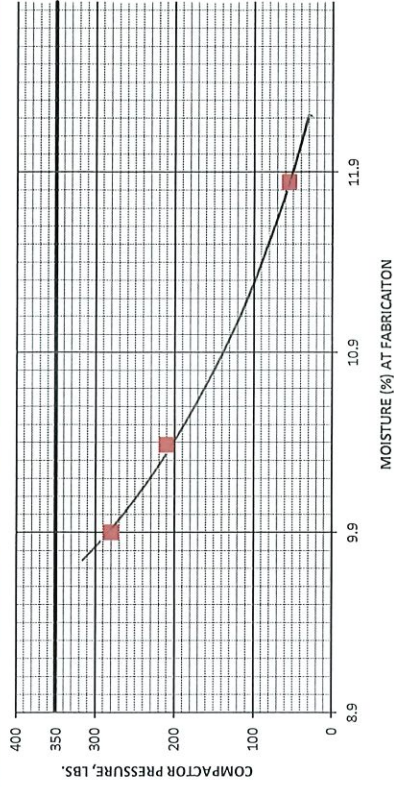
## COVER THICKNESS BY EXUDATION vs COVER THICKNESS BY EXPANSION



## COVER THICKNESS vs MOISTURE %



## COMPACTOR PRESSURE vs MOISTURE %





# R - VALUE DATA SHEET

PROJECT No. 47783  
 DATE: 11/18/2021

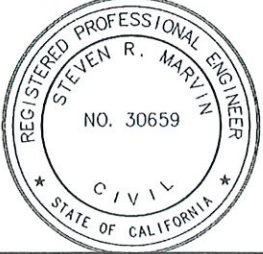
BORING NO. RV-6  
Morningstar Village, LLC, Chevron Service Station, Winchester  
W.O.# 1888-CR

SAMPLE DESCRIPTION: Brown Silty Sand

R-VALUE TESTING DATA   CA TEST 301			
	SPECIMEN ID		
	a	b	c
Mold ID Number	1	2	3
Water added, grams	43	23	14
Initial Test Water, %	12.3	10.3	9.4
Compact Gage Pressure, psi	80	300	350
Exudation Pressure, psi	162	362	568
Height Sample, Inches	2.54	2.46	2.41
Gross Weight Mold, grams	3077	3060	3054
Tare Weight Mold, grams	1951	1944	1955
Sample Wet Weight, grams	1126	1116	1099
Expansion, Inches x 10exp-4	21	30	52
Stability 2,000 lbs (160psi)	40 / 83	24 / 46	19 / 36
Turns Displacement	6.16	4.75	4.25
R-Value Uncorrected	27	57	67
R-Value Corrected	27	57	65
Dry Density, pcf	119.6	124.6	126.3

### DESIGN CALCULATION DATA

	Assumed:			
Traffic Index		4.0	4.0	4.0
G.E. by Stability		0.75	0.44	0.36
G. E. by Expansion		0.70	1.00	1.73

<b>Equilibrium R-Value</b>	<b>32</b> by <b>EXPANSION</b>	Examined & Checked: 11 /18/ 21
REMARKS:	<u>Gf = 1.25</u> <u>0.9% Retained on the</u> <u>3/4" Sieve.</u>	 <u>Steven R. Marvin, RCE 30659</u>

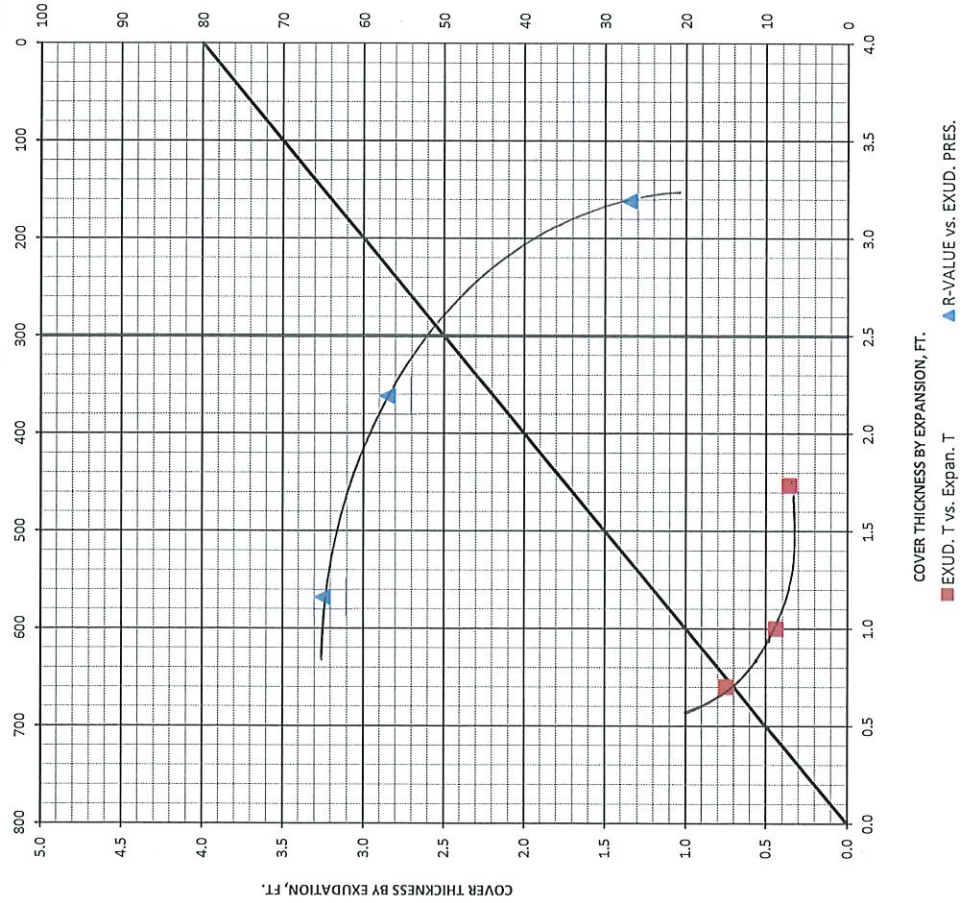
The data above is based upon processing and testing samples as received from the field. Test procedures in accordance with latest revisions to Department of Transportation, State of California, Materials & Research Test Method No. 301.



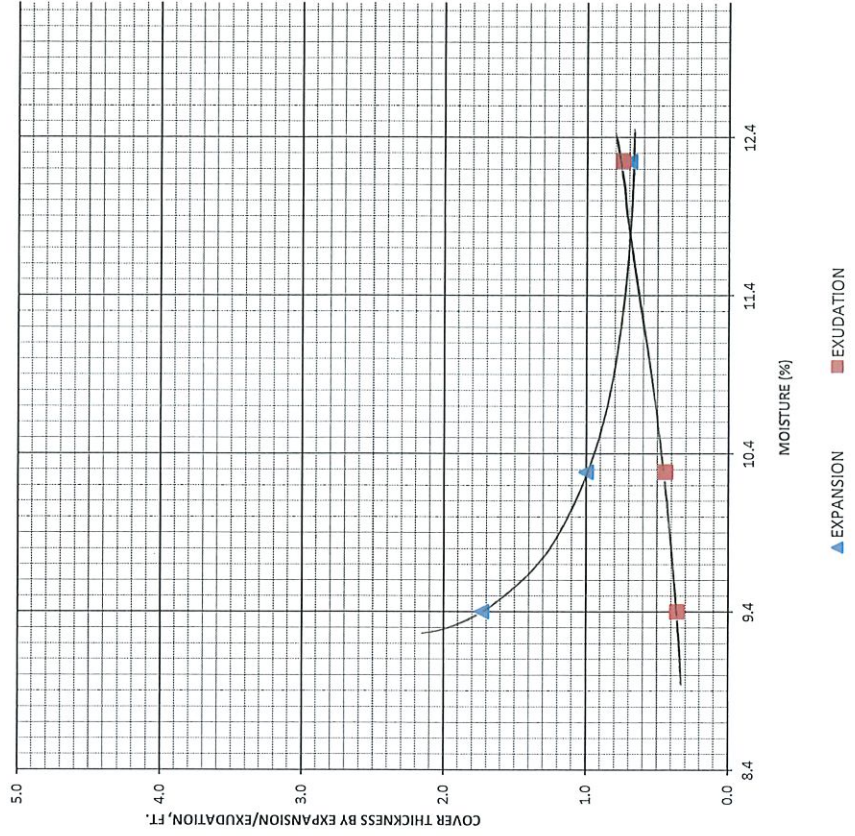
# R-VALUE GRAPHICAL PRESENTATION

PROJECT NO. 47783  
 DATE: 11 /18/ 2021 REMARKS: \_\_\_\_\_  
 BORING NO. RV-6  
Morningstar Village, LLC, Chevron Service Station, Winchester  
W.O.# 1888-CR

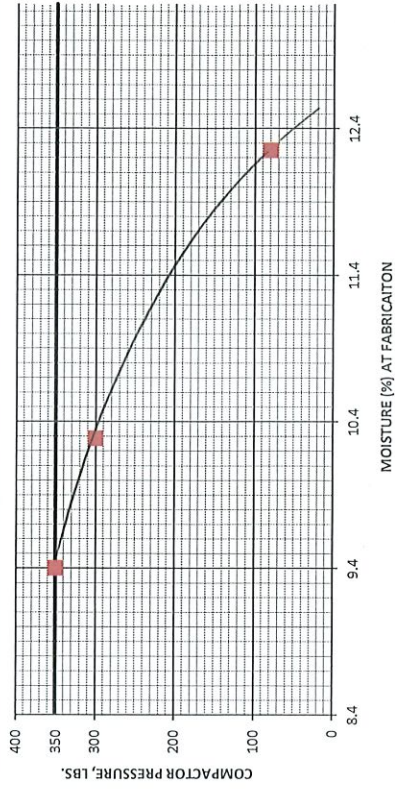
## COVER THICKNESS BY EXUDATION vs COVER THICKNESS BY EXPANSION



## COVER THICKNESS vs MOISTURE %



## COMPACTOR PRESSURE vs MOISTURE %





## Soil Analysis Lab Results

Client: Geotek Inc  
 Job Name: Morning Star Village  
 Client Job Number: 1888-CR  
 Project X Job Number: S180517B  
 May 21, 2018

Bore# / Description	Method Depth (ft)	ASTM G187		ASTM D516		ASTM D512B		SM 4500-NO3-E	SM 4500-NH3-C	SM 4500-S2-D	ASTM G200	ASTM G51
		Resistivity		Sulfates		Chlorides		Nitrate	Ammonia	Sulfide	Redox	pH
		As Rec'd (Ohm-cm)	Minimum (Ohm-cm)	(mg/kg)	(wt%)	(mg/kg)	(wt%)	(mg/kg)	(mg/kg)	(mg/kg)	(mV)	
B-3	1.0-5.0	4,623	1,809	30	0.0030	87	0.0087	48	10.8	0.18	175	8.13
B-2	1.0-5.0	43,550	4,020	30	0.0030	27	0.0027	27	4.5	0.12	212	6.81

Unk = Unknown  
 NT = Not Tested  
 ND = 0 = Not Detected  
 mg/kg = milligrams per kilogram (parts per million) of dry soil weight  
 Chemical Analysis performed on 1:3 Soil-To-Water extract

Please call if you have any questions.

Prepared by,

Ernesto Padilla, BSME  
 Field Engineer

Respectfully Submitted,

Eddie Hernandez, M.Sc., P.E.  
 Sr. Corrosion Consultant  
 NACE Corrosion Technologist #16592  
 Professional Engineer  
 California No. M37102  
[ehernandez@projectxcorrosion.com](mailto:ehernandez@projectxcorrosion.com)



# **APPENDIX D**

## **INFILTRATION TEST RESULTS**

**Updated Geotechnical and Infiltration Evaluation  
C.U.P. 210119, Winchester, California  
Project No. 1888-CR**



**Client:** Morningstar Village LLC  
**Project:** Chevron Service Station  
**Project No:** 1888-CR  
**Date:** 5/9/2018

**Boring No.** I-I at 5 ft

Infiltration Rate (Porchet Method)

Time Interval, $\Delta t =$	30	min
Final Depth to Water, $D_F =$	40.75	in
Test Hole Radius, $r =$	4	in
Initial Depth to Water, $D_O =$	40	in
Total Test Hole Depth, $D_T =$	60	in

Equation -  $I_t = \frac{\Delta H (60r)}{\Delta t (r+2H_{avg})}$

$H_O = D_T - D_O =$	20	in
$H_F = D_T - D_F =$	19.25	in
$\Delta H = \Delta D = H_O - H_F =$	0.75	in
$H_{avg} = (H_O + H_F)/2 =$	19.625	in

$I_t =$  0.14 Inches per Hour



**Client:** Morningstar Village LLC  
**Project:** Chevron Service Station  
**Project No:** 1888-CR  
**Date:** 5/9/2018

**Boring No.** I-2 at 2.5 ft

Infiltration Rate (Porchet Method)

Time Interval, $\Delta t =$	30	min
Final Depth to Water, $D_F =$	16.25	in
Test Hole Radius, $r =$	4	in
Initial Depth to Water, $D_O =$	10	in
Total Test Hole Depth, $D_T =$	30	in

Equation -  $I_t = \frac{\Delta H (60r)}{\Delta t (r+2H_{avg})}$

$H_O = D_T - D_O =$	20	in
$H_F = D_T - D_F =$	13.75	in
$\Delta H = \Delta D = H_O - H_F =$	6.25	in
$H_{avg} = (H_O + H_F) / 2 =$	16.875	in

$I_t =$  1.32 Inches per Hour





**Client:** Morningstar Village LLC  
**Project:** Chevron Service Station  
**Project No:** 1888-CR  
**Date:** 5/9/2018

**Boring No.** I-3 at 2 ft

Infiltration Rate (Porchet Method)

Time Interval, $\Delta t =$	30	min
Final Depth to Water, $D_F =$	9.75	in
Test Hole Radius, $r =$	4	in
Initial Depth to Water, $D_O =$	4	in
Total Test Hole Depth, $D_T =$	24	in

Equation -  $I_t = \frac{\Delta H (60r)}{\Delta t (r+2H_{avg})}$

$H_O = D_T - D_O =$	20	in
$H_F = D_T - D_F =$	14.25	in
$\Delta H = \Delta D = H_O - H_F =$	5.75	in
$H_{avg} = (H_O + H_F) / 2 =$	17.125	in

$I_t =$  1.20 Inches per Hour



**Client:** Morningstar Village LLC  
**Project:** Chevron Service Station - C.U.P 210119  
**Project No:** 1888-CR  
**Date:** 11/18/2021  
  
**Boring No.** I-4 at 8 ft

**Infiltration Rate (Porchet Method)**

Time Interval, $\Delta t =$	30	min
Final Depth to Water, $D_F =$	48.25	in
Test Hole Radius, $r =$	4	in
Initial Depth to Water, $D_O =$	48	in
Total Test Hole Depth, $D_T =$	96	in

Equation - 
$$I_t = \frac{\Delta H (60r)}{\Delta t (r+2H_{avg})}$$

$H_O = D_T - D_O =$	48	in
$H_F = D_T - D_F =$	47.75	in
$\Delta H = \Delta D = H_O - H_F =$	0.25	in
$H_{avg} = (H_O + H_F)/2 =$	47.875	in

$I_t =$  0.02 **Inches per Hour**

**Client:** Morningstar Village LLC  
**Project:** Chevron Service Station - C.U.P 210119  
**Project No:** 1888-CR  
**Date:** 11/18/2021  
  
**Boring No.** I-5 at 6 ft

**Infiltration Rate (Porchet Method)**

Time Interval, $\Delta t =$	30	min
Final Depth to Water, $D_F =$	48.25	in
Test Hole Radius, $r =$	4	in
Initial Depth to Water, $D_O =$	48	in
Total Test Hole Depth, $D_T =$	72	in

Equation - 
$$I_t = \frac{\Delta H (60r)}{\Delta t (r+2H_{avg})}$$

$H_O = D_T - D_O =$	24	in
$H_F = D_T - D_F =$	23.75	in
$\Delta H = \Delta D = H_O - H_F =$	0.25	in
$H_{avg} = (H_O + H_F)/2 =$	23.875	in

$I_t =$  0.04 Inches per Hour



**Client:** Morningstar Village LLC  
**Project:** Chevron Service Station - C.U.P 210119  
**Project No:** 1888-CR  
**Date:** 11/18/2021  
  
**Boring No.** I-6 at 3 ft

**Infiltration Rate (Porchet Method)**

Time Interval,  $\Delta t =$  30 min  
 Final Depth to Water,  $D_F =$  24.25 in  
 Test Hole Radius,  $r =$  4 in  
 Initial Depth to Water,  $D_O =$  24 in  
 Total Test Hole Depth,  $D_T =$  36 in

Equation - 
$$I_t = \frac{\Delta H (60r)}{\Delta t (r+2H_{avg})}$$

$H_O = D_T - D_O =$  12 in  
 $H_F = D_T - D_F =$  11.75 in  
 $\Delta H = \Delta D = H_O - H_F =$  0.25 in  
 $H_{avg} = (H_O + H_F) / 2 =$  11.875 in

$I_t =$  0.07 Inches per Hour



**Client:** Morningstar Village LLC  
**Project:** Chevron Service Station - C.U.P 210119  
**Project No:** 1888-CR  
**Date:** 11/18/2021  
  
**Boring No.** I-7 at 3 ft

**Infiltration Rate (Porchet Method)**

Time Interval, $\Delta t =$	30	min
Final Depth to Water, $D_F =$	24.25	in
Test Hole Radius, $r =$	4	in
Initial Depth to Water, $D_O =$	24	in
Total Test Hole Depth, $D_T =$	36	in

Equation - 
$$I_t = \frac{\Delta H (60r)}{\Delta t (r+2H_{avg})}$$

$H_O = D_T - D_O =$	12	in
$H_F = D_T - D_F =$	11.75	in
$\Delta H = \Delta D = H_O - H_F =$	0.25	in
$H_{avg} = (H_O + H_F)/2 =$	11.875	in

$I_t =$  0.07 Inches per Hour

PERCOLATION DATA SHEET

Project: CHEVRON SERVICE STATION WINCHESTER Job No.: 1888-CR

Test Hole No.: I-1 Tested By: DVG Date: 5/8,9/2018

Depth of Hole As Drilled: 60" Before Test: 60" After Test: 60"

Reading No.	Time	Time Interval (Min)	Total Depth of Hole (Inches)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ In Water Level (Inches)	Comments
							PREWATER 5 GAL. 5/8/2018
	<u>729</u>		<u>60</u>	<u>20</u>			BEGIN 5/9/2018
	<u>754</u>	<u>25</u>			<u>19</u>	<u>1</u>	1ST 25 MIN.
	<u>756</u>		<u>60</u>	<u>20</u>			
	<u>821</u>	<u>25</u>			<u>19</u>	<u>1</u>	2ND 25 MIN.
	<u>823</u>		<u>60</u>	<u>20</u>			
	<u>853</u>	<u>30</u>			<u>19</u>	<u>1</u>	1ST 30 MIN.
	<u>855</u>		<u>60</u>	<u>20</u>			
	<u>925</u>	<u>30</u>			<u>19</u>	<u>1</u>	2ND 30 MIN.
	<u>927</u>		<u>60</u>	<u>20</u>			
	<u>957</u>	<u>30</u>			<u>19</u>	<u>1</u>	3RD 30 MIN.
	<u>959</u>		<u>60</u>	<u>20</u>			
	<u>1029</u>	<u>30</u>			<u>19</u>	<u>1</u>	4TH 30 MIN.
	<u>1031</u>		<u>60</u>	<u>20</u>			
	<u>1101</u>	<u>30</u>			<u>19</u>	<u>1</u>	5TH 30 MIN.
	<u>1103</u>		<u>60</u>	<u>20</u>			
	<u>1133</u>	<u>30</u>			<u>19</u>	<u>1</u>	6TH 30 MIN.
	<u>1135</u>		<u>60</u>	<u>20</u>			
	<u>1205</u>	<u>30</u>			<u>19</u>	<u>1</u>	7TH 30 MIN.



PERCOLATION DATA SHEET

Project: CHEVRON SERVICE STATION WINCHESTER Job No.: 1888-CR

Test Hole No.: I-2 Tasted By: DVG Date: 5/8, 9/2018

Depth of Hole As Drilled: 30" Before Test: 30" After Test: 30"

Reading No.	Time	Time Interval (Min)	Total Depth of Hole (Inches)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ In Water Level (Inches)	Comments
							PREWATER 5 GAL. 5/8/2018
	<u>611</u>		<u>30</u>	<u>20</u>			BEGIN 5/9/2018
	<u>636</u>	<u>25</u>			<u>12 1/4</u>	<u>7 3/4</u>	1ST 25 MIN.
	<u>638</u>		<u>30</u>	<u>20</u>			
	<u>703</u>	<u>25</u>			<u>12 1/4</u>	<u>7 3/4</u>	2ND 25 MIN.
	<u>705</u>		<u>30</u>	<u>20</u>			
	<u>735</u>	<u>30</u>			<u>12</u>	<u>8</u>	1ST 30 MIN.
	<u>737</u>		<u>30</u>	<u>20</u>			
	<u>807</u>	<u>30</u>			<u>12</u>	<u>8</u>	2ND 30 MIN.
	<u>809</u>		<u>30</u>	<u>20</u>			
	<u>839</u>	<u>30</u>			<u>12</u>	<u>8</u>	3RD 30 MIN.
	<u>841</u>		<u>30</u>	<u>20</u>			
	<u>911</u>	<u>30</u>			<u>12 1/4</u>	<u>7 3/4</u>	4TH 30 MIN.
	<u>913</u>		<u>30</u>	<u>20</u>			
	<u>943</u>	<u>30</u>			<u>12 1/2</u>	<u>7 1/2</u>	5TH 30 MIN.
	<u>945</u>		<u>30</u>	<u>20</u>			
	<u>1015</u>	<u>30</u>			<u>12 1/2</u>	<u>7 1/2</u>	6TH 30 MIN.
	<u>1017</u>		<u>30</u>	<u>20</u>			
	<u>1047</u>	<u>30</u>			<u>12 3/4</u>	<u>7 1/4</u>	7TH 30 MIN.





PERCOLATION DATA SHEET

Project: CHEVRON SERVICE STATION WINCHESTER Job No.: 1888-CR

Test Hole No.: I-3 Tasted By: DVG Date: 5/8, 9/2018

Depth of Hole As Drilled: 24" Before Test: 24" After Test: 24"

Reading No.	Time	Time Interval (Min)	Total Depth of Hole (Inches)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ In Water Level (Inches)	Comments
							PREWATER 5 GAL. 5/8/2018
	650		24	20			BEGIN 5/9/2018
	715	25			13 1/4	6 3/4	1ST 25 MIN.
	717		24	20			
	742	25			13 1/4	6 3/4	2ND 25 MIN.
	744		24	20			
	814	30			13	7	1ST 30 MIN.
	816		24	20			
	846	30			13	7	2ND 30 MIN.
	848		24	20			
	918	30			13	7	3RD 30 MIN.
	920		24	20			
	950	30			13	7	4TH 30 MIN.
	952		24	20			
	1022	30			13 1/4	6 3/4	5TH 30 MIN.
	1024		24	20			
	1054	30			13 1/4	6 3/4	6TH 30 MIN.
	1056		24	20			
	1126	30			13 1/2	6 1/2	7TH 30 MIN.



**PERCOLATION DATA SHEET**

Project: Morningstar Village Project

Job No.: 1888-CR

Test Hole No.: I-4 Tested By: JD

Date: 11/18/21

Depth of Hole As Drilled: 96 Before Test: 96

After Test: 96

Reading No.	Time	Time Interval (Min)	Total Depth of Hole (Inches)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ In Water Level (Inches)	Rate (minutes per inch)	Comments
								Prewater 5 gallons 11/17/2021
1	7:08AM		96	48				
	7:33AM	25			48	0		
2	7:35AM		96	48				
	8:00AM	25			48	0		
3	8:02AM		96	48				
	8:32AM	30			48	0		
4	8:34AM		96	48				
	9:04AM	30			48	0		
5	9:06AM		96	48				
	9:36AM	30			48	0		
6	9:38AM		96	48				
	10:08AM	30			48	0		
7	10:10AM		96	48				
	10:40AM	30			48	0		
8	10:42AM		96	48				
	11:12AM	30			48	0		
9	11:14AM		96	48				
	11:44AM	30			48	0		
10	11:46AM		96	48				
	12:16PM	30			48	0		
11	12:18PM		96	48				
	12:48PM	30			48	0		
12	12:50PM		96	48				
	1:20PM	30			48	0		
13	1:22PM		96	48				
	1:52PM	30			48	0		
14	1:54PM		96	48				
	2:24PM	30			47.75	0.25		

**PERCOLATION DATA SHEET**

Project: **Morningstar Village Project**

Job No.: **1888-CR**

Test Hole No.: **I-5** Tested By: **JD**

Date: **11/18/21**

Depth of Hole As Drilled: **72** Before Test: **72**

After Test: **72**

Reading No.	Time	Time Interval (Min)	Total Depth of Hole (Inches)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ In Water Level (Inches)	Rate (minutes per inch)	Comments
								Prewater 5 gallons 11/17/2021
1	7:15AM		72	24				
	7:40AM	25						
2	7:42AM		72	24				
	8:07AM	25						
3	8:09AM		72	24				
	8:39AM	30						
4	8:41AM		72	24				
	9:11AM	30						
5	9:13AM		72	24				
	9:43AM	30						
6	9:45AM		72	24				
	10:15AM	30						
7	10:17AM		72	24				
	10:47AM	30						
8	10:49AM		72	24				
	11:19AM	30						
9	11:21AM		72	24				
	11:51AM	30						
10	11:53AM		72	24				
	12:23PM	30						
11	12:25PM		72	24				
	12:55PM	30						
12	12:57PM		72	24				
	1:27PM	30						
13	1:29PM		72	24				
	1:59PM	30						
14	2:01PM		72	24				
	2:31PM	30						

**PERCOLATION DATA SHEET**

Project: **Morningstar Village Project**

Job No.: **1888-CR**

Test Hole No.: **I-6** Tested By: **JD**

Date: **11/18/21**

Depth of Hole As Drilled: **36** Before Test: **36**

After Test: **36**

Reading No.	Time	Time Interval (Min)	Total Depth of Hole (Inches)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ In Water Level (Inches)	Rate (minutes per inch)	Comments
								Prewater 5 gallons 11/17/2021
1	7:22AM		36	12				
	7:47AM	25						
2	7:49AM		36	12				
	8:14AM	25						
3	8:16AM		36	12				
	8:46AM	30						
4	8:48AM		36	12				
	9:18AM	30						
5	9:20AM		36	12				
	9:50AM	30						
6	9:52AM		36	12				
	10:22AM	30						
7	10:24AM		36	12				
	10:54AM	30						
8	10:56AM		36	12				
	11:26AM	30						
9	11:28AM		36	12				
	11:58AM	30						
10	12:00PM		36	12				
	12:30PM	30						
11	12:32PM		36	12				
	1:02PM	30						
12	1:04PM		36	12				
	1:34PM	30						
13	1:36PM		36	12				
	2:06PM	30						
14	2:08PM		36	12				
	2:38PM	30						

**PERCOLATION DATA SHEET**

Project: **Morningstar Village Project**

Job No.: **1888-CR**

Test Hole No.: **1-7** Tested By: **JD**

Date: **11/18/21**

Depth of Hole As Drilled: **36** Before Test: **36**

After Test: **36**

Reading No.	Time	Time Interval (Min)	Total Depth of Hole (Inches)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ In Water Level (Inches)	Rate (minutes per inch)	Comments
								Prewater 5 gallons 11/17/2021
1	7:29AM 7:54AM	25	36	12	12	0		
2	7:56AM 8:21AM	25	36	12	12	0		
3	8:23AM 8:53AM	30	36	12	12	0		
4	8:55AM 9:25AM	30	36	12	12	0		
5	9:27AM 9:57AM	30	36	12	12	0		
6	9:59AM 10:29AM	30	36	12	12	0		
7	10:31AM 11:01AM	30	36	12	12	0		
8	11:03AM 11:33AM	30	36	12	12	0		
9	11:35AM 12:05PM	30	36	12	12	0		
10	12:07PM 12:37PM	30	36	12	12	0		
11	12:39PM 1:09PM	30	36	12	12	0		
12	1:11PM 1:41PM	30	36	12	12	0		
13	1:43PM 2:13PM	30	36	12	12	0		
14	2:15PM 2:45PM	30	36	12	11.75	0.25		

# **APPENDIX E**

## **GENERAL EARTHWORK AND GRADING GUIDELINES**

**Updated Geotechnical and Infiltration Evaluation**

**C.U.P. 210119, Winchester, California**

**Project No. 1888-CR**





## **GENERAL GRADING GUIDELINES**

Guidelines presented herein are intended to address general construction procedures for earthwork construction. Specific situations and conditions often arise which cannot reasonably be discussed in general guidelines, when anticipated these are discussed in the text of the report. Often unanticipated conditions are encountered which may necessitate modification or changes to these guidelines. It is our hope that these will assist the contractor to more efficiently complete the project by providing a reasonable understanding of the procedures that would be expected during earthwork and the testing and observation used to evaluate those procedures.

### **General**

Grading should be performed to at least the minimum requirements of governing agencies, Chapters 18 and 33 of the California Building Code, CBC (2019) and the guidelines presented below.

### **Preconstruction Meeting**

A preconstruction meeting should be held prior to site earthwork. Any questions the contractor has regarding our recommendations, general site conditions, apparent discrepancies between reported and actual conditions and/or differences in procedures the contractor intends to use should be brought up at that meeting. The contractor (including the main onsite representative) should review our report and these guidelines in advance of the meeting. Any comments the contractor may have regarding these guidelines should be brought up at that meeting.

### **Grading Observation and Testing**

1. Observation of the fill placement should be provided by our representative during grading. Verbal communication during the course of each day will be used to inform the contractor of test results. The contractor should receive a copy of the "Daily Field Report" indicating results of field density tests that day. If our representative does not provide the contractor with these reports, our office should be notified.
2. Testing and observation procedures are, by their nature, specific to the work or area observed and location of the tests taken, variability may occur in other locations. The contractor is responsible for the uniformity of the grading operations; our observations and test results are intended to evaluate the contractor's overall level of efforts during grading. The contractor's personnel are the only individuals participating in all aspect of site work. Compaction testing and observation should not be considered as relieving the contractor's responsibility to properly compact the fill.
3. Cleanouts, processed ground to receive fill, key excavations, and subdrains should be observed by our representative prior to placing any fill. It will be the contractor's responsibility to notify our representative or office when such areas are ready for observation.
4. Density tests may be made on the surface material to receive fill, as considered warranted by this firm.
5. In general, density tests would be made at maximum intervals of two feet of fill height or every 1,000 cubic yards of fill placed. Criteria will vary depending on soil conditions and size of the fill. More frequent testing may be performed. In any case, an adequate number of field density tests should be made to evaluate the required compaction and moisture content is generally being obtained.

6. Laboratory testing to support field test procedures will be performed, as considered warranted, based on conditions encountered (e.g. change of material sources, types, etc.) Every effort will be made to process samples in the laboratory as quickly as possible and in progress construction projects are our first priority. However, laboratory workloads may cause in delays and some soils may require a **minimum of 48 to 72 hours to complete test procedures**. Whenever possible, our representative(s) should be informed in advance of operational changes that might result in different source areas for materials.
7. Procedures for testing of fill slopes are as follows:
  - a) Density tests should be taken periodically during grading on the flat surface of the fill, three to five feet horizontally from the face of the slope.
  - b) If a method other than over building and cutting back to the compacted core is to be employed, slope compaction testing during construction should include testing the outer six inches to three feet in the slope face to determine if the required compaction is being achieved.
8. Finish grade testing of slopes and pad surfaces should be performed after construction is complete.

### **Site Clearing**

1. All vegetation, and other deleterious materials, should be removed from the site. If material is not immediately removed from the site it should be stockpiled in a designated area(s) well outside of all current work areas and delineated with flagging or other means. Site clearing should be performed in advance of any grading in a specific area.
2. Efforts should be made by the contractor to remove all organic or other deleterious material from the fill, as even the most diligent efforts may result in the incorporation of some materials. This is especially important when grading is occurring near the natural grade. All equipment operators should be aware of these efforts. Laborers may be required as root pickers.
3. Nonorganic debris or concrete may be placed in deeper fill areas provided the procedures used are observed and found acceptable by our representative.

### **Treatment of Existing Ground**

1. Following site clearing, all surficial deposits of alluvium and colluvium as well as weathered or creep effected bedrock, should be removed unless otherwise specifically indicated in the text of this report.
2. In some cases, removal may be recommended to a specified depth (e.g. flat sites where partial alluvial removals may be sufficient). The contractor should not exceed these depths unless directed otherwise by our representative.
3. Groundwater existing in alluvial areas may make excavation difficult. Deeper removals than indicated in the text of the report may be necessary due to saturation during winter months.
4. Subsequent to removals, the natural ground should be processed to a depth of six inches, moistened to near optimum moisture conditions and compacted to fill standards.
5. Exploratory back hoe or dozer trenches still remaining after site removal should be excavated and filled with compacted fill if they can be located.

### **Fill Placement**

1. Unless otherwise indicated, all site soil and bedrock may be reused for compacted fill; however, some special processing or handling may be required (see text of report).

2. Material used in the compacting process should be evenly spread, moisture conditioned, processed, and compacted in thin lifts six (6) to eight (8) inches in compacted thickness to obtain a uniformly dense layer. The fill should be placed and compacted on a nearly horizontal plane, unless otherwise found acceptable by our representative.
3. If the moisture content or relative density varies from that recommended by this firm, the contractor should rework the fill until it is in accordance with the following:
  - a) Moisture content of the fill should be at or above optimum moisture. Moisture should be evenly distributed without wet and dry pockets. Pre-watering of cut or removal areas should be considered in addition to watering during fill placement, particularly in clay or dry surficial soils. The ability of the contractor to obtain the proper moisture content will control production rates.
  - b) Each six-inch layer should be compacted to at least 90 percent of the maximum dry density in compliance with the testing method specified by the controlling governmental agency. In most cases, the testing method is ASTM Test Designation D 1557.
4. Rock fragments less than eight inches in diameter may be utilized in the fill, provided:
  - a) They are not placed in concentrated pockets;
  - b) There is a sufficient percentage of fine-grained material to surround the rocks;
  - c) The distribution of the rocks is observed by, and acceptable to, our representative.
5. Rocks exceeding eight (8) inches in diameter should be taken off site, broken into smaller fragments, or placed in accordance with recommendations of this firm in areas designated suitable for rock disposal. On projects where significant large quantities of oversized materials are anticipated, alternate guidelines for placement may be included. If significant oversize materials are encountered during construction, these guidelines should be requested.
6. In clay soil, dry or large chunks or blocks are common. If in excess of eight (8) inches minimum dimension, then they are considered as oversized. Sheepsfoot compactors or other suitable methods should be used to break up blocks. When dry, they should be moisture conditioned to provide a uniform condition with the surrounding fill.

### **Slope Construction**

1. The contractor should obtain a minimum relative compaction of 90 percent out to the finished slope face of fill slopes. This may be achieved by either overbuilding the slope and cutting back to the compacted core, or by direct compaction of the slope face with suitable equipment.
2. Slopes trimmed to the compacted core should be overbuilt by at least three (3) feet with compaction efforts out to the edge of the false slope. Failure to properly compact the outer edge results in trimming not exposing the compacted core and additional compaction after trimming may be necessary.
3. If fill slopes are built "at grade" using direct compaction methods, then the slope construction should be performed so that a constant gradient is maintained throughout construction. Soil should not be "spilled" over the slope face nor should slopes be "pushed out" to obtain grades. Compaction equipment should compact each lift along the immediate top of slope. Slopes should be back rolled or otherwise compacted at approximately every 4 feet vertically as the slope is built.
4. Corners and bends in slopes should have special attention during construction as these are the most difficult areas to obtain proper compaction.
5. Cut slopes should be cut to the finished surface. Excessive undercutting and smoothing of the face with fill may necessitate stabilization.

## **UTILITY TRENCH CONSTRUCTION AND BACKFILL**

Utility trench excavation and backfill is the contractors responsibility. The geotechnical consultant typically provides periodic observation and testing of these operations. While efforts are made to make sufficient observations and tests to verify that the contractors' methods and procedures are adequate to achieve proper compaction, it is typically impractical to observe all backfill procedures. As such, it is critical that the contractor use consistent backfill procedures.

Compaction methods vary for trench compaction and experience indicates many methods can be successful. However, procedures that "worked" on previous projects may or may not prove effective on a given site. The contractor(s) should outline the procedures proposed, so that we may discuss them **prior** to construction. We will offer comments based on our knowledge of site conditions and experience.

1. Utility trench backfill in slopes, structural areas, in streets and beneath flat work or hardscape should be brought to at least optimum moisture and compacted to at least 90 percent of the laboratory standard. Soil should be moisture conditioned prior to placing in the trench.
2. Flooding and jetting are not typically recommended or acceptable for native soils. Flooding or jetting may be used with select sand having a Sand Equivalent (SE) of 30 or higher. This is typically limited to the following uses:
  - a) shallow (12 + inches) under slab interior trenches and,
  - b) as bedding in pipe zone.

The water should be allowed to dissipate prior to pouring slabs or completing trench compaction.

3. Care should be taken not to place soils at high moisture content within the upper three feet of the trench backfill in street areas, as overly wet soils may impact subgrade preparation. Moisture may be reduced to 2% below optimum moisture in areas to be paved within the upper three feet below sub grade.
4. Sand backfill should not be allowed in exterior trenches adjacent to and within an area extending below a 1:1 projection from the outside bottom edge of a footing, unless it is similar to the surrounding soil.
5. Trench compaction testing is generally at the discretion of the geotechnical consultant. Testing frequency will be based on trench depth and the contractors procedures. A probing rod would be used to assess the consistency of compaction between tested areas and untested areas. If zones are found that are considered less compact than other areas, this would be brought to the contractors attention.

## **JOB SAFETY**

### **General**

Personnel safety is a primary concern on all job sites. The following summaries are safety considerations for use by all our employees on multi-employer construction sites. On ground personnel are at highest risk of injury and possible fatality on grading construction projects. The company recognizes that construction activities will vary on each site and that job site safety is the contractor's responsibility. However, it is, imperative that all personnel be safety conscious to avoid accidents and potential injury.



In an effort to minimize risks associated with geotechnical testing and observation, the following precautions are to be implemented for the safety of our field personnel on grading and construction projects.

1. Safety Meetings: Our field personnel are directed to attend the contractor's regularly scheduled safety meetings.
2. Safety Vests: Safety vests are provided for and are to be worn by our personnel while on the job site.
3. Safety Flags: Safety flags are provided to our field technicians; one is to be affixed to the vehicle when on site, the other is to be placed atop the spoil pile on all test pits.

In the event that the contractor's representative observes any of our personnel not following the above, we request that it be brought to the attention of our office.

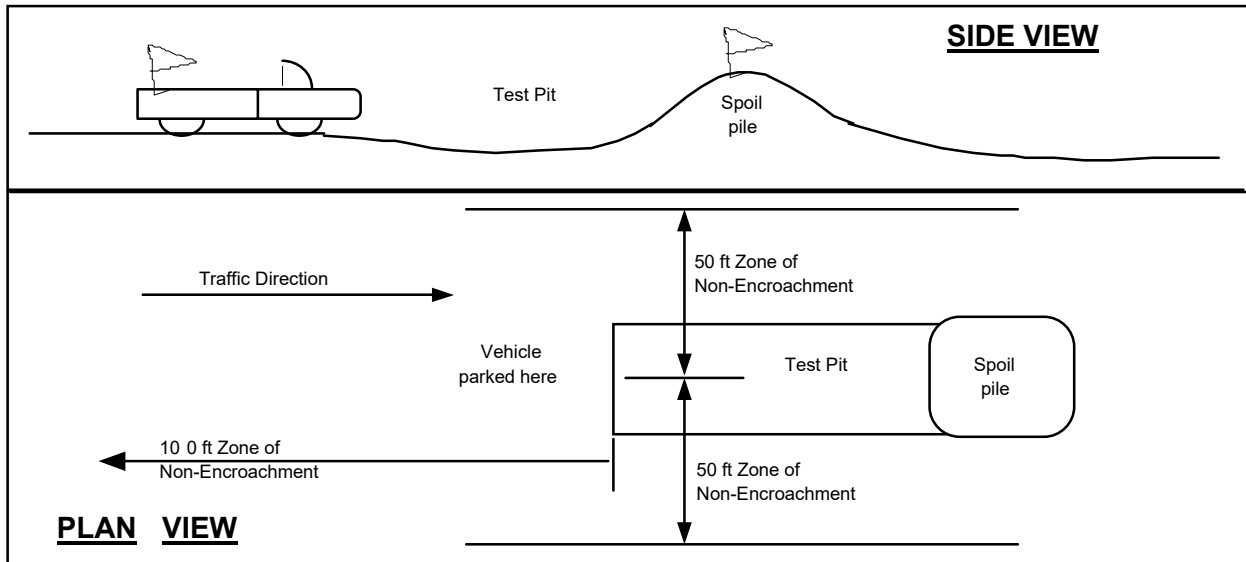
### **Test Pits Location, Orientation and Clearance**

The technician is responsible for selecting test pit locations. The primary concern is the technician's safety. However, it is necessary to take sufficient tests at various locations to obtain a representative sampling of the fill. As such, efforts will be made to coordinate locations with the grading contractors authorized representatives (e.g. dump man, operator, supervisor, grade checker, etc.), and to select locations following or behind the established traffic pattern, preferably outside of current traffic. The contractors authorized representative should direct excavation of the pit and safety during the test period. Again, safety is the paramount concern.

Test pits should be excavated so that the spoil pile is placed away from oncoming traffic. The technician's vehicle is to be placed next to the test pit, opposite the spoil pile. This necessitates that the fill be maintained in a drivable condition. Alternatively, the contractor may opt to park a piece of equipment in front of test pits, particularly in small fill areas or those with limited access.

A zone of non-encroachment should be established for all test pits (see diagram below). No grading equipment should enter this zone during the test procedure. The zone should extend outward to the sides approximately 50 feet from the center of the test pit and 100 feet in the direction of traffic flow. This zone is established both for safety and to avoid excessive ground vibration, which typically decreases test results.

### TEST PIT SAFETY PLAN



#### **Slope Tests**

When taking slope tests, the technician should park their vehicle directly above or below the test location on the slope. The contractor's representative should effectively keep all equipment at a safe operation distance (e.g. 50 feet) away from the slope during testing.

The technician is directed to withdraw from the active portion of the fill as soon as possible following testing. The technician's vehicle should be parked at the perimeter of the fill in a highly visible location.

#### **Trench Safety**

It is the contractor's responsibility to provide safe access into trenches where compaction testing is needed. Trenches for all utilities should be excavated in accordance with CAL-OSHA and any other applicable safety standards. Safe conditions will be required to enable compaction testing of the trench backfill.

All utility trench excavations in excess of 5 feet deep, which a person enters, are to be shored or laid back. Trench access should be provided in accordance with OSHA standards. Our personnel are directed not to enter any trench by being lowered or "riding down" on the equipment.

Our personnel are directed not to enter any excavation which;

1. is 5 feet or deeper unless shored or laid back,
2. exit points or ladders are not provided,
3. displays any evidence of instability, has any loose rock or other debris which could fall into the trench, or
4. displays any other evidence of any unsafe conditions regardless of depth.

If the contractor fails to provide safe access to trenches for compaction testing, our company policy requires that the soil technician withdraws and notifies their supervisor. The contractor's representative will then be contacted in an effort to effect a solution. All backfill not tested due to safety concerns or other reasons is subject to reprocessing and/or removal.

### **Procedures**

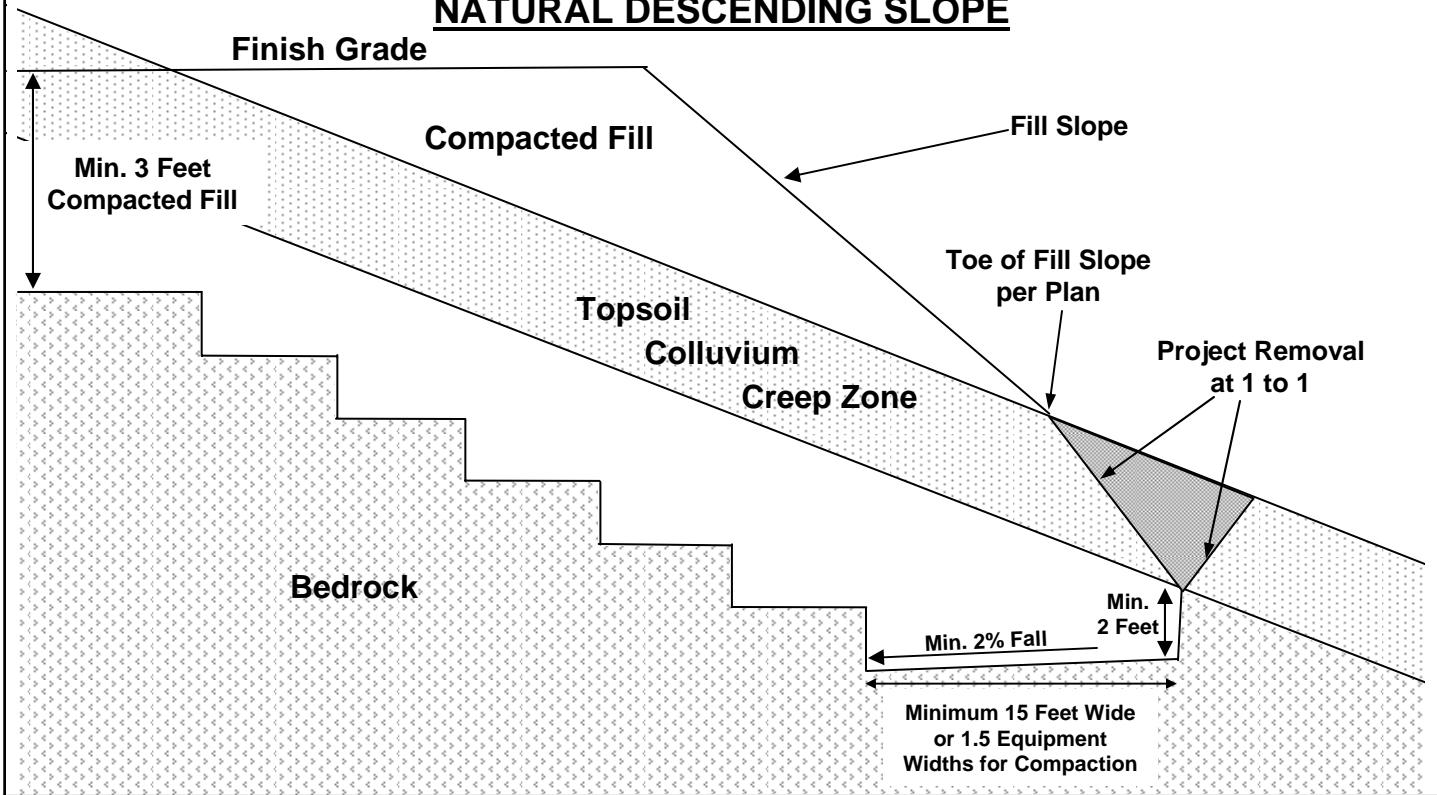
In the event that the technician's safety is jeopardized or compromised as a result of the contractor's failure to comply with any of the above, the technician is directed to inform both the developer's and contractor's representatives. If the condition is not rectified, the technician is required, by company policy, to immediately withdraw and notify their supervisor. The contractor's representative will then be contacted in an effort to effect a solution. No further testing will be performed until the situation is rectified. Any fill placed in the interim can be considered unacceptable and subject to reprocessing, recompaction or removal.

In the event that the soil technician does not comply with the above or other established safety guidelines, we request that the contractor bring this to technicians attention and notify our project manager or office. Effective communication and coordination between the contractors' representative and the field technician(s) is strongly encouraged in order to implement the above safety program and safety in general.

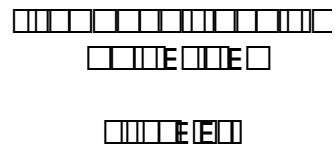
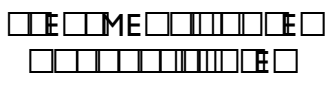
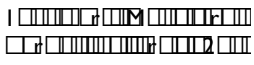
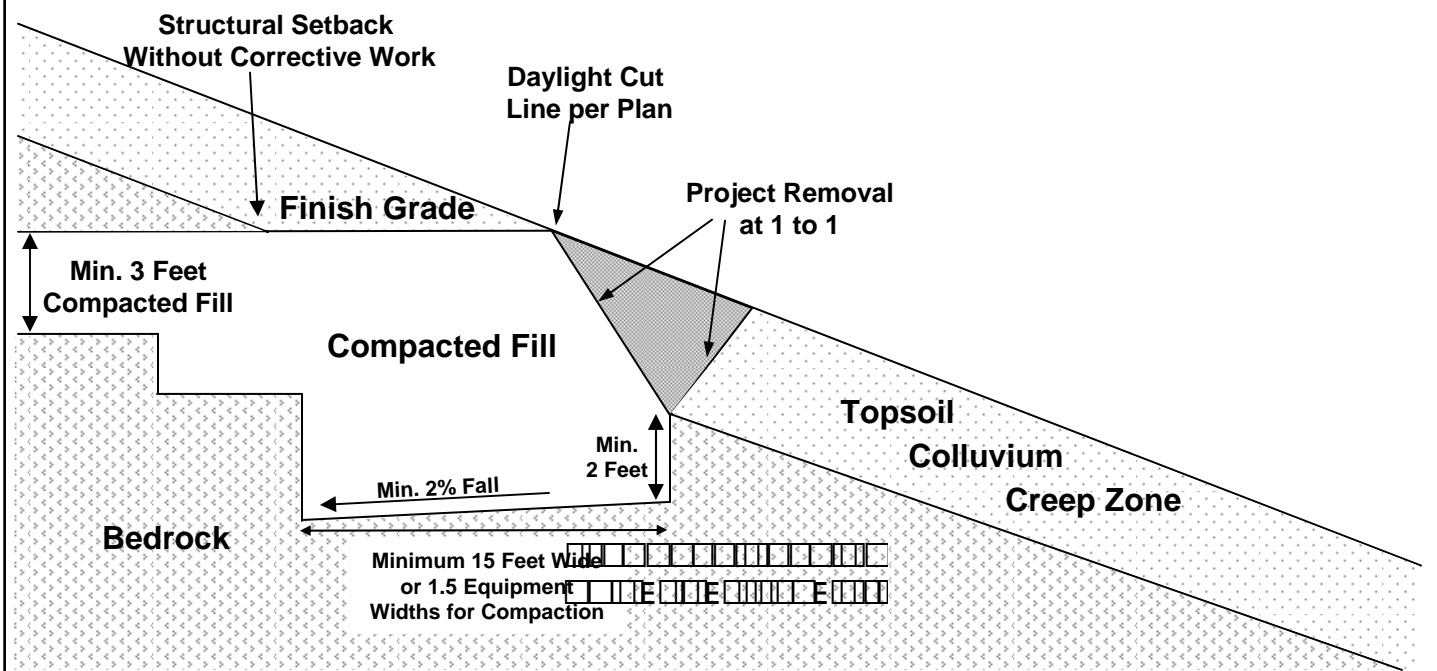
The safety procedures outlined above should be discussed at the contractor's safety meetings. This will serve to inform and remind equipment operators of these safety procedures particularly the zone of non-encroachment.

The safety procedures outlined above should be discussed at the contractor's safety meetings. This will serve to inform and remind equipment operators of these safety procedures particularly the zone of non-encroachment.

## TYPICAL FILL SLOPE OVER NATURAL DESCENDING SLOPE

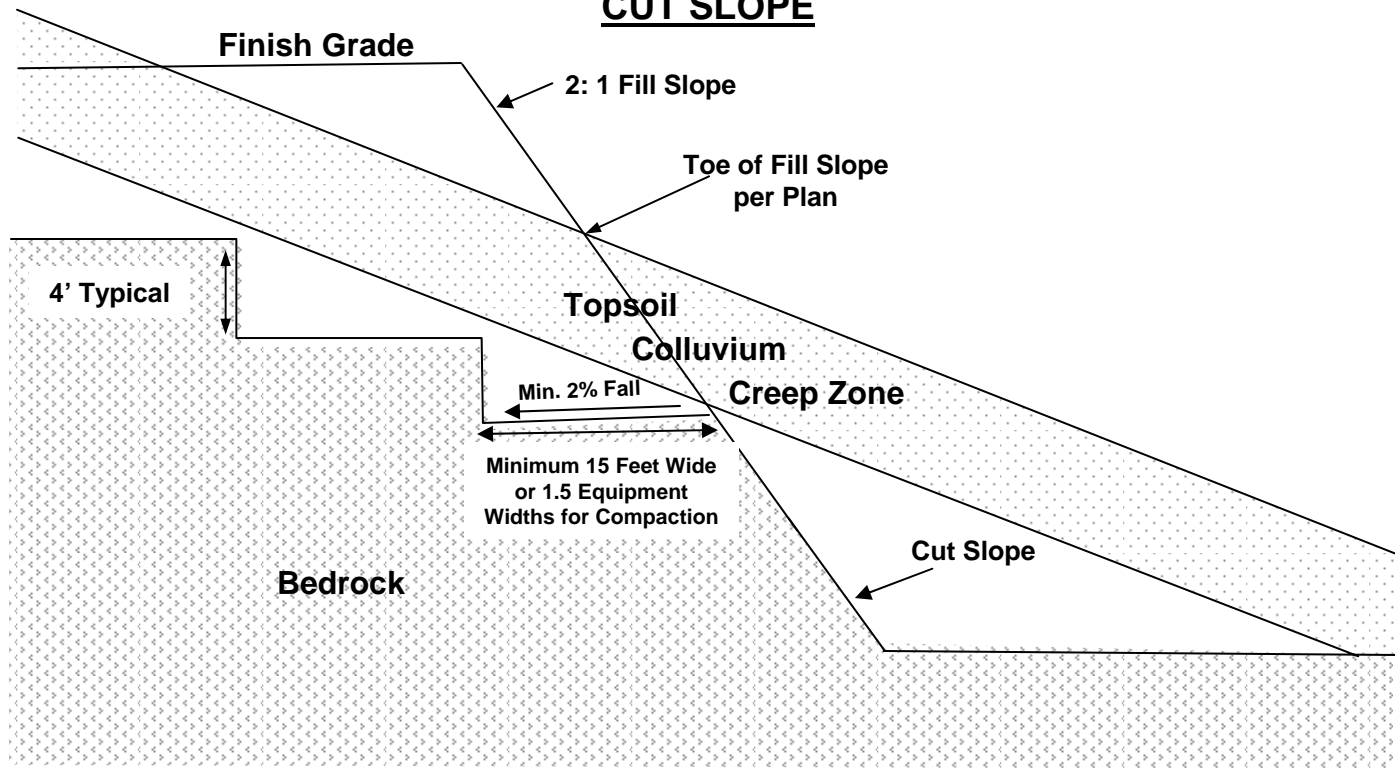


## DAYLIGHT CUT AREA OVER NATURAL DESCENDING SLOPE

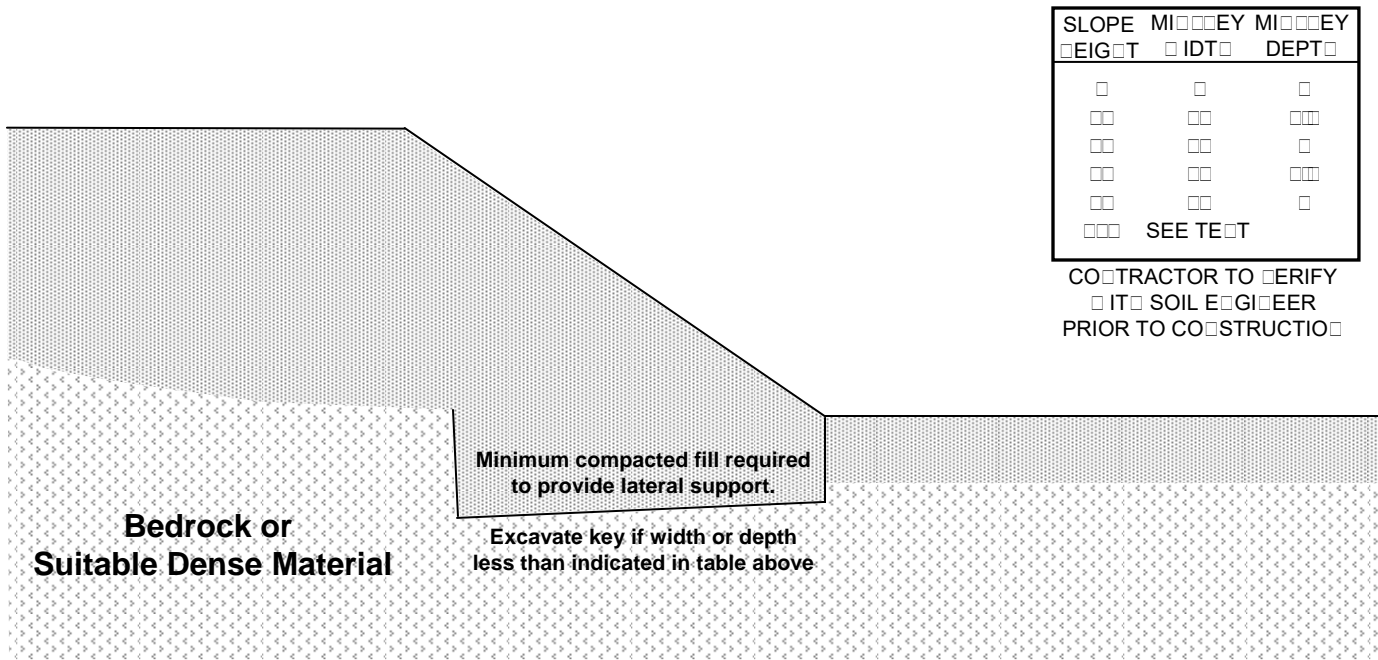




## TYPICAL FILL SLOPE OVER CUT SLOPE



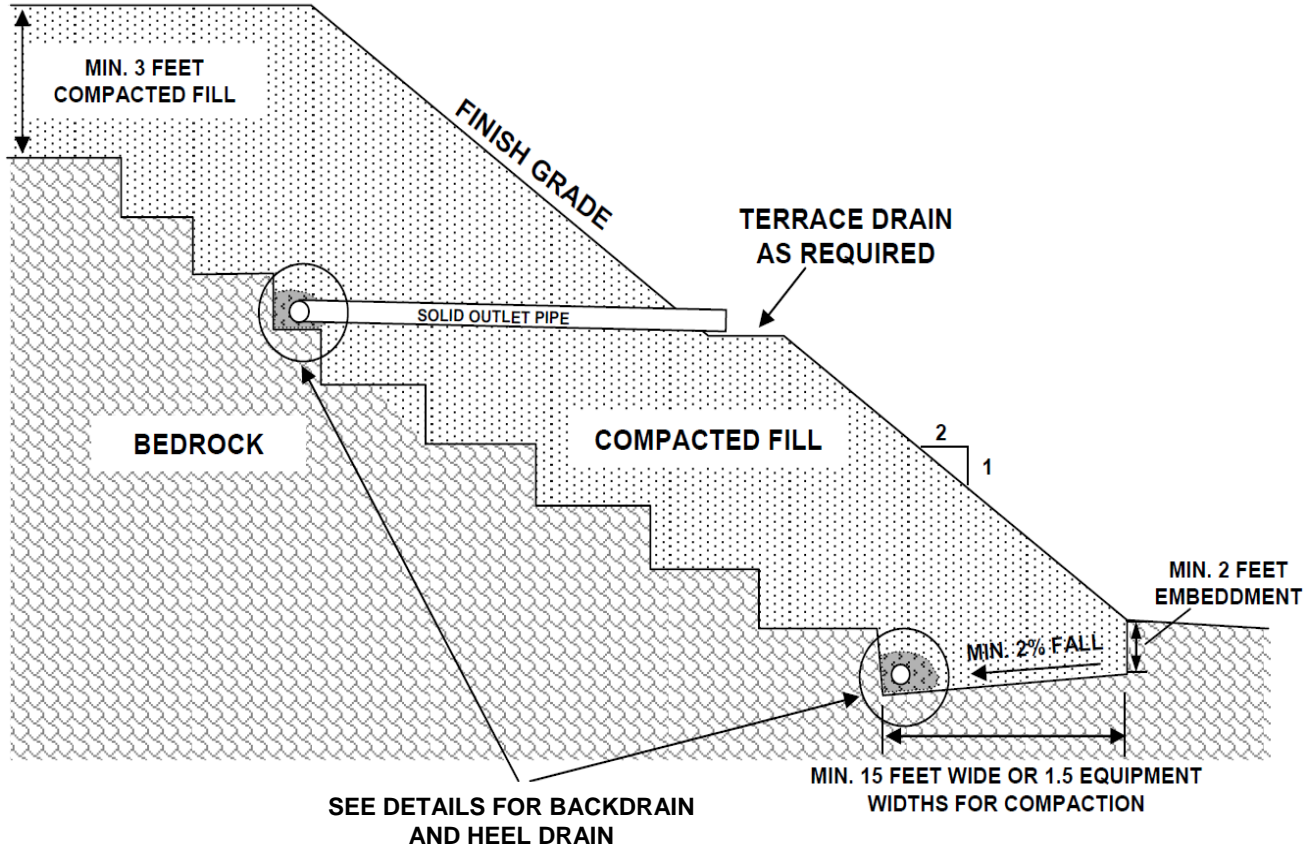
## TYPICAL FILL SLOPE



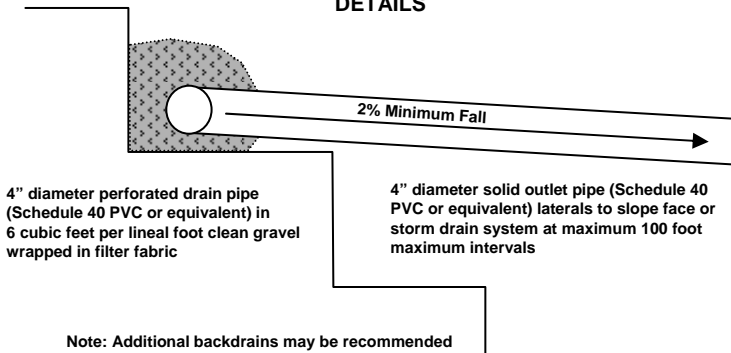
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COMMUNICATIONS  
 ENGINEERING

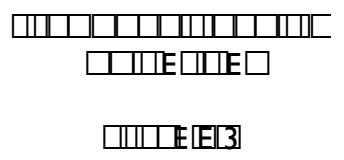
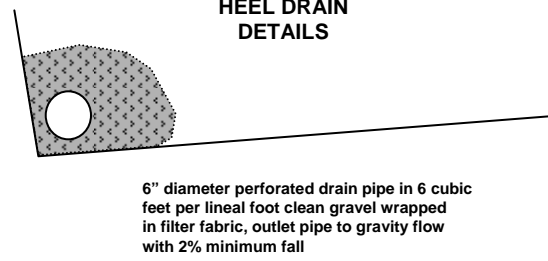
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**BACKDRAIN DETAILS**



**HEEL DRAIN DETAILS**



# Appendix E

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Phase I Environmental Site Assessment

**PHASE I ENVIRONMENTAL SITE ASSESSMENT  
PARCEL MAP 36161  
WINCHESTER, RIVERSIDE COUNTY, CALIFORNIA**

January 23, 2020  
Project No. 2319-CR

Prepared For:

**MORNINGSTAR VILLAGE, LLC  
41805 ALBRAE STREET  
FREMONT, CALIFORNIA 94538**





**GeoTek, Inc.**  
1548 North Maple Street, Corona, California 92880  
(951) 710-1160 Office (951) 710-1167 Fax [www.geotekusa.com](http://www.geotekusa.com)

January 23, 2020  
Project No. 2319-CR

**Morningstar Village, LLC**  
41805 Albrae Street  
Fremont, California 94538

Attention: Mr. Sunny Goyal

Subject: Phase I Environmental Site Assessment  
Parcel Map 36161  
Winchester, Riverside County, California 92582

Dear Mr. Goyal:

GEOTEK, INC. (GEOTEK) is pleased to present this Phase I Environmental Site Assessment for the above-referenced subject Site. Services were conducted in substantial conformance with the scope and limitations of the American Society of Testing and Materials E 1527-13, "*Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*," which is approved to meet the requirements of the federal All Appropriate Inquiries (AAI) standards as set forth in the Code of Federal Regulations, Title 40, Section 312 (40 CFR 312), and GEOTEK's Proposal No. P-0102020-CR, dated January 15, 2020.

This Phase I Environmental Site Assessment has not revealed evidence of a recognized environmental condition or concern at the subject Site.

We appreciate this opportunity to be of service. If you have any questions, or if we can be of further service, please contact us at (951) 710-1160.

Sincerely,  
**GEOTEK, INC.**



Edward H. LaMont  
Principal Geologist, CEG 1892  
Expires 07/31/2020

J. Michael Batten, CEM, REPA  
Environmental Services Manager  
Registered Environmental Property  
Assessor No. 113162  
Expires 06/15/2020

Anna M. Scott  
Project Geologist

Kyle R. McHargue  
Project Geologist, PG 9790  
Expires 02/29/2020

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## I.0 EXECUTIVE SUMMARY

GEO TEK, INC. (GEO TEK) has performed a Phase I Environmental Site Assessment (ESA) for the subject property: Parcel Map 36161 (the “Site”) including Riverside County Assessor’s Parcel Numbers (APNs) 476-010-017, -054 and -055, located in the City of Winchester, Riverside County, California. Our services were conducted in substantial conformance with the scope and limitations of the American Society of Testing and Materials (ASTM) E 1527-13, “*Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*”, which is approved to meet the requirements of the federal All Appropriate Inquiries (AAI) standards as set forth in the Code of Federal Regulations, Title 40, Section 312 (40 CFR 312), and GEO TEK Proposal No. P-0102020-CR, dated January 15, 2020. Any additions or deletions from our scope of services are discussed in the appropriate sections of this assessment.

A representative of GEO TEK conducted a Site reconnaissance on January 16, 2020 and January 20, 2020. The weather was cool and the sky was clear. The irregular shaped Site is currently comprised of three parcels of land (identified as Riverside County Assessor’s Parcel Numbers [APNS] 476-010-017, -054, and -055), encompassing an area of about 22 acres. The Site can generally be accessed by Winchester Road to the south of the Site.

The Site is generally vacant land. Pourroy Road and Pat Road both transect the southern portion of the Site. Visual evidence of hazardous substances or wastes was not observed during our Site reconnaissance. No pungent or acrid odors were observed emanating from the Site.

The Site is in an area largely characterized by residential development and vacant land. The Site is bounded by residential development, followed by vacant land to the north; Winchester Road, followed by vacant land to the east, vacant land and Winchester Road, followed by Abelia Sports Park to the south; and Pourroy Road, followed by vacant land and residential development to the west.

Based on readily available historic information, portion of the Site appears to have been utilized for dry farming agriculture from 1949 to 1996. Due to the nature of dry farming, the agricultural use is considered *di minimus*. The Site appears to be vacant with no significant changes from approximately 1996 until approximately 2006. Construction of Pourroy Road and Pat Road within the southern portion of the Site appears to have been conducted between approximately 2006 until approximately 2009. The residential developments to the south and southwest appear to be completed in the 2006 aerial photograph. There are no significant changes from 2009 to the present. The surrounding properties appear to have historically been utilized for agricultural use or residential development.

The Site appears on the database report obtained for this assessment. The Site is listed on the California Integrated Water Quality System (CIWQS), National Pollutant Discharge Elimination System (NPDES), and the CalEPA Regulated Site Portal (CERS) databases. The NPDES database describes the facility status as “active” and the program type as “construction”. The CIWQS database lists the project type as “construction-commercial” and the regulatory status is listed as “active”. The CERS database lists the description as “construction storm water”. These listings are due to the required stormwater run-off control requirements of construction projects, and do not represent a recognized environmental condition or environmental concern.

None of the adjacent properties appears on the database report. There are two (2) additional facilities listed on the database report within the various search distances specified by ASTM E 1527-13. Due to the status listing, distance and/or location (hydro-geologically down-gradient), these facilities do not represent an environmental concern to the Site.

This Phase I Environmental Site Assessment has not revealed evidence of an environmental condition or concern in connection with the subject Site. No additional investigation is recommended at this time.

This executive summary does not contain all the information that is found in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided and to aid in any decisions made or actions taken based on this information.

## 2.0 INTRODUCTION

GEO TEK, INC. (GEO TEK) has performed a Phase I Environmental Site Assessment (ESA) for APNs 476-010-017, -054, and -055, (the “Site”), located in the City of Winchester, Riverside County, California.

### 2.1 PURPOSE

The purpose of this Phase I ESA was to identify and evaluate actual and potential environmental conditions involving the subject Site. It was not the purpose of this assessment to determine the degree or extent of contamination, if any, but rather the potential for contamination.

### 2.2 SCOPE OF WORK

The Phase I ESA is a general characterization of environmental concerns based on reasonably ascertainable information and observations. GEO TEK performed the Phase I ESA in substantial accordance with ASTM E 1527-13. The following services were provided for the assessment:

- A reconnaissance of the Site and surrounding properties to visually assess current utilization and indications of potential surface contamination. This was accomplished by driving the Site boundaries, and then traversing the Site until the entire Site had been surveyed.
- A reconnaissance of the surrounding area for approximately one-half mile was conducted, without entering the properties, making observations concerning property uses, conditions, and housekeeping.
- A review of the geologic and hydro-geologic settings was conducted using reasonably ascertainable public records and documents.
- An environmental database report was obtained from a data service provider. This database report compiles and locates documented “hazardous waste” facilities within specific minimum search distances as defined by ASTM E 1527-13. If necessary, additional information on identified facilities was gathered by a file review at the appropriate federal, state, local, and/or tribal regulatory agency.

- A review of reasonably ascertainable historical records (including aerial photographs, topographic maps, building records and city directories) was conducted to assess the historical land utilization and indications of potential contamination or sources of contamination for the Site.
- This report was prepared, which relates the findings of this study and presents our conclusions and recommendations.

Specific items not included in this Scope of Services are soil analysis, water analysis, asbestos containing materials analysis, radon analysis, lead-based paint analysis, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, vapor intrusion testing, high voltage power lines, and other items not within the scope of ASTM E 1527-13.

### 2.3 SIGNIFICANT ASSUMPTIONS

Specific assumptions by GEOTEK for this assessment include:

- GEOTEK had permission to access the Site grounds;
- The client has provided GEOTEK with available geotechnical or environmental reports for the Site;
- The client has provided GEOTEK with known current or historic uses of hazardous materials at the Site, or with other specialized knowledge of the environmental history of the Site and surrounding area;
- The client is not the sole and absolute source of information;
- Seller has provided proper and complete access to their knowledge, both written and verbal, and GEOTEK can rely on the information.

### 2.4 LIMITATIONS AND EXCEPTIONS

GEOTEK conducted a Phase I Environmental Site Assessment in substantial accordance with ASTM E 1527-13 and as authorized by Morningstar Village, LLC. This study does not include sampling of soil, groundwater and/or the debris on-site for environmental testing. This report is intended



for the use of Morningstar Village, LLC. The contents should not be relied upon by any party other than the aforementioned without the express written consent of GEOTEK.

The findings, conclusions, and recommendations made in this report are based on the information that was made available to GEOTEK, in most instances from public records. The information is relevant to the date of our site work and should not be relied on to represent conditions at any later date. The opinions and conclusions expressed herein are based on information obtained during our assessment and on our experience and current standards of technical practice. GEOTEK makes no other warranties, either express or implied, concerning the completeness of the data furnished to us. GEOTEK cannot be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time our assessment was undertaken. GEOTEK is not responsible, nor liable for work, testing or recommendations performed or provided by others. This Phase I Environmental Site Assessment is not and should not be construed as a warranty or guarantee about the presence or absence of environmental hazards or contaminants, which may affect the subject Site. Facts, conditions, and acceptable risk factors change with time; accordingly, this report should be viewed within this context.

Specific limitations to the scope of ASTM E 1527-13 due to contract limitations, availability of resources, and/or encountered Site conditions are discussed in the appropriate section(s) of this report.

## 2.5 SPECIAL TERMS AND CONDITIONS

This assessment report is presented as fulfilling the standard requirements of most financial institutions, governmental regulatory agencies, ASTM, and generally accepted industry standards and practices. Please refer to GEOTEK Proposal No. P-0102020-CR for complete terms and conditions for this assessment.

## 2.6 RELIANCE

This assessment has been prepared for the exclusive use and may be relied upon by Morningstar Village, LLC. and the successors and assignees. Third party reliance letters may be issued upon request and upon the payment of the, then current, fee for such letters. All third parties relying on this report, by such reliance, agree to be bound by the General Conditions and Limitations agreed to Morningstar Village, LLC. No reliance by any party is permitted without such agreement, regardless of the content of the reliance letter itself.

### 3.0 DESCRIPTION OF SITE AND SURROUNDING AREA

The objective of describing the Site and surrounding area is to document current conditions as observed and to obtain information which would indicate the likelihood of a recognized environmental condition in connection with the Site. A representative of GEOTEK conducted a Site reconnaissance on January 16, 2020 and January 20, 2020. The weather was cool and the sky was mostly clear. The Site can generally be accessed from Winchester Road to the south of the Site.

#### 3.1 SITE LOCATION AND LEGAL DESCRIPTION

The Site is located north of Winchester Road in the City of Winchester, Riverside County, California. According to the U.S. Geological Survey (USGS) Winchester Quadrangle topographic map sheet (7.5-minute series), the Site is located in Section 28, Township 6 South, Range 2 West, (see Figure 1 in Appendix A and documents in Appendix B). The Riverside County Assessor's Parcel Numbers (APNs) are 476-010-017, -054, and -055. A Property Tax Map Report as obtained from Environmental Data Resources (EDR, a third party vendor) is also included in Appendix B.

#### 3.2 SITE AND VICINITY GENERAL CHARACTERISTICS

The Site is generally vacant land. Pourroy Road and Pat Road both transect the southern portion of the Site.

The Site is in an area largely characterized by residential development and vacant land.

#### 3.3 CURRENT PROPERTY USE

The Site is generally vacant land. Pourroy Road and Pat Road both transect the southern portion of the Site.

#### 3.4 SITE IMPROVEMENTS

The Site is generally vacant land. Pourroy Road and Pat Road both transect the southern portion of the Site. Some of the Site appears to have historically been used for dry farming. Due to the nature of dry farming, the agricultural use is considered *di minimus*. Photographs of the Site are included in Appendix C.

### 3.4.1 HAZARDOUS SUBSTANCES

Visual evidence of hazardous substances or wastes was not observed. No pungent or acrid odors were observed emanating from the Site.

### 3.4.2 STORAGE TANKS

GEO TEK did not observe evidence of underground ground storage tanks (such as vent pipes, fill pipes, regular-shaped depressions, etc.) on the Site.

### 3.4.3 POLY-CHLORINATED BIPHENYLS (PCBs)

GEO TEK did not observe suspect equipment (transformers, elevators, hydraulic lift mechanisms, trash compactors, etc.) which may contain PCBs on the Site.

### 3.4.4 CONTROLLED SUBSTANCES

GEO TEK consulted the U.S. Drug Enforcement Agency (DEA) website to cross-check the Site address against published facilities subject to DEA enforcement. The Site did not appear on the list of published facilities, based on cross-streets.

GEO TEK did not observe evidence of illegal or controlled substances being used or manufactured at the Site.

### 3.4.5 INDICATIONS OF SOLID WASTE DISPOSAL

Waste disposal for the Site and Site area is provided by Waste Management.

### 3.4.6 UTILITY SUPPLY

Water and sewer services for the Site and area are provided by Eastern Municipal Water District. Electric service for the Site and area is provided by Southern California Edison. Natural gas is provided for the Site and area by the Southern California Gas Company.



### 3.4.7 DRAINAGE

Natural drainage at the Site is generally interpreted to be toward the south, conforming to the natural topography in the area. A stormwater drainage culvert is located on the southcentral portion of the site which outlets on the southern side of Winchester Road.

### 3.4.8 OTHER CONDITIONS OF CONCERN

No visual indication of dry wells, cesspools, or other conditions of concern that would indicate a recognized environmental condition were observed during the Site reconnaissance. No stressed vegetation was observed. High-voltage power transmission lines are installed near the northeastern side of Pourroy Road.

### 3.4.9 INTERVIEWS

GEOTEK interviewed the following individuals while performing this assessment:

- Mr. Sunny Goyal (a representative of the current Site owner) completed a User Questionnaire.

Information from this interview is incorporated into the appropriate sections of this report.

### 3.5 CURRENT ADJOINING PROPERTY USE

The Site is in an area largely characterized by residential development and vacant land. The Site is bounded by residential development, followed by vacant land to the north; Winchester Road, followed by vacant land to the east, vacant land and Winchester Road, followed by Abelia Sports Park to the south; and Pourroy Road, followed by vacant land and residential development to the west.

#### **4.0 CLIENT PROVIDED INFORMATION**

As a form of interview, a representative of the current Site owner completed a “User Questionnaire” for the Site in accordance with ASTM E 1527-13. A copy of the completed questionnaire is included in Appendix B.

##### **4.1 ENVIRONMENTAL CLEAN UP LIENS**

Mr. Sunny Goyal is not aware of any environmental clean-up liens at the Site.

##### **4.2 ACTIVITY AND USE LIMITATIONS**

Mr. Sunny Goyal is not aware of any activity use limitations at the Site.

##### **4.3 SPECIALIZED KNOWLEDGE**

Mr. Sunny Goyal stated that the past uses of the property include vacant land and farmland.

##### **4.4 PURCHASE PRICE**

Mr. Sunny Goyal states that the purchase price being paid for the Site reflects fair market value.

##### **4.5 COMMONLY KNOWN INFORMATION**

Mr. Sunny Goyal is not aware of any commonly known information at the Site.

##### **4.6 OBVIOUS INDICATORS OF CONTAMINATION**

Mr. Sunny Goyal is not aware of obvious indicators of a likely environmental impact at the Site.

##### **4.7 OWNER, PROPERTY MANAGER AND OCCUPANT INFORMATION**

At the time of this reporting Morningstar Village, LLC owns and manages the Site.

##### **4.8 REASON FOR PERFORMING PHASE I ESA**

This Phase I ESA was performed at the request of Morningstar Village, LLC. as part of their due diligence for possible future improvements on the Site and in order to qualify for one of the

Landowner Liability Protections offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2002.

#### 4.9 OTHER USER PROVIDED INFORMATION

GEO TEK was not provided with any additional information for the Site by Morningstar Village, LLC.

## 5.0 PROPERTY PHYSICAL SETTING

Surface and subsurface environments are of interest because they control the movement of water-borne contaminants, which could be transported to and from the subject Site. GEOTEK reviewed information regarding the physical setting of the subject Site and immediately surrounding area.

### 5.1 REGIONAL GEOLOGY

The property is situated in the Peninsular Ranges geomorphic province. The Peninsular Ranges province is one of the largest geomorphic units in western North America. Basically, it extends from the point of contact with the Transverse Ranges geomorphic province, southerly to the tip of Baja California. This province varies in width from about 30 to 100 miles. It is bounded on the west by the Pacific Ocean, on the south by the Gulf of California and on the east by the Colorado Desert Province.

The Peninsular Ranges are essentially a series of northwest-southeast oriented fault blocks. Several major fault zones are found in this province. The Elsinore Fault zone and the Winchester Fault zone trend northwest-southeast and are found near the middle of the province. The San Andreas Fault zone borders the northeasterly margin of the province.

### 5.2 LOCAL GEOLOGIC SETTING AND TOPOGRAPHY

The Site and Site area are understood to be underlain primarily by alluvium with the central and northern portions underlain by phyllite (Morton, D.M., Kennedy, M.P. Bovard, K.R., and Burns, D. 2003). Additional data regarding soil survey information for the Site and Site area are also included in Appendix B.

The Site and Site area can be considered as having a rolling to gently sloping terrain to the south. The central portion of the Site is a northwest to southeast trending drainage swale that terminates into a drainage culvert at Winchester Road. Based on the USGS topographic map for the area and other documents reviewed for this report, the elevation of the subject Site ranges from approximately 1,419 feet above mean sea level in the northeast to approximately 1,399 feet above mean sea level in the southwest.

### 5.3 VICINITY SURFACE DRAINAGE

Natural drainage at the Site is interpreted to be dominantly directed toward the south, conforming to the natural topography in the area. The central portion of the Site is a northwest to southeast trending drainage swale that terminates into a drainage culvert at Winchester Road.

According to the Federal Emergency Management Agency (FEMA), the Site is in an area of undetermined flood hazard (Community Panel Nos. 06065C-2730G, dated August 28, 2008). The general area to the north is not located in a 100-year or 500-year flood zone (See appendix B).

### 5.4 HYDROGEOLOGY

According to a review of historical groundwater data (California Department of Water Resources and California State Water Resources Control Board groundwater well data [<http://wdl.water.ca.gov> and <http://geotracker.waterboards.ca.gov>]) and in-house information, depth to groundwater is likely around 25 feet to 30 feet below ground surface (bgs) in the general Site area.

## 6.0 ENVIRONMENTAL REGULATORY RECORDS REVIEW

The records review is conducted to help identify known recognized environmental conditions at the Site and/or on adjacent or nearby properties which may have impacted the subject Site.

### 6.1 ENVIRONMENTAL DATABASE RECORDS SEARCH

GEOTEK obtained and reviewed an environmental database report of the federal and state environmental records specified by ASTM E 1527-13. The database report was provided by Environmental Data Resources, Inc. (EDR) of Shelton, Connecticut. Additionally, orphan or un-mappable sites listed by EDR were reviewed for the approximate minimum search distances noted and included in our discussion, if applicable. Refer to Appendix D for a copy of the database report.

| ENVIRONMENTAL DATABASE   | MINIMUM SEARCH DISTANCE | SITE | ADJACENT | TOTAL LISTED |
|--|-------------------------|------|----------|--------------|
| U.S. Environmental Protection Agency (EPA) - National Priorities List (NPL), including delisted NPL                                      | 1.0 Mile                | No   | 0        | 0            |
| EPA – Superfund Enterprise Management System (SEMS), including archived sites (formerly CERCLIS)   | 0.5 Mile                | No   | 0        | 0            |
| EPA – Resource Conservation and Recovery Act (RCRA), Corrective Action Facilities (CORRACTS)   | 1.0 Mile                | No   | 0        | 0            |
| EPA – RCRA, Transportation, Storage, and Disposal facilities (TSD)   | 0.5 Mile                | No   | 0        | 0            |
| EPA - RCRA Generators  | Site and Adjacent       | No   | 0        | 0            |
| EPA – Emergency Response Notification System (ERNS)  | Site                    | No   | N/A      | 0            |
| Federal institutional control/engineering control registries   | 0.5 Mile                | No   | 0        | 0            |
| California Environmental Protection Agency (CEPA) – State Response Sites (Response, formerly Annual Work Plan and Bond Expenditure Plan) | 1.0 Mile                | No   | 0        | 0            |

| ENVIRONMENTAL DATABASE   | MINIMUM SEARCH DISTANCE | SITE       | ADJACENT | TOTAL LISTED |
|--|-------------------------|------------|----------|--------------|
| CEPA – EnviroStor Database (formerly CALSITES)   | 0.5 Mile                | No         | 0        | 1            |
| CEPA – CHMIRS - California Hazardous Materials Information Reporting System  | Site                    | No         | 0        | 0            |
| CEPA - Solid Waste Fill/Landfill (SWF/LF), Solid Waste Assessment Test (SWAT)/Waste Management Unit Database System (WMUDS) and Recycling Facilities (SWRCY) | 0.5 Mile                | No         | 0        | 0            |
| CEPA – Leaking Underground Storage Tanks (LUST)  | 0.5 Mile                | No         | 0        | 0            |
| CEPA – Underground Storage Tanks (UST), including historic USTs  | Site and Adjacent       | No         | 0        | 0            |
| CEPA – Spills, Leaks, Investigations & Cleanup Cost Recovery Listing (SLIC)  | 0.5 Mile                | No         | 0        | 0            |
| State institutional control/engineering control registries   | Site                    | No         | N/A      | 0            |
| Local and/or Tribal databases  | Up To 1.0 Mile          | No         | 0        | 0            |
| Drycleaners  | 0.25 Mile               | No         | 0        | 0            |
| Other databases  | Up to 1.0 Mile          | <b>YES</b> | 0        | 4            |
| Unmappable facilities  | Up to 1.0 Mile          | No         | 0        | 0            |

N/A – Not Applicable

## 6.2 DISCUSSION OF REGULATORY RECORDS

### 6.2.1 NATIONAL PRIORITY LIST

The National Priority List (NPL) is the EPA's list of confirmed or proposed Superfund sites. Our review of this data includes sites which have been delisted from the NPL. The NPL is searched for a 1.0-mile distance.

The Site does not appear on the NPL. There are no facilities on the NPL within 1.0-mile of the Site.

### 6.2.2 SUPERFUND ENTERPRISE MANAGEMENT SYSTEM

The Superfund Enterprise Management System (SEMS, formerly CERCLIS) is a compilation of sites that the EPA has investigated or is currently investigating for a release or threatened release



of hazardous substances. Our review of SEMS sites includes archive (no further remedial action planned) facilities. The SEMS list is searched for a 0.5-mile distance.

The Site does not appear on the SEMS list. There are no facilities on the SEMS list within 0.5-mile of the Site.

### 6.2.3 RESOURCE CONSERVATION AND RECOVERY ACT

The Resource Conservation and Recovery Act compile selective information on facilities which generate, transport, store, treat and or dispose of hazardous waste. RCRA facilities can be listed on one of three databases:

- *Corrective Action Facilities (CORRACTS)* are facilities undergoing corrective action. A corrective action order is issued pursuant to RCRA Section 3008(h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. The CORRACTS list is searched for a 1.0-mile distance.

The Site does not appear on the CORRACTS list. There are no facilities on the CORRACTS list within 1.0-mile of the Site.

- *Transportation, Storage, and Disposal Facilities (TSD)* includes facilities that transport, store or dispose of hazardous waste and are not listed on the RCRA Generators list. The TSD is searched for a 0.5-mile distance.

The Site does not appear on the RCRA TSD list. There are no facilities on the RCRA TSD list within 0.5-mile of the Site.

- *Generators List* identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Generators database is a compilation by the EPA of reporting facilities that generate hazardous waste. The RCRA generators list is searched for the Site and adjacent properties.

The Site does not appear on the RCRA Generators list. None of the adjacent properties appear on the RCRA generators list.



#### 6.2.4 EMERGENCY RESPONSE NOTIFICATION SYSTEM

The Emergency Response Notification System (ERNS) is a national database used to collect information on reported releases of oil or hazardous substances. The ERNS list is searched for the Site. The Site does not appear on the ERNS list.

#### 6.2.5 FEDERAL INSTITUTIONAL CONTROL/ENGINEERING CONTROL REGISTRIES

The EPA maintains three databases that list sites that have institutional and/or engineering controls in place as part of their operations. These databases are searched for a 0.5-mile distance.

The Site does not appear on these databases. There are no facilities that are listed on these databases within 0.5-mile of the Site.

#### 6.2.6 STATE RESPONSE SITES

The State Response Sites (RESPONSE) records are the state equivalent to the federal National Priorities List (NPL) database. The RESPONSE is searched for a 1.0-mile distance.

The Site does not appear on the on the RESPONSE. There are no RESPONSE facilities listed within a 1.0-mile distance of the Site.

#### 6.2.7 ENVIROSTOR DATABASE

The EnviroStor Database (EnviroStor, formerly CALSITES) records are the state equivalent to the federal SEMS database. EnviroStor is searched for a 0.5-mile distance.

The Site does not appear on the EnviroStor database.

There is one EnviroStor facility within 0.5 mile of the Site. The facility is listed as Proposed Elementary School No 10-A located at the northeast corner of Elliot Road and Pat Road approximately 0.452-mile west of the Site. The site type is listed as “school investigation” and the status is listed as “no further action”. School construction in California requires a Preliminary Endangerment Assessment prior to development, which results in inclusion on the EnviroStor database. Due to the nature of the facility listing, facility status, distance from the Site and/or being hydro-geologically down-gradient, it is our opinion that this facility does not represent a recognized environmental condition or environmental concern to the Site.

#### 6.2.8 CALIFORNIA HAZARDOUS MATERIAL INCIDENT REPORT SYSTEM

The California Hazardous Material Incident Report Systems (CHMIRS) is a state database used to collect information on reported hazardous materials incidents (accidental leaks and spills). The CHMIRS list is searched for a 0.25-mile distance.

The Site does not appear on the CHMIRS list. There are no CHMIRS facilities located within 0.25 mile of the Site.

#### 6.2.9 SOLID WASTE FACILITIES LIST

The Solid Waste Fill/Landfill (SWF/LF), Waste Management Unit Database System (WMUDS)/Solid Waste Assessment Test (SWAT), and Solid Waste Recycling Facilities (SWRCY) databases includes information pertaining to closed and open solid waste facilities operating in the state of California. The SWF/LF, WMUDS/SWAT and SWRCY databases are searched for a 0.5-mile distance.

The Site does not appear on the SWF/LF, WMUDS/SWAT or SWRCY lists.

There are no facilities on the SWF/LF, WMUDS/SWAT or SWRCY lists within 0.5-mile of the subject Site.

#### 6.2.10 LEAKING UNDERGROUND STORAGE TANKS LIST

The California Leaking Underground Storage Tanks (LUST) list is a compilation of petroleum storage tank sites that have reported a release. The LUST list is searched for a 0.5-mile distance.

The Site did not appear on the LUST list. There are no LUST facilities within 0.5 mile of the Site.

#### 6.2.11 UNDERGROUND STORAGE TANKS LIST

The California Underground Storage Tank (UST) list is a compilation of petroleum storage tank sites that are registered with the state of California. The UST list is searched for the Site and adjacent properties.

The Site did not appear on the UST list. None of the adjacent properties appear on the HIST UST list.

#### 6.2.12 SPILLS, LEAKS, INVESTIGATION AND CLEANUP COST RECOVERY LISTING (SLIC)

The SLIC database is compiled by the CEPA California Regional Water Quality Control Board, Santa Ana Region. It is designed to protect and restore water quality from spills, leaks, and similar discharges. The SLIC is searched for a 0.5-mile distance.

The Site does not appear on the SLIC. There is no SLIC facilities listed within a 0.5-mile distance of the Site.

#### 6.2.13 STATE INSTITUTIONAL CONTROL/ENGINEERING CONTROL REGISTRIES

The State of California maintains institutional and engineering control databases or registries. This lists sites with engineering or institutional controls in place. Institutional controls include administrative measures intended to prevent exposure to contaminants remaining on site. Engineering controls include various forms of caps, building foundations, liners, and treatment methods. The State Institutional Control/Engineering Control Registries is searched for the Site.

The subject Site does not appear on the State Institutional Control/Engineering Control Registries.

#### 6.2.14 TRIBAL DATABASES

Tribal governments are under the jurisdiction of the EPA for environmental concerns. Currently, the EPA Region 9 publishes LUST and UST information for tribes in Arizona, California, Hawaii, Nevada, and the Pacific Territories. The LUST database is searched for 0.5 mile, and the UST database is searched for 0.25 mile.

The Site does not appear on the Tribal LUST or UST databases. No facilities were identified on the Tribal LUST or UST databases within 0.5 mile of the Site.

#### 6.2.15 OTHER DATABASES

EDR compiles information from multiple federal, state, local, and proprietary databases. Most are secondary or tertiary or redundant. Facilities compiled on these other databases are evaluated based on the severity of the listing, distance and location.

The Site appears on the database report obtained for this assessment. The Site is listed on the California Integrated Water Quality System (CIWQS), National Pollutant Discharge Elimination

System (NPDES), and the CalEPA Regulated Site Portal (CERS) databases. The NPDES database describes the facility status as “active” and the program type as “construction”. The CIWQS database lists the project type as “construction-commercial” and the regulatory status is listed as “active”. The CERS database lists the description as “construction storm water”. These listings are due to the required stormwater run-off control requirements of construction projects, and do not represent a recognized environmental condition or environmental concern.

There are two additional facilities that appears on the Schools (SCH) database. The first is a redundant listing on the Proposed Elementary School No. 10 that was previously discussed.

The second listing on the SCH database is the Quinta Do Lago Elementary School located at the intersection of Pourroy Road and Thompson Road approximately 0.998-mile south of the Site. The potential contaminants of concern are listed as “no contaminants found”. The status is listed as “no further action” as of August 22, 2001. This is also listed due to a Preliminary Endangerment Assessment for the school property.

Due to the nature of the facility listing, facility status, distance from the Site, it is our opinion that these facilities do not represent a recognized environmental condition or environmental concern to the Site.

#### 6.2.16 DRY CLEANERS

The DRYCLEANERS list is compiled and provided by EDR. The DRYCLEANER database is searched for a 0.25-mile distance.

The Site does not appear on the DRYCLEANER list. No facilities are listed within 0.25-mile of the Site.

#### 6.2.17 VAPOR ENCROACHMENT SCREEN

The purpose of a Vapor Encroachment Screen (VES) is to identify, to the extent feasible, if a Vapor Encroachment Condition (VEC) exists at the Site.

A Vapor Encroachment Screen Report was generated for the Site and Site area utilizing EDR’s Vapor Encroachment Worksheet (see Appendix B). It was determined that there are no historical dry cleaners or auto stations within 600 feet and/or up gradient from the Site.

It is our opinion that a VEC in not likely to exist at the subject Site. The Vapor Encroachment Screen report is included in Appendix B.

#### 6.2.18 UNMAPPABLE FACILITIES

GEO TEK reviewed the listing of “orphan” or unmappable facilities in the database report. There are no unmappable facilities listed within 1-mile of the Site.

#### 6.3 LOCAL REGULATORY AGENCY RECORDS

GEO TEK contacted the County of Riverside Fire and Police Departments regarding underground or above ground storage tanks, hazardous material permits or business plans, emergency responses, spills, inspections, or other information of an environmental or hazardous nature.

Neither of these agencies had information for the Site.

## 7.0 SITE AND SURROUNDING AREA HISTORY

In order to construct the history of the Site and the surrounding area, GEOTEK reviewed reasonably ascertainable public documents, including aerial photographs, topographic maps, building records, city directories, fire insurance maps, and county assessor history records.

### 7.1 HISTORICAL SITE USAGE

#### 7.1.1 AERIAL PHOTOGRAPH REVIEW

GEOTEK reviewed aerial photographs dated 1949, 1953, 1961, 1967, 1978, 1985, 1989, 1996, 2002, 2006, 2009, 2012, and 2016 (see Appendix B).

Based on readily available historic information, a portion of the Site appears to have been utilized for dry farming agriculture from 1949 to 1996. Due to the nature of dry farming, the agricultural use is considered *di minimus*.

The Site appears to be vacant with no significant changes from approximately 1996 until approximately 2006.

Construction of Pourroy Road and Pat Road within the southern portion of the Site appears to have been conducted between approximately 2006 until approximately 2009.

The Site appears to be similar to the current condition in the 2009, 2012, and 2016 aerial photographs.

A 2018 aerial photograph is utilized for Figure 2 (Appendix A).

#### 7.1.2 TOPOGRAPHIC MAP REVIEW

GEOTEK reviewed the Elsinore Quadrangle (30-minute), dated 1901; the Winchester Quadrangles (7.5-minute), dated 1953, 1973, 1979 and 2012; the Murrieta Quadrangles (15-minute series) dated 1942, 1943 and 1947; the Bachelor Mountain Quadrangles (7.5-minute series) dated 1953, 1973, 1978 and 2012; and the Romoland Quadrangle (7.5-minute series) dated 2012. (see Appendix B).

The Site appears to be generally vacant on the 1901, 1942, 1943, 1947, 1953, 1973, 1978 and 2012 topographic map sheets.

The Site appears unmapped on the 1979 topographic map sheet.

The 2012 maps show little detail other than streets in the vicinity. A 2012 topographic map sheet is utilized for Figure I (Appendix A).

### 7.1.3 BUILDING DEPARTMENT RECORDS

The Riverside County Building Department was contacted regarding permitting, projects or properties for APNs 476-010-017, -054, and -055. Multiple permits were located to the property APN's including permits pertaining to earthwork and the proposed construction of a Shell gas station, convenience store and car wash. A list of these permits is included in Appendix B.

### 7.1.4 CITY DIRECTORY REVIEW

GEO TEK reviewed The EDR – City Directory Image Report, as obtained from and provided by EDR, and included in Appendix B. The City Directory Image report provides information on the Site address and numerous nearby addresses. The Site does not have an address; however, Pourroy Road did have listings between the years on 1975 to 2014. These listings do not appear to present an obvious environmental concern to the Site.

### 7.1.5 SANBORN MAP REVIEW

Sanborn Fire Insurance Maps for the parcel were requested from EDR-Sanborn, which owns and maintains the largest and most complete collection of the maps. Source sheets were not available for the Site. The Sanborn Map Report is included in Appendix B.

### 7.1.6 CHAIN OF TITLE

GEO TEK has not received, nor was authorized to obtain Chain-of-Title documents for the Site.

## 7.2 HISTORICAL IMMEDIATELY SURROUNDING PROPERTY USAGE

### 7.2.1 AERIAL PHOTOGRAPH REVIEW

GEO TEK reviewed aerial photographs dated 1949, 1953, 1961, 1967, 1978, 1985, 1989, 1996, 2002, 2006, 2009, 2012, and 2016 (see Appendix B).

Based on readily available historic information, the surrounding areas appear generally vacant land or agricultural land in the 1949, 1953, 1961, 1967, 1975, 1978, 1985, 1996 aerial photograph.

Winchester Road first appears in the 1953 aerial photograph.

Multiple single-family residences first appear to the north and west of the Site in the 1985 aerial photograph.

The residential developments to the south and southwest appear to be completed in the 2006 aerial photograph.

There are no significant changes in the 2009, 2012, and 2016 aerial photographs.

A 2018 aerial photograph is utilized for Figure 2 (Appendix A).

#### 7.2.2 TOPOGRAPHIC MAP REVIEW

GEOTEK reviewed the Elsinore Quadrangle (30-minute and 7.5-minute series), dated 1901; the Winchester Quadrangles (7.5-minute and 30-minute series), dated 1902, 1953, 1967, 1972, 1979, 1996 and 2012; the Perris Quadrangles (15-minute series) dated 1942 and 1943; the Banning Quadrangles (7.5-minute series) dated 1943, 1948 and 1956; and the Lakeview Quadrangles (7.5-minute series) dated 1953, 1967, 1972, 1979 and 2012 (see Appendix B).

The Site appears to be generally vacant on the 1901, 1942, 1943, 1947, 1953, 1973, 1978 and 2012 topographic map sheets.

Some sporadic residential structures first appear within the surrounding areas on the 1942 topographic map sheet.

Portions of the surrounding areas are unmapped on the 1978 and 1979 topographic map sheets.

The 2012 maps show little detail other than streets in the vicinity. A 2012 topographic map sheet is utilized for Figure 1 (Appendix A).

#### 7.2.3 CITY DIRECTORIES

GEOTEK reviewed The EDR – City Directory Image Report, as obtained from and provided by EDR, and included in Appendix B. The City Directory Image report provides information on the



Site address and numerous nearby addresses. The Site does not have an address; however, Pourroy Road did have listings between the years of 1975 to 2014. These listings do not appear to present an obvious environmental concern to the Site.

#### 7.2.4 SANBORN MAP REVIEW

Sanborn Maps for the Site were requested from EDR-Sanborn, which owns and maintains the largest and most complete collection of the maps. According to EDR, source sheets were not available for the property; therefore, it is not likely that source sheets would be available for the adjoining properties. The Sanborn Map Report is included in Appendix B.

#### 7.3 HISTORICAL USE SUMMARY

Based on readily available historic information, portion of the Site appears to have been utilized for dry farming agriculture from 1949 to 1996. Due to the nature of dry farming, the agricultural use is considered *di minimus*. The Site appears to be vacant with no significant changes from approximately 1996 until approximately 2006. Construction of Pourroy Road and Pat Road within the southern portion of the Site appears to have been conducted between approximately 2006 until approximately 2009. The residential developments to the south and southwest appear to be completed in the 2006 aerial photograph. There are no significant changes from 2009 to the present. The surrounding properties appear to have historically been utilized for agricultural use or residential development.

Data gaps exist from 1953 to 1961, 1961 to 1967, 1967 to 1973, 1979 to 1985, 1989 to 1996 and 1996 to 2002 to the limited records which are reasonably ascertainable in the local area. However, it is our opinion that additional historic information, if it were to become available, is not likely to change the conclusions or recommendations of this assessment.

## **8.0 SIGNIFICANT DATA GAPS**

No significant data gaps were discovered while performing this Phase I Environmental Site Assessment. Therefore, it is our opinion that sufficient information was obtained to identify current Site conditions and past Site usage.

Minor data gaps include:

- Data gaps exist from 1953 to 1961, 1961 to 1967, 1967 to 1973, 1979 to 1985, 1989 to 1996 and 1996 to 2002,
- GEOTEK has not received nor reviewed Chain-of-Title documents for the Site.

It is our opinion that additional information, if it were to become available, is not likely to change the conclusions or recommendations of this assessment.

## **9.0 CONCLUSIONS AND RECOMMENDATIONS**

GEO TEK has performed a Phase I Environmental Site Assessment (ESA) for the subject Site in substantial conformance with the scope and limitations of ASTM E 1527-13 and GEO TEK Proposal No. P-0102020-CR, dated January 15, 2020. Any exceptions to, or deletions from, this practice are described in the appropriate sections of this report.

This Phase I Environmental Site Assessment has not revealed evidence of an environmental condition or concern in connection with the subject Site. No additional investigation is recommended at this time.

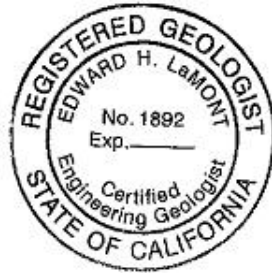
## 10.0 CERTIFICATIONS

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject Site. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR 312.

The qualifications of the Project Team are included in Appendix E.

We appreciate this opportunity to be of service. If you have any questions, or if we can be of further service, please contact us at (951) 710-1160.

Sincerely,  
**GEOTEK, INC.**



Edward H. LaMont  
Principal Geologist, CEG 1892  
Exp. 07/31/2020

J. Michael Batten, CEM, REPA  
Environmental Services Manager  
Registered Environmental Property  
Assessor No. 113162  
Expires 06/15/2020

Anna M. Scott  
Project Geologist

Kyle R. McHargue  
Project Geologist, PG 9790  
Exp. 02/29/2020

## 11.0 REFERENCES

### CALIFORNIA, STATE OF

- Morton, D.M., Kennedy, M.P. Bovard, K.R., and Burns, D. 2003, "Geologic Map and Digital Database of the Bachelor Mountain 7.5-minute Quadrangle, Riverside County, California, U.S. Geological Survey OF-2003-103, Scale 1:24,000.
- Water Resources, Department of Hydrologic Data

### ENVIRONMENTAL DATA RESOURCES, INC.

- Aerial Photo Decade Package, Inquiry No. 5938099.8, dated January 16, 2020
- Certified Sanborn Map Report, Inquiry No. 5938099.3, dated January 16, 2020
- City Directory Image Report, Inquiry No. 5938099.5, dated January 16, 2020
- Historical Topo Map Report, Inquiry No. 5938099.4, dated January 16, 2020
- Radius Map Report, Inquiry No. 5938099.2s, dated January 16, 2020
- Vapor Encroachment Screen Report, Inquiry No. 5938099.2s, dated December 11, 2020

### RIVERSIDE, COUNTY OF

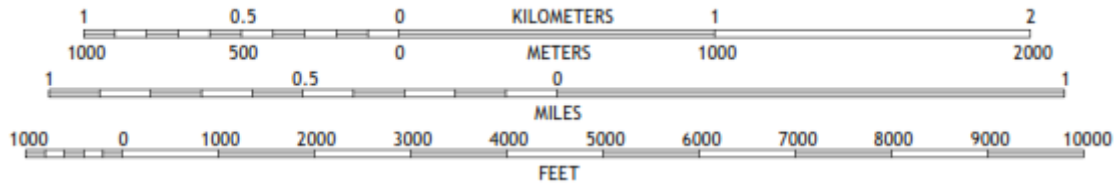
- Assessor's Office, Records Inquiry
- Fire Department, Records Inquiry
- Police Department, Records Inquiry

### U.S. GOVERNMENT

- Drug Enforcement Agency, Records inquiry (<http://www.dea.gov/clan-lab>)
- Federal Emergency Management Agency (FEMA)

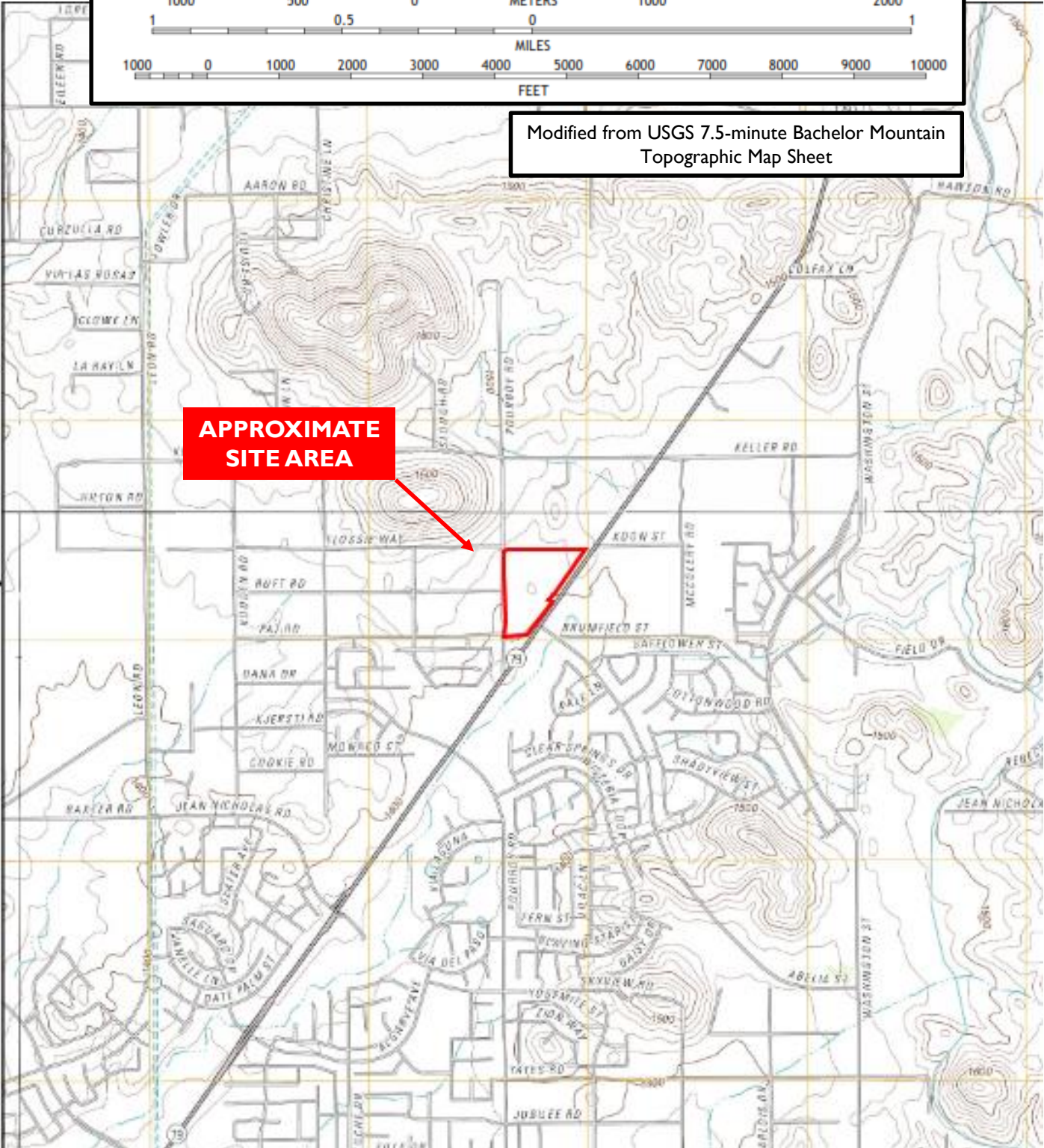
# **APPENDIX A**

## **FIGURES**



Modified from USGS 7.5-minute Bachelor Mountain Topographic Map Sheet

**APPROXIMATE SITE AREA**



**Morningstar Village, LLC.**  
 APNs: 476-010-017, -054 & -055  
 Winchester, Riverside County, California



**Figure I**  
**Site Location and**  
**General**  
**Topography**  
**Map**



**Legend**  
 □ Locations are approximate  
 20 □ -Site Photograph

**Approximate Site Limits**



400 FEET



**Morningstar Village, LLC.**  
 Parcel Map No. 36161  
 Winchester, Riverside County, California  
 Project No. 2319-CR



**Figure 2**  
 Site Layout Map



**MORNINGSTAR VILLAGE, LLC  
APNs 476-010-017, -054, AND -055  
WINCHESTER, RIVERSIDE COUNTY, CALIFORNIA**

**PROJECT No. 2319-CR  
JANUARY 23, 2020**

# **APPENDIX B**

## **SUPPORTING DOCUMENTS**





**Parcel Map 36161**

Not Reported

Winchester, CA 92596

Inquiry Number: 5938099.8

January 16, 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

01/16/20

**Site Name:**

Parcel Map 36161  
Not Reported  
Winchester, CA 92596  
EDR Inquiry # 5938099.8

**Client Name:**

Geotek  
1548 North Maple Street  
Corona, CA 92880  
Contact: Kyle Mchargue



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     |
| 2002        | 1"=500'      | Acquisition Date: May 22, 2002  | USGS/DOQQ     |
| 1996        | 1"=500'      | Flight Date: September 30, 1996 | USGS          |
| 1989        | 1"=500'      | Flight Date: August 15, 1989    | USDA          |
| 1985        | 1"=500'      | Flight Date: February 24, 1985  | USDA          |
| 1978        | 1"=500'      | Flight Date: September 20, 1978 | USDA          |
| 1967        | 1"=500'      | Flight Date: May 09, 1967       | USDA          |
| 1961        | 1"=500'      | Flight Date: July 08, 1961      | USDA          |
| 1953        | 1"=500'      | Flight Date: August 27, 1953    | USDA          |
| 1949        | 1"=500'      | Flight Date: May 23, 1949       | USDA          |

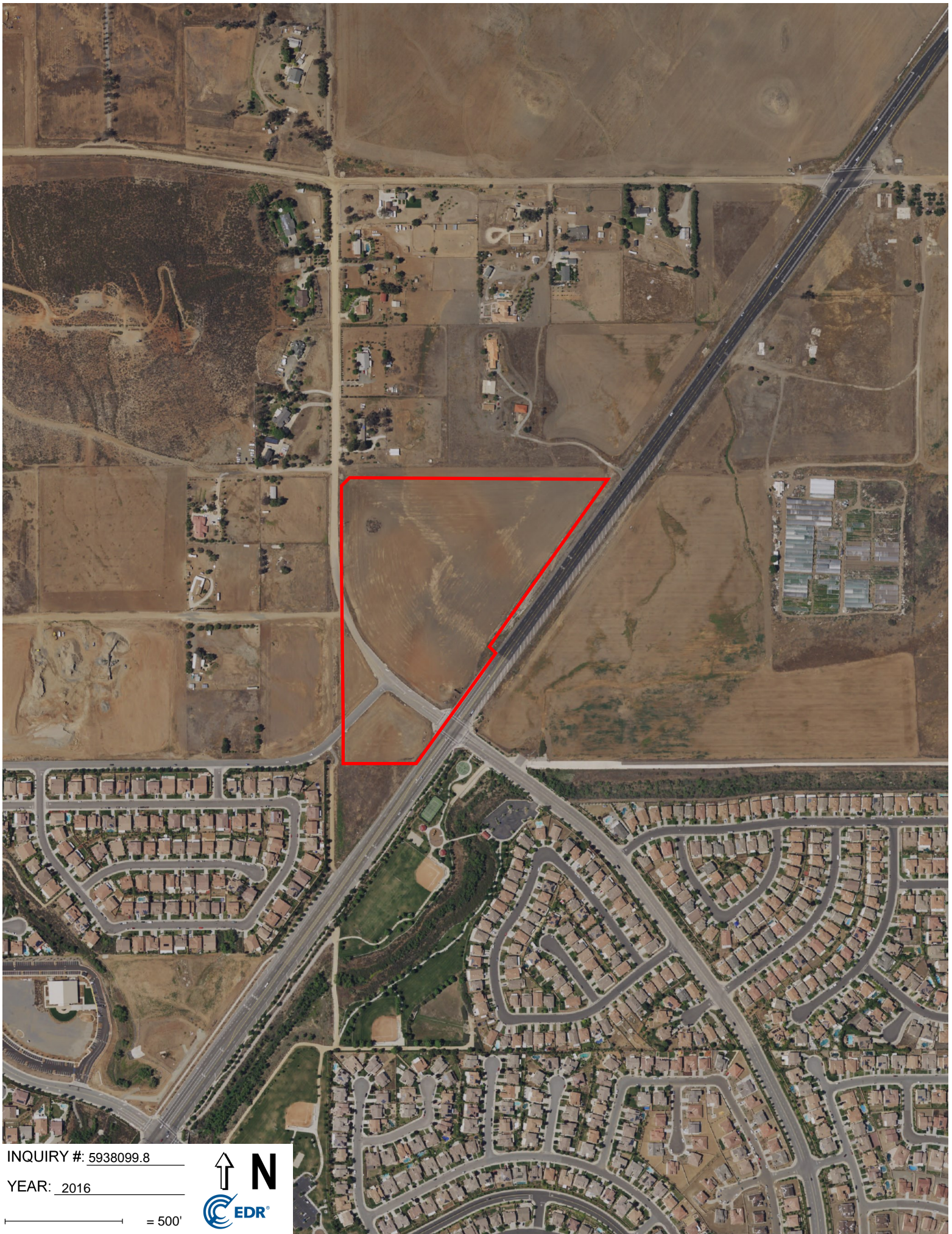
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INQUIRY #: 5938099.8

YEAR: 2016

— = 500'





INQUIRY #: 5938099.8

YEAR: 2012

— = 500'





INQUIRY #: 5938099.8

YEAR: 2009

— = 500'





INQUIRY #: 5938099.8

YEAR: 2006

— = 500'





INQUIRY #: 5938099.8

YEAR: 2002

— = 500'







INQUIRY #: 5938099.8

YEAR: 1996

— = 500'





INQUIRY #: 5938099.8

YEAR: 1989

— = 500'



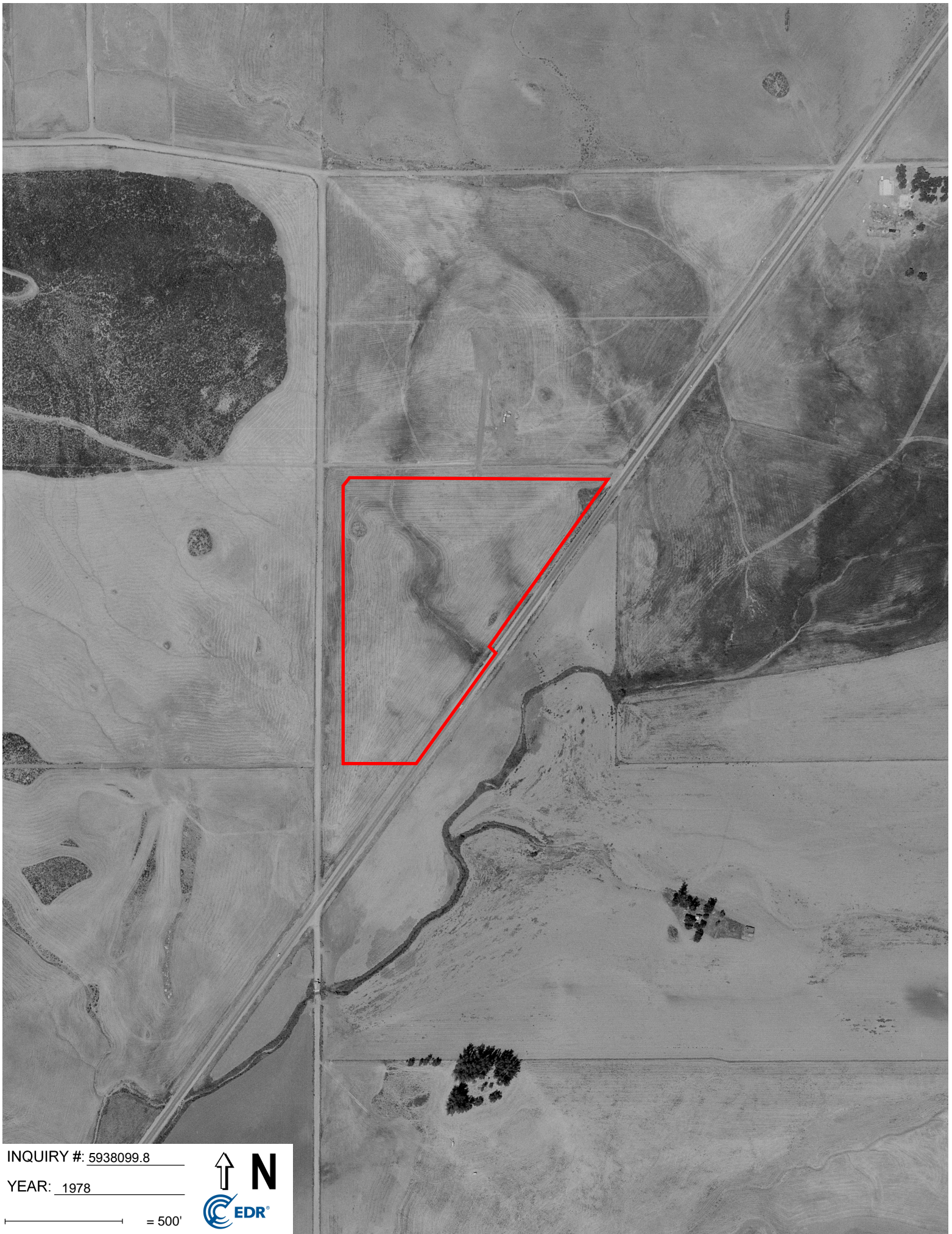


INQUIRY #: 5938099.8

YEAR: 1985

— = 500'



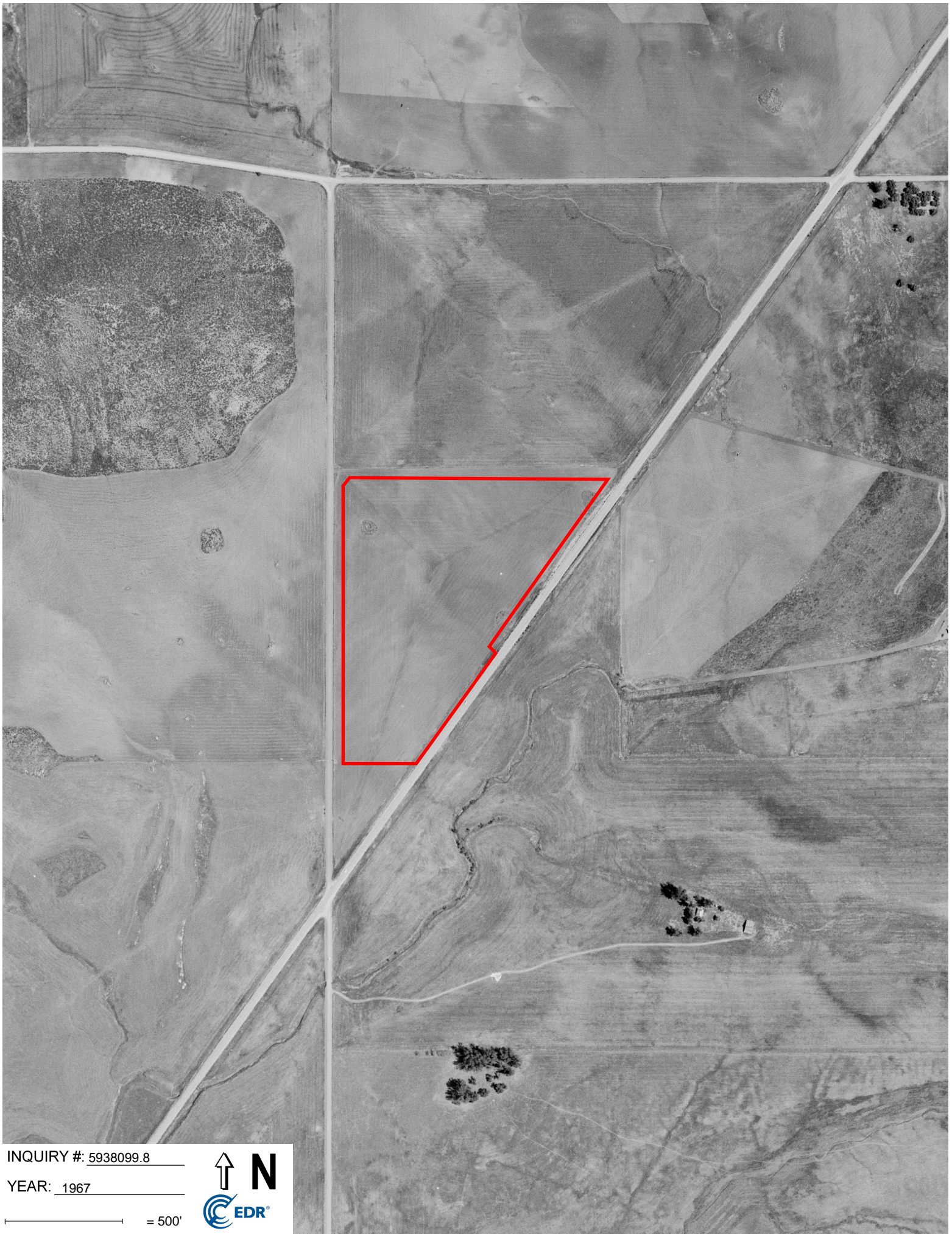


INQUIRY #: 5938099.8

YEAR: 1978

— = 500'



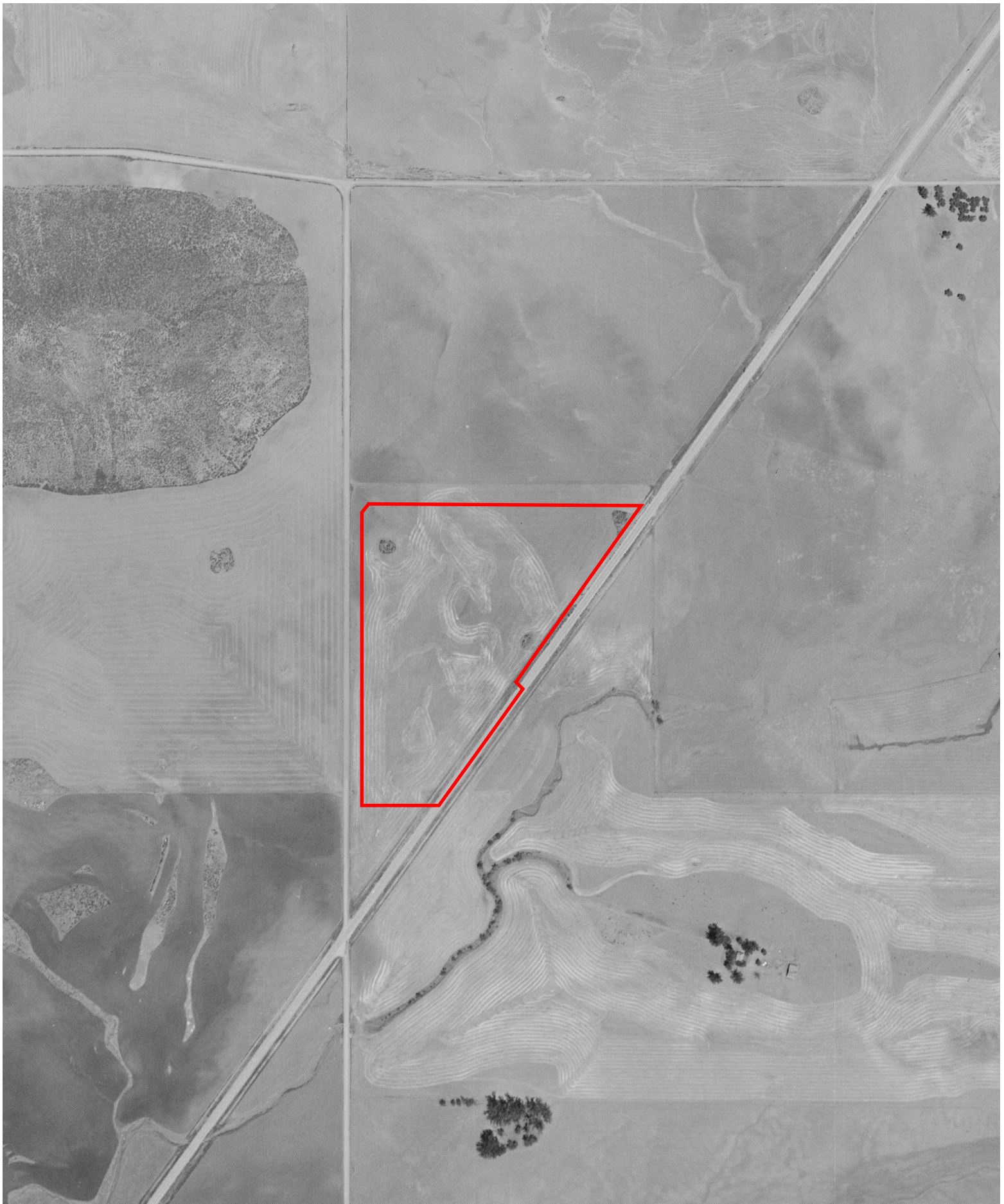


INQUIRY #: 5938099.8

YEAR: 1967

— = 500'





INQUIRY #: 5938099.8

YEAR: 1961

— = 500'



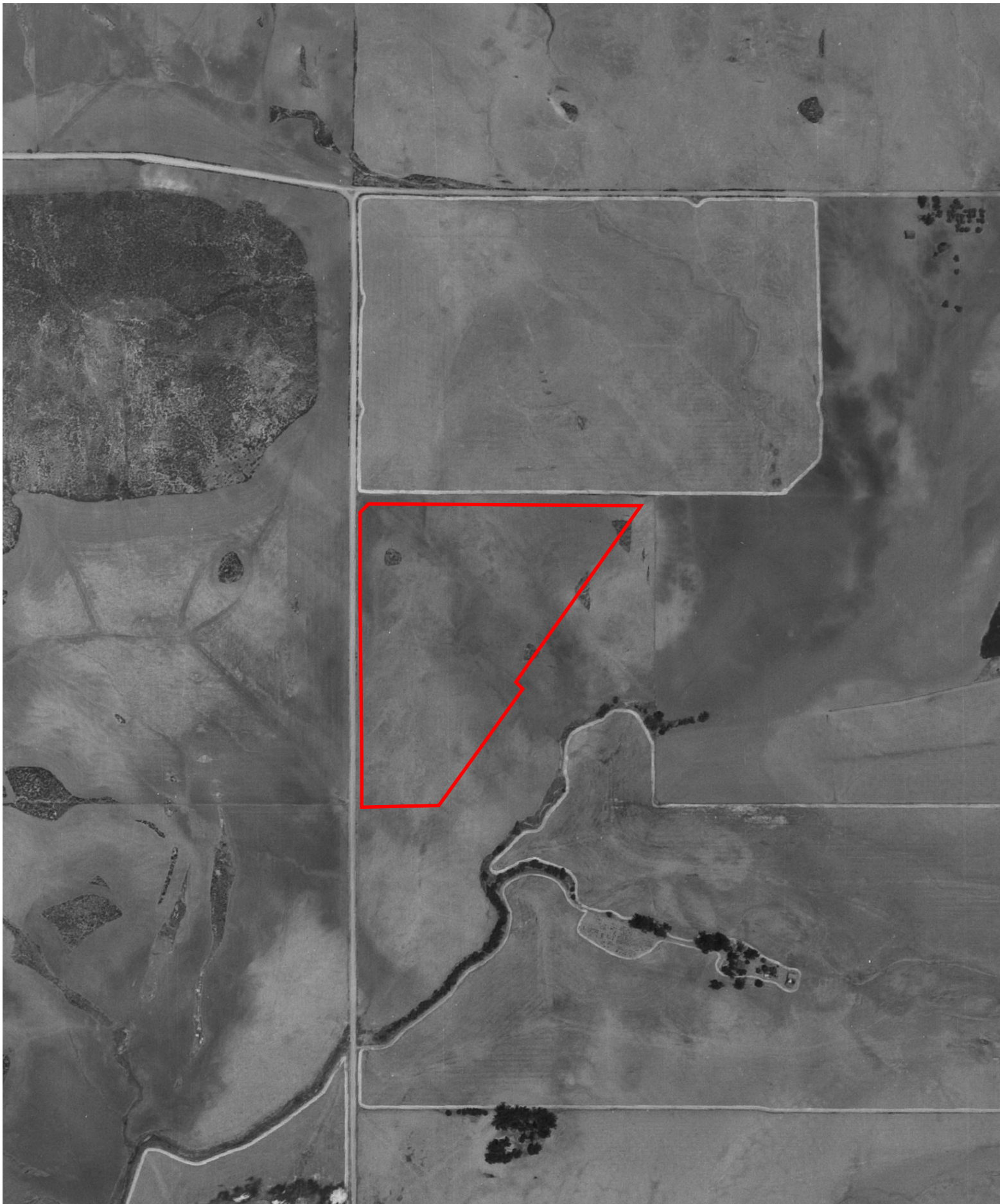


INQUIRY #: 5938099.8

YEAR: 1953

— = 500'





INQUIRY #: 5938099.8

YEAR: 1949

— = 500'





Parcel Map 36161

Not Reported

Winchester, CA 92596

Inquiry Number: 5938099.3

January 16, 2020

## Certified Sanborn® Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# Certified Sanborn® Map Report

01/16/20

**Site Name:**

Parcel Map 36161  
Not Reported  
Winchester, CA 92596  
EDR Inquiry # 5938099.3

**Client Name:**

Geotek  
1548 North Maple Street  
Corona, CA 92880  
Contact: Kyle Mchargue



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### Certified Sanborn Results:

**Certification #** DE34-4BA6-94A8  
**PO #** 2319-CR  
**Project** Parcel Map 36161



Sanborn® Library search results

Certification #: DE34-4BA6-94A8

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- Library of Congress
- University Publications of America
- EDR Private Collection

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**Parcel Map 36161**

Not Reported  
Winchester, CA 92596

Inquiry Number: 5938099.5  
January 21, 2020

# The EDR-City Directory Image Report

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### SECTION

Executive Summary

Findings

City Directory Images

*Thank you for your business.*  
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with any questions or comments.

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## EXECUTIVE SUMMARY

### DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report 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 Report includes a search of available city directory data at 5 year intervals.

### 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. A check mark indicates where information was identified in the source and provided in this report.

| <u>Year</u> | <u>Target Street</u>     | <u>Cross Street</u>                 | <u>Source</u>                |
|-------------|--------------------------|-------------------------------------|------------------------------|
| 2014        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | EDR Digital Archive          |
| 2010        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | EDR Digital Archive          |
| 2005        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | EDR Digital Archive          |
| 2000        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | EDR Digital Archive          |
| 1995        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | EDR Digital Archive          |
| 1992        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | EDR Digital Archive          |
| 1985        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Haines Criss-Cross Directory |
| 1981        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Haines Criss-Cross Directory |
| 1975        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Haines Criss-Cross Directory |
| 1971        | <input type="checkbox"/> | <input type="checkbox"/>            | Haines Criss-Cross Directory |

## FINDINGS

### TARGET PROPERTY STREET

Not Reported  
Winchester, CA 92596

No Addresses Found

## FINDINGS

### CROSS STREETS

| <u>Year</u> | <u>CD Image</u> | <u>Source</u> |
|-------------|-----------------|---------------|
|-------------|-----------------|---------------|

### POURROY RD

|      |         |                              |                             |
|------|---------|------------------------------|-----------------------------|
| 2014 | pg. A2  | EDR Digital Archive          |                             |
| 2010 | pg. A5  | EDR Digital Archive          |                             |
| 2005 | pg. A7  | EDR Digital Archive          |                             |
| 2000 | pg. A8  | EDR Digital Archive          |                             |
| 1995 | pg. A9  | EDR Digital Archive          |                             |
| 1992 | pg. A10 | EDR Digital Archive          |                             |
| 1985 | pg. A11 | Haines Criss-Cross Directory |                             |
| 1981 | pg. A12 | Haines Criss-Cross Directory |                             |
| 1975 | pg. A13 | Haines Criss-Cross Directory |                             |
| 1971 | -       | Haines Criss-Cross Directory | Street not listed in Source |

## **City Directory Images**



**POURROY RD 2014**

33555 OCCUPANT UNKNOWN,  
33975 HOUGH, WADE W  
34044 MOORE, JAMIE M  
34100 OCCUPANT UNKNOWN,  
34120 ACOSTA, HERIBERTO  
34125 WARDLAW, DAN E  
34155 HUNDLEY, JAMES E  
34185 GEALTA, JUSTIN  
PERMAFORM INC  
34205 NEW DAY SOLA  
WAKEFIELD, DAVID W  
34220 FLENOID, ELLIS L  
34250 MARTINEAU, DEWEY J  
34875 AGUIRRE, JOVANNA  
ARCE, MANUEL J  
BABB, CHRISTEE M  
BADER, KARSON  
BAILEY, BROOKE  
BAPTISTE, LISA  
BENDER, MARNI N  
BIANCO, JOSEPH M  
BORDEN, COREY J  
BOSSON, ROSS D  
BOUSQUET, JUSTIN  
BRADBURY, MARK T  
BURKE, SHAWN  
CHANCE, LAWRENCE  
CLAYTON, MARLENA  
CLOUGH, KRISTIN E  
COLE, DOROTHY S  
DAKOTA LEASING OFFICE  
DITHOMMASO, FELICIA P  
ESPINOZA, FRANCISCO J  
FOSTER, KIRTH E  
FRENCH, NICOLE  
GALLO, CHRIS  
GARRETT, GREGORY C  
GARSON, KIMBERLY A  
GEORGE, TAYLOR  
GHEEN, DANELLE  
GLENN, ANTHONY  
GROVE, LAUREN  
GUEST, DEANN R  
HARMSSEN, LISABETH C  
HARRISON, CHRISTINA  
HARTSON, JOSHUA A  
HEATON, DONNA M  
HOWARD, GREGORY  
HUGHES, JILLIAN  
ILICH, PAUL

**POURROY RD    2014    (Cont'd)**

34875    JOHNSON, MARK  
 JONES, ESTHER E  
 JORDAN, DENISE R  
 KELLEY, LAURAL  
 KERR, ROBYN  
 KOBAYASHI, KATHERINE A  
 KOJA, JOSEPH  
 KRASESKI-PANCEVSKI, JANICE L  
 LEWIS, MAXCINE O  
 MACDONALD, ELLIE  
 MARTIN, ELIZABETH  
 MARTINEZ, GEORGE  
 MCLAUGHLIN, BRANDON  
 MCNEES, JAMES C  
 MITCHELL, JASON K  
 MOFFITT, BRENDA L  
 MORA, GUADALUPE  
 MORTON, LAUREN  
 MUELLER, NICHOLE  
 PALMER, TRACIE G  
 PEOPLES, STEPHANIE A  
 PIPER, GUS L  
 RAHMAN, MOHAMMED  
 RAMIREZ, JASMINE  
 RAMIREZ, KIMBERLY L  
 RIDDLE, CASSANDRA D  
 ROBB, CHRISTOPHER T  
 ROCCHI, ISADORA  
 RODRIGUEZ, MANUEL  
 ROMERO, FRANK  
 ROSS, MISTI C  
 ROVERE, REGINA M  
 SALDIVAR, AARON J  
 SHAW, ALEX  
 SITAR, DANIEL J  
 SPIEGEL, JESSICA  
 STONE, BRYAN  
 STROPKO, ANTHONY  
 SZUKSZTUL, JOANNA  
 TEMECULA HEALTH CONS INC  
 TUMAX, ALESSANDRIA  
 UHLER, DOUGLAS J  
 VASQUEZ, CHARLES  
 VINCENTY, JAZMINE A  
 WHITLOCK, ASHLEY  
 WILLIAMS, ANTHONY E  
 WILSON, STEPHEN  
 WRIGHT, NIKKI S  
 36050    NIGHTRINGALE, STEPHEN S  
 36120    FLEMINGTON, WAYNE M

**POURROY RD 2014 (Cont'd)**

36120 SOUTHLAND ROTAX SERVICE CENTER  
36140 DIAMOND SHEET METAL  
MILKOVITS, KEVIN  
36150 THACKER, NICHOLAS A  
36220 SEYMORE, ANTHONY J  
36575 BIUNDO, GIUSEPPE  
PRIMO STONE MARBLE GRANITE  
37300 CENOZ, VALENTINE  
JC PET CARE  
37312 YOUNG, ADAM G  
37350 BENNETT, RANDALL A  
37362 MINKO, JOHN P  
37600 MUNOZ, ALFONSO  
37610 WENZEL, ELSA  
37710 HOUGHTON DIRK L SR  
HOUGHTON, DIRK  
37850 RAGLAND, GUILLERMINA G

**POURROY RD 2010**

33525 MCCAUSLAND, LOUISE C  
33555 REYES, JESSIE J  
34044 MOORE, JAMIE M  
34100 DIAZ, JASON  
34120 OCCUPANT UNKNOWN,  
34125 WARDLAW, DAN E  
34155 ALDRIDGE LEGAL  
34185 GEALTA, JUSTIN  
PERMAFORM INC  
34205 WAKEFIELD, DAVID W  
34220 OCCUPANT UNKNOWN,  
WINCHESTER COMMUNITY GARDEN  
34250 MARTINEAU, DEWEY J  
34875 ACOSTA, ROBERT C  
BROWN, JEREMY  
CLUGSTON, NIQUITA  
DAKOTA LEASING OFFICE  
DEFRAINE, TASHA  
DIGANCI, MICHAEL J  
GAINES, WILLIAM W  
GLENN, ANTHONY  
GREVEN, ROSE  
GROVES, ALISA  
HARRIS, BONNIE  
JAMES, BRANDON  
JONES, CHARLIE K  
KELLY, JASON B  
MOUNSEY, ANTHONY  
NAYLOR, DAVID J  
OCONNOR, GEANA M  
OLSON, KEVIN R  
OSEGUERA, NORMA  
PREIJERS, PETER A  
QUINTANA, IVY  
RICE, NICHOLE M  
SIEGEL, JASMINE J  
THOMAS, NICJIE T  
THORP, JAMES E  
TRACY, TODD L  
VALENCIA, MARK S  
WILLIAMS, WES A  
WILSON, JOHN K  
WINCENTSEN, DAWN  
XAYASOMROTH, SIAMPHONE S  
ZARAGOZA, ANDREW  
36050 NIGHTRINGALE, STEPHEN S  
36120 FLEMINGTON, WAYNE M  
SOUTHLAND ROTAX SERVICE CENTER  
36140 DIAMOND SHEET METAL  
MILKOVITS, KEVIN

**POURROY RD 2010 (Cont'd)**

36140 P B & S CONTRACTING INC  
36150 THACKER, JANET  
36220 SEYMORE, ANTHONY J  
36575 BIUNDO, GIUSEPPE  
PRIMO STONE MARBLE GRANITE  
37300 CENOZ, VALENTINE  
JC PET CARE  
VALENTIN CENOZ  
37312 OCCUPANT UNKNOWN,  
37350 BENNETT, RUSSELL S  
37362 CHERRY, DAVID S  
LISA CHERRY  
37600 MUNOZ, ALFONSO  
37610 CORNEJO, FRANCISCO C  
37710 A TOUCH OF CLEAN  
HOUGHTON DIRK L SR  
HOUGHTON, DIRK  
37850 RAGLAND, WILLIAM L

**POURROY RD 2005**

24185 C C & D ELECTRIC INC  
33525 MCCAUSLAND, LOUISE C  
33555 REYES, JESSE  
33975 STATHATOS, GARY M  
TELEPHONES-TODAY  
34044 MOORE, JAMIE M  
34120 OCCUPANT UNKNOWN,  
34125 WARDLAW, DAN E  
34155 HUNDLEY, KRISTA A  
34185 EGGERS, SUE M  
PERMAFORM INC  
34205 WAKEFIELD, DAVID W  
34220 FLENOID, ELLIS L  
35321 BROOKFIELD, WINCHESTER  
35510 MOODY, HENRY L  
35810 OCCUPANT UNKNOWN,  
35910 MABRY, BILL  
36050 RAMBERG, D  
36120 FLEMMINGTON, WAYNE M  
SOUTHLAND ROTAX SERVICE CENTER  
36140 DIAMOND SHEET METAL  
MILKOVITS, GERALDINE M  
36150 THACKER, JANET  
36220 SEYMORE, ANTHONY J  
36575 BIUNDO, GIUSEPPE  
PRIMO STONE  
37300 CENOZ, VALENTINE  
37312 THOMAS, JAMES R  
37350 BENNETT, RANDALL A  
37362 CHERRY, DAVID S  
LISA CHERRY  
37600 MUNOZ, ALFONSO  
37610 OCCUPANT UNKNOWN,  
37710 HOUGHTON, DIRK  
37850 RAGLAND, WILLIAM L

**POURROY RD 2000**

33555 HAWKS VALLEY FARM  
33975 TELEPHONES-TODAY  
34100 RONEY, TOM  
34120 ACOSTA, H  
34205 WAKEFIELD, DAVID  
35320 RHEINGANS PHIL FARMS  
35510 MOODY, HENRY  
36120 SOUTHLAND ROTAX SERVICE CENTER  
ULTRALIGHT STORE INC  
36140 MILKOVITS, FRANK  
36220 KUELTZO, K  
37312 THOMAS, JIM  
37350 BENNETT, RANDALL A  
37850 RAGLAND, G G

**POURROY RD 1995**

33525 MCCAUSLAND, STEPHEN  
33555 BRANDOW, JOSEPH J  
33975 TELEPHONES-TODAY  
34044 MOORE, JAMIE M  
34205 WAKEFIELD, DAVID  
35510 MOODY, HENRY  
35810 WHITE, CHARLES  
36050 HOUSE, MARK J  
36120 FLEMINGTON, WAYNE M  
36140 MILKOVITS, FRANK  
36220 RACZ, BILL  
37610 CRANE ELLIE



**POURROY RD 1992**

33525 MCCAUSLAND, STEPHEN  
33975 TELEPHONES-TODAY  
34205 BROWN, THOMAS  
WAKEFIELD, DAVID  
35320 POURROY, PIERRE  
35510 MOODY, HENRY  
35810 WHITE, CHARLES  
36050 FOWLER SCAFFOLDING  
36120 WADE, EVELYN  
36140 MILKOVITS, FRANK  
36220 RACZ, BILL

## POURROY RD 1985

# POURROY RD 92396 WINCHESTER

|       |                 |          |       |
|-------|-----------------|----------|-------|
| 34100 | ARMSTRONG CANDY | 926-1989 | +5    |
|       | HOWSON DENNIS   | 926-1989 | +5    |
| 35320 | POURROY PIERRE  | 926-1147 | 3     |
| 35321 | MALNAR RICK L   | 926-1251 | +5    |
| 35510 | MOODY HENRY     | 926-4727 | +5    |
| 36121 | WADE CLARENCE W | 926-2917 | 2     |
| 36140 | MILKOVITS FRANK | 926-4809 | 4     |
| ★     | 0 BUS           | 7 RES    | 4 NEW |

POURROY RD 1981

POURROY 92396  
WINCHESTER

|       |                  |          |
|-------|------------------|----------|
| 35320 | POURROY PIERRE   | 926-1147 |
| 35321 | XXXX             | 00       |
| 36050 | POURROY RONALD D | 926-1738 |
| ★     | 0 BUS      3 RES | 0 NEW    |

POURROY RD 1975

POURROY 92396 WINCHESTER

35320 POURROY PIERRE 926-1147

36050 HILL R W 926-2282

POURROY RONALD D 926-1738

\* 0 BUS 3 RES 0 NEW

Parcel Map 36161

Not Reported

Winchester, CA 92596

Inquiry Number: 5938099.4

January 16, 2020

# EDR Historical Topo Map Report

with QuadMatch™



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Shelton, CT 06484  
Toll Free: 800.352.0050  
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# EDR Historical Topo Map Report

01/16/20

**Site Name:**

Parcel Map 36161  
Not Reported  
Winchester, CA 92596  
EDR Inquiry # 5938099.4

**Client Name:**

Geotek  
1548 North Maple Street  
Corona, CA 92880  
Contact: Kyle Mchargue



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Geotek were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

**Search Results:**

**Coordinates:**

|                 |                  |                      |                               |
|-----------------|------------------|----------------------|-------------------------------|
| <b>P.O.#</b>    | 2319-CR          | <b>Latitude:</b>     | 33.621952 33° 37' 19" North   |
| <b>Project:</b> | Parcel Map 36161 | <b>Longitude:</b>    | -117.099795 -117° 5' 59" West |
|                 |                  | <b>UTM Zone:</b>     | Zone 11 North                 |
|                 |                  | <b>UTM X Meters:</b> | 490743.52                     |
|                 |                  | <b>UTM Y Meters:</b> | 3720244.52                    |
|                 |                  | <b>Elevation:</b>    | 1421.89' above sea level      |

**Maps Provided:**

|      |      |
|------|------|
| 2012 | 1901 |
| 1979 |      |
| 1978 |      |
| 1973 |      |
| 1953 |      |
| 1947 |      |
| 1943 |      |
| 1942 |      |

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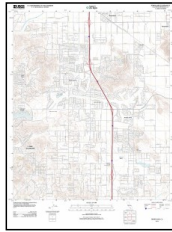
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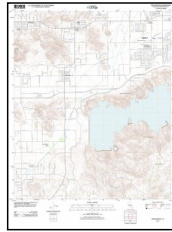
### 2012 Source Sheets



Bachelor Mountain  
2012  
7.5-minute, 24000



Romoland  
2012  
7.5-minute, 24000



Winchester  
2012  
7.5-minute, 24000



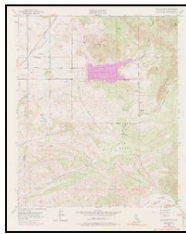
Murrieta  
2012  
7.5-minute, 24000

### 1979 Source Sheets



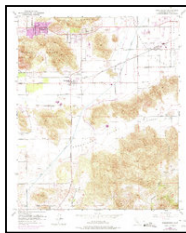
Winchester  
1979  
7.5-minute, 24000  
Aerial Photo Revised 1976

### 1978 Source Sheets



Bachelor Mtn  
1978  
7.5-minute, 24000  
Aerial Photo Revised 1973

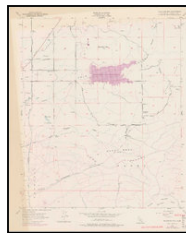
### 1973 Source Sheets



Winchester  
1973  
7.5-minute, 24000  
Aerial Photo Revised 1973



Bachelor Mtn.  
1973  
7.5-minute, 24000  
Aerial Photo Revised 1973

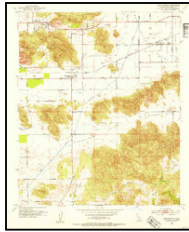


Bachelor Mtn  
1973  
7.5-minute, 24000  
Aerial Photo Revised 1973

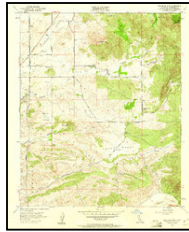
## Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets:

### 1953 Source Sheets

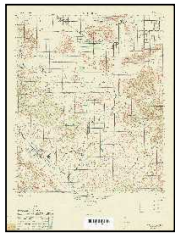


Winchester  
1953  
7.5-minute, 24000  
Aerial Photo Revised 1951



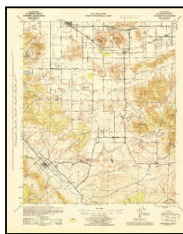
Bachelor Mtn.  
1953  
7.5-minute, 24000  
Aerial Photo Revised 1951

### 1947 Source Sheets



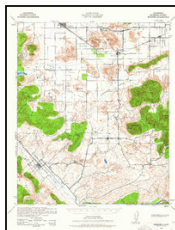
MURRIETA  
1947  
15-minute, 50000

### 1943 Source Sheets



Murrieta  
1943  
15-minute, 62500  
Aerial Photo Revised 1939

### 1942 Source Sheets



Murrieta  
1942  
15-minute, 62500  
Aerial Photo Revised 1939



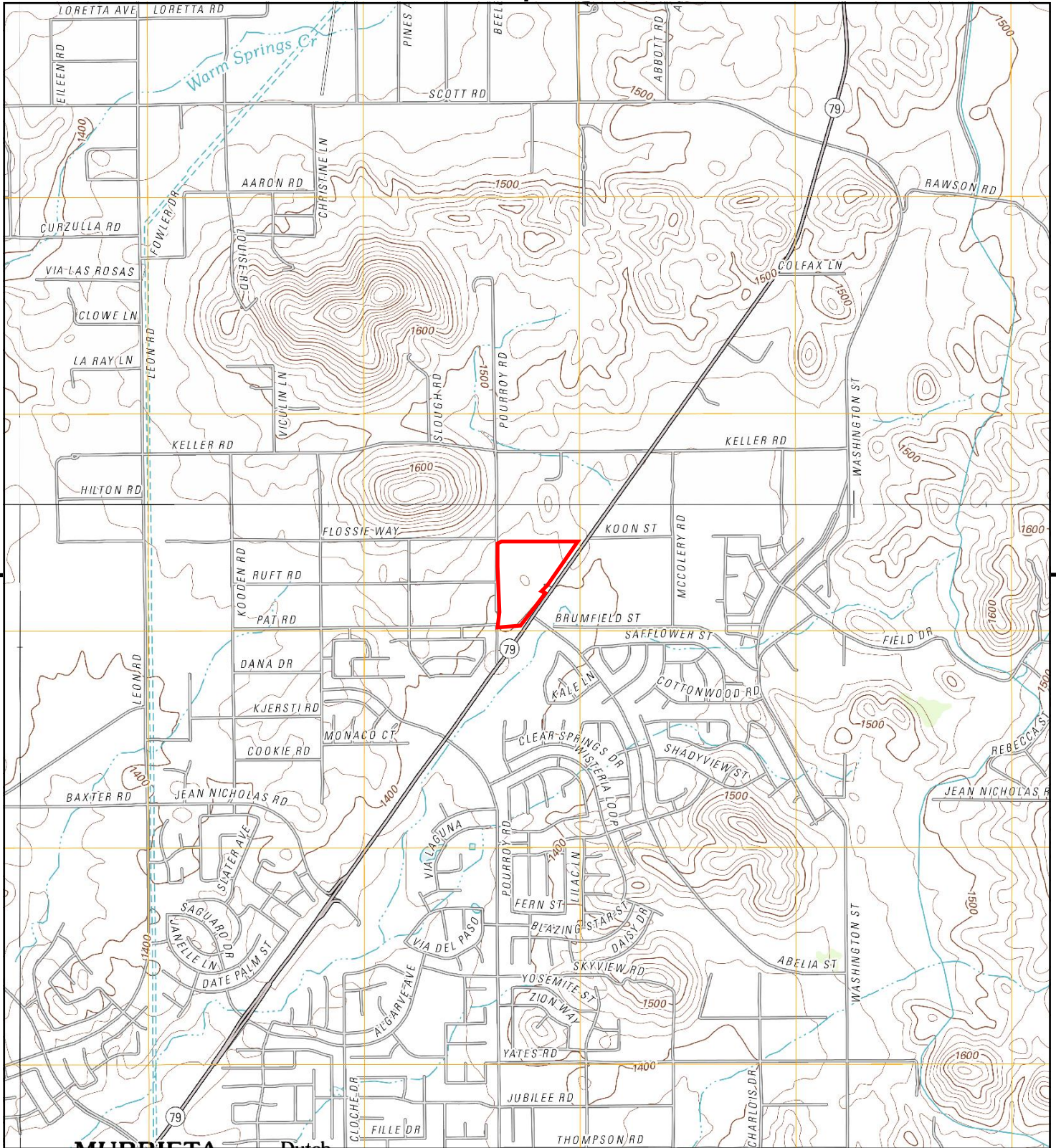
## Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets:

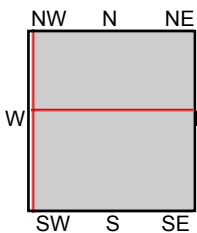
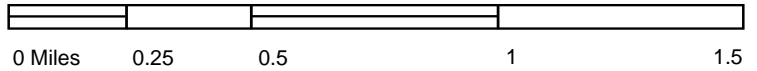
### 1901 Source Sheets



Elsinore  
1901  
30-minute, 125000



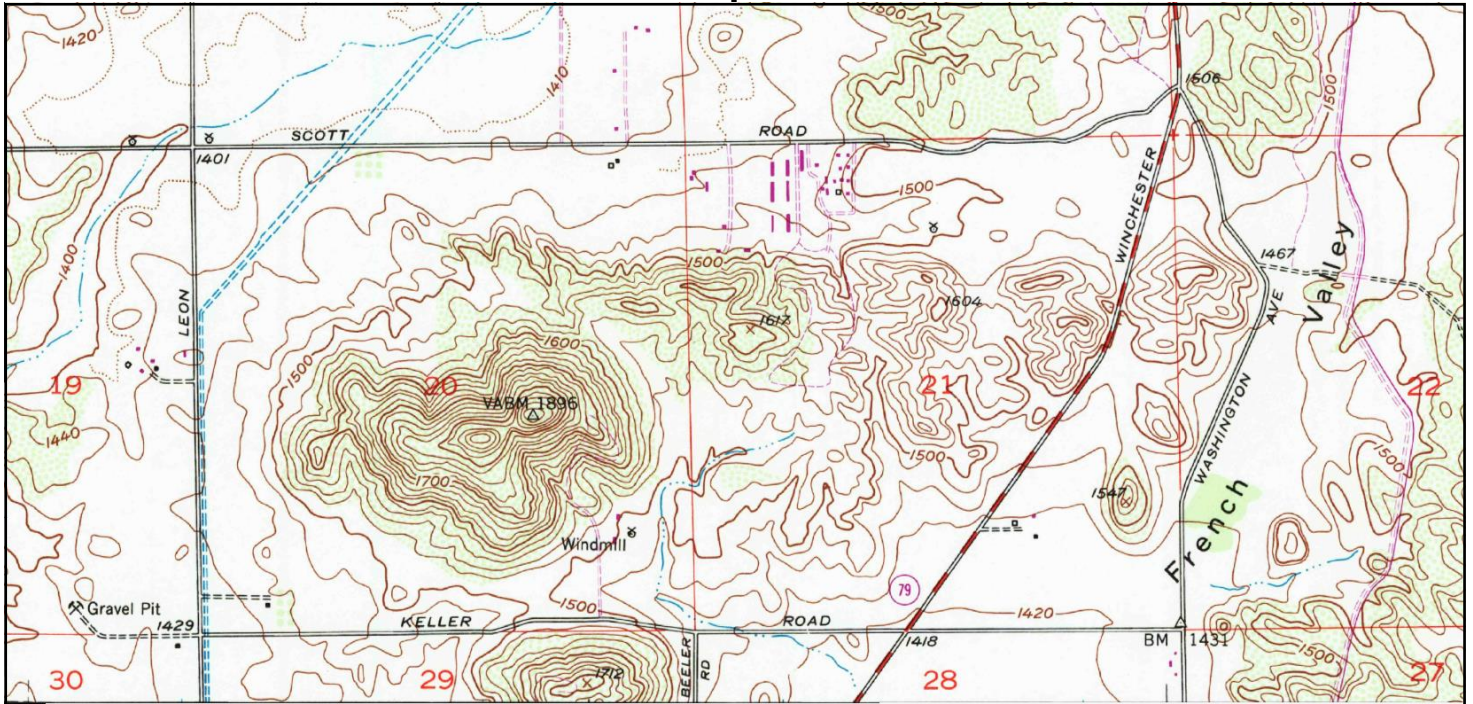
This report includes information from the following map sheets:



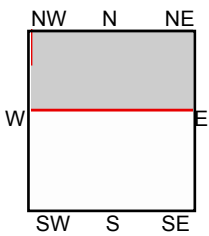
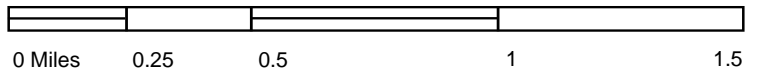
TP, Bachelor Mountain, 2012, 7.5-minute  
 NE, Winchester, 2012, 7.5-minute  
 SW, Murrieta, 2012, 7.5-minute  
 NW, Romoland, 2012, 7.5-minute

SITE NAME Parcel Map 36161  
 ADDRESS Not Reported  
 Winchester, CA 92596  
 CLIENT Geotek





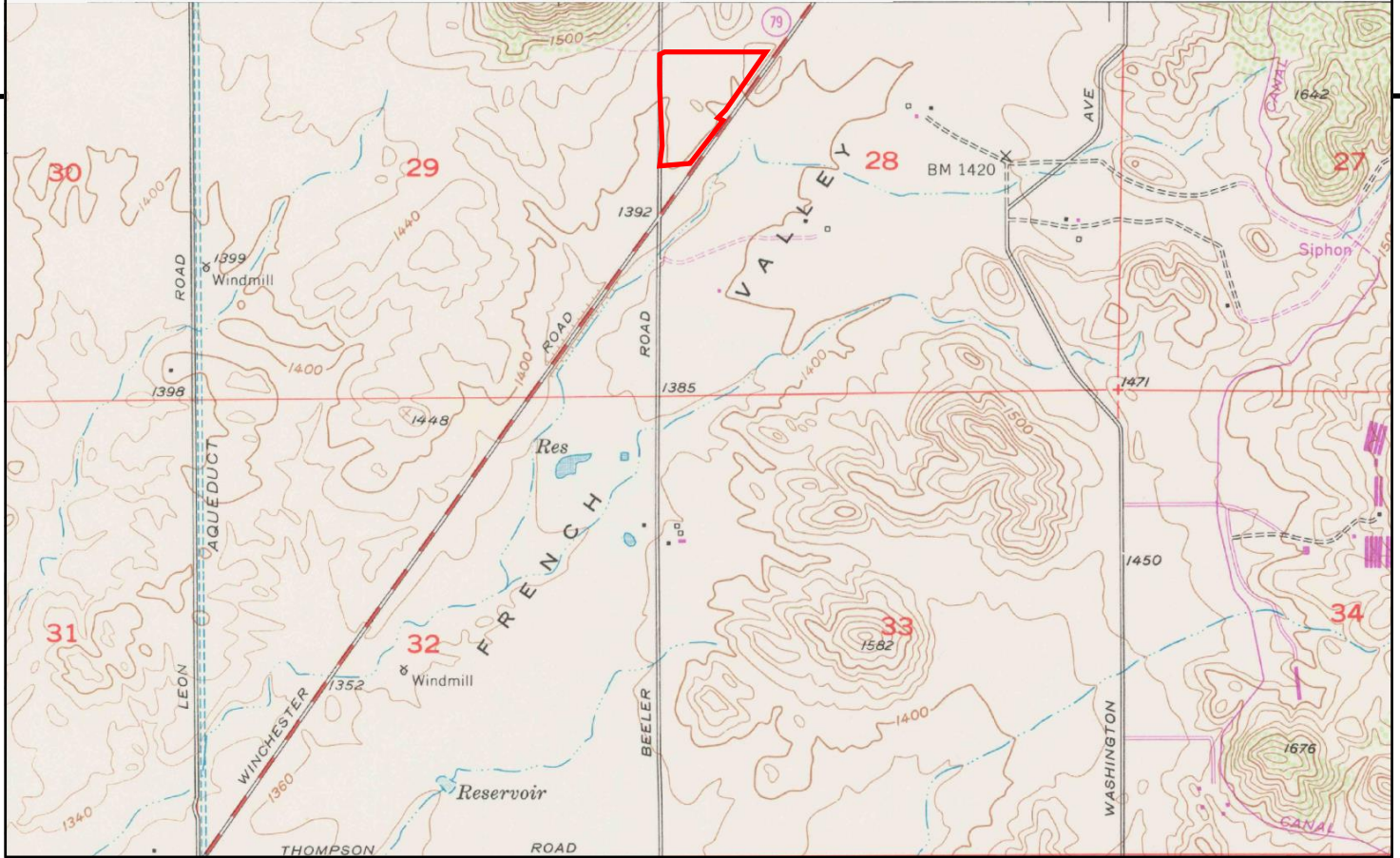
This report includes information from the following map sheets:



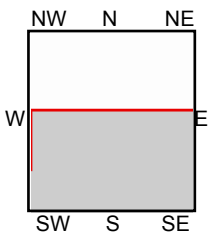
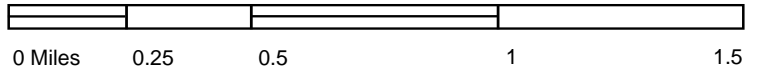
NE, Winchester, 1979, 7.5-minute

SITE NAME Parcel Map 36161  
 ADDRESS Not Reported  
 Winchester, CA 92596  
 CLIENT Geotek





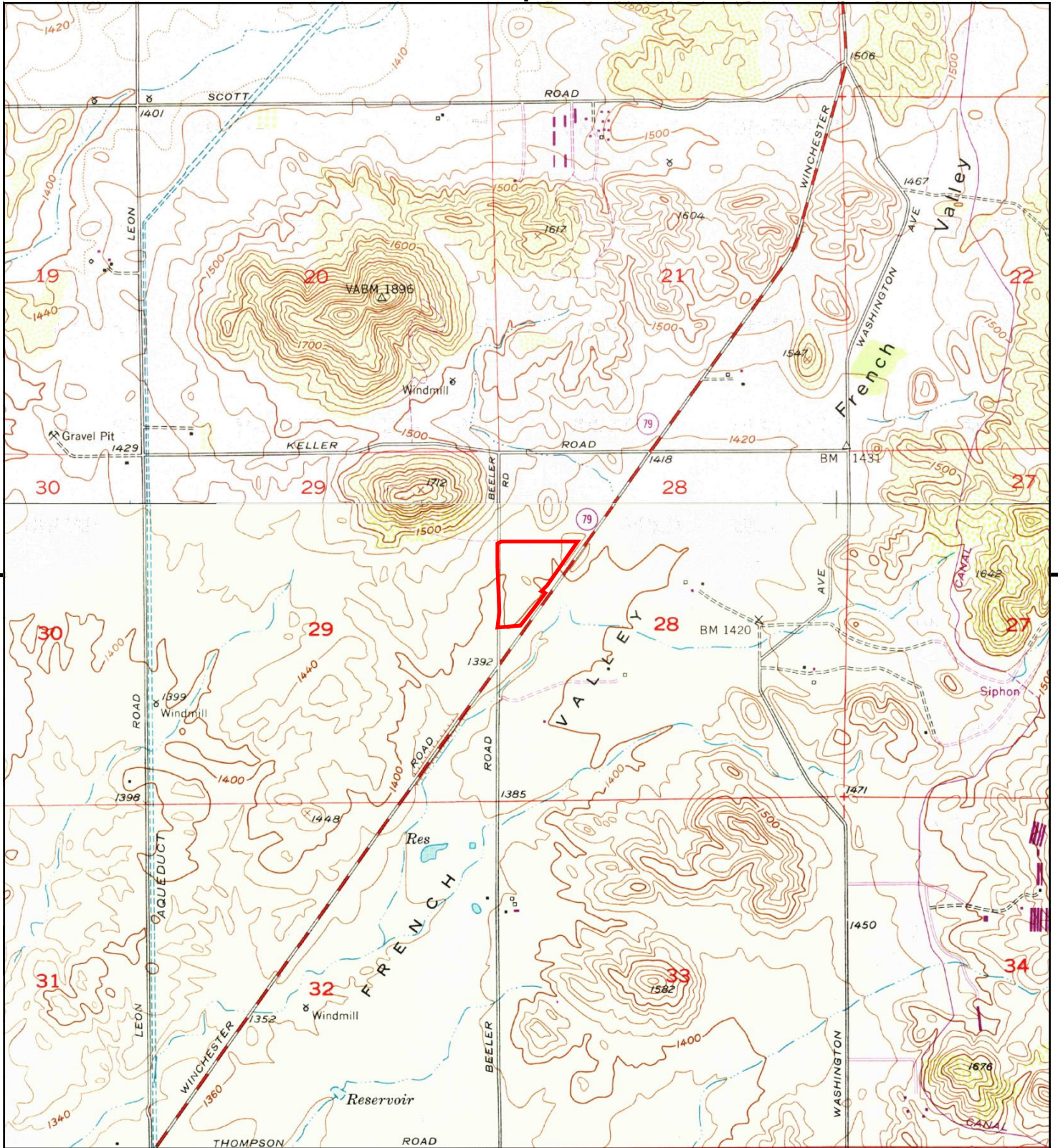
This report includes information from the following map sheets:



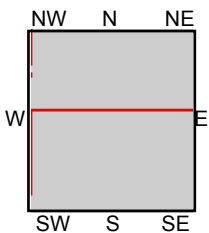
TP, Bachelor Mtn, 1978, 7.5-minute

SITE NAME Parcel Map 36161  
 ADDRESS Not Reported  
 Winchester, CA 92596  
 CLIENT Geotek





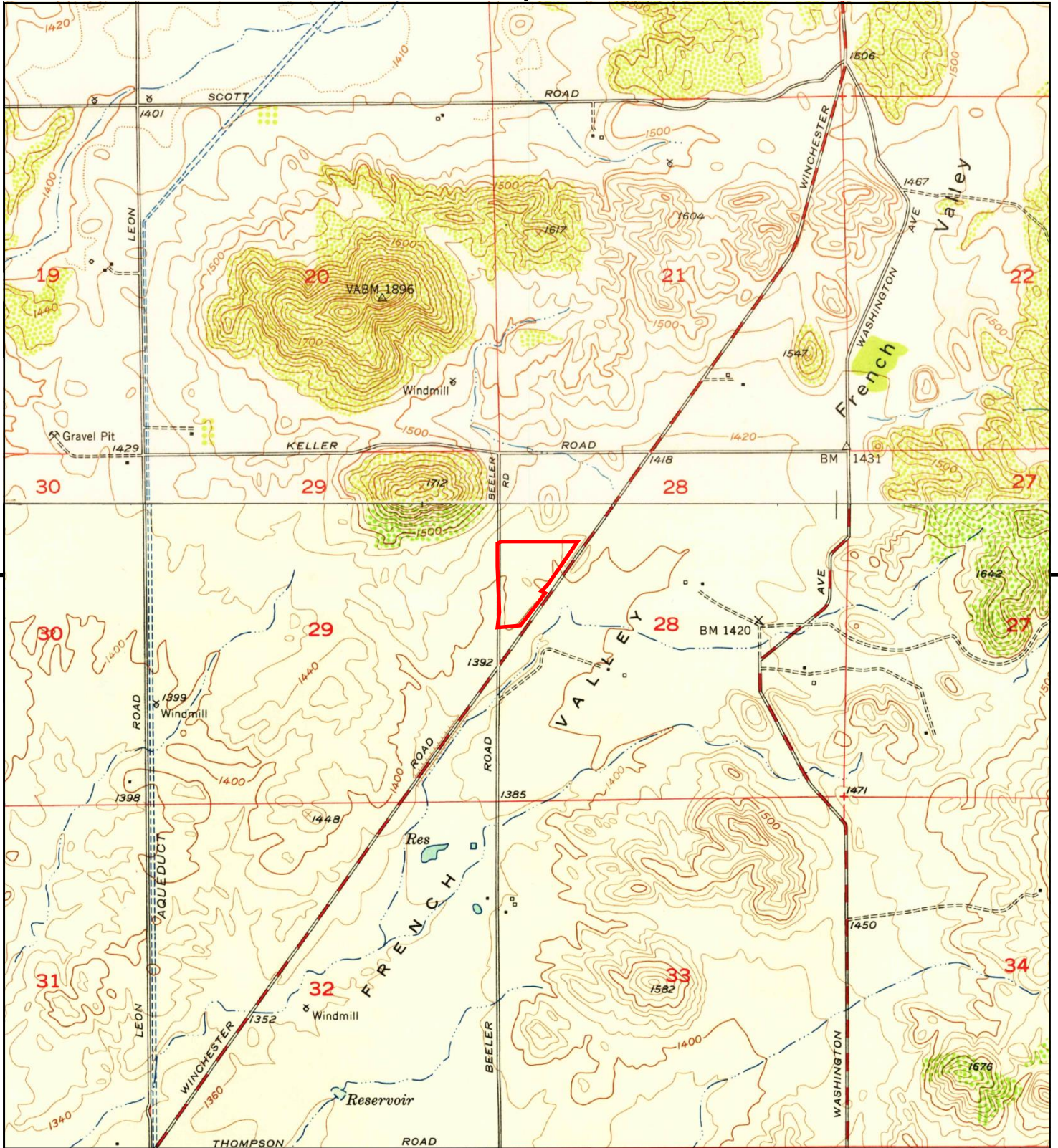
This report includes information from the following maps:



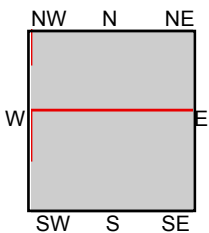
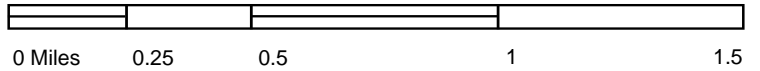
TP, Bachelor Mtn., 1973, 7.5-minute  
 NE, Winchester, 1973, 7.5-minute  
 TP, Bachelor Mtn, 1973, 7.5-minute

SITE NAME Parcel Map 36161  
 ADDRESS Not Reported  
 Winchester, CA 92596  
 CLIENT Geotek





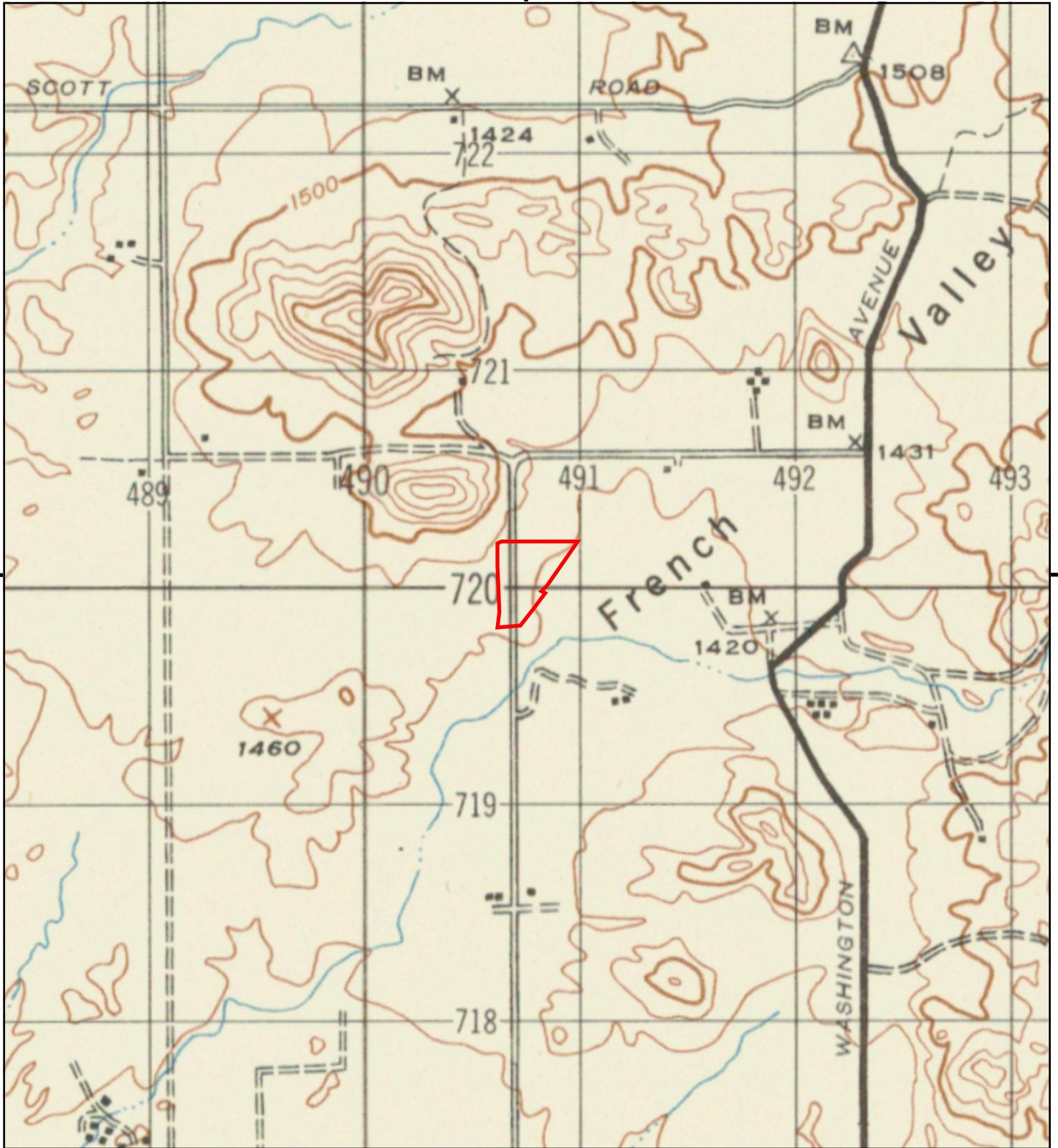
This report includes information from the following maps:



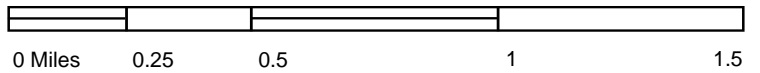
TP, Bachelor Mtn., 1953, 7.5-minute  
NE, Winchester, 1953, 7.5-minute

SITE NAME Parcel Map 36161  
ADDRESS Not Reported  
Winchester, CA 92596  
CLIENT Geotek





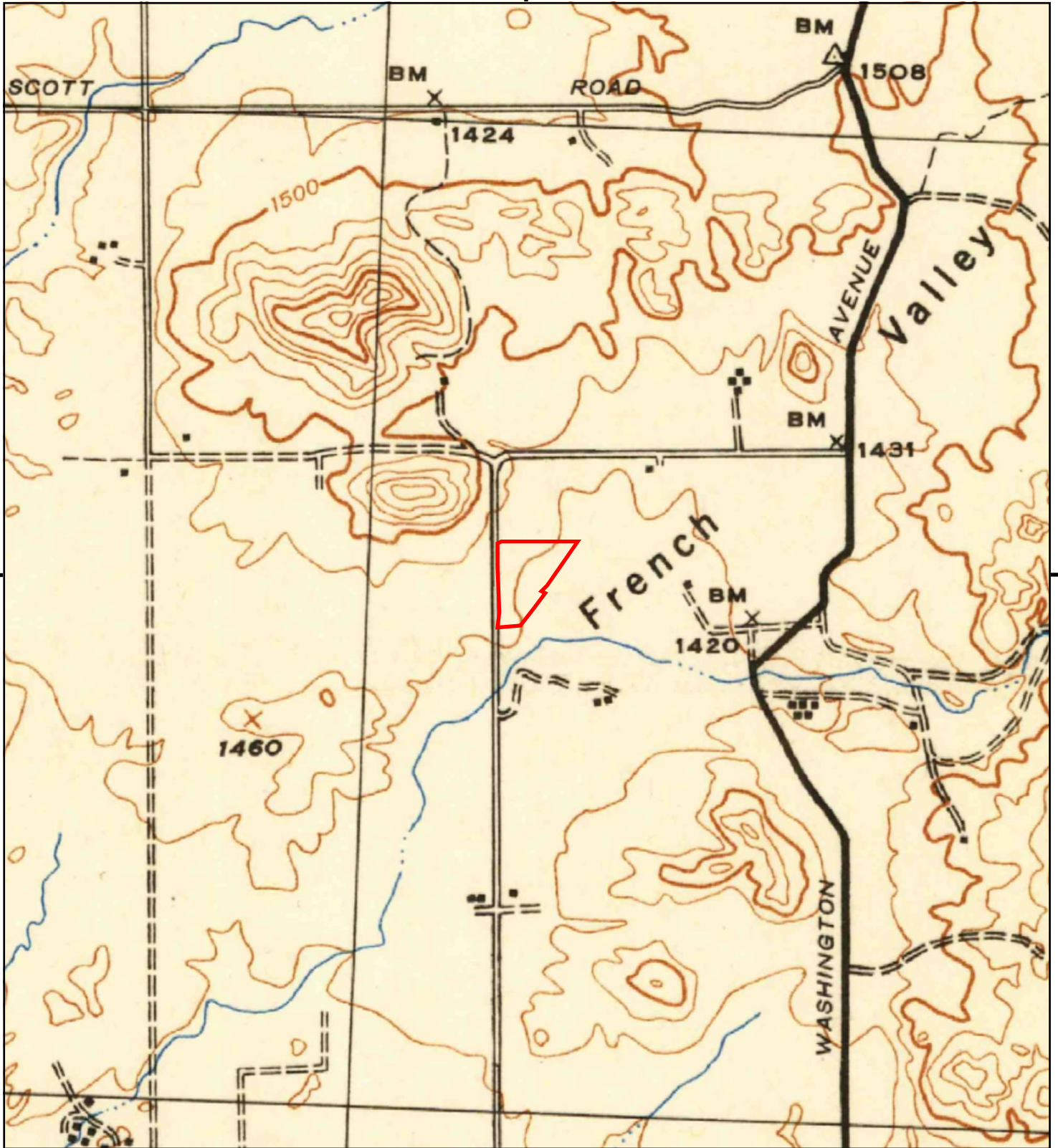
This report includes information from the following map sheets:



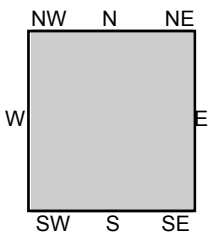
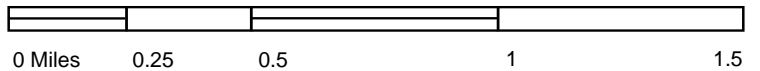
TP, MURRIETA, 1947, 15-minute

SITE NAME Parcel Map 36161  
 ADDRESS Not Reported  
 Winchester, CA 92596  
 CLIENT Geotek





This report includes information from the following map sheets:

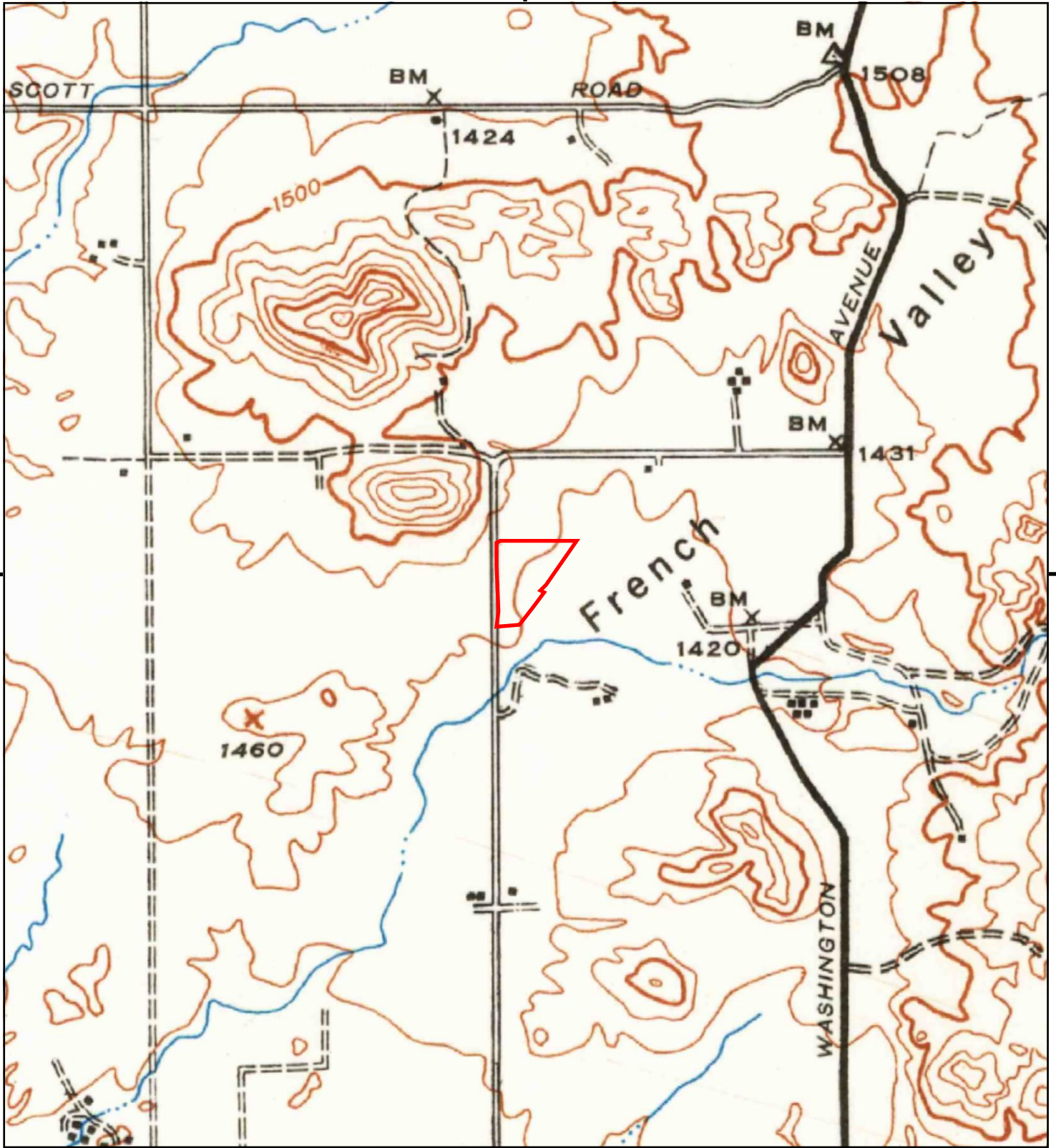


TP, Murrieta, 1943, 15-minute

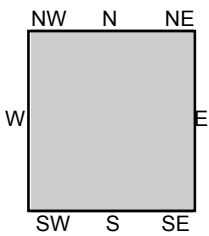
SITE NAME Parcel Map 36161  
 ADDRESS Not Reported  
 Winchester, CA 92596  
 CLIENT Geotek







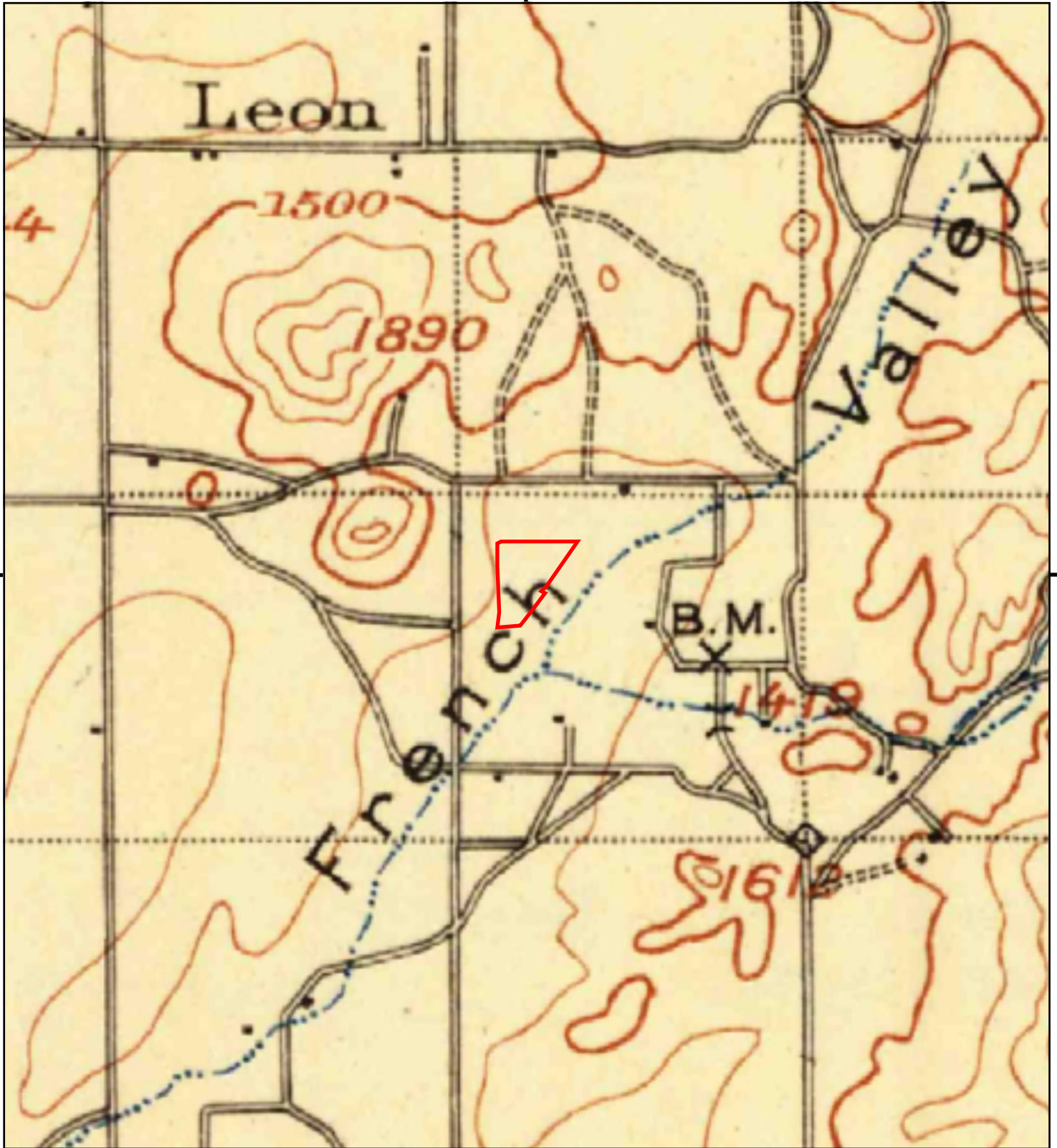
This report includes information from the following map sheets:



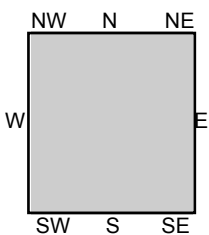
TP, Murrieta, 1942, 15-minute

SITE NAME Parcel Map 36161  
 ADDRESS Not Reported  
 Winchester, CA 92596  
 CLIENT Geotek





This report includes information from the following map sheets:



TP, Elsinore, 1901, 30-minute

SITE NAME Parcel Map 36161  
 ADDRESS Not Reported  
 Winchester, CA 92596  
 CLIENT Geotek



**Parcel Map 36161**

Not Reported

Winchester, CA 92596

Inquiry Number: 5938099.2s

January 16, 2020

# EDR Vapor Encroachment Screen

Prepared using EDR's Vapor Encroachment Worksheet

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| Record Sources and Currency ..... | GR-1        |

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by EDR. The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600).

| <b>STANDARD ENVIRONMENTAL RECORDS</b>                                   | <b>Default Area of Concern (Miles)*</b> | <b>property</b> | <b>1/10</b> | <b>&gt; 1/10</b> |
|---|---|-----------------|-------------|------------------|
| Federal NPL site list   | 1.0                                     | 0               | 0           | 0                |
| Federal Delisted NPL site list  | 1.0                                     | 0               | 0           | 0                |
| Federal CERCLIS list  | 0.5                                     | 0               | 0           | 0                |
| Federal CERCLIS NFRAP site list   | 0.5                                     | 0               | 0           | 0                |
| Federal RCRA CORRACTS facilities list                                   | 1.0                                     | 0               | 0           | 0                |
| Federal RCRA non-CORRACTS TSD facilities list                           | 0.5                                     | 0               | 0           | 0                |
| Federal RCRA generators list  | 0.25                                    | 0               | 0           | 0                |
| Federal institutional controls / engineering controls registries        | 0.5                                     | 0               | 0           | 0                |
| Federal ERNS list   | 0.001                                   | 0               | 0           | -                |
| State- and tribal - equivalent NPL                                      | 1.0                                     | 0               | 0           | 0                |
| State- and tribal - equivalent CERCLIS                                  | 1.0                                     | 0               | 0           | 0                |
| State and tribal landfill and/or solid waste disposal site lists        | 0.5                                     | 0               | 0           | 0                |
| State and tribal leaking storage tank lists                             | 0.5                                     | 0               | 0           | 0                |
| State and tribal registered storage tank lists                          | 0.25                                    | 0               | 0           | 0                |
| State and tribal institutional control / engineering control registries | not searched                            | -               | -           | -                |
| State and tribal voluntary cleanup sites                                | 0.5                                     | 0               | 0           | 0                |
| State and tribal Brownfields sites                                      | 0.5                                     | 0               | 0           | 0                |

### ADDITIONAL ENVIRONMENTAL RECORDS

|  |      |   |   |   |
|--|------|---|---|---|
| Local Brownfield lists                               | 0.5  | 0 | 0 | 0 |
| Local Lists of Landfill / Solid Waste Disposal Sites | 0.5  | 0 | 0 | 0 |
| Local Lists of Hazardous waste / Contaminated Sites  | 1.0  | 0 | 0 | 0 |
| Local Lists of Registered Storage Tanks              | 0.25 | 0 | 0 | 0 |
| Local Land Records                                   | 0.5  | 0 | 0 | 0 |
| Records of Emergency Release Reports                 | 0.5  | 0 | 0 | 0 |
| Other Ascertainable Records                          | 1.0  | 0 | 2 | 0 |

### EDR HIGH RISK HISTORICAL RECORDS

|                                    |       |   |   |   |
|------------------------------------|-------|---|---|---|
| EDR Exclusive Records              | 1.0   | 0 | 0 | 0 |
| Exclusive Recovered Govt. Archives | 0.001 | 0 | 0 | - |

## EXECUTIVE SUMMARY

### EDR RECOVERED GOVERNMENT ARCHIVES

|                                    |       |   |   |   |
|------------------------------------|-------|---|---|---|
| EDR Exclusive Records              | 1.0   | 0 | 0 | 0 |
| Exclusive Recovered Govt. Archives | 0.001 | 0 | 0 | - |

\*The Default Area of Concern may be adjusted by the environmental professional using experience and professional judgement. Each category may include several databases, and each database may have a different distance. A list of individual databases is provided at the back of this report.

# EXECUTIVE SUMMARY

## TARGET PROPERTY INFORMATION

### ADDRESS

PARCEL MAP 36161  
NOT REPORTED  
WINCHESTER, CA 92596

### COORDINATES

|                   |                                |
|-------------------|--------------------------------|
| Latitude (North): | 33.621952 - 33° 37' 19.027405" |
| Longitude (West): | 117.099795 - 117° 5' 59.25293" |
| Elevation:        | 1421 ft. above sea level       |

# EXECUTIVE SUMMARY

## SEARCH RESULTS

Unmappable (orphan) sites are not considered in the foregoing analysis.

## STANDARD ENVIRONMENTAL RECORDS

| <u>Name</u>  | <u>Address</u> | <u>Dist/Dir</u> | <u>Map ID</u> | <u>Page</u> |
|--------------|----------------|-----------------|---------------|-------------|
| Not Reported |                |                 |               |             |

## ADDITIONAL ENVIRONMENTAL RECORDS

| <u>Name</u>                                       | <u>Address</u>                     | <u>Dist/Dir</u> | <u>Map ID</u> | <u>Page</u> |
|---|------------------------------------|-----------------|---------------|-------------|
| MORNINGSTAR VILLAGE<br>CIWQS: CIWQS               | NE COR WINCHESTER<br>RD/POURROY RD | <1/10 SSE       | ◆ A1          | 8           |
| MORNINGSTAR VILLAGE<br>CERS: CERS<br>NPDES: NPDES | NE COR WINCHESTER<br>RD/POURROY RD | <1/10 SSE       | ◆ A2          | 9           |

## EDR HIGH RISK HISTORICAL RECORDS

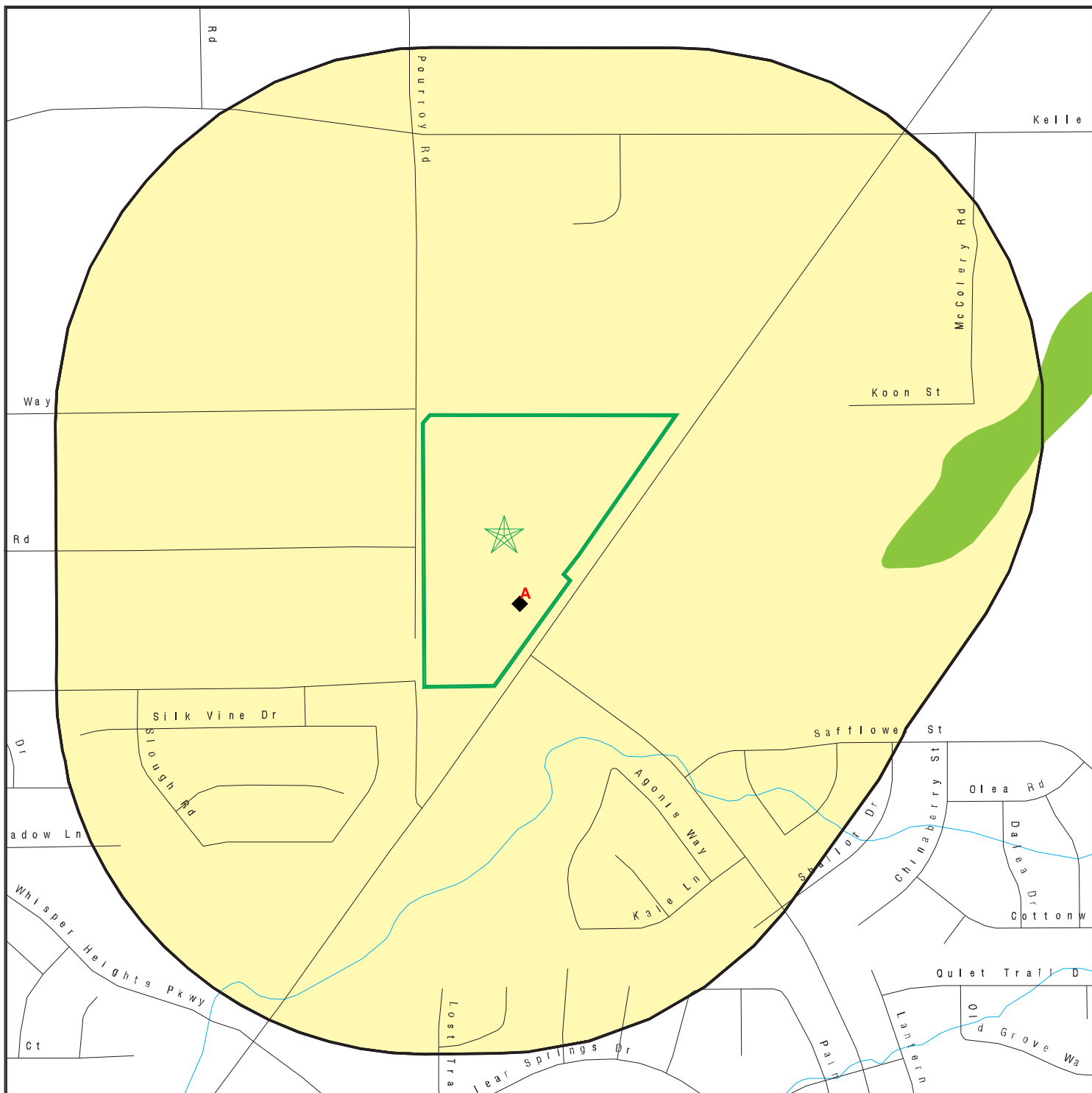
| <u>Name</u>  | <u>Address</u> | <u>Dist/Dir</u> | <u>Map ID</u> | <u>Page</u> |
|--------------|----------------|-----------------|---------------|-------------|
| Not Reported |                |                 |               |             |













## EDR RECOVERED GOVERNMENT ARCHIVES

| <u>Name</u>  | <u>Address</u> | <u>Dist/Dir</u> | <u>Map ID</u> | <u>Page</u> |
|--------------|----------------|-----------------|---------------|-------------|
| Not Reported |                |                 |               |             |



# PRIMARY MAP - 5938099.2S



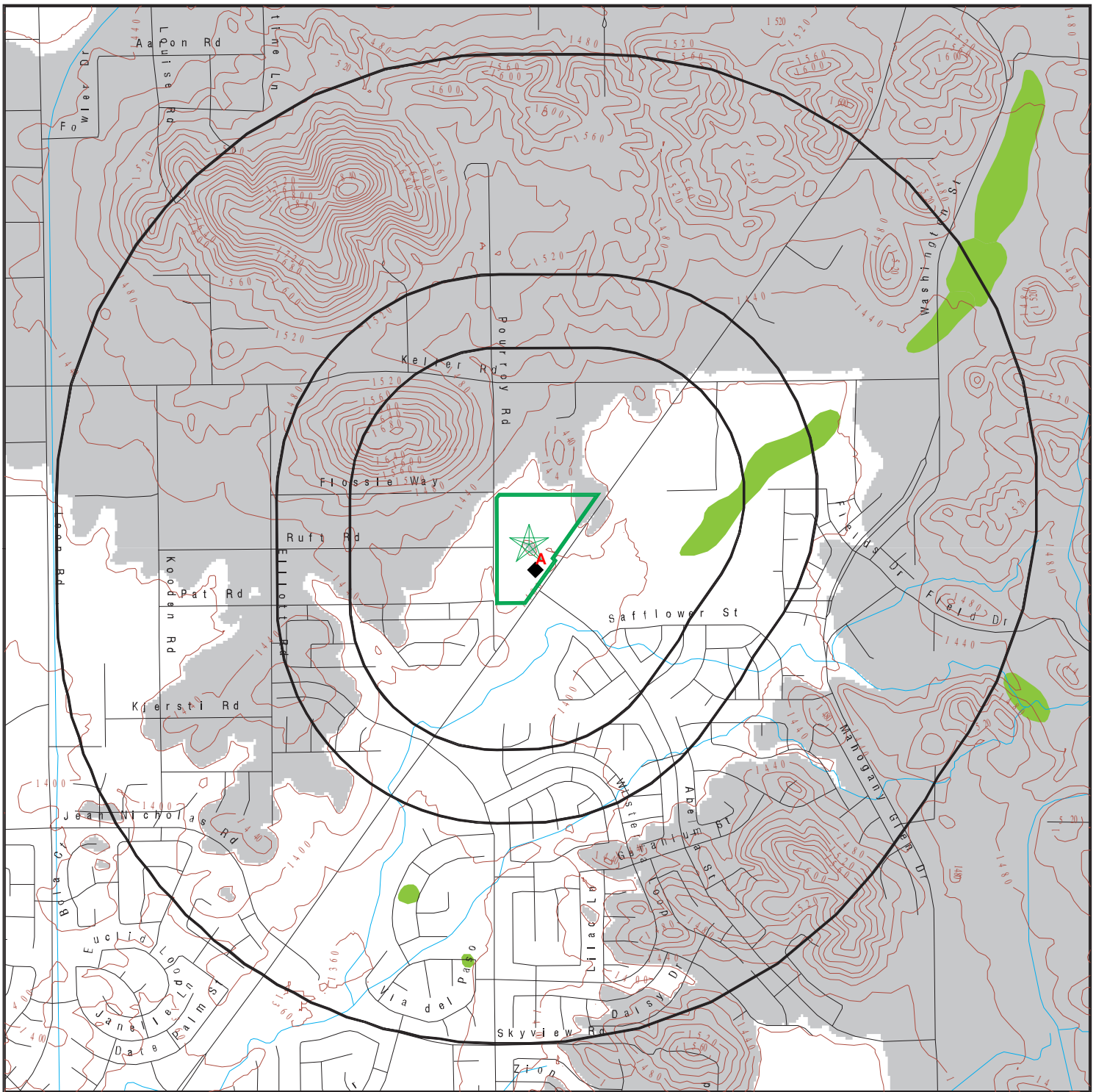
-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  National Priority List Sites
-  Dept. Defense Sites
-  Indian Reservations BIA
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance 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: Parcel Map 36161  
 ADDRESS: Not Reported  
 Winchester CA 92596  
 LAT/LONG: 33.621952 / 117.099795

CLIENT: Geotek  
 CONTACT: Kyle Mchargue  
 INQUIRY #: 5938099.2s  
 DATE: January 16, 2020 1:12 pm

# SECONDARY MAP - 5938099.2S



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

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Upgradient Area

Areas of Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Parcel Map 36161  
 ADDRESS: Not Reported  
 Winchester CA 92596  
 LAT/LONG: 33.621952 / 117.099795

CLIENT: Geotek  
 CONTACT: Kyle Mchargue  
 INQUIRY #: 5938099.2S  
 DATE: January 16, 2020 1:12 pm

MAP FINDINGS

LEGEND

| FACILITY NAME<br>FACILITY ADDRESS, CITY, ST, ZIP                                      |  | EDR SITE ID NUMBER   |
|---|--|--|
| ◆ MAP ID#   | Direction Distance Range (Distance feet / miles) | ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency. |
|   | Relative Elevation Feet Above Sea Level          |  |
| <b>Worksheet:</b>   |  |  |
| <b>Comments:</b><br>Comments may be added on the online Vapor Encroachment Worksheet. |  |  |

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

| MORNINGSTAR VILLAGE<br>NE COR WINCHESTER RD/POURROY RD, MURRIETA, CA, 92596 |   | S123168543                  |
|---|---|-----------------------------|
| ◆ A1  | SSE <1/10 (0 ft. / 0 mi.)                       | Other Ascertainable Records |
|   | 16 ft. Lower Elevation 1405 ft. Above Sea Level |                             |

Worksheet:

CIWQS: Other Ascertainable Records

Name: MORNINGSTAR VILLAGE  
 Address: NE COR WINCHESTER RD/POURROY RD  
 City,State,Zip: MURRIETA, CA 92596  
 Agency: Morningstar Village LLC  
 Agency Address: 41805 Albrae Street, Fremont, CA 94538  
 Place/Project Type: Construction - Commercial  
 SIC/NAICS: Not Reported  
 Region: 9  
 Program: CONSTW  
 Regulatory Measure Status: Active  
 Regulatory Measure Type: Storm water construction  
 Order Number: 2009-0009-DWQ  
 WDID: 9 33C385009  
 NPDES Number: CAS000002  
 Adoption Date: Not Reported  
 Effective Date: 10/23/2018  
 Termination Date: Not Reported  
 Expiration/Review Date: Not Reported  
 Design Flow: Not Reported  
 Major/Minor: Not Reported  
 Complexity: Not Reported  
 TTWQ: Not Reported  
 Enforcement Actions within 5 years: 0  
 Violations within 5 years: 0

MAP FINDINGS

**MORNINGSTAR VILLAGE, NE COR WINCHESTER RD/POURROY RD, MURRIETA, CA 92596 (Continued)**

Latitude: 33.62102  
 Longitude: -117.09955

|   |                        |                          |                             |
|---|------------------------|--------------------------|-----------------------------|
| MORNINGSTAR VILLAGE<br>NE COR WINCHESTER RD/POURROY RD, MURRIETA, CA, 92596 |                        |                          | S123143150                  |
| ◆ A2  | SSE <1/10              | (0 ft. / 0 mi.)          | Other Ascertainable Records |
|   | 16 ft. Lower Elevation | 1405 ft. Above Sea Level |                             |

**Worksheet:**

**NPDES: Other Ascertainable Records**

Name: MORNINGSTAR VILLAGE  
 Address: NE COR WINCHESTER RD/POURROY RD  
 City,State,Zip: MURRIETA, CA 92596  
 Facility Status: Active  
 NPDES Number: CAS000002  
 Region: 9  
 Agency Number: 0  
 Regulatory Measure ID: 501764  
 Place ID: Not Reported  
 Order Number: 2009-0009-DWQ  
 WDID: 9 33C385009  
 Regulatory Measure Type: Enrollee  
 Program Type: Construction  
 Adoption Date Of Regulatory Measure: Not Reported  
 Effective Date Of Regulatory Measure: 10/23/2018  
 Termination Date Of Regulatory Measure: Not Reported  
 Expiration Date Of Regulatory Measure: Not Reported  
 Discharge Address: 41805 Albrae Street  
 Discharge Name: Morningstar Village LLC  
 Discharge City: Fremont  
 Discharge State: California  
 Discharge Zip: 94538  
 Status: Not Reported  
 Status Date: Not Reported  
 Operator Name: Not Reported  
 Operator Address: Not Reported  
 Operator City: Not Reported  
 Operator State: Not Reported  
 Operator Zip: Not Reported

Name: MORNINGSTAR VILLAGE  
 Address: NE COR WINCHESTER RD/POURROY RD  
 City,State,Zip: MURRIETA, CA 92596  
 Facility Status: Not Reported  
 NPDES Number: Not Reported

|              |
|--------------|
| MAP FINDINGS |
|--------------|

**MORNINGSTAR VILLAGE, NE COR WINCHESTER RD/POURROY RD, MURRIETA, CA 92596 (Continued)**

|   |                         |
|---|-------------------------|
| Region:                                 | Not Reported            |
| Agency Number:                          | Not Reported            |
| Regulatory Measure ID:                  | Not Reported            |
| Place ID:                               | Not Reported            |
| Order Number:                           | Not Reported            |
| WDID:                                   | 9 33C385009             |
| Regulatory Measure Type:                | Construction            |
| Program Type:                           | Not Reported            |
| Adoption Date Of Regulatory Measure:    | Not Reported            |
| Effective Date Of Regulatory Measure:   | Not Reported            |
| Termination Date Of Regulatory Measure: | Not Reported            |
| Expiration Date Of Regulatory Measure:  | Not Reported            |
| Discharge Address:                      | Not Reported            |
| Discharge Name:                         | Not Reported            |
| Discharge City:                         | Not Reported            |
| Discharge State:                        | Not Reported            |
| Discharge Zip:                          | Not Reported            |
| Status:                                 | Active                  |
| Status Date:                            | 10/23/2018              |
| Operator Name:                          | Morningstar Village LLC |
| Operator Address:                       | 41805 Albrae Street     |
| Operator City:                          | Fremont                 |
| Operator State:                         | California              |
| Operator Zip:                           | 94538                   |

**CERS: Other Ascertainable Records**

|                   |                                 |
|-------------------|---------------------------------|
| Name:             | MORNINGSTAR VILLAGE             |
| Address:          | NE COR WINCHESTER RD/POURROY RD |
| City,State,Zip:   | MURRIETA, CA 92596              |
| Site ID:          | 537373                          |
| CERS ID:          | 867133                          |
| CERS Description: | Construction Storm Water        |

**Affiliation:**

|                        |                         |
|------------------------|-------------------------|
| Affiliation Type Desc: | Owner/Operator          |
| Entity Name:           | Morningstar Village LLC |
| Entity Title:          | Operator                |
| Affiliation Address:   | 41805 Albrae Street     |
| Affiliation City:      | Fremont                 |
| Affiliation State:     | CA                      |
| Affiliation Country:   | Not Reported            |
| Affiliation Zip:       | 94538                   |
| Affiliation Phone:     | Not Reported            |

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St  | Acronym         | Full Name  | Government Agency                             | Gov Date   | Arvl. Date | Active Date |
|---|-----------------|--|---|------------|------------|-------------|
| <b>ENVIRONMENTAL RECORDS</b>  |                 |  |   |            |            |             |
| <b>Federal NPL site list</b>  |                 |  |   |            |            |             |
| US  | NPL             | National Priority List                                       | EPA   | 10/25/2019 | 11/07/2019 | 11/20/2019  |
| US  | Proposed NPL    | Proposed National Priority List Sites                        | EPA   | 10/25/2019 | 11/07/2019 | 11/20/2019  |
| US  | NPL LIENS       | Federal Superfund Liens                                      | EPA   | 10/15/1991 | 02/02/1994 | 03/30/1994  |
| <b>Federal CERCLIS list</b>   |                 |  |   |            |            |             |
| US  | SEMS            | Superfund Enterprise Management System                       | EPA   | 10/25/2019 | 11/07/2019 | 11/21/2019  |
| <b>Federal RCRA CORRACTS facilities list</b>                            |                 |  |   |            |            |             |
| US  | CORRACTS        | Corrective Action Report                                     | EPA   | 12/16/2019 | 12/16/2019 | 12/20/2019  |
| <b>Federal RCRA TSD facilities list</b>                                 |                 |  |   |            |            |             |
| US  | RCRA-TSDF       | RCRA - Treatment, Storage and Disposal                       | Environmental Protection Agency               | 12/16/2019 | 12/16/2019 | 12/20/2019  |
| <b>Federal RCRA generators list</b>                                     |                 |  |   |            |            |             |
| US  | RCRA-LQG        | RCRA - Large Quantity Generators                             | Environmental Protection Agency               | 12/16/2019 | 12/16/2019 | 12/20/2019  |
| US  | RCRA-SQG        | RCRA - Small Quantity Generators                             | Environmental Protection Agency               | 12/16/2019 | 12/16/2019 | 12/20/2019  |
| US  | RCRA-VSQG       | RCRA - Very Small Quantity Generators (Formerly Conditionall | Environmental Protection Agency               | 12/16/2019 | 12/16/2019 | 12/20/2019  |
| <b>Federal institutional controls / engineering controls registries</b> |                 |  |   |            |            |             |
| US  | LUCIS           | Land Use Control Information System                          | Department of the Navy                        | 08/13/2019 | 08/20/2019 | 08/26/2019  |
| US  | US ENG CONTROLS | Engineering Controls Sites List                              | Environmental Protection Agency               | 08/19/2019 | 08/20/2019 | 08/26/2019  |
| US  | US INST CONTROL | Sites with Institutional Controls                            | Environmental Protection Agency               | 08/19/2019 | 08/20/2019 | 08/26/2019  |
| <b>Federal ERNS list</b>  |                 |  |   |            |            |             |
| US  | ERNS            | Emergency Response Notification System                       | National Response Center, United States Coast | 09/09/2019 | 09/09/2019 | 09/23/2019  |
| <b>State and tribal - equivalent NPL</b>                                |                 |  |   |            |            |             |
| CA  | RESPONSE        | State Response Sites   | Department of Toxic Substances Control        | 10/28/2019 | 10/29/2019 | 01/07/2020  |
| <b>State and tribal - equivalent CERCLIS</b>                            |                 |  |   |            |            |             |
| CA  | ENVIROSTOR      | EnviroStor Database  | Department of Toxic Substances Control        | 10/28/2019 | 10/29/2019 | 01/07/2020  |
| <b>State and tribal landfill / solid waste disposal</b>                 |                 |  |   |            |            |             |
| CA  | SWF/LF (SWIS)   | Solid Waste Information System                               | Department of Resources Recycling and Recover | 11/11/2019 | 11/12/2019 | 01/08/2020  |
| <b>State and tribal leaking storage tank lists</b>                      |                 |  |   |            |            |             |
| CA  | LUST            | Leaking Underground Fuel Tank Report (GEOTRACKER)            | State Water Resources Control Board           | 09/09/2019 | 09/09/2019 | 10/31/2019  |
| CA  | LUST REG 9      | Leaking Underground Storage Tank Report                      | California Regional Water Quality Control Boa | 03/01/2001 | 04/23/2001 | 05/21/2001  |
| CA  | LUST REG 8      | Leaking Underground Storage Tanks                            | California Regional Water Quality Control Boa | 02/14/2005 | 02/15/2005 | 03/28/2005  |
| CA  | LUST REG 7      | Leaking Underground Storage Tank Case Listing                | California Regional Water Quality Control Boa | 02/26/2004 | 02/26/2004 | 03/24/2004  |
| CA  | LUST REG 5      | Leaking Underground Storage Tank Database                    | California Regional Water Quality Control Boa | 07/01/2008 | 07/22/2008 | 07/31/2008  |
| CA  | LUST REG 4      | Underground Storage Tank Leak List                           | California Regional Water Quality Control Boa | 09/07/2004 | 09/07/2004 | 10/12/2004  |
| CA  | LUST REG 3      | Leaking Underground Storage Tank Database                    | California Regional Water Quality Control Boa | 05/19/2003 | 05/19/2003 | 06/02/2003  |

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St  | Acronym            | Full Name  | Government Agency                             | Gov Date   | Arvl. Date | Active Date |
|---|--------------------|--|---|------------|------------|-------------|
| CA  | LUST REG 2         | Fuel Leak List   | California Regional Water Quality Control Boa | 09/30/2004 | 10/20/2004 | 11/19/2004  |
| CA  | LUST REG 1         | Active Toxic Site Investigation                              | California Regional Water Quality Control Boa | 02/01/2001 | 02/28/2001 | 03/29/2001  |
| CA  | LUST REG 6L        | Leaking Underground Storage Tank Case Listing                | California Regional Water Quality Control Boa | 09/09/2003 | 09/10/2003 | 10/07/2003  |
| CA  | LUST REG 6V        | Leaking Underground Storage Tank Case Listing                | California Regional Water Quality Control Boa | 06/07/2005 | 06/07/2005 | 06/29/2005  |
| US  | INDIAN LUST R9     | Leaking Underground Storage Tanks on Indian Land             | Environmental Protection Agency               | 04/08/2019 | 07/29/2019 | 10/17/2019  |
| US  | INDIAN LUST R6     | Leaking Underground Storage Tanks on Indian Land             | EPA Region 6                                  | 05/01/2019 | 07/29/2019 | 10/17/2019  |
| US  | INDIAN LUST R7     | Leaking Underground Storage Tanks on Indian Land             | EPA Region 7                                  | 07/02/2019 | 10/16/2019 | 10/24/2019  |
| US  | INDIAN LUST R4     | Leaking Underground Storage Tanks on Indian Land             | EPA Region 4                                  | 04/12/2019 | 07/29/2019 | 10/17/2019  |
| US  | INDIAN LUST R1     | Leaking Underground Storage Tanks on Indian Land             | EPA Region 1                                  | 04/11/2019 | 07/29/2019 | 10/17/2019  |
| US  | INDIAN LUST R5     | Leaking Underground Storage Tanks on Indian Land             | EPA, Region 5                                 | 04/08/2019 | 07/30/2019 | 10/17/2019  |
| US  | INDIAN LUST R10    | Leaking Underground Storage Tanks on Indian Land             | EPA Region 10                                 | 04/16/2019 | 07/29/2019 | 10/17/2019  |
| US  | INDIAN LUST R8     | Leaking Underground Storage Tanks on Indian Land             | EPA Region 8                                  | 05/02/2019 | 10/22/2019 | 11/11/2019  |
| CA  | CPS-SLIC           | Statewide SLIC Cases (GEOTRACKER)                            | State Water Resources Control Board           | 09/09/2019 | 09/09/2019 | 11/06/2019  |
| CA  | SLIC REG 1         | Active Toxic Site Investigations                             | California Regional Water Quality Control Boa | 04/03/2003 | 04/07/2003 | 04/25/2003  |
| CA  | SLIC REG 2         | Spills, Leaks, Investigation & Cleanup Cost Recovery Listing | Regional Water Quality Control Board San Fran | 09/30/2004 | 10/20/2004 | 11/19/2004  |
| CA  | SLIC REG 3         | Spills, Leaks, Investigation & Cleanup Cost Recovery Listing | California Regional Water Quality Control Boa | 05/18/2006 | 05/18/2006 | 06/15/2006  |
| CA  | SLIC REG 4         | Spills, Leaks, Investigation & Cleanup Cost Recovery Listing | Region Water Quality Control Board Los Angele | 11/17/2004 | 11/18/2004 | 01/04/2005  |
| CA  | SLIC REG 5         | Spills, Leaks, Investigation & Cleanup Cost Recovery Listing | Regional Water Quality Control Board Central  | 04/01/2005 | 04/05/2005 | 04/21/2005  |
| CA  | SLIC REG 6V        | Spills, Leaks, Investigation & Cleanup Cost Recovery Listing | Regional Water Quality Control Board, Victorv | 05/24/2005 | 05/25/2005 | 06/16/2005  |
| CA  | SLIC REG 6L        | SLIC Sites   | California Regional Water Quality Control Boa | 09/07/2004 | 09/07/2004 | 10/12/2004  |
| CA  | SLIC REG 7         | SLIC List  | California Regional Quality Control Board, Co | 11/24/2004 | 11/29/2004 | 01/04/2005  |
| CA  | SLIC REG 8         | Spills, Leaks, Investigation & Cleanup Cost Recovery Listing | California Region Water Quality Control Board | 04/03/2008 | 04/03/2008 | 04/14/2008  |
| CA  | SLIC REG 9         | Spills, Leaks, Investigation & Cleanup Cost Recovery Listing | California Regional Water Quality Control Boa | 09/10/2007 | 09/11/2007 | 09/28/2007  |
| <b>State and tribal registered storage tank lists</b> |                    |  |   |            |            |             |
| CA  | UST                | Active UST Facilities  | SWRCB   | 09/09/2019 | 09/09/2019 | 10/31/2019  |
| CA  | MILITARY UST SITES | Military UST Sites (GEOTRACKER)                              | State Water Resources Control Board           | 09/09/2019 | 09/09/2019 | 11/01/2019  |
| CA  | UST CLOSURE        | Proposed Closure of Underground Storage Tank (UST) Cases     | State Water Resources Control Board           | 09/06/2019 | 09/09/2019 | 10/31/2019  |
| CA  | UST MENDOCINO      | Mendocino County UST Database                                | Department of Public Health                   | 08/20/2019 | 09/09/2019 | 10/31/2019  |
| CA  | AST                | Aboveground Petroleum Storage Tank Facilities                | California Environmental Protection Agency    | 07/06/2016 | 07/12/2016 | 09/19/2016  |
| US  | INDIAN UST R4      | Underground Storage Tanks on Indian Land                     | EPA Region 4                                  | 04/12/2019 | 07/29/2019 | 10/17/2019  |
| US  | INDIAN UST R10     | Underground Storage Tanks on Indian Land                     | EPA Region 10                                 | 04/16/2019 | 07/30/2019 | 10/17/2019  |
| US  | INDIAN UST R7      | Underground Storage Tanks on Indian Land                     | EPA Region 7                                  | 05/02/2019 | 07/29/2019 | 10/17/2019  |
| US  | INDIAN UST R1      | Underground Storage Tanks on Indian Land                     | EPA, Region 1                                 | 04/11/2019 | 07/30/2019 | 10/17/2019  |
| US  | INDIAN UST R9      | Underground Storage Tanks on Indian Land                     | EPA Region 9                                  | 04/08/2019 | 07/29/2019 | 10/17/2019  |
| US  | INDIAN UST R8      | Underground Storage Tanks on Indian Land                     | EPA Region 8                                  | 05/02/2019 | 10/22/2019 | 11/11/2019  |
| US  | INDIAN UST R6      | Underground Storage Tanks on Indian Land                     | EPA Region 6                                  | 05/01/2019 | 07/29/2019 | 10/17/2019  |
| US  | INDIAN UST R5      | Underground Storage Tanks on Indian Land                     | EPA Region 5                                  | 04/08/2019 | 07/29/2019 | 10/17/2019  |
| US  | FEMA UST           | Underground Storage Tank Listing                             | FEMA  | 08/27/2019 | 08/28/2019 | 11/11/2019  |

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St  | Acronym           | Full Name  | Government Agency                              | Gov Date   | Arvl. Date | Active Date |
|---|-------------------|--|--|------------|------------|-------------|
| <b>State and tribal voluntary cleanup sites</b> |                   |  |  |            |            |             |
| US  | INDIAN VCP R1     | Voluntary Cleanup Priority Listing                           | EPA, Region 1                                  | 07/27/2015 | 09/29/2015 | 02/18/2016  |
| CA  | VCP               | Voluntary Cleanup Program Properties                         | Department of Toxic Substances Control         | 10/28/2019 | 10/29/2019 | 01/07/2020  |
| US  | INDIAN VCP R7     | Voluntary Cleanup Priority Listing                           | EPA, Region 7                                  | 03/20/2008 | 04/22/2008 | 05/19/2008  |
| <b>State and tribal Brownfields sites</b>       |                   |  |  |            |            |             |
| CA  | BROWNFIELDS       | Considered Brownfields Sites Listing                         | State Water Resources Control Board            | 09/23/2019 | 09/24/2019 | 11/06/2019  |
| <b>Other Records</b>                            |                   |  |  |            |            |             |
| US  | CONSENT           | Superfund (CERCLA) Consent Decrees                           | Department of Justice, Consent Decree Library  | 09/30/2019 | 10/09/2019 | 12/20/2019  |
| US  | ROD               | Records Of Decision  | EPA  | 10/25/2019 | 11/07/2019 | 11/20/2019  |
| US  | LIENS 2           | CERCLA Lien Information                                      | Environmental Protection Agency                | 10/25/2019 | 11/07/2019 | 11/20/2019  |
| CA  | HIST CAL-SITES    | Calsites Database  | Department of Toxic Substance Control          | 08/08/2005 | 08/03/2006 | 08/24/2006  |
| US  | DEBRIS REGION 9   | Torres Martinez Reservation Illegal Dump Site Locations      | EPA, Region 9                                  | 01/12/2009 | 05/07/2009 | 09/21/2009  |
| CA  | SWRCY             | Recycler Database  | Department of Conservation                     | 09/09/2019 | 09/09/2019 | 11/07/2019  |
| CA  | CA FID UST        | Facility Inventory Database                                  | California Environmental Protection Agency     | 10/31/1994 | 09/05/1995 | 09/29/1995  |
| CA  | HIST UST          | Hazardous Substance Storage Container Database               | State Water Resources Control Board            | 10/15/1990 | 01/25/1991 | 02/12/1991  |
| CA  | SAN FRANCISCO AST | Aboveground Storage Tank Site Listing                        | San Francisco County Department of Public Hea  | 08/01/2019 | 08/02/2019 | 10/11/2019  |
| CA  | SWEEPS UST        | SWEEPS UST Listing   | State Water Resources Control Board            | 06/01/1994 | 07/07/2005 | 08/11/2005  |
| US  | COAL ASH EPA      | Coal Combustion Residues Surface Impoundments List           | Environmental Protection Agency                | 01/12/2017 | 03/05/2019 | 11/11/2019  |
| US  | LEAD SMELTER 2    | Lead Smelter Sites   | American Journal of Public Health              | 04/05/2001 | 10/27/2010 | 12/02/2010  |
| US  | 2020 COR ACTION   | 2020 Corrective Action Program List                          | Environmental Protection Agency                | 09/30/2017 | 05/08/2018 | 07/20/2018  |
| US  | LEAD SMELTER 1    | Lead Smelter Sites   | Environmental Protection Agency                | 10/25/2019 | 11/07/2019 | 11/20/2019  |
| US  | COAL ASH DOE      | Steam-Electric Plant Operation Data                          | Department of Energy                           | 12/31/2018 | 12/04/2019 | 01/15/2020  |
| US  | PCB TRANSFORMER   | PCB Transformer Registration Database                        | Environmental Protection Agency                | 05/24/2017 | 11/30/2017 | 12/15/2017  |
| US  | FUSRAP            | Formerly Utilized Sites Remedial Action Program              | Department of Energy                           | 08/08/2017 | 09/11/2018 | 09/14/2018  |
| US  | EPA WATCH LIST    | EPA WATCH LIST   | Environmental Protection Agency                | 08/30/2013 | 03/21/2014 | 06/17/2014  |
| US  | US AIRS MINOR     | Air Facility System Data                                     | EPA  | 10/12/2016 | 10/26/2016 | 02/03/2017  |
| US  | US AIRS (AFS)     | Aerometric Information Retrieval System Facility Subsystem ( | EPA  | 10/12/2016 | 10/26/2016 | 02/03/2017  |
| US  | US FIN ASSUR      | Financial Assurance Information                              | Environmental Protection Agency                | 09/23/2019 | 09/24/2019 | 12/20/2019  |
| US  | SCRD DRYCLEANERS  | State Coalition for Remediation of Drycleaners Listing       | Environmental Protection Agency                | 01/01/2017 | 02/03/2017 | 04/07/2017  |
| US  | US HIST CDL       | National Clandestine Laboratory Register                     | Drug Enforcement Administration                | 06/11/2019 | 06/13/2019 | 09/03/2019  |
| US  | Delisted NPL      | National Priority List Deletions                             | EPA  | 10/25/2019 | 11/07/2019 | 11/20/2019  |
| US  | SEMS-ARCHIVE      | Superfund Enterprise Management System Archive               | EPA  | 10/25/2019 | 11/07/2019 | 11/21/2019  |
| US  | RCRA NonGen / NLR | RCRA - Non Generators / No Longer Regulated                  | Environmental Protection Agency                | 12/16/2019 | 12/16/2019 | 12/20/2019  |
| US  | HMIRS             | Hazardous Materials Information Reporting System             | U.S. Department of Transportation              | 06/24/2019 | 06/26/2019 | 09/23/2019  |
| US  | DOT OPS           | Incident and Accident Data                                   | Department of Transportation, Office of Pipeli | 10/01/2019 | 10/29/2019 | 01/15/2020  |
| US  | US CDL            | Clandestine Drug Labs  | Drug Enforcement Administration                | 06/11/2019 | 06/13/2019 | 09/03/2019  |
| US  | US BROWNFIELDS    | A Listing of Brownfields Sites                               | Environmental Protection Agency                | 06/03/2019 | 06/04/2019 | 08/26/2019  |
| US  | DOD               | Department of Defense Sites                                  | USGS   | 12/31/2005 | 11/10/2006 | 01/11/2007  |
| US  | FEDLAND           | Federal and Indian Lands                                     | U.S. Geological Survey                         | 04/02/2018 | 04/11/2018 | 11/06/2019  |
| US  | FUDS              | Formerly Used Defense Sites                                  | U.S. Army Corps of Engineers                   | 05/15/2019 | 05/21/2019 | 08/08/2019  |
| US  | UMTRA             | Uranium Mill Tailings Sites                                  | Department of Energy                           | 08/01/2019 | 08/21/2019 | 11/11/2019  |
| US  | ODI               | Open Dump Inventory  | Environmental Protection Agency                | 06/30/1985 | 08/09/2004 | 09/17/2004  |
| US  | MINES VIOLATIONS  | MSHA Violation Assessment Data                               | DOL, Mine Safety & Health Admi                 | 09/17/2019 | 09/18/2019 | 12/03/2019  |
| US  | US MINES          | Mines Master Index File                                      | Department of Labor, Mine Safety and Health A  | 08/01/2019 | 08/27/2019 | 11/11/2019  |



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St | Acronym                   | Full Name  | Government Agency                             | Gov Date   | Arvl. Date | Active Date |
|----|---------------------------|--|---|------------|------------|-------------|
| US | US MINES 2                | Ferrous and Nonferrous Metal Mines Database Listing          | USGS  | 12/05/2005 | 02/29/2008 | 04/18/2008  |
| US | US MINES 3                | Active Mines & Mineral Plants Database Listing               | USGS  | 04/14/2011 | 06/08/2011 | 09/13/2011  |
| US | PRP                       | Potentially Responsible Parties                              | EPA   | 10/25/2019 | 11/07/2019 | 11/21/2019  |
| US | TRIS                      | Toxic Chemical Release Inventory System                      | EPA   | 12/31/2017 | 11/16/2018 | 11/21/2019  |
| US | TSCA                      | Toxic Substances Control Act                                 | EPA   | 12/31/2016 | 06/21/2017 | 01/05/2018  |
| US | FTTS                      | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu | EPA/Office of Prevention, Pesticides and Toxi | 04/09/2009 | 04/16/2009 | 05/11/2009  |
| US | FTTS INSP                 | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu | EPA   | 04/09/2009 | 04/16/2009 | 05/11/2009  |
| US | HIST FTTS                 | FIFRA/TSCA Tracking System Administrative Case Listing       | Environmental Protection Agency               | 10/19/2006 | 03/01/2007 | 04/10/2007  |
| US | HIST FTTS INSP            | FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis | Environmental Protection Agency               | 10/19/2006 | 03/01/2007 | 04/10/2007  |
| US | SSTS                      | Section 7 Tracking Systems                                   | EPA   | 05/01/2019 | 10/23/2019 | 01/15/2020  |
| US | ICIS                      | Integrated Compliance Information System                     | Environmental Protection Agency               | 11/18/2016 | 11/23/2016 | 02/10/2017  |
| US | PADS                      | PCB Activity Database System                                 | EPA   | 10/09/2019 | 10/11/2019 | 12/20/2019  |
| US | MLTS                      | Material Licensing Tracking System                           | Nuclear Regulatory Commission                 | 10/25/2019 | 10/25/2019 | 01/15/2020  |
| US | RADINFO                   | Radiation Information Database                               | Environmental Protection Agency               | 07/01/2019 | 07/01/2019 | 09/23/2019  |
| US | FINDS                     | Facility Index System/Facility Registry System               | EPA   | 08/12/2019 | 09/04/2019 | 12/03/2019  |
| US | RAATS                     | RCRA Administrative Action Tracking System                   | EPA   | 04/17/1995 | 07/03/1995 | 08/07/1995  |
| US | RMP                       | Risk Management Plans  | Environmental Protection Agency               | 04/25/2019 | 05/02/2019 | 05/23/2019  |
| US | BRS                       | Biennial Reporting System                                    | EPA/NTIS                                      | 12/31/2015 | 02/22/2017 | 09/28/2017  |
| US | PWS                       | Public Water System Data                                     | EPA   | 12/17/2013 | 01/09/2014 | 10/15/2014  |
| US | INDIAN RESERV             | Indian Reservations  | USGS  | 12/31/2014 | 07/14/2015 | 01/10/2017  |
| US | INDIAN ODI                | Report on the Status of Open Dumps on Indian Lands           | Environmental Protection Agency               | 12/31/1998 | 12/03/2007 | 01/24/2008  |
| US | IHS OPEN DUMPS            | Open Dumps on Indian Land                                    | Department of Health & Human Serivces, Indian | 04/01/2014 | 08/06/2014 | 01/29/2015  |
| US | ABANDONED MINES           | Abandoned Mines  | Department of Interior                        | 09/10/2019 | 09/10/2019 | 10/17/2019  |
| CA | CA BOND EXP. PLAN         | Bond Expenditure Plan  | Department of Health Services                 | 01/01/1989 | 07/27/1994 | 08/02/1994  |
| CA | CDL                       | Clandestine Drug Labs  | Department of Toxic Substances Control        | 06/30/2018 | 07/16/2019 | 09/24/2019  |
| CA | CHMIRS                    | California Hazardous Material Incident Report System         | Office of Emergency Services                  | 05/15/2019 | 06/24/2019 | 08/21/2019  |
| CA | CORTESE                   | "Cortese" Hazardous Waste & Substances Sites List            | CAL EPA/Office of Emergency Information       | 09/23/2019 | 09/24/2019 | 11/06/2019  |
| CA | CUPA LIVERMORE-PLEASANTON | CUPA Facility Listing  | Livermore-Pleasanton Fire Department          | 05/01/2019 | 05/14/2019 | 07/17/2019  |
| CA | CUPA SAN FRANCISCO CO     | CUPA Facility Listing  | San Francisco County Department of Environmen | 10/31/2019 | 11/01/2019 | 12/11/2019  |
| CA | DEED                      | Deed Restriction Listing                                     | DTSC and SWRCB                                | 09/03/2019 | 09/04/2019 | 11/05/2019  |
| CA | DRYCLEAN AVAQMD           | Antelope Valley Air Quality Management District Drycleaner L | Antelope Valley Air Quality Management Distri | 08/28/2019 | 08/30/2019 | 10/29/2019  |
| CA | DRYCLEANERS               | Cleaner Facilities   | Department of Toxic Substance Control         | 09/06/2019 | 10/11/2019 | 12/12/2019  |
| CA | DRYCLEAN SOUTH COAST      | South Coast Air Quality Management District Drycleaner Listi | South Coast Air Quality Management District   | 09/27/2019 | 10/01/2019 | 11/07/2019  |
| CA | EMI                       | Emissions Inventory Data                                     | California Air Resources Board                | 12/31/2017 | 06/24/2019 | 08/22/2019  |
| CA | ENF                       | Enforcement Action Listing                                   | State Water Resouruces Control Board          | 07/19/2019 | 07/22/2019 | 09/26/2019  |
| CA | Financial Assurance 1     | Financial Assurance Information Listing                      | Department of Toxic Substances Control        | 10/17/2019 | 10/22/2019 | 01/02/2020  |
| CA | Financial Assurance 2     | Financial Assurance Information Listing                      | California Integrated Waste Management Board  | 11/08/2019 | 11/12/2019 | 01/08/2020  |
| CA | HAULERS                   | Registered Waste Tire Haulers Listing                        | Integrated Waste Management Board             | 03/26/2019 | 03/27/2019 | 04/30/2019  |
| CA | HAZNET                    | Facility and Manifest Data                                   | California Environmental Protection Agency    | 12/31/2017 | 05/29/2019 | 07/22/2019  |
| CA | HIST CORTESE              | Hazardous Waste & Substance Site List                        | Department of Toxic Substances Control        | 04/01/2001 | 01/22/2009 | 04/08/2009  |
| CA | HWP                       | EnviroStor Permitted Facilities Listing                      | Department of Toxic Substances Control        | 08/19/2019 | 08/20/2019 | 10/18/2019  |
| CA | HWT                       | Registered Hazardous Waste Transporter Database              | Department of Toxic Substances Control        | 10/07/2019 | 10/08/2019 | 11/07/2019  |
| CA | ICE                       | ICE  | Department of Toxic Substances Control        | 08/19/2019 | 08/20/2019 | 10/18/2019  |
| CA | LDS                       | Land Disposal Sites Listing (GEOTRACKER)                     | State Water Quality Control Board             | 09/09/2019 | 09/09/2019 | 11/05/2019  |
| CA | LIENS                     | Environmental Liens Listing                                  | Department of Toxic Substances Control        | 08/29/2019 | 08/30/2019 | 10/29/2019  |
| CA | MCS                       | Military Cleanup Sites Listing (GEOTRACKER)                  | State Water Resources Control Board           | 09/09/2019 | 09/09/2019 | 11/05/2019  |
| CA | MINES                     | Mines Site Location Listing                                  | Department of Conservation                    | 09/09/2019 | 09/09/2019 | 11/05/2019  |

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St | Acronym             | Full Name  | Government Agency                          | Gov Date   | Arvl. Date | Active Date |
|----|---------------------|--|--|------------|------------|-------------|
| CA | MWMP                | Medical Waste Management Program Listing               | Department of Public Health                | 07/19/2019 | 09/04/2019 | 11/05/2019  |
| CA | NPDES               | NPDES Permits Listing                                  | State Water Resources Control Board        | 11/11/2019 | 11/12/2019 | 01/08/2020  |
| CA | PEST LIC            | Pesticide Regulation Licenses Listing                  | Department of Pesticide Regulation         | 09/03/2019 | 09/04/2019 | 11/05/2019  |
| CA | PROC                | Certified Processors Database                          | Department of Conservation                 | 09/09/2019 | 09/09/2019 | 11/05/2019  |
| CA | NOTIFY 65           | Proposition 65 Records                                 | State Water Resources Control Board        | 09/16/2019 | 09/18/2019 | 11/06/2019  |
| CA | SCH                 | School Property Evaluation Program                     | Department of Toxic Substances Control     | 10/28/2019 | 10/29/2019 | 01/07/2020  |
| CA | SPILLS 90           | SPILLS90 data from FirstSearch                         | FirstSearch                                | 06/06/2012 | 01/03/2013 | 02/22/2013  |
| CA | TOXIC PITS          | Toxic Pits Cleanup Act Sites                           | State Water Resources Control Board        | 07/01/1995 | 08/30/1995 | 09/26/1995  |
| CA | UIC                 | UIC Listing  | Department of Conservation                 | 08/20/2019 | 08/20/2019 | 11/18/2019  |
| CA | WASTEWATER PITS     | Oil Wastewater Pits Listing                            | RWQCB, Central Valley Region               | 05/08/2018 | 07/11/2018 | 09/13/2018  |
| CA | WDS                 | Waste Discharge System                                 | State Water Resources Control Board        | 06/19/2007 | 06/20/2007 | 06/29/2007  |
| CA | WIP                 | Well Investigation Program Case List                   | Los Angeles Water Quality Control Board    | 07/03/2009 | 07/21/2009 | 08/03/2009  |
| CA | WMUDS/SWAT          | Waste Management Unit Database                         | State Water Resources Control Board        | 04/01/2000 | 04/10/2000 | 05/10/2000  |
| CA | MILITARY PRIV SITES | Military Privatized Sites (GEOTRACKER)                 | State Water Resources Control Board        | 09/09/2019 | 09/09/2019 | 11/01/2019  |
| US | DOCKET HWC          | Hazardous Waste Compliance Docket Listing              | Environmental Protection Agency            | 05/31/2018 | 07/26/2018 | 10/05/2018  |
| CA | SAMPLING POINT      | Sampling Point ? Public Sites (GEOTRACKER)             | State Water Resources Control Board        | 09/09/2019 | 09/09/2019 | 11/01/2019  |
| CA | PROJECT             | Project Sites (GEOTRACKER)                             | State Water Resources Control Board        | 09/09/2019 | 09/09/2019 | 11/01/2019  |
| CA | CERS HAZ WASTE      | CERS HAZ WASTE   | CalEPA                                     | 10/21/2019 | 10/22/2019 | 01/02/2020  |
| CA | PFAS                | PFAS Contamination Site Location Listing               | State Water Resources Control Board        | 09/09/2019 | 09/09/2019 | 11/05/2019  |
| CA | WDR                 | Waste Discharge Requirements Listing                   | State Water Resources Control Board        | 09/09/2019 | 09/09/2019 | 11/06/2019  |
| CA | UIC GEO             | Underground Injection Control Sites (GEOTRACKER)       | State Water Resource Control Board         | 09/09/2019 | 09/09/2019 | 11/01/2019  |
| CA | PROD WATER PONDS    | Produced Water Ponds Sites (GEOTRACKER)                | State Water Resources Control Board        | 09/09/2019 | 09/09/2019 | 11/01/2019  |
| CA | WELL STIM PROJ      | Well Stimulation Project (GEOTRACKER)                  | State Water Resources Control Board        | 09/09/2019 | 09/09/2019 | 11/01/2019  |
| CA | CERS                | CalEPA Regulated Site Portal Data                      | California Environmental Protection Agency | 10/21/2019 | 10/22/2019 | 01/03/2020  |
| US | MINES MRDS          | Mineral Resources Data System                          | USGS                                       | 04/06/2018 | 10/21/2019 | 10/24/2019  |
| CA | CERS TANKS          | California Environmental Reporting System (CERS) Tanks | California Environmental Protection Agency | 10/21/2019 | 10/22/2019 | 01/03/2020  |
| US | ECHO                | Enforcement & Compliance History Information           | Environmental Protection Agency            | 10/06/2019 | 10/08/2019 | 01/02/2020  |
| CA | CIWQS               | California Integrated Water Quality System             | State Water Resources Control Board        | 09/03/2019 | 09/04/2019 | 11/05/2019  |
| CA | NON-CASE INFO       | Non-Case Information Sites (GEOTRACKER)                | State Water Resources Control Board        | 09/09/2019 | 09/09/2019 | 11/01/2019  |
| US | FUELS PROGRAM       | EPA Fuels Program Registered Listing                   | EPA  | 08/19/2019 | 08/20/2019 | 11/11/2019  |
| CA | OTHER OIL GAS       | Other Oil & Gas Projects Sites (GEOTRACKER)            | State Water Resources Control Board        | 09/09/2019 | 09/09/2019 | 11/01/2019  |
| US | UXO                 | Unexploded Ordnance Sites                              | Department of Defense                      | 12/31/2017 | 01/17/2019 | 04/01/2019  |

### HISTORICAL USE RECORDS

|    |                  |  |   |  |            |            |
|----|------------------|--|---|--|------------|------------|
| US | EDR MGP          | EDR Proprietary Manufactured Gas Plants                      | EDR, Inc.                                     |  |            |            |
| US | EDR Hist Auto    | EDR Exclusive Historical Auto Stations                       | EDR, Inc.                                     |  |            |            |
| US | EDR Hist Cleaner | EDR Exclusive Historical Cleaners                            | EDR, Inc.                                     |  |            |            |
| CA | RGALF            | Recovered Government Archive Solid Waste Facilities List     | Department of Resources Recycling and Recover |  | 07/01/2013 | 01/13/2014 |
| CA | RGALUST          | Recovered Government Archive Leaking Underground Storage Tan | State Water Resources Control Board           |  | 07/01/2013 | 12/30/2013 |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St                    | Acronym                   | Full Name   | Government Agency                             | Gov Date   | Arvl. Date | Active Date |
|-----------------------|---------------------------|---|---|------------|------------|-------------|
| <b>COUNTY RECORDS</b> |                           |   |   |            |            |             |
| CA                    | CS ALAMEDA                | Contaminated Sites                                  | Alameda County Environmental Health Services  | 01/09/2019 | 01/11/2019 | 03/05/2019  |
| CA                    | UST ALAMEDA               | Underground Tanks                                   | Alameda County Environmental Health Services  | 10/02/2019 | 10/03/2019 | 11/06/2019  |
| CA                    | CUPA AMADOR               | CUPA Facility List                                  | Amador County Environmental Health            | 09/06/2019 | 09/10/2019 | 10/31/2019  |
| CA                    | CUPA BUTTE                | CUPA Facility Listing                               | Public Health Department                      | 04/21/2017 | 04/25/2017 | 08/09/2017  |
| CA                    | CUPA CALVERAS             | CUPA Facility Listing                               | Calveras County Environmental Health          | 08/05/2019 | 08/07/2019 | 10/09/2019  |
| CA                    | CUPA COLUSA               | CUPA Facility List                                  | Health & Human Services                       | 08/14/2019 | 08/20/2019 | 10/18/2019  |
| CA                    | SL CONTRA COSTA           | Site List   | Contra Costa Health Services Department       | 08/20/2019 | 08/23/2019 | 10/22/2019  |
| CA                    | CUPA DEL NORTE            | CUPA Facility List                                  | Del Norte County Environmental Health Divisio | 10/11/2019 | 10/29/2019 | 12/11/2019  |
| CA                    | CUPA EL DORADO            | CUPA Facility List                                  | El Dorado County Environmental Management Dep | 09/06/2019 | 09/12/2019 | 10/31/2019  |
| CA                    | CUPA FRESNO               | CUPA Resources List                                 | Dept. of Community Health                     | 10/08/2019 | 10/10/2019 | 12/11/2019  |
| CA                    | CUPA GLENN                | CUPA Facility List                                  | Glenn County Air Pollution Control District   | 01/22/2018 | 01/24/2018 | 03/14/2018  |
| CA                    | CUPA HUMBOLDT             | CUPA Facility List                                  | Humboldt County Environmental Health          | 07/08/2019 | 07/10/2019 | 09/20/2019  |
| CA                    | CUPA IMPERIAL             | CUPA Facility List                                  | San Diego Border Field Office                 | 10/17/2019 | 10/22/2019 | 01/02/2020  |
| CA                    | CUPA INYO                 | CUPA Facility List                                  | Inyo County Environmental Health Services     | 04/02/2018 | 04/03/2018 | 06/14/2018  |
| CA                    | UST KERN                  | Underground Storage Tank Sites & Tank Listing       | Kern County Environment Health Services Depar | 10/28/2019 | 11/05/2019 | 01/08/2020  |
| CA                    | CUPA KINGS                | CUPA Facility List                                  | Kings County Department of Public Health      | 08/14/2019 | 08/20/2019 | 10/18/2019  |
| CA                    | CUPA LAKE                 | CUPA Facility List                                  | Lake County Environmental Health              | 08/16/2019 | 08/20/2019 | 10/18/2019  |
| CA                    | CUPA LASSEN               | CUPA Facility List                                  | Lassen County Environmental Health            | 07/22/2019 | 07/23/2019 | 09/26/2019  |
| CA                    | AOCONCERN                 | Key Areas of Concerns in Los Angeles County         |   | 03/30/2009 | 03/31/2009 | 10/23/2009  |
| CA                    | HMS LOS ANGELES           | HMS: Street Number List                             | Department of Public Works                    | 09/26/2019 | 10/04/2019 | 11/07/2019  |
| CA                    | LF LOS ANGELES            | List of Solid Waste Facilities                      | La County Department of Public Works          | 10/15/2019 | 10/16/2019 | 12/12/2019  |
| CA                    | LF LOS ANGELES CITY       | City of Los Angeles Landfills                       | Engineering & Construction Division           | 01/01/2019 | 01/15/2019 | 03/07/2019  |
| CA                    | LOS ANGELES AST           | Active & Inactive AST Inventory                     | Los Angeles Fire Department                   | 06/01/2019 | 06/25/2019 | 08/22/2019  |
| CA                    | LOS ANGELES CO LF METHANE | Methane Producing Landfills                         | Los Angeles County Department of Public Works | 04/30/2012 | 04/17/2019 | 05/29/2019  |
| CA                    | LOS ANGELES HM            | Active & Inactive Hazardous Materials Inventory     | Los Angeles Fire Department                   | 06/01/2019 | 06/25/2019 | 08/22/2019  |
| CA                    | LOS ANGELES UST           | Active & Inactive UST Inventory                     | Los Angeles Fire Department                   | 06/01/2019 | 06/25/2019 | 08/22/2019  |
| CA                    | SITE MIT LOS ANGELES      | Site Mitigation List                                | Community Health Services                     | 10/01/2019 | 10/29/2019 | 01/08/2020  |
| CA                    | UST EL SEGUNDO            | City of El Segundo Underground Storage Tank         | City of El Segundo Fire Department            | 01/21/2017 | 04/19/2017 | 05/10/2017  |
| CA                    | UST LONG BEACH            | City of Long Beach Underground Storage Tank         | City of Long Beach Fire Department            | 04/22/2019 | 04/23/2019 | 06/27/2019  |
| CA                    | UST TORRANCE              | City of Torrance Underground Storage Tank           | City of Torrance Fire Department              | 06/27/2019 | 07/30/2019 | 10/02/2019  |
| CA                    | CUPA MADERA               | CUPA Facility List                                  | Madera County Environmental Health            | 08/22/2019 | 08/26/2019 | 10/29/2019  |
| CA                    | UST MARIN                 | Underground Storage Tank Sites                      | Public Works Department Waste Management      | 09/26/2018 | 10/04/2018 | 11/02/2018  |
| CA                    | CUPA MERCED               | CUPA Facility List                                  | Merced County Environmental Health            | 11/18/2019 | 11/20/2019 | 01/03/2020  |
| CA                    | CUPA MONO                 | CUPA Facility List                                  | Mono County Health Department                 | 08/21/2019 | 09/03/2019 | 10/31/2019  |
| CA                    | CUPA MONTEREY             | CUPA Facility Listing                               | Monterey County Health Department             | 11/06/2019 | 11/07/2019 | 01/08/2020  |
| CA                    | LUST NAPA                 | Sites With Reported Contamination                   | Napa County Department of Environmental Manag | 01/09/2017 | 01/11/2017 | 03/02/2017  |
| CA                    | UST NAPA                  | Closed and Operating Underground Storage Tank Sites | Napa County Department of Environmental Manag | 09/05/2019 | 09/09/2019 | 10/31/2019  |
| CA                    | CUPA NEVADA               | CUPA Facility List                                  | Community Development Agency                  | 10/30/2019 | 10/30/2019 | 12/11/2019  |
| CA                    | IND_SITE ORANGE           | List of Industrial Site Cleanups                    | Health Care Agency                            | 07/10/2019 | 08/07/2019 | 10/09/2019  |
| CA                    | LUST ORANGE               | List of Underground Storage Tank Cleanups           | Health Care Agency                            | 07/10/2019 | 08/09/2019 | 10/09/2019  |
| CA                    | UST ORANGE                | List of Underground Storage Tank Facilities         | Health Care Agency                            | 10/04/2019 | 11/05/2019 | 01/08/2020  |
| CA                    | MS PLACER                 | Master List of Facilities                           | Placer County Health and Human Services       | 09/03/2019 | 09/05/2019 | 11/05/2019  |
| CA                    | CUPA PLUMAS               | CUPA Facility List                                  | Plumas County Environmental Health            | 03/31/2019 | 04/23/2019 | 06/26/2019  |
| CA                    | LUST RIVERSIDE            | Listing of Underground Tank Cleanup Sites           | Department of Environmental Health            | 10/17/2019 | 10/22/2019 | 12/13/2019  |
| CA                    | UST RIVERSIDE             | Underground Storage Tank Tank List                  | Department of Environmental Health            | 10/17/2019 | 10/22/2019 | 01/03/2020  |

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St | Acronym                | Full Name  | Government Agency                              | Gov Date   | Arvl. Date | Active Date |
|----|------------------------|--|--|------------|------------|-------------|
| CA | CS SACRAMENTO          | Toxic Site Clean-Up List                                     | Sacramento County Environmental Management     | 08/06/2019 | 10/01/2019 | 11/07/2019  |
| CA | ML SACRAMENTO          | Master Hazardous Materials Facility List                     | Sacramento County Environmental Management     | 08/07/2019 | 10/01/2019 | 11/08/2019  |
| CA | CUPA SAN BENITO        | CUPA Facility List   | San Benito County Environmental Health         | 07/16/2019 | 07/16/2019 | 09/24/2019  |
| CA | PERMITS SAN BERNARDINO | Hazardous Material Permits                                   | San Bernardino County Fire Department Hazardo  | 08/29/2019 | 08/30/2019 | 10/29/2019  |
| CA | HMMD SAN DIEGO         | Hazardous Materials Management Division Database             | Hazardous Materials Management Division        | 09/03/2019 | 09/04/2019 | 11/05/2019  |
| CA | LF SAN DIEGO           | Solid Waste Facilities                                       | Department of Health Services                  | 04/18/2018 | 04/24/2018 | 06/19/2018  |
| CA | SAN DIEGO CO LOP       | Local Oversight Program Listing                              | Department of Environmental Health             | 10/16/2019 | 10/22/2019 | 12/13/2019  |
| CA | SAN DIEGO CO SAM       | Environmental Case Listing                                   | San Diego County Department of Environmental   | 03/23/2010 | 06/15/2010 | 07/09/2010  |
| CA | LUST SAN FRANCISCO     | Local Oversight Facilities                                   | Department Of Public Health San Francisco Cou  | 09/19/2008 | 09/19/2008 | 09/29/2008  |
| CA | UST SAN FRANCISCO      | Underground Storage Tank Information                         | Department of Public Health                    | 08/01/2019 | 08/02/2019 | 10/08/2019  |
| CA | UST SAN JOAQUIN        | San Joaquin Co. UST  | Environmental Health Department                | 06/22/2018 | 06/26/2018 | 07/11/2018  |
| CA | CUPA SAN LUIS OBISPO   | CUPA Facility List   | San Luis Obispo County Public Health Departme  | 08/14/2019 | 08/20/2019 | 10/18/2019  |
| CA | BI SAN MATEO           | Business Inventory   | San Mateo County Environmental Health Service  | 09/03/2019 | 09/09/2019 | 11/05/2019  |
| CA | LUST SAN MATEO         | Fuel Leak List   | San Mateo County Environmental Health Service  | 03/29/2019 | 03/29/2019 | 05/29/2019  |
| CA | CUPA SANTA BARBARA     | CUPA Facility Listing  | Santa Barbara County Public Health Department  | 09/08/2011 | 09/09/2011 | 10/07/2011  |
| CA | CUPA SANTA CLARA       | Cupa Facility List   | Department of Environmental Health             | 08/14/2019 | 08/20/2019 | 10/18/2019  |
| CA | HIST LUST SANTA CLARA  | HIST LUST - Fuel Leak Site Activity Report                   | Santa Clara Valley Water District              | 03/29/2005 | 03/30/2005 | 04/21/2005  |
| CA | LUST SANTA CLARA       | LOP Listing  | Department of Environmental Health             | 03/03/2014 | 03/05/2014 | 03/18/2014  |
| CA | SAN JOSE HAZMAT        | Hazardous Material Facilities                                | City of San Jose Fire Department               | 10/30/2019 | 11/01/2019 | 01/08/2020  |
| CA | CUPA SANTA CRUZ        | CUPA Facility List   | Santa Cruz County Environmental Health         | 01/21/2017 | 02/22/2017 | 05/23/2017  |
| CA | CUPA SHASTA            | CUPA Facility List   | Shasta County Department of Resource Managemen | 06/15/2017 | 06/19/2017 | 08/09/2017  |
| CA | LUST SOLANO            | Leaking Underground Storage Tanks                            | Solano County Department of Environmental Man  | 06/04/2019 | 06/06/2019 | 08/13/2019  |
| CA | UST SOLANO             | Underground Storage Tanks                                    | Solano County Department of Environmental Man  | 08/28/2019 | 08/30/2019 | 10/29/2019  |
| CA | CUPA SONOMA            | Cupa Facility List   | County of Sonoma Fire & Emergency Services De  | 06/18/2019 | 06/25/2019 | 07/24/2019  |
| CA | LUST SONOMA            | Leaking Underground Storage Tank Sites                       | Department of Health Services                  | 10/01/2019 | 10/02/2019 | 11/07/2019  |
| CA | CUPA STANISLAUS        | CUPA Facility List   | Stanislaus County Department of Ennvironmenta  | 11/04/2019 | 11/07/2019 | 01/08/2020  |
| CA | UST SUTTER             | Underground Storage Tanks                                    | Sutter County Environmental Health Services    | 08/29/2019 | 09/03/2019 | 11/06/2019  |
| CA | CUPA TEHAMA            | CUPA Facility List   | Tehama County Department of Environmental Hea  | 05/20/2019 | 05/21/2019 | 07/18/2019  |
| CA | CUPA TRINITY           | CUPA Facility List   | Department of Toxic Substances Control         | 10/17/2019 | 10/22/2019 | 01/02/2020  |
| CA | CUPA TULARE            | CUPA Facility List   | Tulare County Environmental Health Services D  | 08/12/2019 | 08/14/2019 | 10/17/2019  |
| CA | CUPA TUOLUMNE          | CUPA Facility List   | Divison of Environmental Health                | 04/23/2018 | 04/25/2018 | 06/25/2018  |
| CA | BWT VENTURA            | Business Plan, Hazardous Waste Producers, and Operating Unde | Ventura County Environmental Health Division   | 05/29/2019 | 07/29/2019 | 09/30/2019  |
| CA | LF VENTURA             | Inventory of Illegal Abandoned and Inactive Sites            | Environmental Health Division                  | 12/01/2011 | 12/01/2011 | 01/19/2012  |
| CA | LUST VENTURA           | Listing of Underground Tank Cleanup Sites                    | Environmental Health Division                  | 05/29/2008 | 06/24/2008 | 07/31/2008  |
| CA | MED WASTE VENTURA      | Medical Waste Program List                                   | Ventura County Resource Management Agency      | 09/26/2019 | 10/23/2019 | 12/13/2019  |
| CA | UST VENTURA            | Underground Tank Closed Sites List                           | Environmental Health Division                  | 09/26/2019 | 09/09/2019 | 10/31/2019  |
| CA | UST YOLO               | Underground Storage Tank Comprehensive Facility Report       | Yolo County Department of Health               | 09/25/2019 | 10/01/2019 | 10/31/2019  |
| CA | CUPA YUBA              | CUPA Facility List   | Yuba County Environmental Health Department    | 11/04/2019 | 11/06/2019 | 01/08/2020  |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

| St | Acronym | Full Name | Government Agency | Gov Date | Arvl. Date | Active Date |
|----|---------|-----------|-------------------|----------|------------|-------------|
|----|---------|-----------|-------------------|----------|------------|-------------|

## STREET AND ADDRESS INFORMATION

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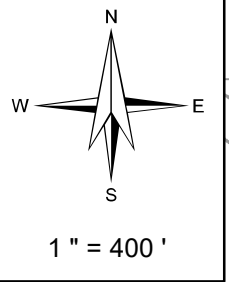
THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCEL MAY NOT COMPLY WITH LOCAL LOT-SPLIT OR BUILDING SITE ORDINANCES.

SEC. 21, 27, 28, T.6S., R.2W.

T.R.A. 094-177  
094-248  
094-297

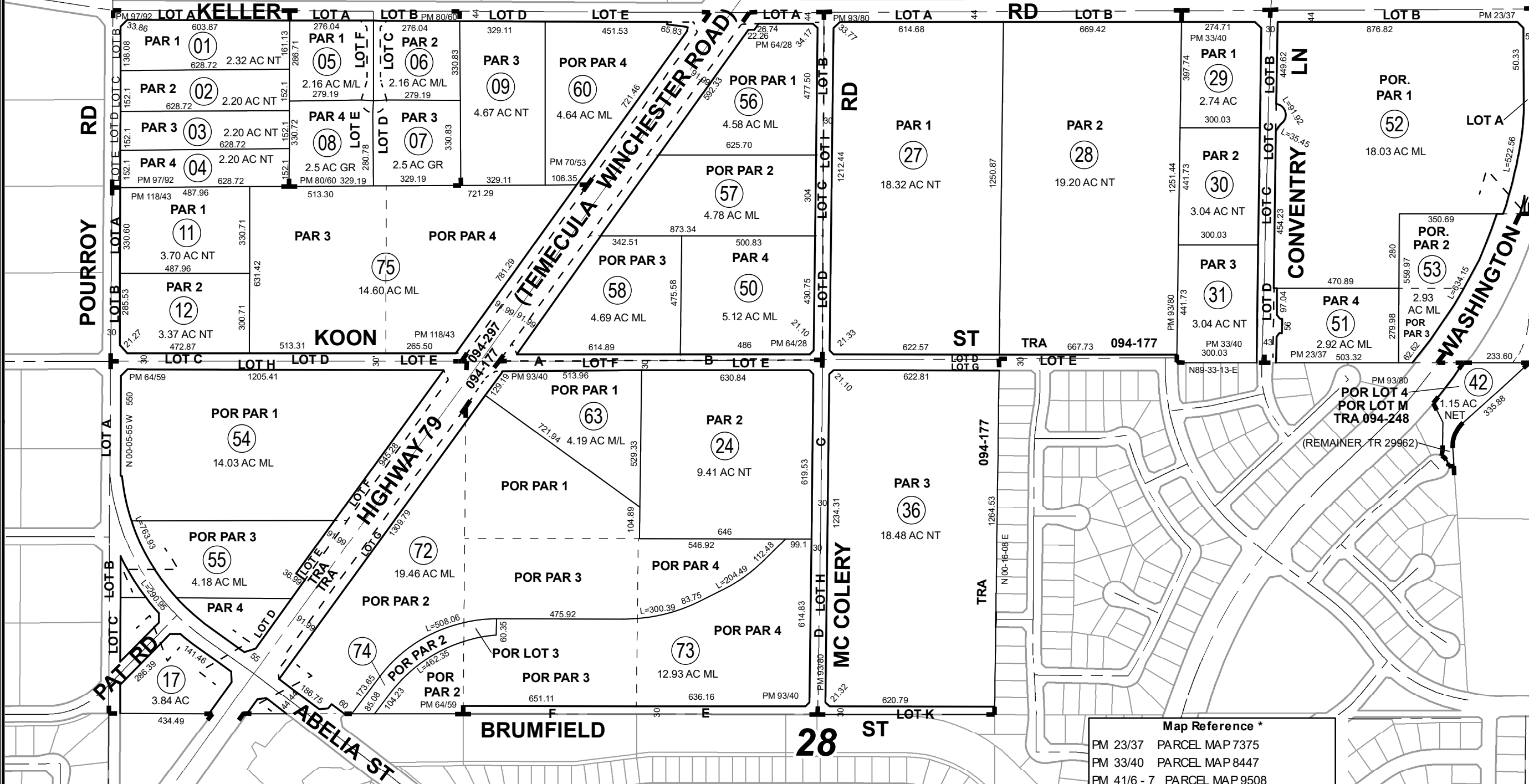
476-01

467-17



**Legend**

- Lot Lines
- Right-Of-Way
- - - Old Lot Lines
- - - Reference R.O.W
- - - Other Easements
- • • • • Lease Area
- Subdivision Tic Mark

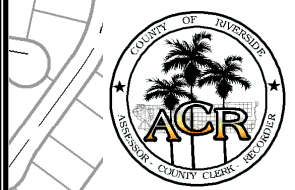
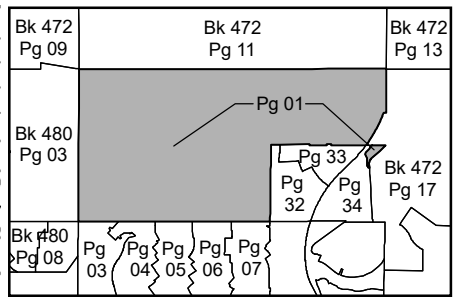


**Map Reference \***

- PM 23/37 PARCEL MAP 7375
- PM 33/40 PARCEL MAP 8447
- PM 41/6 - 7 PARCEL MAP 9508
- PM 64/28 PARCEL MAP 13059
- PM 64/59 PARCEL MAP 11539
- PM 70/53 PARCEL MAP 13130
- PM 80/60 - 61 PARCEL MAP 15673
- PM 93/40 - 41 PARCEL MAP 15358
- PM 93/80 - 82 PARCEL MAP 15090
- PM 97/92 PARCEL MAP 16153
- PM 118/43 - 44 PARCEL MAP 19448
- MB 337/54 - 58 TRACT MAP NO. 29675-2

| Date *    | Old Number * | New Number * |
|-----------|--------------|--------------|
| 1/8/2007  | 37-39        | 41           |
| 1/8/2007  | 41           | 42-43        |
| 1/8/2007  | 43           | PG.32-34     |
| 2/16/2007 | 32           | 44,ST        |
| 2/16/2007 | 34           | 45,ST        |
| 2/16/2007 | 33           | 46,ST        |
| 2/16/2007 | 19           | 47,ST        |
| 2/16/2007 | 20           | 48,ST        |
| 2/16/2007 | 21           | 49,ST        |
| 2/16/2007 | 22           | 50,ST        |
| 5/12/2009 | 35           | 51,ST        |
| 5/12/2009 | 44           | 52,ST        |
| 5/12/2009 | 46           | 53,ST        |
| 9/29/2010 | 15           | 54,ST        |
| 9/29/2010 | 16           | 55,ST        |
| 9/29/2010 | 47           | 56,ST        |
| 9/29/2010 | 48           | 57,ST        |
| 9/29/2010 | 49           | 58,ST        |
| 9/29/2010 | 14           | 59,ST        |
| 4/12/2012 | 10           | 60,ST        |
| 4/12/2012 | 18           | 61,ST        |
| 4/12/2012 | 25           | 62,ST        |
| 4/12/2012 | 23           | 63,ST        |
| 7/1/2014  | 26           | 64,65        |
| 7/1/2014  | 61           | 66-68        |
| 7/1/2014  | 62           | 69-71        |
| 7/1/2014  | 64,66,69     | 72           |
| 7/1/2014  | 65,68,71     | 73           |
| 7/1/2014  | 67,70        | 74           |
| 12/7/2017 | 40,45        | 472-17-20    |
| 4/19/2018 | 13,59        | 75           |

**Data \***  
R.S. 16/72  
C.S. 600-D, 607-W  
266570 12/84 (STREET)



ASSESSOR'S MAP BK476 PG.01  
Riverside County, Calif.

*JHernandez*

May 2018



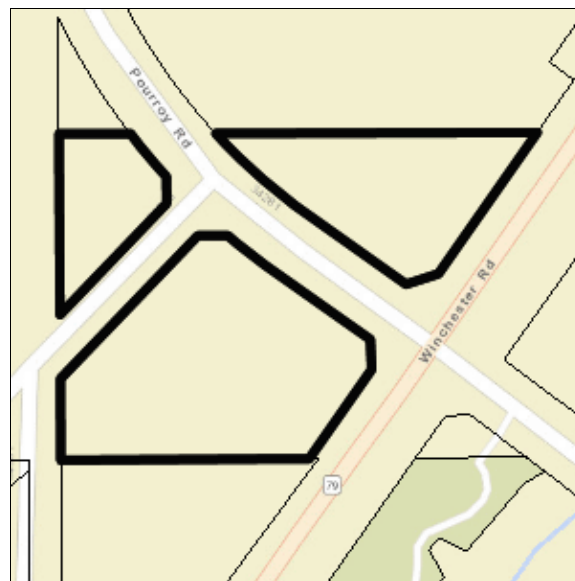
# Riverside County Parcel Report

APN(s):476010017

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## MAPS/IMAGES



## PARCEL

|                   |   |                                 |  |
|-------------------|---|---------------------------------|--|
| APN               | 476-010-017-4   | Supervisory District            | CHUCK WASHINGTON, DISTRICT 3                                   |
| Previous APN      | 476010017<br>000000000  | Township/Range                  | T6SR2W SEC 28 NW   |
| Owner Name        | NOT AVAILABLE ONLINE  | Elevation                       | 1402 ft  |
| Address           | 476010017<br>NOT AVAILABLE  | Thomas Bros. Map<br>Page/Grid   | PAGE: 899, GRID: D4<br>PAGE: 899, GRID: E4                     |
| Mailing Address   | 476010017<br>41805 ALBREA ST 2ND FL<br>FREMONT CA 94538   | Indian Tribal Land              | NOT IN A TRIBAL LAND   |
| Legal Description | 476010017<br>Recorded Book/Page: <a href="#">PM 64/59</a><br>Subdivision Name: PM 11539<br>Lot/Parcel: 4<br>Block:<br>Tract Number: | City Boundary                   | NOT IN A CITY  |
|                   |   | City Spheres of influence       | MURRIETA   |
| Lot Size          | 476010017<br>Recorded lot size is 3.84<br>acres   | March Joint Powers<br>Authority | NOT IN THE JURISDICTION OF THE MARCH JOINT POWERS<br>AUTHORITY |
| Property          | 476010017   | County Service Area             | NOT IN A COUNTY SERVICE AREA                                   |

|                 |  |            |     |
|-----------------|--|------------|-----|
| Characteristics | Year Constructed:<br>Baths:<br>Bedrooms:<br>Construction Type:<br>Garage Type:<br>Property Area (sq ft):<br>Roof Type:<br>Stories:<br>Pool: NO<br>Central Cool: NO<br>Central Heat: NO |            |     |
| Annexation Date | N/A  | LAFCO Case | N/A |
| Proposals       | N/A  |            |     |

**PLANNING more...**

|   |                         |                                   |   |
|---|-------------------------|-----------------------------------|---|
| Specific Plans                                    | NOT IN A SPECIFIC PLAN  | Historic Preservation Districts   | NOT IN A HISTORIC PRESERVATION DISTRICT |
| Land Use Designations                             | CR                      | Agricultural Preserve             | NOT IN AN AGRICULTURAL PRESERVE         |
| General Plan Policy Overlays                      | N/A                     |                                   |   |
| Area Plan (RCIP)                                  | Southwest Area          | Airport Influence Areas           | NOT IN AN AIRPORT INFLUENCE AREA        |
| General Plan Policy Areas                         | HIGHWAY 79 POLICY AREA  | Airport Compatibility Zones       | NOT IN AN AIRPORT COMPATIBILITY AREA    |
| <a href="#">Zoning Classifications (ORD. 348)</a> | C-1/C-P, CZ Number 7709 | Zoning Districts and Zoning Areas | RANCHO CALIFORNIA AREA                  |
| <a href="#">Zoning Overlays</a>                   | NOT IN A ZONING OVERLAY | Community Advisory Councils       | NOT IN A COMMUNITY ADVISORY COUNCIL     |

|                          |     |  |  |
|--------------------------|-----|--|--|
| Residential Permit Stats | N/A |  |  |
|--------------------------|-----|--|--|

**ENVIRONMENTAL more...**

|  |  |   |   |
|--|--|---|---|
| <a href="#">CVMSHCP (Coachella Valley Multi-Species Habitat Conservation Plan) Plan Area</a>         | NOT IN A COACHELLA VALLEY MSHCP FEE AREA               | WRMSHCP (Western Riverside County Multi-Species Habitat Conservation Plan) Cell Group | NOT IN A CELL GROUP   |
| CVMSHCP (Coachella Valley Multi-Species Habitat Conservation Plan) Conservation Area                 | NOT COACHELLA VALLEY CONSERVATION AREA                 | WRMSHCP Cell Number   | 5275  |
| CVMSHCP Fluvial Sand Transport Special Provision Areas   | NOT IN A FLUVIAL SAND TRANSPORT SPECIAL PROVISION AREA | HANS/ERP (Habitat Acquisition and Negotiation Strategy/Expedited Review Process)      | Project:<br>HANS01512<br>Conserve: NO<br>Status: JPR<br>Approval<br>Notes:<br>Development<br>Intake Num:<br>01512<br>LMS Case:<br>HANS01512 |
| <a href="#">WRMSHCP (Western Riverside County Multi-Species Habitat Conservation Plan) Plan Area</a> | WESTERN RIVERSIDE COUNTY                               | Vegetation (2005)   | AGRICULTURE MAPPING UNIT  |

**Fire**

|   |                           |                          |                                   |
|---|---------------------------|--------------------------|-----------------------------------|
| Fire Hazard Classification ( <a href="#">Ord. 787</a> ) | NOT IN A FIRE HAZARD ZONE | Fire Responsibility Area | NOT IN A FIRE RESPONSIBILITY AREA |
|---|---------------------------|--------------------------|-----------------------------------|

**DEVELOPMENT FEES**

|   |  |  |                       |
|---|--|--|-----------------------|
| <a href="#">CVMSHCP (Coachella Valley Multi-Species Habitat Conservation Plan) Fee Area (Ord 875)</a> | NOT IN A COACHELLA VALLEY MSHCP FEE AREA | RBBD (Road & Bridge Benefit District)          | SOUTHWEST AREA ZONE D |
| WRMSHCP (Western Riverside County Multi-Species   | WESTERN RIVERSIDE                        | DIF ( <a href="#">Development Impact Fee</a> ) | SOUTHWEST AREA,       |



|   |  |  |   |
|---|--|--|---|
| Habitat Conservation Plan) Fee Area (Ord. 810)                | COUNTY                                 | Area Ord. 659)                                   | AREA 19                                 |
| Western TUMF (Transportation Uniform Mitigation Fee Ord. 824) | IN OR PARTIALLY WITHIN A TUMF FEE AREA | SKR Fee Area (Stephen's Kagaroo Rat Ord. 663.10) | IN OR PARTIALLY WITHIN THE SKR FEE AREA |
| Eastern TUMF (Transportation Uniform Mitigation Fee Ord. 673) | NOT IN THE EASTERN TUMF FEE AREA       | DA (Development Agreements)                      | NOT IN A DEVELOPMENT AGREEMENT          |

**TRANSPORTATION more...**

|   |   |  |                          |
|---|---|--|--------------------------|
| Circulation Element Ultimate Right-of-Way | IN OR PARTIALLY WITHIN A CIRCULATION ELEMENT RIGHT-OF-WAY | Road Book Page   | 122A                     |
|   |   | Transportation Agreements  | NOT IN A TRANS AGREEMENT |
|   |   | CETAP (Community and Environmental Transportation Acceptability Process) Corridors | NOT IN A CETAP CORRIDOR  |

**HYDROLOGY**

|                        |   |           |                 |
|------------------------|---|-----------|-----------------|
| Flood Plan Review      | *MAYBE REQUIRED, CONTACT RIVERSIDE COUNTY FLOOD CONTROL TO VERIFY | Watershed | SANTA MARGARITA |
| Water District         | EASTERN MUNICIPAL WATER DISTRICT                                  |           |                 |
| Flood Control District | RIVERSIDE COUNTY FLOOD CONTROL DISTRICT                           |           |                 |

**GEOLOGIC**

|                        |                     |                             |   |
|------------------------|---------------------|-----------------------------|---|
| Fault Zone             | NOT IN A FAULT ZONE | Paleontological Sensitivity | LOW POTENTIAL (L): FOLLOWING A LITERATURE SEARCH, RECORDS CHECK AND A FIELD SURVEY, AREAS MAY BE DETERMINED BY A QUALIFIED VERTEBRATE PALEONTOLOGIST AS HAVING LOW POTENTIAL FOR CONTAINING SIGNIFICANT PALEONTOLOGICAL RESOURCES SUBJECT TO ADVERSE IMPACTS. |
| Faults                 | NOT IN A FAULT LINE |                             |   |
| Liquefaction Potential | LOW                 |                             |   |
| Subsidence             | SUSCEPTIBLE         |                             |   |

**MISCELLANEOUS**

|                     |                                      |
|---------------------|--------------------------------------|
| School District     | HEMET UNIFIED                        |
| Communities         | FRENCH VALLEY                        |
| Lighting (Ord. 655) | ZONE: B                              |
| 2010 Census Tract   | 432.35                               |
| Farmland            | LOCAL IMPORTANCE URBAN-BUILT UP LAND |
| Special Notes       | NO SPECIAL NOTES                     |
| Tax Rate Areas      | NO TRA                               |

**Department of Environmental Health Permits**

**Septic Permits**

| Record Id | Application Date | Plan Check Approved Date | Final Inspection Date | Approved Date |
|-----------|------------------|--------------------------|-----------------------|---------------|
| N/A       | N/A              | N/A                      | N/A                   | N/A           |

**Well Water Permits**

| Record Id | PE  | Permit Paid Date | Permit Approved Date | Well Finaled Date |
|-----------|-----|------------------|----------------------|-------------------|
| N/A       | N/A | N/A              | N/A                  | N/A               |

**PLUS PERMITS & CASES**

**Administrative Cases**

| Case                             | Case Description   | Status                            |
|----------------------------------|--|-----------------------------------|
| N/A                              | N/A  | N/A                               |
| <b>Building and Safety Cases</b> |  |                                   |
| Case                             | Case Description   | Status                            |
| BGR1800106                       | ROUGH GRADE FOR PM36161 PARCELS 1-6  | PEND CORRECTION                   |
| BGR1800107                       | PRECISE GRADING FOR SHELL GAS STATION AND CAR WASH                         | PEND CORRECTION                   |
| BGR1900267                       | GRADING STOCKPILE FILL 26,122 (PM36161)                                    | PEND CORRECTION                   |
| BNR170066                        | SHELL GAS STATION W/ CONV STORE AND CAR WASH                               | EXPIRED                           |
| BNR170067                        | SHELL CANOPY FOR GAS STATION/CONV STORE/CAR WASH                           | EXPIRED                           |
| BPL1900046                       | ONSITE SEWER AND WATER FOR GAS STATION, CONV STORE, & CARWASH              | EXPIRED                           |
| BWL1800984                       | TRASH ENCLOSURE FOR MORNING STAR VILLAGE SHELL STATION                     | EXPIRED                           |
| BWL1802451                       | ENGINEERED RETAINING WALL FOR SHELL GAS STATION PARALLEL TO WINCHESTER RD. | EXPIRED                           |
| BXX1800208                       | 8 PARKING LOT LIGHTS & ELECTRICAL FOR VACUUMS FOR SHELL STATION            | EXPIRED                           |
| <b>Code Cases</b>                |  |                                   |
| Case                             | Case Description   | Status                            |
| N/A                              | N/A  | N/A                               |
| <b>Fire Cases</b>                |  |                                   |
| Case                             | Case Description   | Status                            |
| FHAZ0106245                      |  | Closed - Verified<br>Non-Billable |
| FHAZ0310348                      |  | Closed - Verified<br>Non-Billable |
| FHAZ0408925                      |  | Closed-Verified<br>Billable       |
| FHAZ0510879                      |  | Closed - Verified<br>Non-Billable |
| FHAZ0806725                      |  | Closed - Verified<br>Non-Billable |
| FHAZ0902379                      |  | Closed - Verified<br>Non-Billable |
| FHAZ1008041                      |  | Closed - Verified<br>Non-Billable |
| FHAZ1106336                      |  | Closed - Verified<br>Non-Billable |
| FHAZ1209215                      |  | Closed - Verified<br>Non-Billable |
| FHAZ1301164                      |  | Closed - Verified<br>Non-Billable |
| FHAZ1402525                      |  | Closed - Verified<br>Non-Billable |
| FHAZ1502160                      |  | Closed - Verified<br>Non-Billable |
| FHAZ1509563                      |  | Closed - Verified                 |

|              |  |                                   |
|--------------|--|-----------------------------------|
|              |  | Non-Billable                      |
| FHAZ1609351  |  | Closed - Verified<br>Non-Billable |
| FHAZ1700302  |  | Closed - Verified<br>Non-Billable |
| FHAZ1807932  |  | Closed - Verified<br>Non-Billable |
| FHAZ1900706  |  | Closed - Verified<br>Non-Billable |
| FHAZ1907790  |  | Closed - Verified<br>Non-Billable |
| FHAZ9204216  |  | Closed - Verified<br>Non-Billable |
| FPCBP1800138 | MORNINGSTAR VILLAGE SHELL GAS STATION                | ISSUED                            |
| FPCBP1800245 | MORNINGSTAR VILLAGE SHELL CANOPY                     | ISSUED                            |
| FPUWP1800138 | MORNINGSTAR VILLAGE SHELL GAS STATION-ONSITE/OFFSITE | ASSIGNED                          |

### Planning Cases

| Case      | Case Description  | Status    |
|-----------|---|-----------|
| CFG03101  | EA39623   | PAID      |
| CFG05254  | CALIFORNIA FISH AND GAME FOR EA41906  | PAID      |
| CZ06988   | PROPOSING COMMERCIAL ZONING FROM RURAL-RESIDENTIAL  | WITHDRAWN |
| CZ07709   | CHANGE ZONE FROM R-R TO C-1/C-P   | ADOPTED   |
| EA39623   | INTIAL STUDY FOR SCH"A" COMMERCIAL SUBDIVISION  | WITHDRAWN |
| EA41906   | EA FOR GPA01050, CZ07709 & PM36161, PP24054   | APPROVED  |
| GEO02140  | GEOLOGIC REVIEW FOR PM36161 & PP24054   | APPROVED  |
| GPA00700  | PROPOSE (CR) FROM (LDR) FOR COMMERCIAL SUBDIVISION  | WITHDRAWN |
| GPA01050  | CHANGE LANDUSE FROM CD: LDR TO CD: CR   | ADOPTED   |
| HANS01512 | RETAIL SITE   | APPROVED  |
| LLA05549  | LLA TO FACILITATE THE SALE OF 2 PARCELS   | APPLIED   |
| PAR00902  | HANS REVIEW FOR FUTURE COMMERCIAL USE   | APPROVED  |
| PDA04572  | PHASE I ARCHAEOLOGICAL ASSESSMENT   | APPLIED   |
| PDB04400  | GEN BIO ANALYSIS, BUOWL & 13 SPS FOCUSED HA SURVEY:4/26/06 REPORT:5/9/06                                      | APPROVED  |
| PM32581   | SCH"A" COMMERCIAL RETAIL CENTER SUBDIVISION (PROPOSING 16 PARCELS)  | WITHDRAWN |
| PM36161   | SCHEDULE E SUBDIVISION OF 23.66 AC. INTO 6 PARCELS  | APPROVED  |
| PP19579   | COMMERCIAL RETAIL CENTER PLAN REQUIRED FOR PM32581  | WITHDRAWN |
| PP24054   | 160,680 SF MIX OF COMMERCIAL, RESTAURANT, FINANCIA L AND DAYCARE USES ON 23.66 ACRES, CONSTRUCTED IN 3 PHASES | APPROVED  |

### Survey Cases

| Case     | Case Description                     | Status          |
|----------|--------------------------------------|-----------------|
| FPM36161 | SUBDIVIDE 23.66 ACRES INTO 6 PARCELS | PEND CORRECTION |

### Transportation Cases

| <b>Case</b> | <b>Case Description</b>   | <b>Status</b> |
|-------------|---|---------------|
| BMP1800104  | ROUGH GRADE FOR PM36161 PARCELS 1-6                                   | APPLIED       |
| BMP1800105  | PRECISE GRADING FOR SHELL GAS STATION AND CAR WASH                    | APPLIED       |
| IP180041    | TR36161 MORNING STAR VILLAGE N W CORNER OF WINCHESTER RD & POURROY RD | ASSIGNED      |



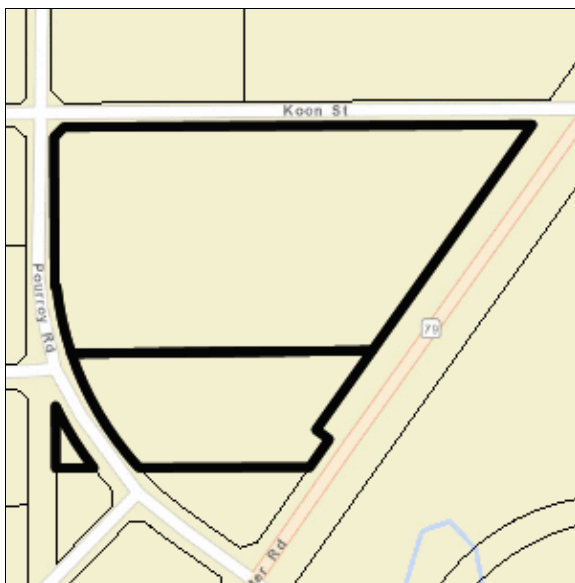
# Riverside County Parcel Report

APN(s):476010055,476010054

## DISCLAIMER

Maps, permit information and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.

## MAPS/IMAGES



## PARCEL

|     |                              |                      |                              |
|-----|------------------------------|----------------------|------------------------------|
| APN | 476-010-054-7, 476-010-055-8 | Supervisory District | CHUCK WASHINGTON, DISTRICT 3 |
|-----|------------------------------|----------------------|------------------------------|

|              |  |                |                  |
|--------------|--|----------------|------------------|
| Previous APN | 476010054<br>000000000<br>476010055<br>000000000 | Township/Range | T6SR2W SEC 28 NW |
|--------------|--|----------------|------------------|

|            |                      |           |         |
|------------|----------------------|-----------|---------|
| Owner Name | NOT AVAILABLE ONLINE | Elevation | 1416 ft |
|------------|----------------------|-----------|---------|

|         |                            |                               |  |
|---------|----------------------------|-------------------------------|--|
| Address | 476010054<br>NOT AVAILABLE | Thomas Bros. Map<br>Page/Grid | PAGE: 899, GRID: D3<br>PAGE: 899, GRID: D4<br>PAGE: 899, GRID: E3<br>PAGE: 899, GRID: E4 |
|         | 476010055<br>NOT AVAILABLE |                               |  |

|                 |   |                    |                      |
|-----------------|---|--------------------|----------------------|
| Mailing Address | 476010054<br>41805 ALBREA ST 2ND FL<br>FREMONT CA 94538 | Indian Tribal Land | NOT IN A TRIBAL LAND |
|                 | 476010055<br>41805 ALBREA ST 2ND FL<br>FREMONT CA 94538 |                    |                      |

|                   |  |               |               |
|-------------------|--|---------------|---------------|
| Legal Description | 476010054<br>Recorded Book/Page: <a href="#">PM 64/59</a><br>Subdivision Name: PM 11539<br>Lot/Parcel: 1<br>Block:<br>Tract Number:<br><br>476010055<br>Recorded Book/Page: <a href="#">PM 64/59</a><br>Subdivision Name: PM 11539<br>Lot/Parcel: 3<br>Block:<br>Tract Number: | City Boundary | NOT IN A CITY |
|-------------------|--|---------------|---------------|

|          |   |                              |   |
|----------|---|------------------------------|---|
|          |   | City Spheres of influence    | MURRIETA  |
| Lot Size | 476010054<br>Recorded lot size is 14.03 acres<br><br>476010055<br>Recorded lot size is 4.18 acres | March Joint Powers Authority | NOT IN THE JURISDICTION OF THE MARCH JOINT POWERS AUTHORITY |

|                          |  |                     |                              |
|--------------------------|--|---------------------|------------------------------|
| Property Characteristics | 476010054<br>Year Constructed:<br>Baths:<br>Bedrooms:<br>Construction Type:<br>Garage Type:<br>Property Area (sq ft):<br>Roof Type:<br>Stories:<br>Pool: NO<br>Central Cool: NO<br>Central Heat: NO<br><br>476010055<br>Year Constructed:<br>Baths:<br>Bedrooms:<br>Construction Type:<br>Garage Type:<br>Property Area (sq ft):<br>Roof Type:<br>Stories:<br>Pool: NO<br>Central Cool: NO<br>Central Heat: NO | County Service Area | NOT IN A COUNTY SERVICE AREA |
|--------------------------|--|---------------------|------------------------------|

|                 |     |            |     |
|-----------------|-----|------------|-----|
| Annexation Date | N/A | LAFCO Case | N/A |
| Proposals       | N/A |            |     |

**PLANNING more...**

|                              |                        |                                 |   |
|------------------------------|------------------------|---------------------------------|---|
| Specific Plans               | NOT IN A SPECIFIC PLAN | Historic Preservation Districts | NOT IN A HISTORIC PRESERVATION DISTRICT |
| Land Use Designations        | CR                     | Agricultural Preserve           | NOT IN AN AGRICULTURAL PRESERVE         |
| General Plan Policy Overlays | N/A                    |                                 |   |
| Area Plan (RCIP)             | Southwest Area         | Airport Influence Areas         | NOT IN AN AIRPORT INFLUENCE AREA        |
| General Plan Policy Areas    | HIGHWAY 79 POLICY AREA | Airport Compatibility Zones     | NOT IN AN AIRPORT COMPATIBILITY         |

|                                   |                         |                                   |                                     |
|-----------------------------------|-------------------------|-----------------------------------|-------------------------------------|
| Zoning Classifications (ORD. 348) | C-1/C-P, CZ Number 7709 | Zoning Districts and Zoning Areas | RANCHO CALIFORNIA AREA              |
| Zoning Overlays                   | NOT IN A ZONING OVERLAY | Community Advisory Councils       | NOT IN A COMMUNITY ADVISORY COUNCIL |

Residential Permit Stats

N/A

**ENVIRONMENTAL more...**

|  |  |   |   |
|--|--|---|---|
| CVMSHCP (Coachella Valley Multi-Species Habitat Conservation Plan) Plan Area         | NOT IN A COACHELLA VALLEY MSHCP FEE AREA               | WRMSHCP (Western Riverside County Multi-Species Habitat Conservation Plan) Cell Group | NOT IN A CELL GROUP   |
| CVMSHCP (Coachella Valley Multi-Species Habitat Conservation Plan) Conservation Area | NOT COACHELLA VALLEY CONSERVATION AREA                 | WRMSHCP Cell Number   | 5275  |
| CVMSHCP Fluvial Sand Transport Special Provision Areas                               | NOT IN A FLUVIAL SAND TRANSPORT SPECIAL PROVISION AREA | HANS/ERP (Habitat Acquisition and Negotiation Strategy/Expedited Review Process)      | Project:<br>HANS01512<br>Conserve: NO<br>Status: JPR<br>Approval<br>Notes:<br>Development<br>Intake Num:<br>01512<br>LMS Case:<br>HANS01512 |
| WRMSHCP (Western Riverside County Multi-Species Habitat Conservation Plan) Plan Area | WESTERN RIVERSIDE COUNTY                               | Vegetation (2005)   | AGRICULTURE MAPPING UNIT  |

**Fire**

|                                       |                           |                          |                                   |
|---------------------------------------|---------------------------|--------------------------|-----------------------------------|
| Fire Hazard Classification (Ord. 787) | NOT IN A FIRE HAZARD ZONE | Fire Responsibility Area | NOT IN A FIRE RESPONSIBILITY AREA |
|---------------------------------------|---------------------------|--------------------------|-----------------------------------|

**DEVELOPMENT FEES**

|  |  |  |   |
|--|--|--|---|
| CVMSHCP (Coachella Valley Multi-Species Habitat Conservation Plan) Fee Area (Ord 875)          | NOT IN A COACHELLA VALLEY MSHCP FEE AREA | RBBB (Road & Bridge Benefit District)            | SOUTHWEST AREA ZONE D                   |
| WRMSHCP (Western Riverside County Multi-Species Habitat Conservation Plan) Fee Area (Ord. 810) | WESTERN RIVERSIDE COUNTY                 | DIF (Development Impact Fee Area Ord. 659)       | SOUTHWEST AREA, AREA 19                 |
| Western TUMF (Transportation Uniform Mitigation Fee Ord. 824)                                  | IN OR PARTIALLY WITHIN A TUMF FEE AREA   | SKR Fee Area (Stephen's Kagaroo Rat Ord. 663.10) | IN OR PARTIALLY WITHIN THE SKR FEE AREA |
| Eastern TUMF (Transportation Uniform Mitigation Fee Ord. 673)                                  | NOT IN THE EASTERN TUMF FEE AREA         | DA (Development Agreements)                      | NOT IN A DEVELOPMENT AGREEMENT          |

**TRANSPORTATION more...**

|   |   |  |                          |
|---|---|--|--------------------------|
| Circulation Element Ultimate Right-of-Way | IN OR PARTIALLY WITHIN A CIRCULATION ELEMENT RIGHT-OF-WAY | Road Book Page   | 122A                     |
|   |   | Transportation Agreements  | NOT IN A TRANS AGREEMENT |
|   |   | CETAP (Community and Environmental Transportation Acceptability Process) Corridors | NOT IN A CETAP CORRIDOR  |

**HYDROLOGY**

|                        |   |           |                 |
|------------------------|---|-----------|-----------------|
| Flood Plan Review      | *MAYBE REQUIRED, CONTACT RIVERSIDE COUNTY FLOOD CONTROL TO VERIFY | Watershed | SANTA MARGARITA |
| Water District         | EASTERN MUNICIPAL WATER DISTRICT                                  |           |                 |
| Flood Control District | RIVERSIDE COUNTY FLOOD CONTROL DISTRICT                           |           |                 |

**GEOLOGIC**

|                        |                     |                             |   |
|------------------------|---------------------|-----------------------------|---|
| Fault Zone             | NOT IN A FAULT ZONE | Paleontological Sensitivity | LOW POTENTIAL (L): FOLLOWING A LITERATURE SEARCH, RECORDS CHECK AND A FIELD SURVEY, AREAS MAY BE DETERMINED BY A QUALIFIED VERTEBRATE PALEONTOLOGIST AS HAVING LOW POTENTIAL FOR CONTAINING SIGNIFICANT PALEONTOLOGICAL RESOURCES SUBJECT TO ADVERSE IMPACTS. |
| Faults                 | NOT IN A FAULT LINE |                             |   |
| Liquefaction Potential | LOW                 |                             |   |
| Subsidence             | SUSCEPTIBLE         |                             |   |

**MISCELLANEOUS**

|                     |                  |
|---------------------|------------------|
| School District     | HEMET UNIFIED    |
| Communities         | FRENCH VALLEY    |
| Lighting (Ord. 655) | ZONE: B          |
| 2010 Census Tract   | 432.35           |
| Farmland            | LOCAL IMPORTANCE |
| Special Notes       | NO SPECIAL NOTES |
| Tax Rate Areas      | NO TRA           |

**Department of Environmental Health Permits**

**Septic Permits**

| Record Id | Application Date | Plan Check Approved Date | Final Inspection Date | Approved Date |
|-----------|------------------|--------------------------|-----------------------|---------------|
| N/A       | N/A              | N/A                      | N/A                   | N/A           |

**Well Water Permits**

| Record Id | PE  | Permit Paid Date | Permit Approved Date | Well Finaled Date |
|-----------|-----|------------------|----------------------|-------------------|
| N/A       | N/A | N/A              | N/A                  | N/A               |

**PLUS PERMITS & CASES**

**Administrative Cases**

| Case | Case Description | Status |
|------|------------------|--------|
| N/A  | N/A              | N/A    |

**Building and Safety Cases**

| Case       | Case Description                        | Status          |
|------------|---|-----------------|
| BGR1900267 | GRADING STOCKPILE FILL 26,122 (PM36161) | PEND CORRECTION |

**Code Cases**

| Case | Case Description | Status |
|------|------------------|--------|
| N/A  | N/A              | N/A    |

**Fire Cases**

| Case        | Case Description | Status                         |
|-------------|------------------|--------------------------------|
| FHAZ0106247 |                  | Closed - Verified Non-Billable |
| FHAZ0106249 |                  | Closed - Verified Non-Billable |
| FHAZ0310352 |                  | Closed - Verified              |



|             |                                   |
|-------------|-----------------------------------|
|             | Non-Billable                      |
| FHAZ0310353 | Closed - Verified<br>Non-Billable |
| FHAZ0408915 | Closed-Verified<br>Billable       |
| FHAZ0408917 | Closed-Verified<br>Billable       |
| FHAZ0510885 | Closed - Verified<br>Non-Billable |
| FHAZ0510887 | Closed - Verified<br>Non-Billable |
| FHAZ0703156 | Closed - Verified<br>Non-Billable |
| FHAZ0806723 | Closed-Verified<br>Billable       |
| FHAZ0806724 | Closed-Verified<br>Billable       |
| FHAZ0902377 | Closed - Verified<br>Non-Billable |
| FHAZ0902378 | Closed - Verified<br>Non-Billable |
| FHAZ1008039 | Closed - Verified<br>Non-Billable |
| FHAZ1008040 | Closed - Verified<br>Non-Billable |
| FHAZ1106350 | Closed - Verified<br>Non-Billable |
| FHAZ1106351 | Closed - Verified<br>Non-Billable |
| FHAZ1209229 | Closed - Verified<br>Non-Billable |
| FHAZ1209230 | Closed - Verified<br>Non-Billable |
| FHAZ1301175 | Closed - Verified<br>Non-Billable |
| FHAZ1301176 | Closed - Verified<br>Non-Billable |
| FHAZ1402536 | Closed - Verified<br>Non-Billable |
| FHAZ1402537 | Closed - Verified<br>Non-Billable |
| FHAZ1502130 | Closed - Verified<br>Non-Billable |
| FHAZ1502131 | Closed - Verified<br>Non-Billable |
| FHAZ1509588 | Closed - Verified<br>Non-Billable |
| FHAZ1509589 | Closed - Verified<br>Non-Billable |
| FHAZ1607140 | Closed - Verified                 |

|             |  |                                   |
|-------------|--|-----------------------------------|
|             |  | Non-Billable                      |
| FHAZ1607141 |  | Closed - Verified<br>Non-Billable |
| FHAZ1609347 |  | Closed - Verified<br>Non-Billable |
| FHAZ1609348 |  | Closed - Verified<br>Non-Billable |
| FHAZ1700303 |  | Closed - Verified<br>Non-Billable |
| FHAZ1700304 |  | Closed - Verified<br>Non-Billable |
| FHAZ1807933 |  | Closed - Verified<br>Non-Billable |
| FHAZ1807934 |  | Closed - Verified<br>Non-Billable |
| FHAZ1900703 |  | Open                              |
| FHAZ1900705 |  | Open                              |
| FHAZ9204215 |  | Closed - Verified<br>Non-Billable |

**Planning Cases**

| Case      | Case Description  | Status    |
|-----------|---|-----------|
| CFG03101  | EA39623   | PAID      |
| CFG05254  | CALIFORNIA FISH AND GAME FOR EA41906  | PAID      |
| CZ06988   | PROPOSING COMMERCIAL ZONING FROM RURAL-RESIDENTIAL  | WITHDRAWN |
| CZ07709   | CHANGE ZONE FROM R-R TO C-1/C-P   | ADOPTED   |
| EA39623   | INTIAL STUDY FOR SCH"A" COMMERCIAL SUBDIVISION  | WITHDRAWN |
| EA41906   | EA FOR GPA01050, CZ07709 & PM36161, PP24054   | APPROVED  |
| GEO02140  | GEOLOGIC REVIEW FOR PM36161 & PP24054   | APPROVED  |
| GPA00700  | PROPOSE (CR) FROM (LDR) FOR COMMERCIAL SUBDIVISION  | WITHDRAWN |
| GPA01050  | CHANGE LANDUSE FROM CD: LDR TO CD: CR   | ADOPTED   |
| HANS01512 | RETAIL SITE   | APPROVED  |
| PAR00902  | HANS REVIEW FOR FUTURE COMMERCIAL USE   | APPROVED  |
| PDA04572  | PHASE I ARCHAEOLOGICAL ASSESSMENT   | APPLIED   |
| PDB04400  | GEN BIO ANALYSIS, BUOWL & 13 SPS FOCUSED HA SURVEY:4/26/06 REPORT:5/9/06  | APPROVED  |
| PDB04554  | FOCUSED SURVEYS FOR THE BUOWL, CALIF ORCUTT GRASS, COULTER'S GOLDFIELDS, LITTLE MOUSETAIL, SPREADING NAVARRETIA & SAN DIEGO AMBROSIA SURVEY DATES: 6/16 & 23/2006, 7/7 & 12/2006 REPORT DATE: 7/16/06 | APPROVED  |
| PM32581   | SCH"A" COMMERCIAL RETAIL CENTER SUBDIVISION (PROPOSING 16 PARCELS)  | WITHDRAWN |
| PM36161   | SCHEDULE E SUBDIVISION OF 23.66 AC. INTO 6 PARCELS  | APPROVED  |
| PP19579   | COMMERCIAL RETAIL CENTER PLAN REQUIRED FOR PM32581  | WITHDRAWN |
| PP24054   | 160,680 SF MIX OF COMMERCIAL, RESTAURANT, FINANCIA L AND DAYCARE USES ON 23.66 ACRES, CONSTRUCTED IN 3 PHASES   | APPROVED  |

**Survey Cases**

| <b>Case</b> | <b>Case Description</b> | <b>Status</b> |
|-------------|-------------------------|---------------|
| MAP32581    |                         | ISSUED        |
| MAP36161    |                         | ISSUED        |

**Transportation Cases**

| <b>Case</b> | <b>Case Description</b> | <b>Status</b> |
|-------------|-------------------------|---------------|
| ST00854     | WINCHESTER PLAZA        | APPLIED       |

## USER QUESTIONNAIRE

### INTRODUCTION

In order to qualify for one of the *Landowner Liability Protections* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2002, the user must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that “*all appropriate inquiry*” is not complete.

(1) Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

CIRCLE YES or  NO

If yes, please explain in detail.

(2) Are you aware of any Act Use Limitations (AUL), such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

YES or  NO

If yes, please explain.

(3) As the user of this Environmental Site Assessment (ESA) do you have any specialized knowledge or familiarity 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 its neighboring *property*, so that you may have specific knowledge of the chemicals and processes used by this type of business?

YES or  NO

If yes, please explain.

(4) Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*?

YES or NO

If you believe that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?

YES or NO

If yes, please explain.

(5) Are you aware of commonly known or *reasonably* ascertainable information that would help the *environment professional* to identify conditions pinpointing releases or threaten releases of hazardous materials and/ or chemicals? For example, as user,

(a.) Do you know of any past uses of the *property*? YES or NO

Vacant land. -- farm land

(b.) Do you know of specific chemicals that are present or once were present at the *property*? YES or NO

(c.) Do you know of any chemical spills or any other chemical releases that have taken place at the *property*? YES or NO

(d.) Do you know of any environmental cleanups that have taken place at the *property*? YES or NO

If any yes, please explain.

(6) As the user of this Environmental Site Assessment (ESA), based on your knowledge and experience related to the *property* are there any *obvious* indicators that point to the presence or likely presence of a contamination at the *property*?

YES or NO

If yes, please explain.

Completed By Sunny Goyal  
Print Name  
[Signature]

# United States Drug Enforcement Administration- Clandestine Laboratory Register Data

| state      | county  | city          | address1                 | address2 | date       |
|------------|---------|---------------|--------------------------|----------|------------|
| California | Alameda | San Lorenzo   | 17283 Via Annette Dr     |          | 2/6/2004   |
| California | Alameda | San Lorenzo   | 17283 Via Annette Dr     |          | 2/6/2004   |
| California | Alameda | San Leandro   | 1735 138th Ave           |          | 2/18/2004  |
| California | Alameda | San Leandro   | 1735 138th Ave           |          | 2/18/2004  |
| California | Alameda | Newark        | 37120 Spruce St G        |          | 2/29/2004  |
| California | Alameda | Hayward       | 333 Jackson St 219       |          | 3/12/2004  |
| California | Alameda | Hayward       | 333 Jackson St 219       |          | 3/12/2004  |
| California | Alameda | Hayward       | 1032 Central Blvd        |          | 6/9/2004   |
| California | Alameda | Hayward       | 1032 Central Blvd        |          | 6/9/2004   |
| California | Alameda | Hayward       | 231 Culp Ave             |          | 8/29/2004  |
| California | Alameda | Hayward       | 231 Culp Ave             |          | 8/29/2004  |
| California | Alameda | Union City    | 32673 Brenda Way 3       |          | 9/28/2004  |
| California | Alameda | Union City    | 32673 Brenda Way 3       |          | 9/28/2004  |
| California | Alameda | Pleasanton    | 6443 Alisal St           |          | 1/19/2005  |
| California | Alameda | San Leandro   | 872 Donovan Dr           |          | 5/4/2005   |
| California | Alameda | San Leandro   | 14446 Elm St             |          | 5/31/2005  |
| California | Alameda | Hayward       | 27948 Pueblo Serena Way  |          | 1/9/2006   |
| California | Alameda | Union City    | 2351 Hartford Drive      |          | 4/7/2006   |
| California | Alameda | Union City    | 2351 Hartford Drive      |          | 4/7/2006   |
| California | Alameda | Fremont       | 35856 Toledo Court       |          | 7/28/2006  |
| California | Alameda | San Lorenzo   | 1302 Via San Juan Street |          | 10/25/2007 |
| California | Alameda | San Leandro   | 1553 Santa Maria Road    |          | 11/28/2007 |
| California | Alameda | San Leandro   | 1553 Santa Maria Road    |          | 11/28/2007 |
| California | Alameda | Hayward       | 698 Overhill Drive       |          | 5/16/2008  |
| California | Alameda | Hayward       | 698 Overhill Drive       |          | 5/16/2008  |
| California | Alameda | Berkeley      | 2240 9th Street          |          | 7/19/2008  |
| California | Alameda | Oakland       | 923 39th Street          |          | 11/25/2008 |
| California | Alameda | San Lorenzo   | 16150 Arriba Viaduct     |          | 4/8/2009   |
| California | Alameda | Pleasanton    | 818 Angela Street        |          | 3/10/2010  |
| California | Alameda | Pleasanton    | 818 Angela Street        |          | 3/10/2010  |
| California | Alameda | Castro Valley | 19127 Santa Maria Avenue |          | 3/24/2010  |
| California | Alameda | Castro Valley | 19127 Santa Maria Avenue |          | 3/24/2010  |
| California | Alameda | Oakland       | 1950 86th Avenue         |          | 12/7/2015  |
| California | Alameda | Oakland       | 1950 86th Avenue         |          | 12/7/2015  |
| California | Butte   | Oroville      | 1940 Helman St           |          | 2/4/2004   |
| California | Butte   | Oroville      | 1940 Helman St           |          | 2/4/2004   |
| California | Butte   | Oroville      | 110 Greenback Dr         |          | 2/5/2004   |
| California | Butte   | Oroville      | 110 Greenback Dr         |          | 2/5/2004   |
| California | Butte   | Oroville      | 2437 Oro Quincy Hwy      |          | 3/17/2004  |
| California | Butte   | Oroville      | 2437 Oro Quincy Hwy      |          | 3/17/2004  |
| California | Butte   | Paradise      | 6441 Moss Ln             |          | 3/31/2004  |
| California | Butte   | Paradise      | 6441 Moss Ln             |          | 3/31/2004  |
| California | Butte   | Magalia       | 3 Jordan Hill Rd         |          | 3/31/2004  |
| California | Butte   | Biggs         | 2164 Larkin              |          | 4/9/2004   |
| California | Butte   | Biggs         | 2164 Larkin              |          | 4/9/2004   |
| California | Butte   | Chico         | 939 W East Ave 4         |          | 4/19/2004  |
| California | Butte   | Chico         | 939 W East Ave 4         |          | 4/19/2004  |
| California | Butte   | Oroville      | 126 Canyon Highlands Dr  |          | 5/5/2004   |

|            |       |          |                         |            |
|------------|-------|----------|-------------------------|------------|
| California | Butte | Oroville | 126 Canyon Highlands Dr | 5/5/2004   |
| California | Butte | Oroville | 208 Misty View Ln       | 5/10/2004  |
| California | Butte | Oroville | 208 Misty View Ln       | 5/10/2004  |
| California | Butte | Chico    | 853 E 7th St            | 7/14/2004  |
| California | Butte | Oroville | 2750 De Bangar Hwy      | 7/21/2004  |
| California | Butte | Paradise | 538 Castle              | 7/23/2004  |
| California | Butte | Paradise | 538 Castle              | 7/23/2004  |
| California | Butte | Oroville | 2720 Oro Dam Blvd 6a    | 8/3/2004   |
| California | Butte | Oroville | 2720 Oro Dam Blvd 6a    | 8/3/2004   |
| California | Butte | Chico    | 453 Posada Way 12       | 8/4/2004   |
| California | Butte | Chico    | 453 Posada Way 12       | 8/4/2004   |
| California | Butte | Magalia  | 14723 Gold Cone Dr      | 9/21/2004  |
| California | Butte | Biggs    | 488 G St                | 10/26/2004 |
| California | Butte | Biggs    | 488 G St                | 10/26/2004 |
| California | Butte | Oroville | 1130 Tehama St          | 1/12/2005  |
| California | Butte | Oroville | 1130 Tehama St          | 1/12/2005  |
| California | Butte | Chico    | 1056 E 8th St           | 3/18/2005  |
| California | Butte | Chico    | 1056 E 8th St           | 3/18/2005  |
| California | Butte | Oroville | 1915 Plumas St          | 6/9/2005   |
| California | Butte | Durham   | 9606 Fimple Rd          | 7/15/2005  |
| California | Butte | Chico    | 696 7th E St            | 10/19/2005 |
| California | Butte | Chico    | 1402 Pomona Ln          | 11/17/2005 |
| California | Butte | Oroville | 2794 Oak Knoll Way      | 11/30/2005 |
| California | Butte | Chico    | 997 E 16th St           | 12/15/2005 |
| California | Butte | Chico    | 997 E 16th St           | 12/15/2005 |
| California | Butte | Gridley  | 233 Kentucky Street     | 2/21/2006  |
| California | Butte | Gridley  | 233 Kentucky Street     | 2/21/2006  |
| California | Butte | Gridley  | 275 Kentucky St         | 2/21/2006  |
| California | Butte | Gridley  | 275 Kentucky St         | 2/21/2006  |
| California | Butte | Paradise | 5955 Hazel Way          | 5/25/2006  |
| California | Butte | Oroville | 91 Toyon Hills Drive    | 2/23/2007  |
| California | Butte | Chico    | 1735 Magnolia Avenue    | 2/26/2007  |
| California | Butte | Chico    | 1735 Magnolia Avenue    | 2/26/2007  |
| California | Butte | Oroville | 165 Hurles Circle       | 3/18/2007  |
| California | Butte | Oroville | 165 Hurles Circle       | 3/18/2007  |
| California | Butte | Oroville | 4210 Oro Bangor Highway | 6/1/2007   |
| California | Butte | Oroville | 4210 Oro Bangor Highway | 6/1/2007   |
| California | Butte | Palermo  | 2398 Louis Avenue       | 8/27/2007  |
| California | Butte | Palermo  | 2398 Louis Avenue       | 8/27/2007  |
| California | Butte | Oroville | 2349 Via Madero         | 9/11/2007  |
| California | Butte | Oroville | 1616 Oro Dam Boulevard  | 10/29/2007 |
| California | Butte | Oroville | 1616 Oro Dam Boulevard  | 10/29/2007 |
| California | Butte | Oroville | 1660 20th Street        | 1/31/2008  |
| California | Butte | Oroville | 1660 20th Street        | 1/31/2008  |
| California | Butte | Oroville | 3 Alverda Drive         | 5/13/2008  |
| California | Butte | Oroville | 3 Alverda Drive         | 5/13/2008  |
| California | Butte | Chico    | 1024 Neal Dow Avenue    | 6/7/2008   |
| California | Butte | Honcut   | 16 Truxton Court        | 9/2/2008   |
| California | Butte | Honcut   | 16 Truxton Court        | 9/2/2008   |



|            |              |                |                              |            |
|------------|--------------|----------------|------------------------------|------------|
| California | Butte        | Oroville       | 1840 7th Street              | 9/17/2008  |
| California | Butte        | Oroville       | 1840 7th Street              | 9/17/2008  |
| California | Butte        | Chico          | 729 Nord Avenue              | 9/30/2008  |
| California | Butte        | Chico          | 729 Nord Avenue              | 9/30/2008  |
| California | Butte        | Oroville       | 1960 Rose Street             | 4/7/2009   |
| California | Butte        | Oroville       | 1960 Rose Street             | 4/7/2009   |
| California | Butte        | Oroville       | 5075 Lower Wyandotte Avenue  | 4/7/2009   |
| California | Butte        | Oroville       | 5075 Lower Wyandotte Avenue  | 4/7/2009   |
| California | Butte        | Gridley        | 124 East Gridley Road        | 5/14/2010  |
| California | Butte        | Gridley        | 124 East Gridley Road        | 5/14/2010  |
| California | Butte        | Durham         | 8200 Durnel Drive            | 5/22/2010  |
| California | Butte        | Durham         | 8200 Durnel Drive            | 5/22/2010  |
| California | Calaveras    | Mountain Ranch | 5645 Doster Rd               | 12/20/2004 |
| California | Calaveras    | Mountain Ranch | 5645 Doster Rd               | 12/20/2004 |
| California | Contra Costa | Rodeo          | 1120 4th St                  | 7/8/2004   |
| California | Contra Costa | Rodeo          | 1120 4th St                  | 7/8/2004   |
| California | Contra Costa | Antioch        | 1927 Birch Ave               | 12/12/2004 |
| California | Contra Costa | Martinez       | 625 Marina Vista St          | 3/22/2005  |
| California | Contra Costa | Martinez       | 625 Marina Vista St          | 3/22/2005  |
| California | Contra Costa | Richmond       | 2420 Esmond Avenue           | 12/5/2006  |
| California | Contra Costa | El Sobrante    | 2211 Rancho Road             | 9/20/2007  |
| California | Contra Costa | El Sobrante    | 2211 Rancho Road             | 9/20/2007  |
| California | Contra Costa | Richmond       | 712 Bradford Drive           | 7/29/2008  |
| California | Contra Costa | Richmond       | 712 Bradford Drive           | 7/29/2008  |
| California | Contra Costa | Brentwood      | 638 Summerwood Drive         | 2/11/2010  |
| California | Contra Costa | Brentwood      | 638 Summerwood Drive         | 2/11/2010  |
| California | Contra Costa | Crockett       | 815 1st Avenue               | 12/9/2010  |
| California | Contra Costa | Crockett       | 815 1st Avenue               | 12/9/2010  |
| California | Contra Costa | Bay Point      | 71 Mountain View Avenue      | 3/22/2011  |
| California | Contra Costa | Bay Point      | 71 Mountain View Avenue      | 3/22/2011  |
| California | Contra Costa | Brentwood      | 1880 East Eden Plains Street | 10/2/2014  |
| California | Contra Costa | Brentwood      | 1880 East Eden Plains Street | 10/2/2014  |
| California | Del Norte    | Crescent City  | 1733 Wildwood Ln             | 4/14/2004  |
| California | Del Norte    | Crescent City  | 1733 Wildwood Ln             | 4/14/2004  |
| California | El Dorado    | El Dorado      | 6841 Union Mine Rd           | 4/29/2004  |
| California | El Dorado    | El Dorado      | 6841 Union Mine Rd           | 4/29/2004  |
| California | Fresno       | Reedley        | 22134 E Hogan Ave            | 1/15/2004  |
| California | Fresno       | Reedley        | 22134 E Hogan Ave            | 1/15/2004  |
| California | Fresno       | Fresno         | 12884 S Elm Ave              | 7/15/2004  |
| California | Fresno       | Fresno         | 12884 S Elm Ave              | 7/15/2004  |
| California | Fresno       | Fresno         | 1315 E Cornell               | 7/15/2004  |
| California | Fresno       | Fresno         | 1315 E Cornell               | 7/15/2004  |
| California | Fresno       | Fresno         | 7090 N Fruit Ave 140         | 7/29/2004  |
| California | Fresno       | Coalinga       | 47932 Lost Hills Rd          | 8/30/2004  |
| California | Fresno       | Fresno         | 4822 E Mono St               | 6/9/2005   |
| California | Fresno       | Fresno         | 4822 E Mono St               | 6/9/2005   |
| California | Fresno       | San Joaquin    | 2243 Eldorado S B            | 3/10/2006  |
| California | Fresno       | Fresno         | 2540 North Floyd Avenue      | 11/24/2006 |
| California | Fresno       | Fresno         | 2540 North Floyd Avenue      | 11/24/2006 |

|            |          |               |                                       |            |
|------------|----------|---------------|---------------------------------------|------------|
| California | Fresno   | Caruthers     | 14594 South Elm Avenue                | 11/28/2006 |
| California | Fresno   | Caruthers     | 14594 South Elm Avenue                | 11/28/2006 |
| California | Fresno   | Fresno        | 8971 Mountain View                    | 12/13/2006 |
| California | Fresno   | Fresno        | 8971 Mountain View                    | 12/13/2006 |
| California | Fresno   | Fowler        | 6424 South Fowler Avenue              | 8/21/2007  |
| California | Fresno   | Reedley       | 20069 Clayton Avenue                  | 12/8/2007  |
| California | Fresno   | Reedley       | 20069 Clayton Avenue                  | 12/8/2007  |
| California | Fresno   | Fresno        | 4409 East Hedges Avenue A             | 12/16/2008 |
| California | Fresno   | Dos Palos     | 43186 Merrill Avenue                  | 4/15/2010  |
| California | Fresno   | Dos Palos     | 43186 Merrill Avenue                  | 4/15/2010  |
| California | Fresno   | Clovis        | 287 West Barstow Avenue 125b          | 10/26/2012 |
| California | Fresno   | Fresno        | 3001 West Swift Ave Avenue 104        | 8/6/2013   |
| California | Fresno   | Fresno        | 3001 West Swift Ave Avenue 104        | 8/6/2013   |
| California | Fresno   | Squaw Valley  | 46992 Creekside Road                  | 11/18/2013 |
| California | Fresno   | Fresno        | 4851 North N Cedar Ave Avenue 117     | 1/6/2014   |
| California | Fresno   | Fresno        | 3852 East E Olive Ave Avenue 201      | 1/14/2014  |
| California | Fresno   | Fresno        | 3852 East E Olive Ave Avenue 201      | 1/14/2014  |
| California | Fresno   | Fresno        | 3025 East E Gettysburg Ave Avenue 102 | 1/21/2014  |
| California | Fresno   | Fresno        | 3025 East E Gettysburg Ave Avenue 102 | 1/21/2014  |
| California | Fresno   | Fresno        | 7675 N First Street Box 203           | 9/6/2015   |
| California | Fresno   | Fresno        | 4102 E North Avenue                   | 12/24/2015 |
| California | Fresno   | Fresno        | 2715 N Millbrook Avenue               | 2/3/2016   |
| California | Fresno   | Fresno        | 2715 N Millbrook Avenue               | 2/3/2016   |
| California | Glenn    | Willows       | 5627 County Road 69                   | 5/12/2004  |
| California | Glenn    | Willows       | 5627 County Road 69                   | 5/12/2004  |
| California | Humboldt | Fortuna       | 1788 Penn Ave                         | 3/2/2004   |
| California | Humboldt | Fortuna       | 1788 Penn Ave                         | 3/2/2004   |
| California | Humboldt | Mckinleyville | 2331 Central Ave 4                    | 3/25/2004  |
| California | Humboldt | Eureka        | 1984 Gage Ln                          | 4/27/2004  |
| California | Humboldt | Blue Lake     | 113 Raymar Ave                        | 5/9/2005   |
| California | Humboldt | Eureka        | 1034 14th St                          | 6/6/2005   |
| California | Humboldt | Eureka        | 1034 14th St                          | 6/6/2005   |
| California | Humboldt | Eureka        | 1323 Summer Street                    | 6/15/2006  |
| California | Humboldt | Arcata        | 258 Lupin Avenue                      | 8/30/2006  |
| California | Humboldt | Arcata        | 258 Lupin Avenue                      | 8/30/2006  |
| California | Imperial | Holtville     | 819 1/2 Fern St                       | 1/28/2004  |
| California | Imperial | Holtville     | 819 1/2 Fern St                       | 1/28/2004  |
| California | Imperial | Holtville     | 2300 Slayton Rd                       | 2/5/2004   |
| California | Imperial | Seeley        | 2205 Haskell Rd                       | 7/20/2004  |
| California | Imperial | Holtville     | 819 1/2 Fern Ave                      | 3/20/2006  |
| California | Imperial | Holtville     | 819 1/2 Fern Ave                      | 3/20/2006  |
| California | Kern     | Shafter       | 18478 S Shafter Ave                   | 1/23/2004  |
| California | Kern     | Shafter       | 18478 S Shafter Ave                   | 1/23/2004  |
| California | Kern     | Delano        | 1305 20th Ave                         | 2/4/2004   |
| California | Kern     | Delano        | 1305 20th Ave                         | 2/4/2004   |
| California | Kern     | Bakersfield   | 8614 Fuller                           | 2/22/2004  |
| California | Kern     | Bakersfield   | 2600 Norman Ave                       | 5/26/2004  |
| California | Kern     | Bakersfield   | 2600 Norman Ave                       | 5/26/2004  |
| California | Kern     | Shafter       | 31396 Burbank Ave                     | 6/12/2004  |

|            |       |                     |                         |            |
|------------|-------|---------------------|-------------------------|------------|
| California | Kern  | Taft                | 412 Kern St             | 8/26/2004  |
| California | Kern  | Lake Isabella       | 3105 Wenyor             | 9/21/2004  |
| California | Kern  | Lake Isabella       | 3105 Wenyor             | 9/21/2004  |
| California | Kern  | Ridgecrest          | 709 W Atkins Ave        | 12/9/2004  |
| California | Kern  | Bakersfield         | 321 Oakdale Dr          | 3/15/2005  |
| California | Kern  | Bakersfield         | 2714 Allen Rd           | 3/22/2005  |
| California | Kern  | Bakersfield         | 2714 Allen Rd           | 3/22/2005  |
| California | Kern  | Taft                | 217 Lierly St           | 6/20/2005  |
| California | Kern  | Bakersfield         | 2314 Center St          | 10/19/2005 |
| California | Kern  | Bakersfield         | 200 Miraflores          | 2/28/2006  |
| California | Kern  | Bakersfield         | 200 Miraflores          | 2/28/2006  |
| California | Kern  | Bakersfield         | 101 Agarnsey Ln         | 3/20/2006  |
| California | Kern  | Bakersfield         | 101 Agarnsey Ln         | 3/20/2006  |
| California | Kern  | Bakersfield         | 109 Clyde Street        | 4/26/2006  |
| California | Kern  | Bakersfield         | 109 Clyde Street        | 4/26/2006  |
| California | Kern  | Bakersfield         | 200 Miraflores Avenue   | 3/18/2007  |
| California | Kern  | Bakersfield         | 200 Miraflores Avenue   | 3/18/2007  |
| California | Kern  | Ridgecrest          | 345 West Moyer Avenue   | 6/4/2007   |
| California | Kern  | Ridgecrest          | 345 West Moyer Avenue   | 6/4/2007   |
| California | Kern  | Lamont              | 10224 San Emidio Street | 7/11/2007  |
| California | Kern  | Lamont              | 10224 San Emidio Street | 7/11/2007  |
| California | Kern  | Lamont              | 8008 Middleton Lane     | 5/19/2008  |
| California | Kern  | Lamont              | 8008 Middleton Lane     | 5/19/2008  |
| California | Kern  | Johannesburg        | 405 Broadway Avenue     | 10/9/2008  |
| California | Kern  | Johannesburg        | 405 Broadway Avenue     | 10/9/2008  |
| California | Kern  | Bakersfield         | 8th Street              | 6/22/2009  |
| California | Kern  | Bakersfield         | 3801 Newcombe Court     | 3/3/2011   |
| California | Kern  | Bakersfield         | 3804 La Tonia Court     | 3/3/2011   |
| California | Kern  | Bakersfield         | 3804 La Tonia Court     | 3/3/2011   |
| California | Kern  | Bakersfield         | 3801 Newcombe Court     | 3/3/2011   |
| California | Kern  | Bakersfield         | 218 El Tejon Avenue     | 7/8/2011   |
| California | Kern  | Bakersfield         | 218 El Tejon Avenue     | 7/8/2011   |
| California | Kern  | Bakersfield         | 7601 Redbank            | 12/13/2011 |
| California | Kern  | Bakersfield         | 7601 Redbank            | 12/13/2011 |
| California | Kings | Unincorporated City | 6260 Barstow Ave        | 5/21/2004  |
| California | Kings | Unincorporated City | 6260 Barstow Ave        | 5/21/2004  |
| California | Kings | Hanford             | 11111 9 3/4 Avenue      | 4/16/2007  |
| California | Kings | Hanford             | 11111 9 3/4 Avenue      | 4/16/2007  |
| California | Lake  | Lakeport            | 525 Esplanade St        | 1/27/2004  |
| California | Lake  | Clearlake           | 13660 East Lake Dr      | 4/19/2004  |
| California | Lake  | Clearlake           | 13660 East Lake Dr      | 4/19/2004  |
| California | Lake  | Clearlake           | 15888 19th St           | 4/28/2004  |
| California | Lake  | Clearlake           | 15888 19th St           | 4/28/2004  |
| California | Lake  | Finley              | 3424 Stone Dr           | 9/15/2004  |
| California | Lake  | Finley              | 3424 Stone Dr           | 9/15/2004  |
| California | Lake  | Lower Lake          | 10243 Siegler Canyon Rd | 11/17/2004 |
| California | Lake  | Lower Lake          | 10243 Siegler Canyon Rd | 11/17/2004 |
| California | Lake  | Clearlake           | 16537 35th Ave          | 6/18/2005  |
| California | Lake  | Nice                | 6643 Collier            | 2/15/2006  |

|            |             |                      |                                |            |
|------------|-------------|----------------------|--------------------------------|------------|
| California | Lake        | Clearlake            | 13820 Manakee Drive            | 1/20/2010  |
| California | Lake        | Clearlake            | 13820 Manakee Drive            | 1/20/2010  |
| California | Los Angeles | Redondo Beach        | 208 B Ave                      | 1/4/2004   |
| California | Los Angeles | Los Angeles          | 2742 Lanfranco St 7            | 1/7/2004   |
| California | Los Angeles | Covina               | 444 Citrus N Ave               | 1/13/2004  |
| California | Los Angeles | Santa Fe Springs     | 11462 Telegraph Rd             | 1/14/2004  |
| California | Los Angeles | Littlerock           | 8632 Avenue U E                | 1/21/2004  |
| California | Los Angeles | Long Beach           | 2520 Pacific Coast E Hwy 221   | 1/27/2004  |
| California | Los Angeles | Lancaster            | 3995 Avenue H W                | 3/3/2004   |
| California | Los Angeles | East Los Angeles     | 4135 Floral Ave                | 3/5/2004   |
| California | Los Angeles | Compton              | 1016 Poinsettia S Ave          | 3/10/2004  |
| California | Los Angeles | Llano                | 25757 V E Ave                  | 3/24/2004  |
| California | Los Angeles | Palmdale             | 38233 Hendon Dr                | 4/3/2004   |
| California | Los Angeles | Torrance             | 4111 Pacific Coast Highway 308 | 4/11/2004  |
| California | Los Angeles | Norwalk              | 11026 Imperial E Hwy 10        | 4/21/2004  |
| California | Los Angeles | Los Angeles          | 560 Keenan Ave                 | 5/12/2004  |
| California | Los Angeles | La Canada Flintridge | 5016 Angeles Crest Hwy         | 5/25/2004  |
| California | Los Angeles | Los Angeles          | 5320 1/2 Ithaca Ave            | 6/22/2004  |
| California | Los Angeles | Whittier             | 8171 Washington Ave            | 6/24/2004  |
| California | Los Angeles | Long Beach           | 1401 11 E St                   | 7/1/2004   |
| California | Los Angeles | Signal Hill          | 2210 Gaviota N Ave C           | 7/6/2004   |
| California | Los Angeles | Glendora             | 19104 Manua Loa                | 7/21/2004  |
| California | Los Angeles | Los Angeles          | 21150 Hobart                   | 8/18/2004  |
| California | Los Angeles | La Puente            | 410 Evanwood Ave               | 9/22/2004  |
| California | Los Angeles | Baldwin Park         | 3109 Robinette Ave             | 9/28/2004  |
| California | Los Angeles | San Dimas            | 1717 Monte Vista Dr            | 10/7/2004  |
| California | Los Angeles | Pomona               | 320 Jefferson W Ave            | 10/19/2004 |
| California | Los Angeles | Lynwood              | 10868 Drury Ln                 | 10/29/2004 |
| California | Los Angeles | El Monte             | 11828 Emery St                 | 11/18/2004 |
| California | Los Angeles | El Monte             | 4350 Ranger Ave                | 11/29/2004 |
| California | Los Angeles | La Puente            | 18631 Altario St               | 1/13/2005  |
| California | Los Angeles | Lancaster            | 42705 6th E St                 | 2/3/2005   |
| California | Los Angeles | Downey               | 9322 Stamps Ave                | 2/18/2005  |
| California | Los Angeles | City Of Commerce     | 5820 Ramon Ct                  | 4/14/2005  |
| California | Los Angeles | San Pedro            | 975 5th W St                   | 8/3/2005   |
| California | Los Angeles | Winnetka             | 8474 Quartz Ave                | 9/28/2005  |
| California | Los Angeles | Van Nuys             | 15149 Domino St                | 11/8/2005  |
| California | Los Angeles | Whittier             | 6133 Mcnees Ave                | 1/14/2006  |
| California | Los Angeles | Panorama City        | 8154 Allott                    | 1/19/2006  |
| California | Los Angeles | Wilmington           | 1724 Fries Ave                 | 2/17/2006  |
| California | Los Angeles | Gardena              | 14903 Chadron Ave 1            | 3/1/2006   |
| California | Los Angeles | Los Angeles          | 1406 Gordon Street             | 3/26/2006  |
| California | Los Angeles | Long Beach           | 2124 Mc Kenzie Avenue          | 4/25/2006  |
| California | Los Angeles | Lancaster            | 44634 Date Avenue              | 6/2/2006   |
| California | Los Angeles | Shadow Hills         | 10339 Johanna Avenue           | 6/22/2006  |
| California | Los Angeles | Los Angeles          | 123 S Lake Street              | 7/14/2006  |
| California | Los Angeles | Sylmar               | 12600 Bradley Street           | 7/19/2006  |
| California | Los Angeles | Diamond Bar          | 2620 Castlerock Road           | 8/1/2006   |
| California | Los Angeles | Covina               | 19850 Arrow Highway            | 8/6/2006   |

|            |             |                  |                             |            |
|------------|-------------|------------------|-----------------------------|------------|
| California | Los Angeles | Los Angeles      | 3015 Sunnynook Drive        | 8/11/2006  |
| California | Los Angeles | Palmdale         | 38566 East 35th Street      | 10/3/2006  |
| California | Los Angeles | Los Angeles      | 244 West 47th Place         | 10/12/2006 |
| California | Los Angeles | Los Angeles      | 244 47th Place              | 10/12/2006 |
| California | Los Angeles | Pomona           | 1347 Cambrin Road           | 12/7/2006  |
| California | Los Angeles | Los Angeles      | 11630 West 207th Street     | 12/7/2006  |
| California | Los Angeles | Cerritos         | 12513 Sandy Creek Lane      | 3/9/2007   |
| California | Los Angeles | Long Beach       | 1624 Junipero Avenue        | 4/4/2007   |
| California | Los Angeles | Whittier         | 10816 Townley Drive         | 5/11/2007  |
| California | Los Angeles | Huntington Park  | 2505 Olive Street           | 5/15/2007  |
| California | Los Angeles | South Gate       | 2634 Palm Place             | 5/29/2007  |
| California | Los Angeles | Pomona           | 260 La Verne Avenue         | 7/12/2007  |
| California | Los Angeles | Lancaster        | 45448 Elm                   | 7/14/2007  |
| California | Los Angeles | Wilmington       | 1630 Sandison Street        | 7/20/2007  |
| California | Los Angeles | Los Angeles      | 321 Westminster Avenue      | 8/9/2007   |
| California | Los Angeles | Los Angeles      | 1216 Hanover Avenue         | 8/12/2007  |
| California | Los Angeles | Huntington Park  | 6418 Seville                | 9/18/2007  |
| California | Los Angeles | Los Angeles      | 359 71st Street             | 10/10/2007 |
| California | Los Angeles | Diamond Bar      | 749 Featherwood Drive       | 11/1/2007  |
| California | Los Angeles | Long Beach       | 3613 La Jara Street         | 11/14/2007 |
| California | Los Angeles | Los Angeles      | 3744 59th Street            | 12/20/2007 |
| California | Los Angeles | Van Nuys         | 7400 Sepulveda Boulevard    | 2/12/2008  |
| California | Los Angeles | Los Angeles      | 218 1/2 54th Street         | 3/14/2008  |
| California | Los Angeles | Los Angeles      | 4154 Compton Avenue         | 4/17/2008  |
| California | Los Angeles | Downey           | 10350 Haledon Avenue        | 5/21/2008  |
| California | Los Angeles | Baldwin Park     | 4442 Edra Avenue            | 6/16/2008  |
| California | Los Angeles | Encino           | 17448 Ventura Boulevard     | 8/11/2008  |
| California | Los Angeles | Bellflower       | 17122 Downey Avenue         | 11/2/2008  |
| California | Los Angeles | Huntington Park  | 2409 Olive Street           | 11/18/2008 |
| California | Los Angeles | Long Beach       | 1875 Lime Avenue            | 12/22/2008 |
| California | Los Angeles | Los Angeles      | 6118 Hooper Street          | 4/24/2009  |
| California | Los Angeles | Bell             | 3717 Bell Avenue            | 6/6/2009   |
| California | Los Angeles | Los Angeles      | 5170 South Normandie Avenue | 1/3/2010   |
| California | Los Angeles | Los Angeles      | 2109 Estrella Avenue        | 2/2/2010   |
| California | Los Angeles | Long Beach       | 2345 East Harding Street    | 2/4/2010   |
| California | Los Angeles | Long Beach       | 2454 Easy Avenue            | 2/10/2010  |
| California | Los Angeles | Santa Fe Springs | 13310 Telegraph Road        | 4/14/2010  |
| California | Los Angeles | Bell Gardens     | 7534 Purdy Street           | 5/1/2010   |
| California | Los Angeles | Inglewood        | 8815 South Van Ness Avenue  | 5/4/2010   |
| California | Los Angeles | Los Angeles      | 6516 South Main Street      | 6/2/2010   |
| California | Los Angeles | Norwalk          | 12618 Studebaker Road       | 6/14/2010  |
| California | Los Angeles | Hawthorne        | 12600 Prairie Avenue        | 7/19/2010  |
| California | Los Angeles | Hawthorne        | 2851 West 120th Street      | 7/22/2010  |
| California | Los Angeles | Los Angeles      | 213 1/2 West 66 Street      | 9/21/2010  |
| California | Los Angeles | Hawthorne        | 13611 Doty Avenue           | 2/3/2011   |
| California | Los Angeles | Los Angeles      | 1564 East 117th Street      | 4/4/2013   |
| California | Los Angeles | Artesia          | 11635 Artesia Boulevard     | 5/1/2013   |
| California | Los Angeles | Beverly Hills    | 712 North Rexford Drive     | 6/1/2013   |
| California | Los Angeles | Covina           | 771 Rancho Simi Drive       | 6/1/2016   |

|            |             |                 |                             |            |
|------------|-------------|-----------------|-----------------------------|------------|
| California | Los Angeles | Compton         | 14502 S Keene Ave           | 8/14/2016  |
| California | Los Angeles | Gardena         | 1218 W 134th St             | 9/25/2016  |
| California | Los Angeles | Lancaster       | 42835 San Francisco Av      | 12/10/2017 |
| California | Los Angeles | North Hollywood | 7829 Nagle Av               | 12/10/2017 |
| California | Madera      | Chowchilla      | 18899 Road 16               | 4/28/2004  |
| California | Madera      | Chowchilla      | 1304 Colusa Ave A           | 1/25/2005  |
| California | Madera      | Madera          | 21442 Avenue 19 Ave         | 2/10/2005  |
| California | Madera      | Madera          | 815 East Clinton Avenue     | 8/29/2006  |
| California | Madera      | Madera          | 18697 Avenue Pass           | 8/21/2007  |
| California | Madera      | Madera          | 512 Fein Street             | 8/25/2007  |
| California | Madera      | Madera          | 35626 14 1/2 Avenue         | 2/1/2008   |
| California | Madera      | Madera          | 13577 20th Avenue           | 9/4/2008   |
| California | Madera      | Madera          | 19184 Ave 18                | 5/15/2014  |
| California | Madera      | Madera          | 25816 Avenue 18 1/2         | 6/14/2016  |
| California | Madera      | Madera          | 11265 Iowa Av               | 12/27/2017 |
| California | Mendocino   | Fort Bragg      | 16900 Franklin Road         | 5/9/2006   |
| California | Mendocino   | Willits         | 65000 Sherwood Ridge Road   | 2/20/2008  |
| California | Mendocino   | Redwood Valley  | 9800 West Road              | 4/9/2009   |
| California | Mendocino   | Philo           | 3500 Little Mill Creek Road | 5/6/2010   |
| California | Mendocino   | Fort Bragg      | 621 West St                 | 9/16/2016  |
| California | Mendocino   | Hopland         | 14410 Mountain House Rd     | 9/21/2016  |
| California | Merced      | Merced          | 2536 Lobo                   | 2/4/2004   |
| California | Merced      | Stevinson       | 18910 W 6th St              | 2/10/2004  |
| California | Merced      | Merced          | 3613 N Garner Rd            | 2/27/2004  |
| California | Merced      | Livingston      | 5679 Arena Way              | 4/6/2004   |
| California | Merced      | Hilmar          | 20295 August Rd             | 4/15/2004  |
| California | Merced      | Cressey         | 9835 Cressey                | 6/3/2004   |
| California | Merced      | Delhi           | 16235 Redbud Ct             | 6/29/2004  |
| California | Merced      | South Dos Palos | 8827 W K St                 | 7/23/2004  |
| California | Merced      | Winton          | 6280 Central Ave            | 8/8/2004   |
| California | Merced      | Winton          | 9605 Eucalyptus Ave         | 8/8/2004   |
| California | Merced      | Hilmar          | 19511 Williams Ave          | 10/13/2004 |
| California | Merced      | Merced          | 321 S 59 S Hwy              | 1/3/2005   |
| California | Merced      | Gustine         | 8450 Highway 33 S Hwy       | 3/2/2005   |
| California | Merced      | Atwater         | 9000 Moran Ave              | 5/11/2005  |
| California | Merced      | Atwater         | 1236 Hull Rd                | 9/23/2005  |
| California | Merced      | Stevinson       | 23875 Second Avenue         | 3/27/2006  |
| California | Merced      | Los Banos       | 313 J Street                | 8/11/2006  |
| California | Merced      | Atwater         | 1001 Sandpiper Way          | 11/15/2006 |
| California | Merced      | Delhi           | 8620 Hinton                 | 11/15/2006 |
| California | Merced      | Merced          | 824 S Freya                 | 1/25/2007  |
| California | Merced      | Winton          | 7409 Amanda Drive           | 3/13/2007  |
| California | Merced      | Merced          | 2499 East Gerard Avenue     | 3/21/2007  |
| California | Merced      | Merced          | 14717 East 272nd            | 9/6/2007   |
| California | Merced      | Hilmar          | 250 N Union                 | 10/12/2007 |
| California | Merced      | Merced          | 5 West 25th Street 2        | 1/16/2008  |
| California | Merced      | Stevinson       | 2917 Cemetery Road          | 2/20/2008  |
| California | Merced      | Stevinson       | 2991 Cemetery               | 2/20/2008  |
| California | Merced      | Winton          | 6814 Arlene Way             | 3/12/2008  |

|            |          |               |                                   |            |
|------------|----------|---------------|-----------------------------------|------------|
| California | Merced   | Atwater       | 4146 South Elliott Road           | 8/11/2008  |
| California | Merced   | Delhi         | 15575 August Avenue               | 9/8/2008   |
| California | Merced   | Ballico       | 11368 North Santa Fe Avenue       | 1/10/2010  |
| California | Merced   | Hilmar        | 19542 East First Street           | 4/1/2010   |
| California | Merced   | Winton        | 7125 North Vine Avenue            | 4/21/2010  |
| California | Merced   | Stevinson     | 2228 Nelander Avenue              | 4/27/2010  |
| California | Merced   | Livingston    | 15290 Sunset Drive                | 5/22/2010  |
| California | Merced   | Delhi         | 9640 Sands Road                   | 6/6/2010   |
| California | Merced   | Winton        | 7040 Myrtle Avenue                | 2/8/2016   |
| California | Merced   | Atwater       | 2521 Boulder Dr                   | 9/21/2016  |
| California | Monterey | Salinas       | 1769 Yosemite Cir                 | 5/21/2004  |
| California | Monterey | Pacific Grove | 316 Prescott Ln                   | 7/16/2004  |
| California | Monterey | Salinas       | 18840 Northeast Eisenhowere Drive | 6/20/2007  |
| California | Monterey | Salinas       | 1233 East Polk Street             | 6/20/2007  |
| California | Monterey | Greenfield    | 424 7th Avenue                    | 9/19/2010  |
| California | Nevada   | Grass Valley  | 439 Neal St 1                     | 7/30/2004  |
| California | Orange   | Laguna Beach  | 985 Pacific Coast N Hwy           | 2/1/2004   |
| California | Orange   | Buena Park    | 7555 Beach Blvd 128               | 2/10/2004  |
| California | Orange   | Irvine        | 173 Topeka                        | 2/11/2004  |
| California | Orange   | Tustin        | 13624 Estero Cir                  | 4/24/2004  |
| California | Orange   | Santa Ana     | 1137 Mcfadden W                   | 7/7/2004   |
| California | Orange   | Westminster   | 7681 Baylor Dr                    | 7/15/2004  |
| California | Orange   | La Habra      | 2320 Story Ave                    | 7/16/2004  |
| California | Orange   | Garden Grove  | 8062 Garden Grove Blvd 241        | 9/21/2004  |
| California | Orange   | Orange        | 2135 Almond W St                  | 10/15/2004 |
| California | Orange   | Santa Ana     | 1233 Genoa S Dr                   | 11/30/2004 |
| California | Orange   | Cypress       | 4812 Grace Avenue                 | 4/10/2006  |
| California | Orange   | Westminster   | 9851 Bolsa Avenue                 | 5/5/2006   |
| California | Orange   | Westminster   | 5051 Princeton Avenue             | 5/17/2006  |
| California | Orange   | La Palma      | 4761 Sharon Drive A               | 7/17/2006  |
| California | Orange   | Stanton       | 10698 Court Street                | 9/15/2006  |
| California | Orange   | Stanton       | 7701 Westbrook Way                | 4/19/2007  |
| California | Orange   | Yorba Linda   | 5471 Jefferson Street             | 11/13/2007 |
| California | Orange   | Fullerton     | 641 Commonwealth Avenue           | 12/7/2007  |
| California | Orange   | Anaheim       | 131 Magnolia Avenue               | 3/21/2008  |
| California | Orange   | Anaheim       | 3554 West Cornelia Circle         | 3/24/2008  |
| California | Orange   | Anaheim       | 1819 Cris                         | 3/27/2008  |
| California | Orange   | Anaheim       | 1261 Placentia Street             | 3/29/2008  |
| California | Orange   | Anaheim       | 2500 East Terrace Street          | 4/8/2008   |
| California | Orange   | Santa Ana     | 1314 Harbor Boulevard             | 4/9/2008   |
| California | Orange   | Garden Grove  | 9755 Bixby Avenue                 | 4/11/2008  |
| California | Orange   | Costa Mesa    | 929 Joann Street                  | 5/13/2008  |
| California | Orange   | Santa Ana     | 3012 Halladay                     | 5/19/2008  |
| California | Orange   | Santa Ana     | 412 Baker Street                  | 5/21/2008  |
| California | Orange   | Orange        | 207 Esplande Street               | 5/30/2008  |
| California | Orange   | Santa Ana     | 702 Santa Ana Boulevard           | 7/14/2008  |
| California | Orange   | Anaheim       | 622 Velare Avenue                 | 9/16/2008  |
| California | Orange   | Westminster   | 13100 Goldenwest Street           | 4/28/2009  |
| California | Orange   | Santa Ana     | 1450 Auto Drive                   | 5/11/2009  |

|            |           |                    |                              |            |
|------------|-----------|--------------------|------------------------------|------------|
| California | Orange    | Garden Grove       | 10042 Lampson Avenue         | 5/13/2009  |
| California | Orange    | Westminster        | 6942 Garden Grove Boulevard  | 5/21/2009  |
| California | Orange    | Buena Park         | 7111 Beach Boulevard         | 2/10/2010  |
| California | Orange    | Garden Grove       | 13691 Barnett Way            | 2/13/2010  |
| California | Orange    | Anaheim            | 1303 West Marlboro Avenue    | 2/22/2010  |
| California | Orange    | Placentia          | 745 Dunn                     | 3/16/2010  |
| California | Orange    | Irvine             | 87 Pinestone                 | 3/23/2010  |
| California | Orange    | Orange             | 2300 North Tustin Avenue     | 3/29/2010  |
| California | Orange    | Huntington Beach   | 8230 Talbert                 | 4/7/2010   |
| California | Orange    | Santa Ana          | 4417 Morningside             | 4/28/2010  |
| California | Orange    | Brea               | 2595 Imperial Highway        | 5/20/2010  |
| California | Orange    | Santa Ana          | 800 South Sullivan Street D3 | 12/23/2011 |
| California | Orange    | Anaheim            | 10141 Gravier St             | 12/8/2017  |
| California | Plumas    | Portola            | 5630 Casey Jones Road        | 4/14/2006  |
| California | Plumas    | Chester            | 460 Melissa Avenue           | 10/11/2007 |
| California | Plumas    | Quincy Junction    | 1426 Butterfly Valley Road   | 2/17/2010  |
| California | Plumas    | Portola            | 324 Bella Vista              | 3/9/2010   |
| California | Riverside | Desert Hot Springs | 66366 6th St                 | 1/20/2004  |
| California | Riverside | Riverside          | 344 N State 148              | 1/28/2004  |
| California | Riverside | Hemet              | 531 Cedar Ln 2               | 2/7/2004   |
| California | Riverside | Perris             | 332 W 11th St                | 2/8/2004   |
| California | Riverside | Hemet              | 1675 Cobble Ln               | 2/11/2004  |
| California | Riverside | Cathedral City     | 68557 C Street               | 2/16/2004  |
| California | Riverside | Hemet              | 1097 N State St 2            | 2/18/2004  |
| California | Riverside | Glen Avon Heights  | 4080 Conning                 | 2/29/2004  |
| California | Riverside | Corona             | 734 Viewtop Ln               | 3/12/2004  |
| California | Riverside | El Cerrito         | 19078 Rising Sun Rd          | 3/12/2004  |
| California | Riverside | Norco              | 2574 Ridgecrest              | 3/16/2004  |
| California | Riverside | Hemet              | 772 N State                  | 3/24/2004  |
| California | Riverside | Hemet              | 225 S Elk St 36              | 3/30/2004  |
| California | Riverside | Riverside          | 5861 Mitchell                | 3/31/2004  |
| California | Riverside | Corona             | 995 Pomona Rd 17             | 4/2/2004   |
| California | Riverside | Beaumont           | 34250 San Timiteo Canyon Rd  | 4/15/2004  |
| California | Riverside | Beaumont           | 1016 Palm Ave                | 4/19/2004  |
| California | Riverside | Lake Elsinore      | 17911 Thoreson               | 4/29/2004  |
| California | Riverside | Hemet              | 43939 Florida Ave            | 5/4/2004   |
| California | Riverside | Hemet              | 585 S Santa Fe               | 5/15/2004  |
| California | Riverside | Winchester         | 33091 Willard                | 5/20/2004  |
| California | Riverside | Hemet              | 2688 E Florida Ave 18        | 6/4/2004   |
| California | Riverside | Indio              | 46540 Padua Cir              | 6/9/2004   |
| California | Riverside | Anza               | 57310 Valley Vista           | 6/11/2004  |
| California | Riverside | Perris             | 143 Perou St                 | 6/27/2004  |
| California | Riverside | Victorville        | 20197 Nandina Ave            | 7/9/2004   |
| California | Riverside | Corona             | 1330 W 8th St 18             | 7/21/2004  |
| California | Riverside | Perris             | 618 Bond Dr                  | 7/29/2004  |
| California | Riverside | San Jacinto        | 437 Mead                     | 8/2/2004   |
| California | Riverside | Moreno Valley      | 25204 Bridle Trail           | 8/29/2004  |
| California | Riverside | Indio              | 47800 Madison St 169         | 9/21/2004  |
| California | Riverside | Lake Matthews      | 17224 Cajon Dr               | 9/28/2004  |



|            |            |                    |                             |            |
|------------|------------|--------------------|-----------------------------|------------|
| California | Riverside  | Banning            | 1007 Linda Vista Rd         | 10/26/2004 |
| California | Riverside  | Victorville        | 22875 Rios                  | 11/16/2004 |
| California | Riverside  | Menifee            | 26814 Madera Ct             | 12/6/2004  |
| California | Riverside  | Hemet              | 4400 Florida W Ave 117      | 12/8/2004  |
| California | Riverside  | Hemet              | 41251 Rope Rd               | 1/29/2005  |
| California | Riverside  | Perris             | 4715 Wade Ave               | 3/3/2005   |
| California | Riverside  | San Jacinto        | 344 N State St Sp 196       | 6/15/2005  |
| California | Riverside  | Perris             | 19881 Gustin Rd             | 12/12/2005 |
| California | Riverside  | Hemet              | 525 Gilbert N 49            | 1/20/2006  |
| California | Riverside  | Lake Elsinore      | 34323 Sunrise Drive         | 1/27/2006  |
| California | Riverside  | Corona             | 446 Francis E St            | 2/2/2006   |
| California | Riverside  | San Jacinto        | 610 Washington E Ave        | 2/22/2006  |
| California | Riverside  | Hemet              | 25873 Riverview Lane        | 3/15/2006  |
| California | Riverside  | Desert Hot Springs | 13255 Mexquite Avenue       | 3/23/2006  |
| California | Riverside  | San Jacinto        | 182 De Anza                 | 4/20/2006  |
| California | Riverside  | Nuevo              | 22788 Via Santana           | 4/21/2006  |
| California | Riverside  | Calimesa           | 9453 Sharondale Road        | 6/8/2006   |
| California | Riverside  | Riverside          | 11235 Cypress               | 6/27/2006  |
| California | Riverside  | Mountain Center    | 63137 Jeraboa Road          | 4/12/2007  |
| California | Riverside  | Corona             | 379 East Rancho Road        | 1/2/2008   |
| California | Riverside  | Norco              | 3117 Shadow Canyon Circle   | 1/31/2008  |
| California | Riverside  | Hemet              | 32809 Red Mountain Road     | 2/18/2008  |
| California | Riverside  | Palm Springs       | 383 Vereda Norte            | 6/20/2008  |
| California | Riverside  | Perris             | 21747 Webster Avenue        | 8/7/2008   |
| California | Riverside  | Perris             | 21881 Oleander Avenue       | 8/29/2008  |
| California | Riverside  | Mira Loma          | 10351 Oak Bark Lane         | 11/12/2008 |
| California | Riverside  | Desert Hot Springs | 12155 Ocotillo Road         | 4/29/2009  |
| California | Riverside  | Hemet              | 871 San Mateo Circle        | 5/21/2009  |
| California | Riverside  | Temecula           | 29774 Calle Pantano         | 2/2/2010   |
| California | Riverside  | Riverside          | 4080 Pedley Road            | 2/5/2010   |
| California | Riverside  | Banning            | 514 East Victory Avenue     | 3/21/2010  |
| California | Riverside  | Riverside          | 12172 Severn Way            | 4/2/2010   |
| California | Riverside  | Riverside          | 11744 Hazeldell Drive       | 4/2/2010   |
| California | Riverside  | Perris             | 644 Primrose Place          | 4/8/2011   |
| California | Riverside  | Perris             | 2520 Spectacular Bid Street | 7/29/2014  |
| California | Riverside  | Moreno Valley      | 16329 Saddleback Lane       | 2/3/2015   |
| California | Riverside  | Moreno Valley      | 25399 Todd Drive            | 8/15/2015  |
| California | Riverside  | Moreno Valley      | 16329 Saddlebrook Lane      | 2/9/2016   |
| California | Riverside  | Hemet              | 1610 Bluejay Way            | 3/2/2016   |
| California | Riverside  | Indio              | 43430 Monroe St             | 9/3/2016   |
| California | Riverside  | Coachella          | 731 Orchard St              | 10/4/2016  |
| California | Riverside  | Mira Loma          | 12332 Kern River Dr         | 12/6/2017  |
| California | Riverside  | Temecula           | 30984 Lolita Rd             | 12/7/2017  |
| California | Sacramento | Sacramento         | 4405 23rd St                | 2/4/2004   |
| California | Sacramento | Sacramento         | 4719 Hayford Way            | 2/24/2004  |
| California | Sacramento | Sacramento         | 7624 Birdie Ct              | 3/23/2004  |
| California | Sacramento | Sacramento         | 1536 Strader Ave            | 3/26/2004  |
| California | Sacramento | Sacramento         | 5867 Auburn Blvd 30         | 3/30/2004  |
| California | Sacramento | Sacramento         | 2530 Street S 8             | 4/1/2004   |

|            |                |                  |                            |           |
|------------|----------------|------------------|----------------------------|-----------|
| California | Sacramento     | Rancho Cordova   | 10892 Walnutwood Way       | 4/4/2004  |
| California | Sacramento     | Elverta          | 2495 Rhine Way             | 8/5/2004  |
| California | Sacramento     | Sacramento       | 3534 Summer Park Dr 354    | 10/8/2004 |
| California | Sacramento     | Elk Grove        | 5354 Jade Creek            | 2/23/2005 |
| California | Sacramento     | Elverta          | 2110 Quail Ranch Court     | 2/28/2006 |
| California | Sacramento     | Sacramento       | 4144 Cabinet Circle        | 3/6/2006  |
| California | Sacramento     |                  | 5140 W Sherman Island Road | 5/13/2006 |
| California | Sacramento     | Sacramento       | 7662 Country Park Drive    | 6/6/2006  |
| California | Sacramento     | Sacramento       | 5230 Palm                  | 1/30/2007 |
| California | Sacramento     | Sacramento       | 2681 Fairfield Street      | 2/13/2007 |
| California | Sacramento     | Citrus Heights   | 7401 Lovato                | 6/23/2007 |
| California | Sacramento     | Sacramento       | 6316 Welty Way             | 12/3/2008 |
| California | Sacramento     | Galt             | 132 4th                    | 4/20/2010 |
| California | San Bernardino | Fontana          | 14430 Santa Ana            | 1/15/2004 |
| California | San Bernardino | Ontario          | 844 Wysteria E Ct          | 1/21/2004 |
| California | San Bernardino | Redlands         | 1034 Alta St               | 1/28/2004 |
| California | San Bernardino | Victorville      | 16717 C St                 | 1/30/2004 |
| California | San Bernardino | Chino            | 11838 Central Ave 93       | 2/11/2004 |
| California | San Bernardino | Rialto           | 349 N Lilac                | 2/17/2004 |
| California | San Bernardino | Apple Valley     | 21845 Arapahoe St 1        | 2/17/2004 |
| California | San Bernardino | Victorville      | 16868 Stoddard Wells Rd    | 2/19/2004 |
| California | San Bernardino | Twentynine Palms | 4828 Lear Ave              | 2/22/2004 |
| California | San Bernardino | Hesperia         | 14926 Fir St               | 2/25/2004 |
| California | San Bernardino | San Bernardino   | 1443 Cedar 23              | 3/9/2004  |
| California | San Bernardino | Victorville      | 15330 Condor Rd            | 3/9/2004  |
| California | San Bernardino | Newberry Springs | 52875 Bedford Rd           | 3/25/2004 |
| California | San Bernardino | Fontana          | 13519 Arrow Rt             | 3/30/2004 |
| California | San Bernardino | Twentynine Palms | 7580 Mac Rd                | 3/31/2004 |
| California | San Bernardino | San Bernardino   | 1443 Cedar St 1            | 4/9/2004  |
| California | San Bernardino | Twentynine Palms | 5665 Aeronia               | 4/15/2004 |
| California | San Bernardino | Baker            | 71759 Baker Blvd           | 4/16/2004 |
| California | San Bernardino | Highland         | 7409 Los Feliz Dr          | 4/23/2004 |
| California | San Bernardino | San Bernardino   | 3160 N State St            | 4/23/2004 |
| California | San Bernardino | Phelan           | 8135 Joshua St             | 4/27/2004 |
| California | San Bernardino | Chino            | 12018 Central Ave          | 5/13/2004 |
| California | San Bernardino | Highland         | 25715 Lime St              | 5/18/2004 |
| California | San Bernardino | Apple Valley     | 10620 Matilija             | 5/21/2004 |
| California | San Bernardino | San Bernardino   | 2176 Amanda St             | 5/21/2004 |
| California | San Bernardino | Highland         | 28457 Merrion Ave          | 5/21/2004 |
| California | San Bernardino | Joshua Tree      | 62475 Cove Ln              | 5/27/2004 |
| California | San Bernardino | Apple Valley     | 10808 Mills Rd             | 6/2/2004  |
| California | San Bernardino | Barstow          | 24966 Camino Del Sol St    | 6/7/2004  |
| California | San Bernardino | Hesperia         | 15356 Pendleton            | 6/16/2004 |
| California | San Bernardino | Twentynine Palms | 68077 Indian Trail         | 6/16/2004 |
| California | San Bernardino | Muscoy           | 2544 3rd St                | 6/23/2004 |
| California | San Bernardino | Newberry Springs | 47962 Horner Rd            | 6/24/2004 |
| California | San Bernardino | Hesperia         | 11976 Mariposa Rd          | 7/3/2004  |
| California | San Bernardino | Ontario          | 1506 E Highland Ct         | 7/26/2004 |
| California | San Bernardino | Fontana          | 7642 Kempster Ave          | 9/7/2004  |

|            |                |                  |                               |            |
|------------|----------------|------------------|-------------------------------|------------|
| California | San Bernardino | Phelan           | 6721 Nielson Rd               | 9/17/2004  |
| California | San Bernardino | Barstow          | 2577 Community Blvd           | 9/18/2004  |
| California | San Bernardino | Joshua Tree      | 3255 Sunset Rd                | 9/26/2004  |
| California | San Bernardino | Hesperia         | 7892 Alston                   | 10/1/2004  |
| California | San Bernardino | Rancho Cucamonga | 7651 Effen                    | 10/1/2004  |
| California | San Bernardino | Newberry Springs | 35377 Newberry Rd             | 10/11/2004 |
| California | San Bernardino | Phelan           | 11480 Macron                  | 10/19/2004 |
| California | San Bernardino | Victorville      | 17053 B St                    | 10/19/2004 |
| California | San Bernardino | Victorville      | 16688 Hughes                  | 10/21/2004 |
| California | San Bernardino | Redlands         | 28565 San Timoteo Canyon      | 10/25/2004 |
| California | San Bernardino | San Bernardino   | 1162 E 2nd                    | 11/16/2004 |
| California | San Bernardino | Bloomington      | 16742 14th St                 | 11/17/2004 |
| California | San Bernardino | Barstow          | 29779 N 1st                   | 11/18/2004 |
| California | San Bernardino | Chino Hills      | 15553 Esther St               | 12/13/2004 |
| California | San Bernardino | San Bernardino   | 2547 3rd Ave                  | 12/28/2004 |
| California | San Bernardino | Trona            | 13860 Fremont St 2            | 12/30/2004 |
| California | San Bernardino | Barstow          | 434 S Second St 1             | 1/1/2005   |
| California | San Bernardino | Upland           | 359 Seventh St                | 1/5/2005   |
| California | San Bernardino | San Bernardino   | 123 E 11th St                 | 1/19/2005  |
| California | San Bernardino | San Bernardino   | 1318 E Gould St               | 1/22/2005  |
| California | San Bernardino | Redlands         | 2155 Citrus Ave 112           | 2/14/2005  |
| California | San Bernardino | Yucaipa          | 12470 15th St                 | 5/25/2005  |
| California | San Bernardino | Hesperia         | 10721 Maple St                | 7/29/2005  |
| California | San Bernardino | Victorville      | 16262 Yucca Ave               | 8/1/2005   |
| California | San Bernardino | San Bernardino   | 11571 5th St                  | 8/29/2005  |
| California | San Bernardino | Victorville      | 11550 White Rd                | 10/17/2005 |
| California | San Bernardino | Hesperia         | 9553 Los Banos Ave            | 1/12/2006  |
| California | San Bernardino | Victorville      | 13126 Mesa                    | 2/7/2006   |
| California | San Bernardino | Ontario          | 956 Princeton W St            | 2/10/2006  |
| California | San Bernardino | Victorville      | 16755 Union St B              | 2/24/2006  |
| California | San Bernardino | Victorville      | 15618 Topango Road            | 3/2/2006   |
| California | San Bernardino | San Bernardino   | 2131 Genevieve Street         | 3/10/2006  |
| California | San Bernardino | Victorville      | 13602 Nassau Drive            | 3/15/2006  |
| California | San Bernardino | San Bernardino   | 756 W 19 St                   | 3/16/2006  |
| California | San Bernardino | Fontana          | 17265 Lurelane Street         | 3/20/2006  |
| California | San Bernardino | Redlands         | 828 6th Street                | 3/23/2006  |
| California | San Bernardino | Hesperia         | 11516 Hawthorne               | 3/25/2006  |
| California | San Bernardino | Newberry Springs | 42378 Silver Valley Road      | 4/21/2006  |
| California | San Bernardino | Hesperia         | 9393 Hickory                  | 6/8/2006   |
| California | San Bernardino | Hesperia         | 10983 4th Avenue              | 6/9/2006   |
| California | San Bernardino | Oro Grande       | 21451 National Trails Highway | 6/13/2006  |
| California | San Bernardino | Fontana          | 13449 Ivy                     | 6/15/2006  |
| California | San Bernardino | Loma Linda       | 26232 Newport Avenue          | 8/1/2006   |
| California | San Bernardino | Yermo            | 37933 Grandview Avenue        | 8/10/2006  |
| California | San Bernardino | Yucca Valley     | 58620 San Marino Drive        | 9/6/2006   |
| California | San Bernardino | San Bernardino   | 19829 Kendall Drive           | 9/12/2006  |
| California | San Bernardino | San Bernardino   | 2292 Portola Street           | 10/13/2006 |
| California | San Bernardino | Apple Valley     | 12618 Pocono Road             | 10/15/2006 |
| California | San Bernardino | Fontana          | 14349 Figwood Drive           | 12/13/2006 |

|            |                |                    |                            |            |
|------------|----------------|--------------------|----------------------------|------------|
| California | San Bernardino | Victorville        | 14349 Hesperia Road        | 12/21/2006 |
| California | San Bernardino | Apple Valley       | 20024 Happy Trails Highway | 1/4/2007   |
| California | San Bernardino | Hesperia           | 13010 Prairie Trail        | 2/22/2007  |
| California | San Bernardino | Pinon Hills        | 11475 Prado Road           | 3/27/2007  |
| California | San Bernardino | Victorville        | 13852 Burning Tree Lane    | 5/3/2007   |
| California | San Bernardino | Redlands           | 511 Redlands Boulevard     | 5/16/2007  |
| California | San Bernardino | Colton             | 1822 Admiralty Street      | 6/15/2007  |
| California | San Bernardino | San Bernardino     | 243 Meridian Avenue        | 7/18/2007  |
| California | San Bernardino | Victorville        | 16753 Zenda Street         | 8/6/2007   |
| California | San Bernardino | Ontario            | 740 Camalot                | 9/10/2007  |
| California | San Bernardino | San Bernardino     | 223 49th                   | 11/7/2007  |
| California | San Bernardino | San Bernardino     | 1431 7th Street            | 11/26/2007 |
| California | San Bernardino | Adelanto           | 17526 Keats Road           | 11/29/2007 |
| California | San Bernardino | Rialto             | 624 Etiwanda Avenue        | 12/22/2007 |
| California | San Bernardino | Joshua Tree        | 8997 Tortuga Road          | 1/14/2008  |
| California | San Bernardino | San Bernardino     | 6317 Bonnie Street         | 4/3/2008   |
| California | San Bernardino | Fontana            | 16411 Athol Street         | 4/17/2008  |
| California | San Bernardino | San Bernardino     | 7234 Dwight Way            | 7/1/2008   |
| California | San Bernardino | Landers            | 57646 Linn Road            | 10/14/2008 |
| California | San Bernardino | Hesperia           | 9519 Maple Avenue          | 10/18/2008 |
| California | San Bernardino | Hinkley            | 23572 State Highway 58     | 4/5/2009   |
| California | San Bernardino | Apple Valley       | 9611 Navajo Road           | 5/5/2009   |
| California | San Bernardino | Victorville        | 13143 Sleepy Ridge Lane    | 3/5/2010   |
| California | San Bernardino | San Bernardino     | 205 West Benedict Road     | 4/2/2010   |
| California | San Diego      | Boulevard          | 2605 Paseo Alta Ct         | 1/7/2004   |
| California | San Diego      | San Ysidro         | 905 Hwy Caliente Rd        | 1/16/2004  |
| California | San Diego      | Santee             | 8593 Magnolia Ave          | 1/30/2004  |
| California | San Diego      | San Diego          | 875 Hotel S Cir            | 1/30/2004  |
| California | San Diego      | Escondido          | 1306 Ronda Ave             | 3/23/2004  |
| California | San Diego      | Fallbrook          | 422 Catalpa Ln             | 5/19/2004  |
| California | San Diego      | San Diego          | 6173 Fauna Drive           | 5/21/2004  |
| California | San Diego      | Lakeside           | 11441 El Nopal             | 8/12/2004  |
| California | San Diego      | Escondido          | 431 4th E Ave 1b           | 8/31/2004  |
| California | San Diego      | San Diego          | 4242 34th St D             | 9/16/2004  |
| California | San Diego      | Vista              | 1280 Hacienda Dr G6        | 11/24/2004 |
| California | San Diego      | Escondido          | 16975 Guejito Rd           | 3/3/2005   |
| California | San Diego      | Escondido          | 1825 East Valley Way       | 6/6/2006   |
| California | San Diego      | Vista              | 1710 Avocado Drive         | 9/14/2006  |
| California | San Diego      | Oceanside          | 3965 Brown Street          | 9/20/2006  |
| California | San Diego      | Vista              | 663 Eucalyptus             | 4/3/2007   |
| California | San Diego      | La Puente          | 1254 Bannon                | 5/10/2007  |
| California | San Diego      | San Diego          | 3835 Midway #203 Drive     | 6/20/2007  |
| California | San Diego      | Vista              | 526 Mar Vista Drive        | 11/29/2007 |
| California | San Diego      | Vista              | 1610 N Santa Fe            | 4/9/2008   |
| California | San Diego      | Valley Center      | 30118 Miller Road          | 11/7/2008  |
| California | San Diego      | San Diego          | 9777 De La Amistad Viaduct | 6/12/2009  |
| California | San Diego      | Escondido Junction | 1531 Montiel               | 1/20/2010  |
| California | San Diego      | Carlsbad           | 847 Laguna                 | 8/8/2010   |
| California | San Diego      | Carlsbad           | 382 Acacia                 | 8/8/2010   |

|            |                 |                 |                          |            |
|------------|-----------------|-----------------|--------------------------|------------|
| California | San Diego       | Alpine          | 404 Summerhill Terrace   | 12/2/2013  |
| California | San Francisco   | San Francisco   | 35 Belvedere St 5        | 3/29/2006  |
| California | San Joaquin     | Stockton        | 7790 N Ashley Ln         | 1/20/2004  |
| California | San Joaquin     | Stockton        | 9800 E Eight Mile Rd     | 4/16/2004  |
| California | San Joaquin     | Stockton        | 5708 N Highway 99        | 4/18/2004  |
| California | San Joaquin     | Stockton        | 1560 Silver Creek        | 4/22/2004  |
| California | San Joaquin     | Stockton        | 10285 Hildreth Ln        | 6/30/2004  |
| California | San Joaquin     | Stockton        | 2717 W March Ln          | 7/31/2004  |
| California | San Joaquin     | Stockton        | 2654 W March Ln 304      | 8/4/2004   |
| California | San Joaquin     | Stockton        | 3416 Farmington E Rd 2   | 8/26/2004  |
| California | San Joaquin     | Stockton        | 2274 E Fremont           | 9/25/2004  |
| California | San Joaquin     | Stockton        | 2071 La Jolla Dr         | 4/25/2005  |
| California | San Joaquin     | Stockton        | 2553 Michaelangelo Drive | 6/1/2006   |
| California | San Joaquin     | Tracy           | 14703 Finck Road         | 8/3/2006   |
| California | San Joaquin     | Stockton        | 301 Morada               | 4/19/2007  |
| California | San Joaquin     | Manteca         | 481 South Union Road     | 4/20/2007  |
| California | San Joaquin     | Lathrop         | 15523 Sixth Street       | 10/11/2007 |
| California | San Joaquin     | Tracy           | 11422 West Larch Road    | 3/14/2008  |
| California | San Luis Obispo | Atascadero      | 1400 San Ramon           | 1/5/2004   |
| California | San Luis Obispo | Atascadero      | 4080 Dolores Avenue      | 3/14/2006  |
| California | San Luis Obispo | Grover Beach    | 448 North 9th Street     | 3/30/2006  |
| California | San Luis Obispo | Morro Bay       | 525 Atascadero Road      | 7/12/2006  |
| California | San Luis Obispo | San Luis Obispo | 3500 Bullock             | 8/29/2006  |
| California | San Luis Obispo | Paso Robles     | 749 Orchard              | 9/5/2006   |
| California | San Luis Obispo | Templeton       | 30 Danelion Road         | 1/15/2007  |
| California | San Luis Obispo | Nipomo          | 155 East Price Street    | 4/29/2008  |
| California | San Luis Obispo | San Luis Obispo | 1771 Cordova             | 12/7/2011  |
| California | San Mateo       | East Palo Alto  | 1894 Bay Road            | 6/4/2006   |
| California | San Mateo       | Belmont         | 926 South Road           | 6/21/2006  |
| California | San Mateo       | Daly City       | 439 Bonnie Street        | 1/14/2010  |
| California | Santa Clara     | San Jose        | 3570 Columbine Dr        | 1/15/2004  |
| California | Santa Clara     | San Jose        | 110 Roundtable Dr 1      | 2/8/2004   |
| California | Santa Clara     | Gilroy          | 7860 Driftwood Ter A     | 4/3/2004   |
| California | Santa Clara     | San Jose        | 1374 Randol Ave          | 5/5/2004   |
| California | Santa Clara     | Santa Clara     | 1232 Warburton Ave       | 6/8/2004   |
| California | Santa Clara     | San Jose        | 90 Saddlebrook Dr        | 6/22/2004  |
| California | Santa Clara     | San Jose        | 935 Foxchase Dr 413      | 9/21/2004  |
| California | Santa Clara     | Morgan Hill     | 6760 Croy Rd             | 9/29/2004  |
| California | Santa Clara     | Los Altos       | 25562 Fernhill Dr        | 10/26/2004 |
| California | Santa Clara     | San Jose        | 2251 Lansford Ave        | 11/15/2004 |
| California | Santa Clara     | San Jose        | 1425 Stahl St            | 10/16/2005 |
| California | Santa Clara     | San Jose        | 1560 Darlene Ave         | 1/24/2006  |
| California | Santa Clara     | San Jose        | 1919 Fruitdale Avenue    | 5/11/2006  |
| California | Santa Clara     | San Jose        | 4075 Hobart Avenue       | 4/27/2007  |
| California | Santa Clara     | Campbell        | 768 Nevins Street        | 7/11/2007  |
| California | Santa Clara     | San Jose        | 2475 Glen Angus Way      | 2/21/2008  |
| California | Santa Clara     | Santa Clara     | 2597 Borax Drive         | 2/22/2008  |
| California | Santa Clara     | San Jose        | 843 Spindrift Way        | 3/18/2008  |
| California | Santa Clara     | San Jose        | 1480 Douglas Street      | 3/20/2008  |

|            |             |             |                           |            |
|------------|-------------|-------------|---------------------------|------------|
| California | Santa Clara | San Jose    | 71 Avenida Espana         | 5/29/2008  |
| California | Santa Clara | San Jose    | 973 Idlewood Drive        | 8/31/2008  |
| California | Santa Clara | San Jose    | 800 Saratoga Avenue A308  | 6/10/2010  |
| California | Santa Clara | Gilroy      | 2250 Roop Rd Road         | 8/19/2010  |
| California | Santa Clara | San Jose    | 5674 San Felipe Road      | 8/26/2010  |
| California | Santa Clara | Santa Clara | 2147 Newhall Street       | 3/9/2011   |
| California | Santa Clara | San Jose    | 315 N 21st Street         | 9/18/2015  |
| California | Santa Clara | Santa Clara | 930 El Camino Real        | 5/19/2016  |
| California | Santa Cruz  | Soquel      | 2600 41st St              | 8/12/2004  |
| California | Santa Cruz  | Santa Cruz  | 911 Soquel Ave            | 3/18/2005  |
| California | Santa Cruz  | Santa Cruz  | 231 Felix Street          | 5/2/2006   |
| California | Santa Cruz  | Santa Cruz  | 870 17th Avenue           | 9/29/2006  |
| California | Santa Cruz  | Watsonville | 216 Silverleaf Drive      | 10/17/2007 |
| California | Santa Cruz  | Santa Cruz  | 15769 Comstock Mill Road  | 3/13/2008  |
| California | Santa Cruz  | Capitola    | 1066 41st Avenue          | 9/12/2010  |
| California | Shasta      | Redding     | 1420 Arizona Street       | 2/2/2004   |
| California | Shasta      | Redding     | 781 S Street              | 3/21/2004  |
| California | Shasta      | Redding     | 12691 Williamson Rd       | 3/30/2004  |
| California | Shasta      | Anderson    | 6465 Saddle Trail Rd      | 7/29/2004  |
| California | Shasta      | Redding     | 80 Churn Creek Rd         | 7/18/2005  |
| California | Shasta      | Igo         | 14463 Windwalker Ln       | 3/27/2006  |
| California | Shasta      | Shingletown | 7498 Hilda Rd             | 4/13/2006  |
| California | Shasta      | Redding     | 3115 Stratford Avenue     | 9/19/2006  |
| California | Shasta      | Redding     | 1571 College View Drive   | 8/29/2007  |
| California | Shasta      | Redding     | 13922a Sundust Road       | 3/11/2010  |
| California | Siskiyou    | Weed        | 208 Jackson St            | 2/21/2004  |
| California | Siskiyou    | Dorris      | 2100 Sheepy Island Rd 437 | 3/3/2004   |
| California | Solano      | Vallejo     | 1130 Monterey St          | 2/12/2004  |
| California | Solano      | Dixon       | 805 N Adams St 110        | 3/23/2004  |
| California | Solano      | Vallejo     | 1163 Lewis Ave            | 3/30/2004  |
| California | Solano      | Vallejo     | 618 Main St               | 4/20/2004  |
| California | Solano      | Vallejo     | 136 Hogan St              | 5/14/2004  |
| California | Solano      | Suisun City | 515 Crested Dr            | 3/9/2005   |
| California | Solano      | Vacaville   | 7234 Shelton Ln           | 9/29/2005  |
| California | Solano      | Dixon       | 9155 Olmo Rd              | 3/3/2006   |
| California | Solano      | Vallejo     | 318 Taper Avenue          | 1/31/2008  |
| California | Solano      | Vacaville   | 148 Lomita Avenue         | 3/5/2008   |
| California | Solano      | Vallejo     | 264 Flyingcloud Court     | 4/30/2010  |
| California | Stanislaus  | Ceres       | 4837 Faith Home Rd 119    | 1/1/2004   |
| California | Stanislaus  | Oakdale     | 143 N 6th St              | 1/5/2004   |
| California | Stanislaus  | Modesto     | 3356 Maze W Blvd          | 1/17/2004  |
| California | Stanislaus  | Hickman     | 948 Hickman Rd            | 1/20/2004  |
| California | Stanislaus  | Modesto     | 1520 Prospect Ln          | 1/24/2004  |
| California | Stanislaus  | Stanislaus  | 13660 Carpenter Rd        | 2/7/2004   |
| California | Stanislaus  | Waterford   | 575 E St                  | 3/5/2004   |
| California | Stanislaus  | Turlock     | 6407 Mitchell Rd          | 4/12/2004  |
| California | Stanislaus  | Turlock     | 1625 Larkspur St          | 6/29/2004  |
| California | Stanislaus  | Ceres       | 4022 Esmail Keyes         | 7/2/2004   |
| California | Stanislaus  | Modesto     | 2009 Monticello Ave       | 7/13/2004  |

|            |            |           |                           |            |
|------------|------------|-----------|---------------------------|------------|
| California | Stanislaus | Modesto   | 1312 Mchenry 111          | 7/13/2004  |
| California | Stanislaus | Modesto   | 1516 Bollinger Ct         | 9/1/2004   |
| California | Stanislaus | Modesto   | 1240 N 9th St 10          | 9/5/2004   |
| California | Stanislaus | Denair    | 5319 Berkeley Ave         | 9/19/2004  |
| California | Stanislaus | Modesto   | 8100 Yosemite Blvd        | 10/3/2004  |
| California | Stanislaus | Oakdale   | 13537 Orange Blossom Rd   | 10/22/2004 |
| California | Stanislaus | Oakdale   | 410 Arboles Way           | 10/26/2004 |
| California | Stanislaus | Turlock   | 265 Ironwood              | 10/30/2004 |
| California | Stanislaus | Turlock   | 357 E Olive Ave           | 11/4/2004  |
| California | Stanislaus | Oakdale   | 755 River Ave             | 11/29/2004 |
| California | Stanislaus | Oakdale   | 445 N Fifth               | 12/6/2004  |
| California | Stanislaus | Modesto   | 3708 Almeria Dr           | 12/11/2004 |
| California | Stanislaus | Ceres     | 2033 Hackett Rd           | 1/18/2005  |
| California | Stanislaus | Modesto   | 400 Algen Ave             | 2/2/2005   |
| California | Stanislaus | Denair    | 4540 Arnold Rd            | 2/2/2005   |
| California | Stanislaus | Modesto   | 1022 Calder Ct            | 3/26/2005  |
| California | Stanislaus | Grayson   | 1705 Hito Dr              | 4/7/2005   |
| California | Stanislaus | Modesto   | 205 Glacier Ave           | 1/18/2006  |
| California | Stanislaus | Riverbank | 3939 Minniear Ave         | 1/31/2006  |
| California | Stanislaus | Modesto   | 3500 Plain View Road      | 3/7/2006   |
| California | Stanislaus | Ceres     | 527 Mitchell Rd           | 3/22/2006  |
| California | Stanislaus | Ceres     | 3707 Monte Vista E Ave    | 3/24/2006  |
| California | Stanislaus | Modesto   | 1411 Scenic Drive         | 4/24/2006  |
| California | Stanislaus | Modesto   | 110 Wisenor               | 5/18/2006  |
| California | Stanislaus | Modesto   | 2008 Stracker Way         | 6/8/2006   |
| California | Stanislaus | Modesto   | 620 Paradise Road         | 9/13/2006  |
| California | Stanislaus | Modesto   | 306 Locust Street         | 9/14/2006  |
| California | Stanislaus | Ceres     | 1743 Central              | 10/20/2006 |
| California | Stanislaus | Modesto   | 665 7th Street            | 12/4/2006  |
| California | Stanislaus | Modesto   | 1331 Paradise Road        | 6/3/2007   |
| California | Stanislaus | Turlock   | 201 G Street              | 6/26/2007  |
| California | Stanislaus | Turlock   | 1105 Berea                | 9/15/2007  |
| California | Stanislaus | Turlock   | 1090 Denair Avenue        | 1/6/2008   |
| California | Stanislaus | Newman    | 531 Lady Slipper          | 1/15/2008  |
| California | Stanislaus | Turlock   | 1125 South Tegner Road A  | 2/16/2008  |
| California | Stanislaus | Turlock   | 3800 Crowell Road         | 4/18/2008  |
| California | Stanislaus | Modesto   | 1016 East Marlow          | 6/19/2008  |
| California | Stanislaus | Hickman   | 861 Meier Road            | 6/19/2008  |
| California | Stanislaus | Modesto   | 1016 Marlow               | 6/19/2008  |
| California | Stanislaus | Turlock   | 590 Minaret Avenue        | 8/5/2008   |
| California | Stanislaus | Ceres     | 112 Taylor Road           | 8/25/2008  |
| California | Stanislaus | Ceres     | 1948 Evans Road           | 11/16/2008 |
| California | Stanislaus | Ceres     | 1528 Evans Road           | 11/18/2008 |
| California | Stanislaus | Turlock   | 677 North Soderquist Road | 12/15/2008 |
| California | Stanislaus | Denair    | 18000 Keyes Road          | 4/14/2009  |
| California | Stanislaus | Turlock   | 4519 Moffett Road         | 4/22/2009  |
| California | Stanislaus | Patterson | 1830 Orange Avenue        | 5/3/2009   |
| California | Stanislaus | Ceres     | 3107 Taylor Road          | 5/19/2009  |
| California | Stanislaus | Ceres     | 3107 East Taylor Road     | 5/19/2009  |

|            |            |                |                          |            |
|------------|------------|----------------|--------------------------|------------|
| California | Stanislaus | Turlock        | 6107 Mountain View Road  | 5/19/2009  |
| California | Stanislaus | Modesto        | 1898 Skylane Way         | 5/21/2009  |
| California | Stanislaus | Oakdale        | 20601 Warnerville Road   | 5/28/2009  |
| California | Stanislaus | Turlock        | 460 Moffet Road          | 5/29/2009  |
| California | Stanislaus | Riverbank      | 2924 Stanislaus Street   | 6/18/2009  |
| California | Stanislaus | Oakdale        | 10742 Pioneer Avenue     | 6/30/2009  |
| California | Stanislaus | Ceres          | 2329 6th Street          | 2/5/2010   |
| California | Stanislaus | Turlock        | 1180 West Linwood Avenue | 2/9/2010   |
| California | Stanislaus | Riverbank      | 3238 Pocket Avenue       | 5/22/2010  |
| California | Stanislaus | Newman         | 1200 Main Street         | 7/26/2010  |
| California | Stanislaus | Modesto        | 1600 French              | 8/11/2011  |
| California | Stanislaus | Hughson        | 1828 White Birtch Drive  | 8/28/2011  |
| California | Stanislaus | Modesto        | 1749 Poland              | 2/9/2012   |
| California | Sutter     | Yuba City      | 2898 Mckenly Rd          | 1/11/2004  |
| California | Sutter     | Yuba City      | 1400 Lytle Rd            | 2/17/2004  |
| California | Sutter     | Yuba City      | 1718 Elmer Rd            | 3/10/2004  |
| California | Sutter     | Yuba City      | 1292 Harter Rd           | 5/11/2004  |
| California | Sutter     | Sutter         | 2235 Madrone St          | 5/17/2004  |
| California | Sutter     | Yuba City      | 1619 Franklin Rd K       | 6/7/2004   |
| California | Sutter     | Yuba City      | 1081 Northridge Dr       | 9/1/2004   |
| California | Sutter     | Yuba City      | 400 Walton N Ave 3       | 9/2/2004   |
| California | Sutter     | Yuba City      | 761 Chestnut St          | 10/18/2004 |
| California | Sutter     | Yuba City      | 413 Pine St              | 10/30/2004 |
| California | Sutter     | Yuba City      | 1368 Hutchinson A        | 11/5/2004  |
| California | Sutter     | Live Oak       | 2691 Stafford Dr         | 11/10/2004 |
| California | Sutter     | Yuba City      | 24 Central Ave           | 12/11/2004 |
| California | Sutter     | Yuba City      | 132 S Walton Ave A       | 12/22/2004 |
| California | Sutter     | Yuba City      | 1587 Gray Ave            | 2/15/2005  |
| California | Sutter     | Live Oak       | 9755 O St                | 4/7/2005   |
| California | Sutter     | Yuba City      | 1341 Dustin Dr 39        | 9/1/2005   |
| California | Sutter     | Yuba City      | 4098 Marlette Rd         | 1/23/2006  |
| California | Sutter     | Yuba City      | 1115 Marcia Avenue       | 2/18/2006  |
| California | Sutter     | Yuba City      | 1250 Kenny Drive         | 5/19/2006  |
| California | Sutter     | Yuba City      | 617 Forbes Avenue        | 1/2/2007   |
| California | Tehama     | Corning        | 6330 Piedmont Rd         | 9/27/2004  |
| California | Tehama     | Corning        | 323 Rio Del Rey Court    | 7/31/2006  |
| California | Tehama     | Red Bluff      | 19932 Sawtooth Drive     | 8/1/2006   |
| California | Tehama     | Los Molinos    | 24881 68th               | 4/28/2010  |
| California | Trinity    | Trinity Center | 360 Maude Avenue         | 3/11/2007  |
| California | Tulare     | Woodville      | 16477 Hudson Ave         | 1/29/2004  |
| California | Tulare     | Porterville    | 27003 Avenue 120         | 2/7/2004   |
| California | Tulare     | Lindsay        | 1445 E Honolulu          | 3/24/2004  |
| California | Tulare     | Dinuba         | 39780 Road 56            | 3/31/2004  |
| California | Tulare     | Tulare         | 26442 99 Hwy 210         | 5/26/2004  |
| California | Tulare     | Porterville    | 1611 E Success Drive     | 1/7/2006   |
| California | Tulare     | Porterville    | 670 E Poplar             | 1/7/2006   |
| California | Tulare     | Cutler         | 39500 Road 136           | 4/28/2006  |
| California | Tulare     | Tipton         | 14144 Road 152           | 8/9/2006   |
| California | Tulare     | Dinuba         | 38929 Road 84            | 8/17/2006  |

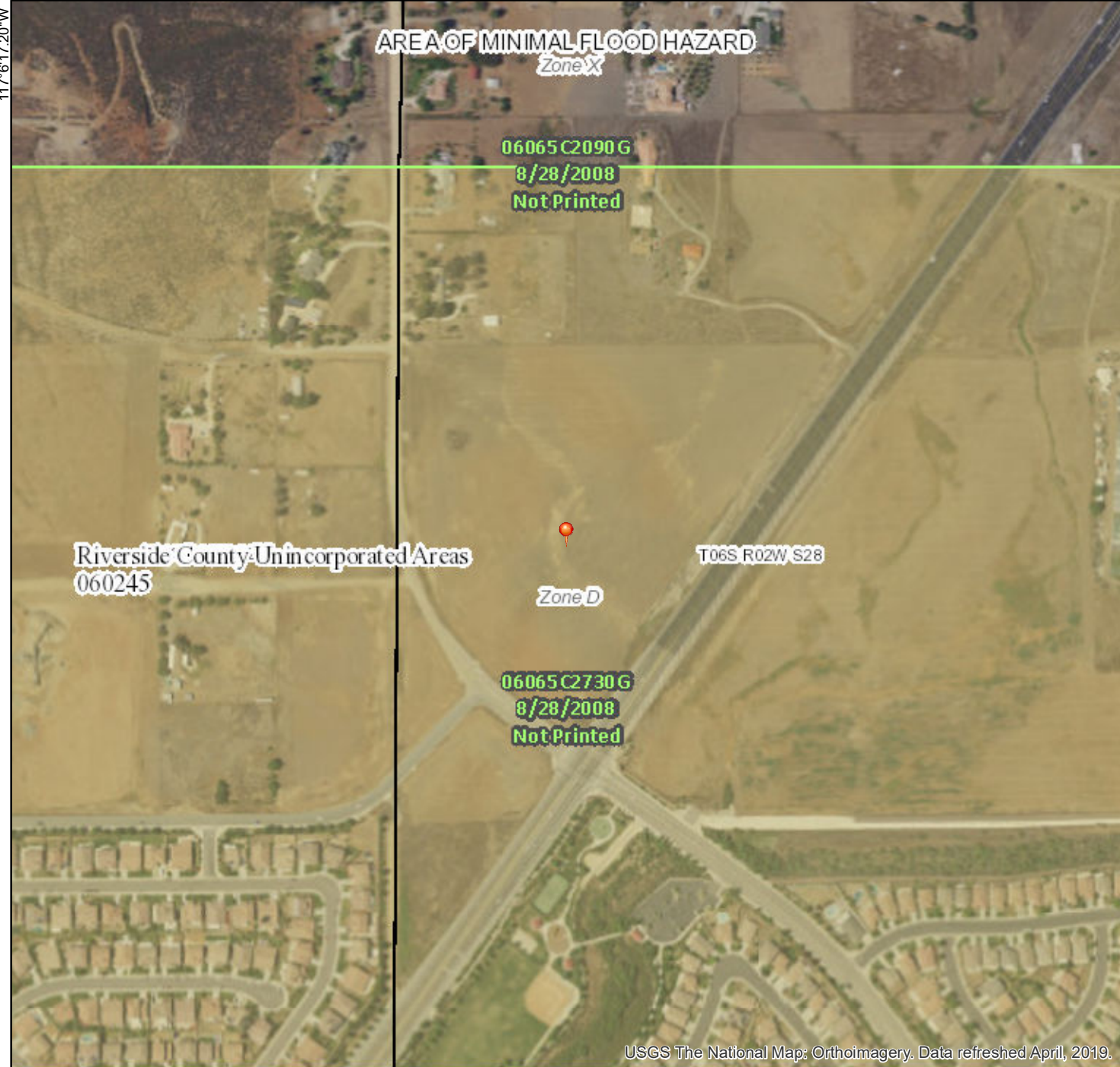


|            |         |                 |                                    |            |
|------------|---------|-----------------|------------------------------------|------------|
| California | Ventura | N/a             | 5892 Santa Clara Rd                | 2/22/2006  |
| California | Ventura | Ventura         | 1300 Saratoga Street               | 5/4/2006   |
| California | Ventura | Fillmore        | 2989 West W Telegraph Road Highway | 6/14/2006  |
| California | Ventura | Oxnard          | 765 Kohala Street                  | 11/9/2006  |
| California | Ventura | Thousand Oaks   | 982 East Janas Road                | 3/20/2007  |
| California | Yolo    | West Sacramento | 1155 Linden Rd                     | 1/13/2004  |
| California | Yolo    | Woodland        | 1730 Donner Way                    | 3/10/2004  |
| California | Yolo    | West Sacramento | 1900 Evergreen Avenue              | 3/30/2007  |
| California | Yuba    | Marysville      | 1118 I St                          | 4/6/2004   |
| California | Yuba    | Marysville      | 1205 E 22nd St                     | 4/12/2004  |
| California | Yuba    | Marysville      | 222 H St                           | 4/14/2004  |
| California | Yuba    | Marysville      | 1804 Hile Ave C                    | 5/12/2004  |
| California | Yuba    | Marysville      | 1505 Ramirez Rd                    | 5/20/2004  |
| California | Yuba    | Arboga          | 13814 Charlies Ln                  | 5/27/2004  |
| California | Yuba    | Marysville      | 5956 Park Ave O                    | 7/18/2004  |
| California | Yuba    | Marysville      | 5818 Park Ave                      | 8/3/2004   |
| California | Yuba    | Marysville      | 5931 Redburn Ave                   | 8/8/2004   |
| California | Yuba    | Marysville      | 1735 N Beale Rd                    | 9/10/2004  |
| California | Yuba    | Olivehurst      | 3735 Arboga Rd                     | 9/27/2004  |
| California | Yuba    | Olivehurst      | 4456 College                       | 9/28/2004  |
| California | Yuba    | Marysville      | 2209 Boulton Way                   | 10/18/2004 |
| California | Yuba    | Marysville      | 976 Kay St                         | 10/25/2004 |
| California | Yuba    | Olivehurst      | 1941 14th St                       | 11/3/2004  |
| California | Yuba    | Olivehurst      | 4461 College Way                   | 11/17/2004 |
| California | Yuba    | Marysville      | 5395 Feather River Blvd            | 12/21/2004 |
| California | Yuba    | Olivehurst      | 1696 10th Ave                      | 1/27/2005  |
| California | Yuba    | Marysville      | 5528 Alicia Ave                    | 2/22/2005  |
| California | Yuba    | Marysville      | 5696 Arboga Rd                     | 3/9/2005   |
| California | Yuba    | Marysville      | 1100 E 17th St 36                  | 5/18/2005  |
| California | Yuba    | Marysville      | 885 Grand Ave                      | 5/24/2005  |
| California | Yuba    | Marysville      | 209 E St                           | 12/13/2005 |
| California | Yuba    | Marysville      | 1097 Vine Ave                      | 1/12/2006  |
| California | Yuba    | Olivehurst      | 1440 Broadway Rd                   | 1/17/2006  |
| California | Yuba    | Loma Rica       | 5124 Wolf Trail                    | 1/25/2006  |
| California | Yuba    | Olivehurst      | 3948 Shimer Rd                     | 1/31/2006  |
| California | Yuba    | Olivehurst      | 4605 Summers Ln                    | 1/31/2006  |
| California | Yuba    | Marysville      | 647 Ramirez Rd B                   | 2/16/2006  |
| California | Yuba    | Marysville      | 714 Boyer Road                     | 3/30/2006  |
| California | Yuba    | Marysville      | 5514 Feather River Boulevard       | 7/13/2006  |
| California | Yuba    | Marysville      | 8369 Hwy 70                        | 10/3/2006  |
| California | Yuba    | Marysville      | 7340 Doc Adams Road                | 10/9/2006  |
| California | Yuba    | Marysville      | 1164 Redwood Avenue                | 6/11/2007  |
| California | Yuba    | Marysville      | 4499 East Erle Road                | 7/7/2007   |

# National Flood Hazard Layer FIRMette



33°37'34.67"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

| SPECIAL FLOOD HAZARD AREAS  |   |
|-----------------------------|---|
|                             | Without Base Flood Elevation (BFE)<br>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 Water Surface Elevation   |
|                             | 17.5 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 1/16/2020 at 6:51:31 PM 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.

USGS The National Map: Orthoimagery. Data refreshed April, 2019.

0 250 500 1,000 1,500 2,000 Feet 1:6,000

33°37'4.71"N

117°5'39.74"W



# **APPENDIX C**

## **PHOTOGRAPHS**

**PHOTOGRAPHS**  
**Parcel Map 36161**  
**Winchester, Riverside County, California**



**1. View north from west portion of property.**



**2. View east from west portion of property.**

**PHOTOGRAPHS**  
**Parcel Map 36161**  
**Winchester, Riverside County, California**



**3. View southeast from west portion of property.**



**4. View east from west portion of property.**

**PHOTOGRAPHS**  
**Parcel Map 36161**  
**Winchester, Riverside County, California**



5. View east from northwest portion of property..



6. View south from northwest portion of property

**PHOTOGRAPHS**  
**Parcel Map 36161**  
**Winchester, Riverside County, California**



**7. View east from northwest portion of property.**



**8. View west from northwest portion of property.**

**PHOTOGRAPHS**  
**Parcel Map 36161**  
**Winchester, Riverside County, California**



**9. View east from the north portion of property.**



**10. View south from the north portion of property.**



**PHOTOGRAPHS**  
**Parcel Map 36161**  
**Winchester, Riverside County, California**



**11. View northwest from southeast portion of property.**



**12. View southwest from southeast portion of property.**

**PHOTOGRAPHS**  
**Parcel Map 36161**  
**Winchester, Riverside County, California**



**13. View southwest from south portion of property. Shows Winchester Road.**



**14. View northwest from south portion of property. Shows graded pad.**

**PHOTOGRAPHS**  
**Parcel Map 36161**  
**Winchester, Riverside County, California**



**15. View northwest from south portion of the Site.**



**16. View northeast from southwest portion of the Site.**

**PHOTOGRAPHS**  
**Parcel Map 36161**  
**Winchester, Riverside County, California**



**17. View southwest from southwest portion of the Site.**



**18. View northwest from southwest portion of the Site.**

**PHOTOGRAPHS**  
**Parcel Map 36161**  
**Winchester, Riverside County, California**



**19. View northwest from southwest portion of property. Showing Pourroy Road.**



**20. View east from southwest portion of property.**

**PHOTOGRAPHS**  
**Parcel Map 36161**  
**Winchester, Riverside County, California**



**21. View east from southwest portion of property. Showing Pat Road.**



**22. View southeast from southwest portion of property.**

**PHOTOGRAPHS**  
**Parcel Map 36161**  
**Winchester, Riverside County, California**



**23. View north from west portion of property. Showing Pat Road.**



**24. View southeast from west portion of property. Showing Intersection of Winchester Road and Pourroy Road.**

**MORNINGSTAR VILLAGE, LLC  
APNs 476-010-017, -054, AND -055  
WINCHESTER, RIVERSIDE COUNTY, CALIFORNIA**

**PROJECT No. 2319-CR  
JANUARY 23, 2020**

# **APPENDIX D**

## **ENVIRONMENTAL DATABASE REPORT**





**Parcel Map 36161**

Not Reported

Winchester, CA 92596

Inquiry Number: 5938099.2s

January 16, 2020

# The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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***Thank you for your business.***  
 Please contact EDR at 1-800-352-0050  
 with any questions or comments.

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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

NOT REPORTED  
WINCHESTER, CA 92596

#### COORDINATES

Latitude (North): 33.6219520 - 33° 37' 19.02"  
Longitude (West): 117.0997950 - 117° 5' 59.26"  
Universal Transverse Mercator: Zone 11  
UTM X (Meters): 490743.3  
UTM Y (Meters): 3720051.2  
Elevation: 1421 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5640928 BACHELOR MOUNTAIN, CA  
Version Date: 2012  
  
Northeast Map: 5640944 WINCHESTER, CA  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140530  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
 NOT REPORTED  
 WINCHESTER, CA 92596

Click on Map ID to see full detail.

| MAP ID             | SITE NAME            | ADDRESS               | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.)<br>DIRECTION |
|--------------------|----------------------|-----------------------|-------------------|--------------------|-------------------------------|
| <a href="#">A1</a> | MORNINGSTAR VILLAGE  | NE COR WINCHESTER RD  | CIWQS             | Lower              | 1 ft.                         |
| <a href="#">A2</a> | MORNINGSTAR VILLAGE  | NE COR WINCHESTER RD  | NPDES, CERS       | Lower              | 1 ft.                         |
| <a href="#">3</a>  | BP SOLAR C/O DON END | 34205 POURROY RD      | RCRA-LQG          | Higher             | 245, 0.046, NNW               |
| <a href="#">4</a>  | PROPOSED ELEMENTARY  | NORTHEAST CORNER ELL  | ENVIROSTOR, SCH   | Higher             | 2388, 0.452, West             |
| <a href="#">5</a>  | QUINTA DO LAGO ELEME | POURROY ROAD/THOMPSON | ENVIROSTOR, SCH   | Lower              | 5267, 0.998, South            |

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### ***Federal NPL site list***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing  
SEMS..... Superfund Enterprise Management System

### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Federal RCRA generators list***

RCRA-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

## EXECUTIVE SUMMARY

US INST CONTROL..... Sites with Institutional Controls

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

### ***State- and tribal - equivalent NPL***

RESPONSE..... State Response Sites

### ***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF..... Solid Waste Information System

### ***State and tribal leaking storage tank lists***

LUST..... Geotracker's Leaking Underground Fuel Tank Report

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

CPS-SLIC..... Statewide SLIC Cases

### ***State and tribal registered storage tank lists***

FEMA UST..... Underground Storage Tank Listing

UST..... Active UST Facilities

AST..... Aboveground Petroleum Storage Tank Facilities

INDIAN UST..... Underground Storage Tanks on Indian Land

### ***State and tribal voluntary cleanup sites***

VCP..... Voluntary Cleanup Program Properties

INDIAN VCP..... Voluntary Cleanup Priority Listing

### ***State and tribal Brownfields sites***

BROWNFIELDS..... Considered Brownfields Sites Listing

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### ***Local Brownfield lists***

US BROWNFIELDS..... A Listing of Brownfields Sites

### ***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT..... Waste Management Unit Database

SWRCY..... Recycler Database

HAULERS..... Registered Waste Tire Haulers Listing

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

ODI..... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

### ***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL..... Delisted National Clandestine Laboratory Register

## EXECUTIVE SUMMARY

|                     |  |
|---------------------|--|
| HIST Cal-Sites..... | Historical Calsites Database             |
| SCH.....            | School Property Evaluation Program       |
| CDL.....            | Clandestine Drug Labs                    |
| CERS HAZ WASTE..... | CERS HAZ WASTE                           |
| Toxic Pits.....     | Toxic Pits Cleanup Act Sites             |
| 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         |
| CERS TANKS..... | California Environmental Reporting System (CERS) Tanks |
| CA FID UST..... | Facility Inventory Database                            |

### **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   |
| FUDS.....              | Formerly Used Defense Sites   |
| DOD.....               | Department of Defense Sites   |
| SCRD DRYCLEANERS.....  | State Coalition for Remediation of Drycleaners Listing  |
| US FIN ASSUR.....      | Financial Assurance Information   |
| EPA WATCH LIST.....    | EPA WATCH LIST  |
| 2020 COR ACTION.....   | 2020 Corrective Action Program List   |
| TSCA.....              | Toxic Substances Control Act  |
| TRIS.....              | Toxic Chemical Release Inventory System   |
| SSTS.....              | Section 7 Tracking Systems  |
| ROD.....               | Records Of Decision   |
| RMP.....               | Risk Management Plans   |
| RAATS.....             | RCRA Administrative Action Tracking System  |
| PRP.....               | Potentially Responsible Parties   |
| PADS.....              | PCB Activity Database System  |
| ICIS.....              | Integrated Compliance Information System  |
| FTTS.....              | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) |
| MLTS.....              | Material Licensing Tracking System  |
| 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  |

## EXECUTIVE SUMMARY

|                          |  |
|--------------------------|--|
| DOT OPS.....             | Incident and Accident Data                                 |
| CONSENT.....             | Superfund (CERCLA) Consent Decrees                         |
| INDIAN RESERV.....       | Indian Reservations  |
| FUSRAP.....              | Formerly Utilized Sites Remedial Action Program            |
| UMTRA.....               | Uranium Mill Tailings Sites                                |
| LEAD SMELTERS.....       | Lead Smelter Sites   |
| US AIRS.....             | Aerometric Information Retrieval System Facility Subsystem |
| US MINES.....            | Mines Master Index File                                    |
| ABANDONED MINES.....     | Abandoned Mines  |
| FINDS.....               | Facility Index System/Facility Registry System             |
| ECHO.....                | Enforcement & Compliance History Information               |
| UXO.....                 | Unexploded Ordnance Sites                                  |
| DOCKET HWC.....          | Hazardous Waste Compliance Docket Listing                  |
| FUELS PROGRAM.....       | EPA Fuels Program Registered Listing                       |
| CA BOND EXP. PLAN.....   | Bond Expenditure Plan                                      |
| Cortese.....             | "Cortese" Hazardous Waste & Substances Sites List          |
| CUPA Listings.....       | CUPA Resources List  |
| DRYCLEANERS.....         | Cleaner Facilities   |
| EML.....                 | Emissions Inventory Data                                   |
| ENF.....                 | Enforcement Action Listing                                 |
| Financial Assurance..... | Financial Assurance Information Listing                    |
| HAZNET.....              | Facility and Manifest Data                                 |
| ICE.....                 | ICE  |
| HIST CORTESE.....        | Hazardous Waste & Substance Site List                      |
| HWP.....                 | EnviroStor Permitted Facilities Listing                    |
| HWT.....                 | Registered Hazardous Waste Transporter Database            |
| MINES.....               | Mines Site Location Listing                                |
| MWMP.....                | Medical Waste Management Program Listing                   |
| PEST LIC.....            | Pesticide Regulation Licenses Listing                      |
| PROC.....                | Certified Processors Database                              |
| Notify 65.....           | Proposition 65 Records                                     |
| 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                       |
| 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)                      |
| 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 |
|-------------|--|



## EXECUTIVE SUMMARY

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

#### ***Federal RCRA generators list***

RCRA-LQG: 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.

A review of the RCRA-LQG list, as provided by EDR, and dated 12/16/2019 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

| <u>Equal/Higher Elevation</u>                 | <u>Address</u>   | <u>Direction / Distance</u> | <u>Map ID</u> | <u>Page</u> |
|---|------------------|-----------------------------|---------------|-------------|
| BP SOLAR C/O DON END<br>EPA ID:: CAP000272633 | 34205 POURROY RD | NNW 0 - 1/8 (0.046 mi.)     | 3             | 10          |

#### ***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 10/28/2019 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>PROPOSED ELEMENTARY</i></b> | <b><i>NORTHEAST CORNER ELL</i></b> | <b><i>W 1/4 - 1/2 (0.452 mi.)</i></b> | <b><i>4</i></b> | <b><i>11</i></b> |

## EXECUTIVE SUMMARY

Facility Id: 60001559  
Status: No Further Action

| <u>Lower Elevation</u>   | <u>Address</u>              | <u>Direction / Distance</u>  | <u>Map ID</u> | <u>Page</u> |
|--|-----------------------------|------------------------------|---------------|-------------|
| <b>QUINTA DO LAGO ELEME</b><br>Facility Id: 33010047<br>Status: No Action Required | <b>POURROY ROAD/THOMPSO</b> | <b>S 1/2 - 1 (0.998 mi.)</b> | <b>5</b>      | <b>14</b>   |

### ADDITIONAL ENVIRONMENTAL RECORDS

#### **Other Ascertainable Records**

NPDES: A listing of NPDES permits, including stormwater.

A review of the NPDES list, as provided by EDR, and dated 11/11/2019 has revealed that there is 1 NPDES site within approximately 0.001 miles of the target property.

| <u>Lower Elevation</u>                                | <u>Address</u>              | <u>Direction / Distance</u> | <u>Map ID</u> | <u>Page</u> |
|---|-----------------------------|-----------------------------|---------------|-------------|
| <b>MORNINGSTAR VILLAGE</b><br>Facility Status: Active | <b>NE COR WINCHESTER RD</b> | <b>0 - 1/8 (0.000 mi.)</b>  | <b>A2</b>     | <b>8</b>    |

CIWQS: 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.

A review of the CIWQS list, as provided by EDR, and dated 09/03/2019 has revealed that there is 1 CIWQS site within approximately 0.001 miles of the target property.

| <u>Lower Elevation</u> | <u>Address</u>       | <u>Direction / Distance</u> | <u>Map ID</u> | <u>Page</u> |
|------------------------|----------------------|-----------------------------|---------------|-------------|
| MORNINGSTAR VILLAGE    | NE COR WINCHESTER RD | 0 - 1/8 (0.000 mi.)         | A1            | 8           |

CERS: 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

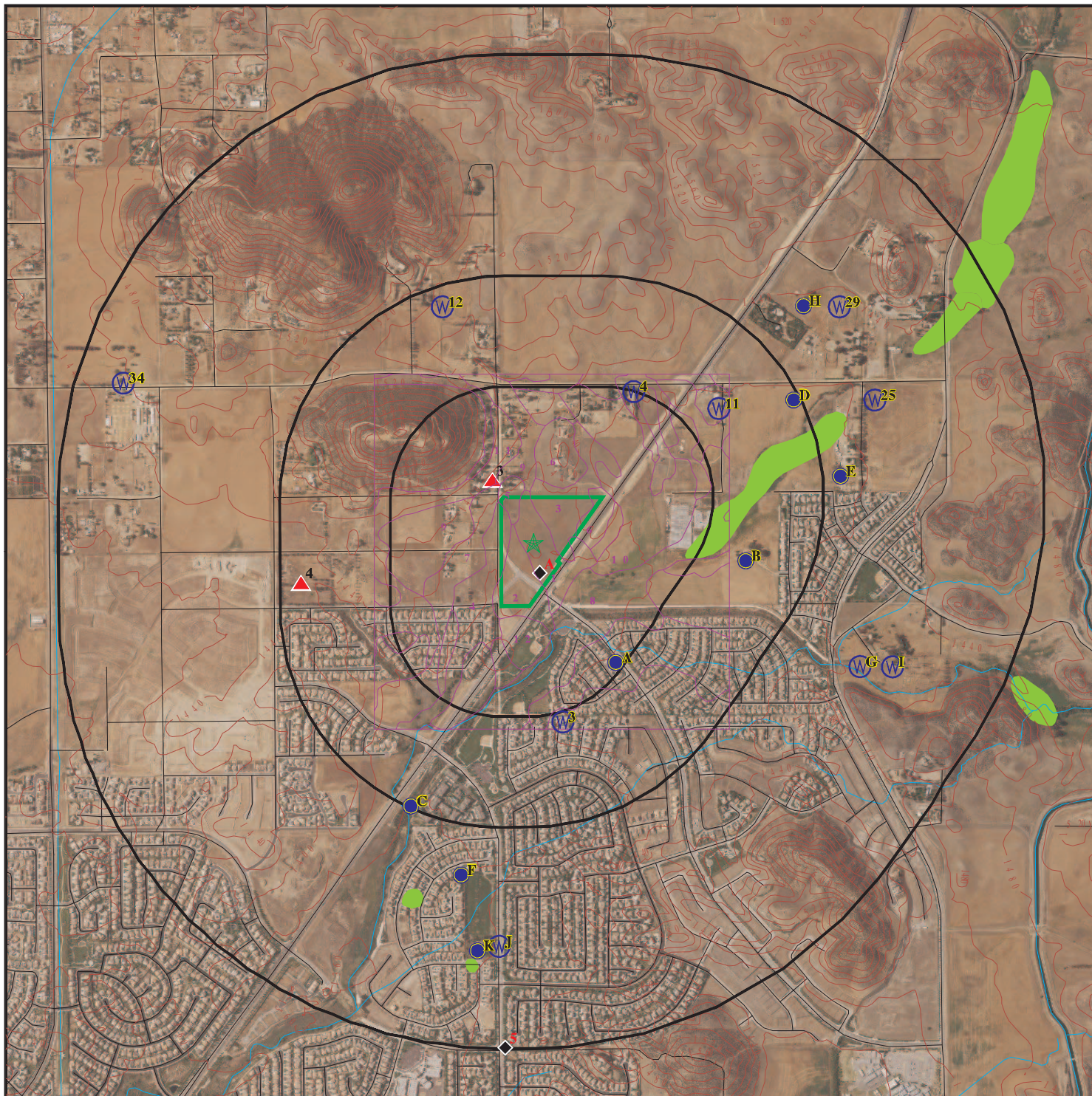
A review of the CERS list, as provided by EDR, and dated 10/21/2019 has revealed that there is 1 CERS site within approximately 0.001 miles of the target property.

| <u>Lower Elevation</u>     | <u>Address</u>              | <u>Direction / Distance</u> | <u>Map ID</u> | <u>Page</u> |
|----------------------------|-----------------------------|-----------------------------|---------------|-------------|
| <b>MORNINGSTAR VILLAGE</b> | <b>NE COR WINCHESTER RD</b> | <b>0 - 1/8 (0.000 mi.)</b>  | <b>A2</b>     | <b>8</b>    |

## EXECUTIVE SUMMARY

There were no unmapped sites in this report.

# OVERVIEW MAP - 5938099.2S



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

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

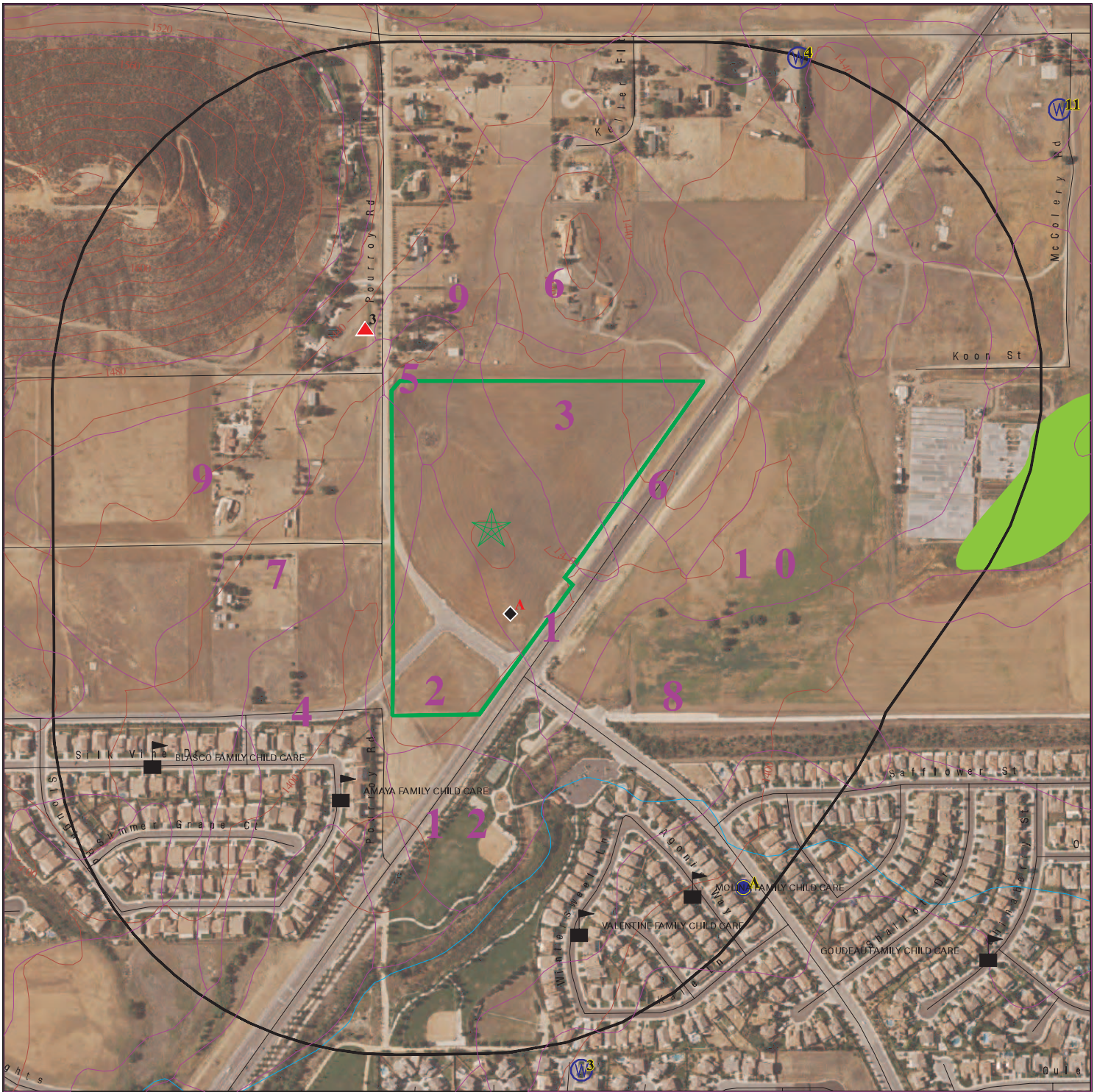









This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.







SITE NAME: Parcel Map 36161  
 ADDRESS: Not Reported  
 Winchester CA 92596  
 LAT/LONG: 33.621952 / 117.099795

CLIENT: Geotek  
 CONTACT: Kyle Mchargue  
 INQUIRY #: 5938099.2s  
 DATE: January 16, 2020 1:12 pm

# DETAIL MAP - 5938099.2S



-  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
-  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: Parcel Map 36161  
 ADDRESS: Not Reported  
 Winchester CA 92596  
 LAT/LONG: 33.621952 / 117.099795

CLIENT: Geotek  
 CONTACT: Kyle Mchargue  
 INQUIRY #: 5938099.2s  
 DATE: January 16, 2020 1:13 pm

## MAP FINDINGS SUMMARY

| Database   | Search<br>Distance<br>(Miles) | Target<br>Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total<br>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                         |                    | 1     | 0         | NR        | NR      | NR  | 1                |
| 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 /<br/>engineering controls registries</i></b> |                               |                    |       |           |           |         |     |                  |
| LUCIS  | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| US ENG CONTROLS  | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| US INST CONTROL  | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| <b><i>Federal ERNS list</i></b>  |                               |                    |       |           |           |         |     |                  |
| ERNS   | 0.001                         |                    | 0     | NR        | NR        | NR      | NR  | 0                |
| <b><i>State- and tribal - equivalent NPL<br/>RESPONSE</i></b>                      |                               |                    |       |           |           |         |     |                  |
| RESPONSE   | 1.000                         |                    | 0     | 0         | 0         | 0       | NR  | 0                |
| <b><i>State- and tribal - equivalent CERCLIS<br/>ENVIROSTOR</i></b>                |                               |                    |       |           |           |         |     |                  |
| ENVIROSTOR   | 1.000                         |                    | 0     | 0         | 1         | 1       | NR  | 2                |
| <b><i>State and tribal landfill and/or<br/>solid waste disposal site lists</i></b> |                               |                    |       |           |           |         |     |                  |
| SWF/LF   | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| <b><i>State and tribal leaking storage tank lists</i></b>                          |                               |                    |       |           |           |         |     |                  |
| LUST   | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |

## MAP FINDINGS SUMMARY

| Database   | Search<br>Distance<br>(Miles) | Target<br>Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total<br>Plotted |
|--|-------------------------------|--------------------|-------|-----------|-----------|---------|-----|------------------|
| INDIAN LUST  | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| CPS-SLIC   | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| <b><i>State and tribal registered storage tank lists</i></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><i>State and tribal voluntary cleanup sites</i></b>             |                               |                    |       |           |           |         |     |                  |
| VCP  | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| INDIAN VCP   | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| <b><i>State and tribal Brownfields sites</i></b>                   |                               |                    |       |           |           |         |     |                  |
| BROWNFIELDS  | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| <b><u>ADDITIONAL ENVIRONMENTAL RECORDS</u></b>                     |                               |                    |       |           |           |         |     |                  |
| <b><i>Local Brownfield lists</i></b>                               |                               |                    |       |           |           |         |     |                  |
| US BROWNFIELDS   | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| <b><i>Local Lists of Landfill / Solid Waste Disposal Sites</i></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                |
| ODI  | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| DEBRIS REGION 9  | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| IHS OPEN DUMPS   | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| <b><i>Local Lists of Hazardous waste / Contaminated Sites</i></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                |
| CERS HAZ WASTE   | 0.250                         |                    | 0     | 0         | NR        | NR      | NR  | 0                |
| Toxic Pits   | 1.000                         |                    | 0     | 0         | 0         | 0       | NR  | 0                |
| US CDL   | 0.001                         |                    | 0     | NR        | NR        | NR      | NR  | 0                |
| PFAS   | 0.500                         |                    | 0     | 0         | 0         | NR      | NR  | 0                |
| <b><i>Local Lists of Registered Storage Tanks</i></b>              |                               |                    |       |           |           |         |     |                  |
| SWEEPS UST   | 0.250                         |                    | 0     | 0         | NR        | NR      | NR  | 0                |
| HIST UST   | 0.250                         |                    | 0     | 0         | NR        | NR      | NR  | 0                |
| CERS TANKS   | 0.250                         |                    | 0     | 0         | NR        | NR      | NR  | 0                |
| CA FID UST   | 0.250                         |                    | 0     | 0         | NR        | NR      | NR  | 0                |
| <b><i>Local Land Records</i></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         | 0       | NR  | 0             |
| DOD   | 1.000                   |                 | 0     | 0         | 0         | 0       | NR  | 0             |
| SCRD DRYCLEANERS                            | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| US FIN ASSUR                                | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| EPA WATCH LIST                              | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| 2020 COR ACTION                             | 0.250                   |                 | 0     | 0         | NR        | NR      | NR  | 0             |
| TSCA  | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| TRIS  | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| SSTS  | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| ROD   | 1.000                   |                 | 0     | 0         | 0         | 0       | NR  | 0             |
| RMP   | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| RAATS                                       | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| PRP   | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| PADS  | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| ICIS  | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| FTTS  | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| MLTS  | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| COAL ASH DOE                                | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| COAL ASH EPA                                | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| PCB TRANSFORMER                             | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| RADINFO                                     | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| HIST FTTS                                   | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| DOT OPS                                     | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| CONSENT                                     | 1.000                   |                 | 0     | 0         | 0         | 0       | NR  | 0             |
| INDIAN RESERV                               | 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                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| ECHO  | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| UXO   | 1.000                   |                 | 0     | 0         | 0         | 0       | NR  | 0             |
| DOCKET HWC                                  | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |
| FUELS PROGRAM                               | 0.250                   |                 | 0     | 0         | NR        | NR      | NR  | 0             |
| CA BOND EXP. PLAN                           | 1.000                   |                 | 0     | 0         | 0         | 0       | NR  | 0             |
| Cortese                                     | 0.500                   |                 | 0     | 0         | 0         | NR      | NR  | 0             |
| CUPA Listings                               | 0.250                   |                 | 0     | 0         | NR        | NR      | NR  | 0             |



## MAP FINDINGS 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         | 0         | NR      | NR  | 0             |
| 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             |
| MWMP                | 0.250                   |                 | 0     | 0         | NR        | NR      | NR  | 0             |
| NPDES               | 0.001                   |                 | 1     | NR        | NR        | NR      | NR  | 1             |
| 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         | 0       | NR  | 0             |
| 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                   |                 | 1     | NR        | NR        | NR      | NR  | 1             |
| CERS                | 0.001                   |                 | 1     | 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             |
| MINES MRDS          | 0.001                   |                 | 0     | NR        | NR        | NR      | NR  | 0             |

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

|                  |       |  |   |    |    |    |    |   |
|------------------|-------|--|---|----|----|----|----|---|
| 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 |

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

|          |       |  |   |    |    |    |    |   |
|----------|-------|--|---|----|----|----|----|---|
| RGA LF   | 0.001 |  | 0 | NR | NR | NR | NR | 0 |
| RGA LUST | 0.001 |  | 0 | NR | NR | NR | NR | 0 |

|             |  |   |   |   |   |   |   |   |
|-------------|--|---|---|---|---|---|---|---|
| - Totals -- |  | 0 | 4 | 0 | 1 | 1 | 0 | 6 |
|-------------|--|---|---|---|---|---|---|---|

#### NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**A1**            **MORNINGSTAR VILLAGE**  
**NE COR WINCHESTER RD/POURROY RD**  
**MURRIETA, CA 92596**

**CIWQS**    **S123168543**  
**N/A**

< 1/8  
 1 ft.

**Site 1 of 2 in cluster A**

**Relative:**  
**Lower**

**Actual:**  
**1405 ft.**

**CIWQS:**  
 Name: MORNINGSTAR VILLAGE  
 Address: NE COR WINCHESTER RD/POURROY RD  
 City,State,Zip: MURRIETA, CA 92596  
 Agency: Morningstar Village LLC  
 Agency Address: 41805 Albrae Street, Fremont, CA 94538  
 Place/Project Type: Construction - Commercial  
 SIC/NAICS: Not reported  
 Region: 9  
 Program: CONSTW  
 Regulatory Measure Status: Active  
 Regulatory Measure Type: Storm water construction  
 Order Number: 2009-0009-DWQ  
 WDID: 9 33C385009  
 NPDES Number: CAS000002  
 Adoption Date: Not reported  
 Effective Date: 10/23/2018  
 Termination Date: Not reported  
 Expiration/Review Date: Not reported  
 Design Flow: Not reported  
 Major/Minor: Not reported  
 Complexity: Not reported  
 TTWQ: Not reported  
 Enforcement Actions within 5 years: 0  
 Violations within 5 years: 0  
 Latitude: 33.62102  
 Longitude: -117.09955

**A2**            **MORNINGSTAR VILLAGE**  
**NE COR WINCHESTER RD/POURROY RD**  
**MURRIETA, CA 92596**

**NPDES**    **S123143150**  
**CERS**     **N/A**

< 1/8  
 1 ft.

**Site 2 of 2 in cluster A**

**Relative:**  
**Lower**

**Actual:**  
**1405 ft.**

**NPDES:**  
 Name: MORNINGSTAR VILLAGE  
 Address: NE COR WINCHESTER RD/POURROY RD  
 City,State,Zip: MURRIETA, CA 92596  
 Facility Status: Active  
 NPDES Number: CAS000002  
 Region: 9  
 Agency Number: 0  
 Regulatory Measure ID: 501764  
 Place ID: Not reported  
 Order Number: 2009-0009-DWQ  
 WDID: 9 33C385009  
 Regulatory Measure Type: Enrollee  
 Program Type: Construction  
 Adoption Date Of Regulatory Measure: Not reported  
 Effective Date Of Regulatory Measure: 10/23/2018  
 Termination Date Of Regulatory Measure: Not reported  
 Expiration Date Of Regulatory Measure: Not reported  
 Discharge Address: 41805 Albrae Street  
 Discharge Name: Morningstar Village LLC

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MORNINGSTAR VILLAGE (Continued)**

**S123143150**

Discharge City: Fremont  
Discharge State: California  
Discharge Zip: 94538  
Status: Not reported  
Status Date: Not reported  
Operator Name: Not reported  
Operator Address: Not reported  
Operator City: Not reported  
Operator State: Not reported  
Operator Zip: Not reported

Name: MORNINGSTAR VILLAGE  
Address: NE COR WINCHESTER RD/POURROY RD  
City,State,Zip: MURRIETA, CA 92596  
Facility Status: Not reported  
NPDES Number: Not reported  
Region: Not reported  
Agency Number: Not reported  
Regulatory Measure ID: Not reported  
Place ID: Not reported  
Order Number: Not reported  
WDID: 9 33C385009  
Regulatory Measure Type: Construction  
Program Type: Not reported  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Expiration Date Of Regulatory Measure: Not reported  
Discharge Address: Not reported  
Discharge Name: Not reported  
Discharge City: Not reported  
Discharge State: Not reported  
Discharge Zip: Not reported  
Status: Active  
Status Date: 10/23/2018  
Operator Name: Morningstar Village LLC  
Operator Address: 41805 Albrae Street  
Operator City: Fremont  
Operator State: California  
Operator Zip: 94538

CERS:  
Name: MORNINGSTAR VILLAGE  
Address: NE COR WINCHESTER RD/POURROY RD  
City,State,Zip: MURRIETA, CA 92596  
Site ID: 537373  
CERS ID: 867133  
CERS Description: Construction Storm Water

Affiliation:  
Affiliation Type Desc: Owner/Operator  
Entity Name: Morningstar Village LLC  
Entity Title: Operator  
Affiliation Address: 41805 Albrae Street  
Affiliation City: Fremont  
Affiliation State: CA  
Affiliation Country: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MORNINGSTAR VILLAGE (Continued)**

**S123143150**

Affiliation Zip: 94538  
Affiliation Phone: Not reported

**3**  
**NNW**  
**< 1/8**  
**0.046 mi.**  
**245 ft.**

**BP SOLAR C/O DON ENDERUD**  
**34205 POURROY RD**  
**WINCHESTER, CA 92596**

**RCRA-LQG** **1025882064**  
**CAP000272633**

**Relative:**  
**Higher**  
**Actual:**  
**1432 ft.**

RCRA-LQG:  
Date form received by agency: 2017-05-10 00:00:00.0  
Facility name: BP SOLAR C/O DON ENDERUD  
Facility address: 34205 POURROY RD  
WINCHESTER, CA 92596  
EPA ID: CAP000272633  
Mailing address: W WARRENVILLE RD  
NAPERVILLE, IL 60563  
Contact: JEFFREY CAHILL  
Contact address: W WARRENVILLE RD  
NAPERVILLE, IL 60563  
Contact country: US  
Contact telephone: 331-702-4177  
Contact email: JEFFREY.CAHILL@BP.COM  
EPA Region: 09  
Classification: Large Quantity Generator  
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:  
Owner/operator name: DON ENDERUD  
Owner/operator address: POURROY RD  
WINCHESTER, CA 92596  
Owner/operator country: US  
Owner/operator telephone: 951-317-1004  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 2012-05-10 00:00:00.  
Owner/Op end date: Not reported  
Owner/operator name: BP SOLAR  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BP SOLAR C/O DON ENDERUD (Continued)**

**1025882064**

Owner/operator telephone: Not reported  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 2017-05-05 00:00:00.  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Hazardous Waste Summary:

. Waste code: 181  
. Waste name: Other inorganic solid waste  
  
. Waste code: D006  
. Waste name: CADMIUM  
  
. Waste code: D008  
. Waste name: LEAD

Violation Status: No violations found

**4**  
**West**  
**1/4-1/2**  
**0.452 mi.**  
**2388 ft.**

**PROPOSED ELEMENTARY SCHOOL NO. 10-A**  
**NORTHEAST CORNER ELLIOTT ROAD AND PAT ROAD**  
**WINCHESTER, CA 92596**

**ENVIROSTOR** **S111290786**  
**SCH** **N/A**

**Relative:**  
**Higher**

ENVIROSTOR:  
Name: PROPOSED ELEMENTARY SCHOOL NO. 10-A  
Address: NORTHEAST CORNER ELLIOTT ROAD AND PAT ROAD  
City,State,Zip: WINCHESTER, CA 92596  
Facility ID: 60001559  
Status: No Further Action  
Status Date: 01/19/2012  
Site Code: 404867  
Site Type: School Investigation  
Site Type Detailed: School  
Acres: 17.42  
NPL: NO  
Regulatory Agencies: SMBRP

**Actual:**  
**1423 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PROPOSED ELEMENTARY SCHOOL NO. 10-A (Continued)**

**S111290786**

Lead Agency: SMBRP  
Program Manager: Aslam Shareef  
Supervisor: Shahir Haddad  
Division Branch: Southern California Schools & Brownfields Outreach  
Assembly: 67  
Senate: 28  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: Responsible Party  
Latitude: 33.6207  
Longitude: -117.1089  
APN: 480-030-025, 480-030-026  
Past Use: NONE, TRANSPORTATION - WAREHOUSING  
Potential COC: Lead  
Confirmed COC: 30013-NO  
Potential Description: NMA  
Alias Name: 480-030-025  
Alias Type: APN  
Alias Name: 480-030-026  
Alias Type: APN  
Alias Name: 404867  
Alias Type: Project Code (Site Code)  
Alias Name: 60001559  
Alias Type: Envirostor ID Number

**Completed Info:**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 11/29/2011  
Comments: DTSC prepared a project closeout Cost Recovery Unit Memorandum

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 11/15/2011  
Comments: The Report was considered to be a Phase I Addendum due to the inclusion of sampling results for lead from lead-based paint and OCPs from termiticides. DTSC approved the Phase I Addendum with a No Further Action determination

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

**SCH:**

Name: PROPOSED ELEMENTARY SCHOOL NO. 10-A  
Address: NORTHEAST CORNER ELLIOTT ROAD AND PAT ROAD  
City,State,Zip: WINCHESTER, CA 92596

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PROPOSED ELEMENTARY SCHOOL NO. 10-A (Continued)**

**S111290786**

Facility ID: 60001559  
Site Type: School Investigation  
Site Type Detail: School  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 17.42  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Cleanup Program  
Project Manager: Aslam Shareef  
Supervisor: Shahir Haddad  
Division Branch: Southern California Schools & Brownfields Outreach  
Site Code: 404867  
Assembly: 67  
Senate: 28  
Special Program Status: Not reported  
Status: No Further Action  
Status Date: 01/19/2012  
Restricted Use: NO  
Funding: Responsible Party  
Latitude: 33.6207  
Longitude: -117.1089  
APN: 480-030-025, 480-030-026  
Past Use: NONE, TRANSPORTATION - WAREHOUSING  
Potential COC: Lead  
Confirmed COC: 30013-NO  
Potential Description: NMA  
Alias Name: 480-030-025  
Alias Type: APN  
Alias Name: 480-030-026  
Alias Type: APN  
Alias Name: 404867  
Alias Type: Project Code (Site Code)  
Alias Name: 60001559  
Alias Type: Envirostor ID Number

**Completed Info:**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 11/29/2011  
Comments: DTSC prepared a project closeout Cost Recovery Unit Memorandum

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 11/15/2011  
Comments: The Report was considered to be a Phase I Addendum due to the inclusion of sampling results for lead from lead-based paint and OCPs from termiticides. DTSC approved the Phase I Addendum with a No Further Action determination

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PROPOSED ELEMENTARY SCHOOL NO. 10-A (Continued)**

**S111290786**

Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

**5**  
**South**  
**1/2-1**  
**0.998 mi.**  
**5267 ft.**

**QUINTA DO LAGO ELEMENTARY**  
**POURROY ROAD/THOMPSON ROAD/FRENCH VALLEY**  
**TEMECULA, CA 92592**

**ENVIROSTOR** **S118756704**  
**SCH** **N/A**

**Relative:**  
**Lower**  
**Actual:**  
**1389 ft.**

ENVIROSTOR:  
Name: QUINTA DO LAGO ELEMENTARY  
Address: POURROY ROAD/THOMPSON ROAD/FRENCH VALLEY  
City,State,Zip: TEMECULA, CA 92592  
Facility ID: 33010047  
Status: No Action Required  
Status Date: 08/22/2001  
Site Code: 404261  
Site Type: School Investigation  
Site Type Detailed: School  
Acres: 12  
NPL: NO  
Regulatory Agencies: SMBRP  
Lead Agency: SMBRP  
Program Manager: Not reported  
Supervisor: Mark Malinowski  
Division Branch: Southern California Schools & Brownfields Outreach  
Assembly: 67  
Senate: 28  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: School District  
Latitude: 33.60545  
Longitude: -117.1009  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: NONE SPECIFIED No Contaminants found  
Confirmed COC: NONE SPECIFIED  
Potential Description: NMA  
Alias Name: QUINTA DO LAGO ELEMENTARY  
Alias Type: Alternate Name  
Alias Name: TEMECULA VALLEY USD-QUINTA DO LAGO ELEM  
Alias Type: Alternate Name  
Alias Name: 404261  
Alias Type: Project Code (Site Code)  
Alias Name: 33010047  
Alias Type: Envirostor ID Number

Completed Info:  
Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 08/22/2001  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**QUINTA DO LAGO ELEMENTARY (Continued)**

**S118756704**

Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 08/28/2001  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

**SCH:**

Name: QUINTA DO LAGO ELEMENTARY  
Address: POURROY ROAD/THOMPSON ROAD/FRENCH VALLEY  
City,State,Zip: TEMECULA, CA 92592  
Facility ID: 33010047  
Site Type: School Investigation  
Site Type Detail: School  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 12  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Cleanup Program  
Project Manager: Not reported  
Supervisor: Mark Malinowski  
Division Branch: Southern California Schools & Brownfields Outreach  
Site Code: 404261  
Assembly: 67  
Senate: 28  
Special Program Status: Not reported  
Status: No Action Required  
Status Date: 08/22/2001  
Restricted Use: NO  
Funding: School District  
Latitude: 33.60545  
Longitude: -117.1009  
APN: NONE SPECIFIED  
Past Use: AGRICULTURAL - ROW CROPS  
Potential COC: NONE SPECIFIED, No Contaminants found  
Confirmed COC: NONE SPECIFIED  
Potential Description: NMA  
Alias Name: QUINTA DO LAGO ELEMENTARY  
Alias Type: Alternate Name  
Alias Name: TEMECULA VALLEY USD-QUINTA DO LAGO ELEM  
Alias Type: Alternate Name  
Alias Name: 404261  
Alias Type: Project Code (Site Code)  
Alias Name: 33010047  
Alias Type: Envirostor ID Number

Completed Info:  
Completed Area Name: PROJECT WIDE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**QUINTA DO LAGO ELEMENTARY (Continued)**

**S118756704**

Completed Sub Area Name: Not reported  
Completed Document Type: Phase 1  
Completed Date: 08/22/2001  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 08/28/2001  
Comments: Not reported

Future Area Name: Not reported  
Future Sub Area Name: Not reported  
Future Document Type: Not reported  
Future Due Date: Not reported  
Schedule Area Name: Not reported  
Schedule Sub Area Name: Not reported  
Schedule Document Type: Not reported  
Schedule Due Date: Not reported  
Schedule Revised Date: Not reported

Count: 0 records.

ORPHAN SUMMARY

| City           | EDR ID | Site Name | Site Address | Zip | Database(s) |
|----------------|--------|-----------|--------------|-----|-------------|
| NO SITES FOUND |        |           |              |     |             |

# 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: 10/25/2019  | Source: EPA                            |
| Date Data Arrived at EDR: 11/07/2019    | Telephone: N/A                         |
| Date Made Active in Reports: 11/20/2019 | Last EDR Contact: 01/03/2020           |
| Number of Days to Update: 13            | Next Scheduled EDR Contact: 04/13/2020 |
|   | 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: 10/25/2019  | Source: EPA                            |
| Date Data Arrived at EDR: 11/07/2019    | Telephone: N/A                         |
| Date Made Active in Reports: 11/20/2019 | Last EDR Contact: 01/03/2020           |
| Number of Days to Update: 13            | Next Scheduled EDR Contact: 04/13/2020 |
|   | 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: 10/25/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 11/20/2019  
Number of Days to Update: 13

Source: EPA  
Telephone: N/A  
Last EDR Contact: 01/03/2020  
Next Scheduled EDR Contact: 04/13/2020  
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: 04/05/2019  
Next Scheduled EDR Contact: 04/13/2020  
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: 10/25/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 11/21/2019  
Number of Days to Update: 14

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 01/03/2020  
Next Scheduled EDR Contact: 01/27/2020  
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: 10/25/2019  | Source: EPA                            |
| Date Data Arrived at EDR: 11/07/2019    | Telephone: 800-424-9346                |
| Date Made Active in Reports: 11/21/2019 | Last EDR Contact: 01/03/2020           |
| Number of Days to Update: 14            | Next Scheduled EDR Contact: 01/27/2020 |
|   | 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: 12/16/2019  | Source: EPA                            |
| Date Data Arrived at EDR: 12/16/2019    | Telephone: 800-424-9346                |
| Date Made Active in Reports: 12/20/2019 | Last EDR Contact: 12/16/2019           |
| Number of Days to Update: 4             | Next Scheduled EDR Contact: 04/06/2020 |
|   | 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: 12/16/2019  | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 12/16/2019    | Telephone: (415) 495-8895               |
| Date Made Active in Reports: 12/20/2019 | Last EDR Contact: 12/16/2019            |
| Number of Days to Update: 4             | Next Scheduled EDR Contact: 04/06/2020  |
|   | 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: 12/16/2019  | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 12/16/2019    | Telephone: (415) 495-8895               |
| Date Made Active in Reports: 12/20/2019 | Last EDR Contact: 12/16/2019            |
| Number of Days to Update: 4             | Next Scheduled EDR Contact: 04/06/2020  |
|   | 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: 12/16/2019  | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 12/16/2019    | Telephone: (415) 495-8895               |
| Date Made Active in Reports: 12/20/2019 | Last EDR Contact: 12/16/2019            |
| Number of Days to Update: 4             | Next Scheduled EDR Contact: 04/06/2020  |
|   | 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: 12/16/2019  | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 12/16/2019    | Telephone: (415) 495-8895               |
| Date Made Active in Reports: 12/20/2019 | Last EDR Contact: 12/16/2019            |
| Number of Days to Update: 4             | Next Scheduled EDR Contact: 04/06/2020  |
|   | 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: 08/13/2019  | Source: Department of the Navy         |
| Date Data Arrived at EDR: 08/20/2019    | Telephone: 843-820-7326                |
| Date Made Active in Reports: 08/26/2019 | Last EDR Contact: 11/07/2019           |
| Number of Days to Update: 6             | Next Scheduled EDR Contact: 02/24/2020 |
|   | 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: 08/19/2019  | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 08/20/2019    | Telephone: 703-603-0695                 |
| Date Made Active in Reports: 08/26/2019 | Last EDR Contact: 11/22/2019            |
| Number of Days to Update: 6             | Next Scheduled EDR Contact: 03/09/2020  |
|   | Data Release Frequency: Varies          |

### US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

|   |   |
|---|---|
| Date of Government Version: 08/19/2019  | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 08/20/2019    | Telephone: 703-603-0695                 |
| Date Made Active in Reports: 08/26/2019 | Last EDR Contact: 11/22/2019            |
| Number of Days to Update: 6             | Next Scheduled EDR Contact: 03/09/2020  |
|   | 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: 09/09/2019

Date Data Arrived at EDR: 09/09/2019

Date Made Active in Reports: 09/23/2019

Number of Days to Update: 14

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 12/19/2019

Next Scheduled EDR Contact: 04/06/2020

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: 10/28/2019

Date Data Arrived at EDR: 10/29/2019

Date Made Active in Reports: 01/07/2020

Number of Days to Update: 70

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 10/29/2019

Next Scheduled EDR Contact: 02/10/2020

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: 10/28/2019

Date Data Arrived at EDR: 10/29/2019

Date Made Active in Reports: 01/07/2020

Number of Days to Update: 70

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 10/29/2019

Next Scheduled EDR Contact: 02/10/2020

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: 11/11/2019

Date Data Arrived at EDR: 11/12/2019

Date Made Active in Reports: 01/08/2020

Number of Days to Update: 57

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 11/12/2019

Next Scheduled EDR Contact: 02/24/2020

Data Release Frequency: Quarterly

## ***State and tribal leaking storage tank lists***



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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 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: 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: 09/09/2019  | Source: State Water Resources Control Board |
| Date Data Arrived at EDR: 09/09/2019    | Telephone: see region list                  |
| Date Made Active in Reports: 10/31/2019 | Last EDR Contact: 12/10/2019                |
| Number of Days to Update: 52            | Next Scheduled EDR Contact: 03/23/2020      |
|   | Data Release Frequency: Quarterly           |

## 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 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 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

|   |   |
|---|---|
| Date of Government Version: 06/07/2005  | Source: California Regional Water Quality Control Board Victorville Branch Office (6) |
| Date Data Arrived at EDR: 06/07/2005    | Telephone: 760-241-7365   |
| Date Made Active in Reports: 06/29/2005 | Last EDR Contact: 09/12/2011  |
| Number of Days to Update: 22            | Next Scheduled EDR Contact: 12/26/2011  |
|   | Data Release Frequency: No Update Planned   |

## LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/09/2003  
Date Data Arrived at EDR: 09/10/2003  
Date Made Active in Reports: 10/07/2003  
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)  
Telephone: 530-542-5572  
Last EDR Contact: 09/12/2011  
Next Scheduled EDR Contact: 12/26/2011  
Data Release Frequency: No Update Planned

## LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001  
Date Data Arrived at EDR: 04/23/2001  
Date Made Active in Reports: 05/21/2001  
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)  
Telephone: 858-637-5595  
Last EDR Contact: 09/26/2011  
Next Scheduled EDR Contact: 01/09/2012  
Data Release Frequency: No Update Planned

## LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004  
Date Data Arrived at EDR: 09/07/2004  
Date Made Active in Reports: 10/12/2004  
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6710  
Last EDR Contact: 09/06/2011  
Next Scheduled EDR Contact: 12/19/2011  
Data Release Frequency: No Update Planned

## LUST REG 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

## 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: 04/08/2019  
Date Data Arrived at EDR: 07/30/2019  
Date Made Active in Reports: 10/17/2019  
Number of Days to Update: 79

Source: EPA, Region 5  
Telephone: 312-886-7439  
Last EDR Contact: 12/04/2019  
Next Scheduled EDR Contact: 02/03/2020  
Data Release Frequency: Varies

## INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/12/2019  
Date Data Arrived at EDR: 07/29/2019  
Date Made Active in Reports: 10/17/2019  
Number of Days to Update: 80

Source: EPA Region 4  
Telephone: 404-562-8677  
Last EDR Contact: 12/03/2019  
Next Scheduled EDR Contact: 02/03/2020  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in New Mexico and Oklahoma.

|   |  |
|---|--|
| Date of Government Version: 05/01/2019  | Source: EPA Region 6                   |
| Date Data Arrived at EDR: 07/29/2019    | Telephone: 214-665-6597                |
| Date Made Active in Reports: 10/17/2019 | Last EDR Contact: 10/25/2019           |
| Number of Days to Update: 80            | Next Scheduled EDR Contact: 02/03/2020 |
|   | 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: 04/08/2019  | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 07/29/2019    | Telephone: 415-972-3372                 |
| Date Made Active in Reports: 10/17/2019 | Last EDR Contact: 12/04/2019            |
| Number of Days to Update: 80            | Next Scheduled EDR Contact: 02/03/2020  |
|   | Data Release Frequency: Varies          |

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

|   |  |
|---|--|
| Date of Government Version: 04/16/2019  | Source: EPA Region 10                  |
| Date Data Arrived at EDR: 07/29/2019    | Telephone: 206-553-2857                |
| Date Made Active in Reports: 10/17/2019 | Last EDR Contact: 12/04/2019           |
| Number of Days to Update: 80            | Next Scheduled EDR Contact: 02/03/2020 |
|   | 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: 05/02/2019  | Source: EPA Region 8                   |
| Date Data Arrived at EDR: 10/22/2019    | Telephone: 303-312-6271                |
| Date Made Active in Reports: 11/11/2019 | Last EDR Contact: 12/04/2019           |
| Number of Days to Update: 20            | Next Scheduled EDR Contact: 02/03/2020 |
|   | 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: 04/11/2019  | Source: EPA Region 1                   |
| Date Data Arrived at EDR: 07/29/2019    | Telephone: 617-918-1313                |
| Date Made Active in Reports: 10/17/2019 | Last EDR Contact: 12/04/2019           |
| Number of Days to Update: 80            | Next Scheduled EDR Contact: 02/03/2020 |
|   | 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: 07/02/2019  | Source: EPA Region 7                   |
| Date Data Arrived at EDR: 10/16/2019    | Telephone: 913-551-7003                |
| Date Made Active in Reports: 10/24/2019 | Last EDR Contact: 12/16/2020           |
| Number of Days to Update: 8             | Next Scheduled EDR Contact: 02/03/2020 |
|   | 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: 09/09/2019  | Source: State Water Resources Control Board |
| Date Data Arrived at EDR: 09/09/2019    | Telephone: 866-480-1028                     |
| Date Made Active in Reports: 11/06/2019 | Last EDR Contact: 12/10/2019                |
| Number of Days to Update: 58            | Next Scheduled EDR Contact: 03/23/2020      |
|   | 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: Region Water Quality Control Board Los Angeles Region (4)  
Telephone: 213-576-6600  
Last EDR Contact: 07/01/2011  
Next Scheduled EDR Contact: 10/17/2011  
Data Release Frequency: 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: 08/27/2019  
Date Data Arrived at EDR: 08/28/2019  
Date Made Active in Reports: 11/11/2019  
Number of Days to Update: 75

Source: FEMA  
Telephone: 202-646-5797  
Last EDR Contact: 01/07/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Varies

### UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 52

Source: SWRCB  
Telephone: 916-341-5851  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

|   |   |
|---|---|
| Date of Government Version: 09/09/2019  | Source: State Water Resources Control Board |
| Date Data Arrived at EDR: 09/09/2019    | Telephone: 866-480-1028                     |
| Date Made Active in Reports: 11/01/2019 | Last EDR Contact: 12/10/2019                |
| Number of Days to Update: 53            | Next Scheduled EDR Contact: 03/23/2020      |
|   | 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.

|   |   |
|---|---|
| Date of Government Version: 09/06/2019  | Source: State Water Resources Control Board |
| Date Data Arrived at EDR: 09/09/2019    | Telephone: 916-327-7844                     |
| Date Made Active in Reports: 10/31/2019 | Last EDR Contact: 12/10/2019                |
| Number of Days to Update: 52            | Next Scheduled EDR Contact: 03/23/2020      |
|   | Data Release Frequency: Varies              |

## AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

|   |  |
|---|--|
| Date of Government Version: 07/06/2016  | Source: California Environmental Protection Agency |
| Date Data Arrived at EDR: 07/12/2016    | Telephone: 916-327-5092                            |
| Date Made Active in Reports: 09/19/2016 | Last EDR Contact: 12/11/2019                       |
| Number of Days to Update: 69            | Next Scheduled EDR Contact: 03/30/2020             |
|   | Data Release Frequency: Varies                     |

## 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: 04/16/2019  | Source: EPA Region 10                  |
| Date Data Arrived at EDR: 07/30/2019    | Telephone: 206-553-2857                |
| Date Made Active in Reports: 10/17/2019 | Last EDR Contact: 12/04/2019           |
| Number of Days to Update: 79            | Next Scheduled EDR Contact: 02/03/2020 |
|   | 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: 05/02/2019  | Source: EPA Region 7                   |
| Date Data Arrived at EDR: 07/29/2019    | Telephone: 913-551-7003                |
| Date Made Active in Reports: 10/17/2019 | Last EDR Contact: 12/04/2019           |
| Number of Days to Update: 80            | Next Scheduled EDR Contact: 02/03/2020 |
|   | 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: 04/08/2019  | Source: EPA Region 9                   |
| Date Data Arrived at EDR: 07/29/2019    | Telephone: 415-972-3368                |
| Date Made Active in Reports: 10/17/2019 | Last EDR Contact: 12/04/2019           |
| Number of Days to Update: 80            | Next Scheduled EDR Contact: 02/03/2020 |
|   | Data Release Frequency: Varies         |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 05/02/2019  | Source: EPA Region 8                   |
| Date Data Arrived at EDR: 10/22/2019    | Telephone: 303-312-6137                |
| Date Made Active in Reports: 11/11/2019 | Last EDR Contact: 12/04/2019           |
| Number of Days to Update: 20            | Next Scheduled EDR Contact: 02/03/2020 |
|   | Data Release Frequency: Varies         |

## INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

|   |  |
|---|--|
| Date of Government Version: 05/01/2019  | Source: EPA Region 6                   |
| Date Data Arrived at EDR: 07/29/2019    | Telephone: 214-665-7591                |
| Date Made Active in Reports: 10/17/2019 | Last EDR Contact: 12/04/2019           |
| Number of Days to Update: 80            | Next Scheduled EDR Contact: 02/03/2020 |
|   | 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: 04/08/2019  | Source: EPA Region 5                   |
| Date Data Arrived at EDR: 07/29/2019    | Telephone: 312-886-6136                |
| Date Made Active in Reports: 10/17/2019 | Last EDR Contact: 12/04/2019           |
| Number of Days to Update: 80            | Next Scheduled EDR Contact: 02/03/2020 |
|   | 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: 04/12/2019  | Source: EPA Region 4                   |
| Date Data Arrived at EDR: 07/29/2019    | Telephone: 404-562-9424                |
| Date Made Active in Reports: 10/17/2019 | Last EDR Contact: 12/03/2019           |
| Number of Days to Update: 80            | Next Scheduled EDR Contact: 02/03/2020 |
|   | 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: 04/11/2019  | Source: EPA, Region 1                  |
| Date Data Arrived at EDR: 07/30/2019    | Telephone: 617-918-1313                |
| Date Made Active in Reports: 10/17/2019 | Last EDR Contact: 12/04/2019           |
| Number of Days to Update: 79            | Next Scheduled EDR Contact: 02/03/2020 |
|   | Data Release Frequency: Varies         |

## **State and tribal voluntary cleanup sites**

### INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

|   |  |
|---|--|
| Date of Government Version: 07/27/2015  | Source: EPA, Region 1                  |
| Date Data Arrived at EDR: 09/29/2015    | Telephone: 617-918-1102                |
| Date Made Active in Reports: 02/18/2016 | Last EDR Contact: 12/17/2019           |
| Number of Days to Update: 142           | Next Scheduled EDR Contact: 04/06/2020 |
|   | Data Release Frequency: Varies         |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

|   |  |
|---|--|
| Date of Government Version: 03/20/2008  | Source: EPA, Region 7                  |
| Date Data Arrived at EDR: 04/22/2008    | Telephone: 913-551-7365                |
| Date Made Active in Reports: 05/19/2008 | Last EDR Contact: 04/20/2009           |
| Number of Days to Update: 27            | Next Scheduled EDR Contact: 07/20/2009 |
|   | Data Release Frequency: Varies         |

## VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

|   |  |
|---|--|
| Date of Government Version: 10/28/2019  | Source: Department of Toxic Substances Control |
| Date Data Arrived at EDR: 10/29/2019    | Telephone: 916-323-3400                        |
| Date Made Active in Reports: 01/07/2020 | Last EDR Contact: 10/29/2019                   |
| Number of Days to Update: 70            | Next Scheduled EDR Contact: 02/10/2020         |
|   | Data Release Frequency: Quarterly              |

## **State and tribal Brownfields sites**

### BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

|   |   |
|---|---|
| Date of Government Version: 09/23/2019  | Source: State Water Resources Control Board |
| Date Data Arrived at EDR: 09/24/2019    | Telephone: 916-323-7905                     |
| Date Made Active in Reports: 11/06/2019 | Last EDR Contact: 12/19/2019                |
| Number of Days to Update: 43            | Next Scheduled EDR Contact: 04/06/2020      |
|   | 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: 06/03/2019  | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 06/04/2019    | Telephone: 202-566-2777                 |
| Date Made Active in Reports: 08/26/2019 | Last EDR Contact: 12/16/2019            |
| Number of Days to Update: 83            | Next Scheduled EDR Contact: 03/30/2020  |
|   | 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: 10/25/2019  
Next Scheduled EDR Contact: 02/10/2020  
Data Release Frequency: No Update Planned

## SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/07/2019  
Number of Days to Update: 59

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Quarterly

## HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 03/26/2019  
Date Data Arrived at EDR: 03/27/2019  
Date Made Active in Reports: 04/30/2019  
Number of Days to Update: 34

Source: Integrated Waste Management Board  
Telephone: 916-341-6422  
Last EDR Contact: 11/07/2019  
Next Scheduled EDR Contact: 02/24/2020  
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: 10/28/2019  
Next Scheduled EDR Contact: 02/10/2020  
Data Release Frequency: Varies

## 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

## 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: 10/17/2019  
Next Scheduled EDR Contact: 02/03/2020  
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: 11/01/2019  
Next Scheduled EDR Contact: 02/10/2020  
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: 06/11/2019  | Source: Drug Enforcement Administration   |
| Date Data Arrived at EDR: 06/13/2019    | Telephone: 202-307-1000                   |
| Date Made Active in Reports: 09/03/2019 | Last EDR Contact: 11/20/2019              |
| Number of Days to Update: 82            | Next Scheduled EDR Contact: 03/09/2020    |
|   | Data Release Frequency: No Update Planned |

### **HIST CAL-SITES: Calsites Database**

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

|   |   |
|---|---|
| Date of Government Version: 08/08/2005  | Source: Department of Toxic Substance Control |
| Date Data Arrived at EDR: 08/03/2006    | Telephone: 916-323-3400                       |
| Date Made Active in Reports: 08/24/2006 | Last EDR Contact: 02/23/2009                  |
| Number of Days to Update: 21            | Next Scheduled EDR Contact: 05/25/2009        |
|   | Data Release Frequency: No Update Planned     |

### **SCH: School Property Evaluation Program**

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

|   |  |
|---|--|
| Date of Government Version: 10/28/2019  | Source: Department of Toxic Substances Control |
| Date Data Arrived at EDR: 10/29/2019    | Telephone: 916-323-3400                        |
| Date Made Active in Reports: 01/07/2020 | Last EDR Contact: 10/29/2019                   |
| Number of Days to Update: 70            | Next Scheduled EDR Contact: 02/10/2020         |
|   | 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: 06/30/2018  | Source: Department of Toxic Substances Control |
| Date Data Arrived at EDR: 07/16/2019    | Telephone: 916-255-6504                        |
| Date Made Active in Reports: 09/24/2019 | Last EDR Contact: 01/06/2020                   |
| Number of Days to Update: 70            | Next Scheduled EDR Contact: 04/20/2020         |
|   | Data Release Frequency: Varies                 |

### **CERS HAZ WASTE: CERS HAZ WASTE**

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

|   |  |
|---|--|
| Date of Government Version: 10/21/2019  | Source: CalEPA                         |
| Date Data Arrived at EDR: 10/22/2019    | Telephone: 916-323-2514                |
| Date Made Active in Reports: 01/02/2020 | Last EDR Contact: 10/22/2019           |
| Number of Days to Update: 72            | Next Scheduled EDR Contact: 02/03/2020 |
|   | Data Release Frequency: Quarterly      |

### **TOXIC PITS: Toxic Pits Cleanup Act Sites**

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

## 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: 06/11/2019  
Date Data Arrived at EDR: 06/13/2019  
Date Made Active in Reports: 09/03/2019  
Number of Days to Update: 82

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
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: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/05/2019  
Number of Days to Update: 57

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
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: 08/20/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 52

Source: Department of Public Health  
Telephone: 707-463-4466  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
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: 08/01/2019  | Source: San Francisco County Department of Public Health |
| Date Data Arrived at EDR: 08/02/2019    | Telephone: 415-252-3896                                  |
| Date Made Active in Reports: 10/11/2019 | Last EDR Contact: 10/31/2019                             |
| Number of Days to Update: 70            | Next Scheduled EDR Contact: 02/17/2020                   |
|   | Data Release Frequency: Varies                           |

## CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

|   |  |
|---|--|
| 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          |

## 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: 10/21/2019  | Source: California Environmental Protection Agency |
| Date Data Arrived at EDR: 10/22/2019    | Telephone: 916-323-2514                            |
| Date Made Active in Reports: 01/03/2020 | Last EDR Contact: 10/22/2019                       |
| Number of Days to Update: 73            | Next Scheduled EDR Contact: 02/03/2020             |
|   | Data Release Frequency: Quarterly                  |

## **Local Land Records**

### LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

|   |  |
|---|--|
| Date of Government Version: 08/29/2019  | Source: Department of Toxic Substances Control |
| Date Data Arrived at EDR: 08/30/2019    | Telephone: 916-323-3400                        |
| Date Made Active in Reports: 10/29/2019 | Last EDR Contact: 12/02/2019                   |
| Number of Days to Update: 60            | Next Scheduled EDR Contact: 03/16/2020         |
|   | 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: 10/25/2019  | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 11/07/2019    | Telephone: 202-564-6023                 |
| Date Made Active in Reports: 11/20/2019 | Last EDR Contact: 01/03/2020            |
| Number of Days to Update: 13            | Next Scheduled EDR Contact: 04/13/2020  |
|   | 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: 09/03/2019  | Source: DTSC and SWRCB                 |
| Date Data Arrived at EDR: 09/04/2019    | Telephone: 916-323-3400                |
| Date Made Active in Reports: 11/05/2019 | Last EDR Contact: 12/04/2019           |
| Number of Days to Update: 62            | Next Scheduled EDR Contact: 03/16/2020 |
|   | 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: 06/24/2019  | Source: U.S. Department of Transportation |
| Date Data Arrived at EDR: 06/26/2019    | Telephone: 202-366-4555                   |
| Date Made Active in Reports: 09/23/2019 | Last EDR Contact: 12/06/2019              |
| Number of Days to Update: 89            | Next Scheduled EDR Contact: 04/06/2020    |
|   | 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: 05/15/2019  | Source: Office of Emergency Services   |
| Date Data Arrived at EDR: 06/24/2019    | Telephone: 916-845-8400                |
| Date Made Active in Reports: 08/21/2019 | Last EDR Contact: 10/25/2019           |
| Number of Days to Update: 58            | Next Scheduled EDR Contact: 02/03/2020 |
|   | 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: 09/09/2019  | Source: State Water Quality Control Board |
| Date Data Arrived at EDR: 09/09/2019    | Telephone: 866-480-1028                   |
| Date Made Active in Reports: 11/05/2019 | Last EDR Contact: 12/10/2019              |
| Number of Days to Update: 57            | Next Scheduled EDR Contact: 03/23/2020    |
|   | 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: 09/09/2019  | Source: State Water Resources Control Board |
| Date Data Arrived at EDR: 09/09/2019    | Telephone: 866-480-1028                     |
| Date Made Active in Reports: 11/05/2019 | Last EDR Contact: 12/10/2019                |
| Number of Days to Update: 57            | Next Scheduled EDR Contact: 03/23/2020      |
|   | 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: 12/16/2019  | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 12/16/2019    | Telephone: (415) 495-8895               |
| Date Made Active in Reports: 12/20/2019 | Last EDR Contact: 12/16/2019            |
| Number of Days to Update: 4             | Next Scheduled EDR Contact: 04/06/2020  |
|   | 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: 05/15/2019  | Source: U.S. Army Corps of Engineers   |
| Date Data Arrived at EDR: 05/21/2019    | Telephone: 202-528-4285                |
| Date Made Active in Reports: 08/08/2019 | Last EDR Contact: 11/19/2019           |
| Number of Days to Update: 79            | Next Scheduled EDR Contact: 03/02/2020 |
|   | 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: 01/10/2020           |
| Number of Days to Update: 62            | Next Scheduled EDR Contact: 04/20/2020 |
|   | 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: 01/09/2020           |
| Number of Days to Update: 574           | Next Scheduled EDR Contact: 04/20/2020 |
|   | 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: 12/02/2019  
Next Scheduled EDR Contact: 02/24/2020  
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: 09/23/2019  
Date Data Arrived at EDR: 09/24/2019  
Date Made Active in Reports: 12/20/2019  
Number of Days to Update: 87

Source: Environmental Protection Agency  
Telephone: 202-566-1917  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 04/06/2020  
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: 10/31/2019  
Next Scheduled EDR Contact: 02/17/2020  
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: 11/08/2019  
Next Scheduled EDR Contact: 02/17/2020  
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: 06/21/2017  
Date Made Active in Reports: 01/05/2018  
Number of Days to Update: 198

Source: EPA  
Telephone: 202-260-5521  
Last EDR Contact: 12/20/2019  
Next Scheduled EDR Contact: 03/30/2020  
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: 12/31/2017  
Date Data Arrived at EDR: 11/16/2018  
Date Made Active in Reports: 11/21/2019  
Number of Days to Update: 370

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 11/22/2019  
Next Scheduled EDR Contact: 03/02/2020  
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: 05/01/2019  
Date Data Arrived at EDR: 10/23/2019  
Date Made Active in Reports: 01/15/2020  
Number of Days to Update: 84

Source: EPA  
Telephone: 202-564-4203  
Last EDR Contact: 10/23/2019  
Next Scheduled EDR Contact: 02/03/2020  
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: 10/25/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 11/20/2019  
Number of Days to Update: 13

Source: EPA  
Telephone: 703-416-0223  
Last EDR Contact: 01/03/2020  
Next Scheduled EDR Contact: 03/16/2020  
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: 04/25/2019  
Date Data Arrived at EDR: 05/02/2019  
Date Made Active in Reports: 05/23/2019  
Number of Days to Update: 21

Source: Environmental Protection Agency  
Telephone: 202-564-8600  
Last EDR Contact: 10/21/2019  
Next Scheduled EDR Contact: 02/03/2020  
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: 10/25/2019  | Source: EPA                            |
| Date Data Arrived at EDR: 11/07/2019    | Telephone: 202-564-6023                |
| Date Made Active in Reports: 11/21/2019 | Last EDR Contact: 01/03/2020           |
| Number of Days to Update: 14            | Next Scheduled EDR Contact: 02/17/2020 |
|   | 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: 01/10/2020           |
| Number of Days to Update: 70            | Next Scheduled EDR Contact: 04/20/2020 |
|   | 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: 01/06/2020            |
| Number of Days to Update: 79            | Next Scheduled EDR Contact: 04/20/2020  |
|   | 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: 10/25/2019  | Source: Nuclear Regulatory Commission  |
| Date Data Arrived at EDR: 10/25/2019    | Telephone: 301-415-7169                |
| Date Made Active in Reports: 01/15/2020 | Last EDR Contact: 10/25/2019           |
| Number of Days to Update: 82            | Next Scheduled EDR Contact: 02/03/2020 |
|   | 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: 12/04/2019           |
| Number of Days to Update: 42            | Next Scheduled EDR Contact: 03/16/2020 |
|   | 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: 11/25/2019            |
| Number of Days to Update: 251           | Next Scheduled EDR Contact: 03/16/2020  |
|   | 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: 05/24/2017  | Source: Environmental Protection Agency |
| Date Data Arrived at EDR: 11/30/2017    | Telephone: 202-566-0517                 |
| Date Made Active in Reports: 12/15/2017 | Last EDR Contact: 11/06/2019            |
| Number of Days to Update: 15            | Next Scheduled EDR Contact: 02/17/2020  |
|   | 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: 12/20/2019            |
| Number of Days to Update: 84            | Next Scheduled EDR Contact: 04/13/2020  |
|   | 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: 10/01/2019  
Date Data Arrived at EDR: 10/29/2019  
Date Made Active in Reports: 01/15/2020  
Number of Days to Update: 78

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 10/29/2019  
Next Scheduled EDR Contact: 02/10/2020  
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: 09/30/2019  
Date Data Arrived at EDR: 10/09/2019  
Date Made Active in Reports: 12/20/2019  
Number of Days to Update: 72

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 01/06/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Varies

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 09/28/2017  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 12/16/2019  
Next Scheduled EDR Contact: 04/06/2020  
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: 01/07/2020  
Next Scheduled EDR Contact: 04/20/2020  
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: 11/04/2019  
Next Scheduled EDR Contact: 02/17/2020  
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: 08/01/2019  
Date Data Arrived at EDR: 08/21/2019  
Date Made Active in Reports: 11/11/2019  
Number of Days to Update: 82

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 11/15/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/25/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 11/20/2019  
Number of Days to Update: 13

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 01/03/2020  
Next Scheduled EDR Contact: 04/13/2020  
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: 09/17/2019  
Date Data Arrived at EDR: 09/18/2019  
Date Made Active in Reports: 12/03/2019  
Number of Days to Update: 76

Source: DOL, Mine Safety & Health Administration  
Telephone: 202-693-9424  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
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: 08/01/2019  
Date Data Arrived at EDR: 08/27/2019  
Date Made Active in Reports: 11/11/2019  
Number of Days to Update: 76

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 11/25/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Semi-Annually

## US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 11/22/2019  
Next Scheduled EDR Contact: 03/09/2020  
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: 11/22/2019  
Next Scheduled EDR Contact: 03/09/2020  
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: 09/10/2019  
Date Data Arrived at EDR: 09/10/2019  
Date Made Active in Reports: 10/17/2019  
Number of Days to Update: 37

Source: Department of Interior  
Telephone: 202-208-2609  
Last EDR Contact: 12/04/2019  
Next Scheduled EDR Contact: 03/23/2020  
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: 08/12/2019  
Date Data Arrived at EDR: 09/04/2019  
Date Made Active in Reports: 12/03/2019  
Number of Days to Update: 90

Source: EPA  
Telephone: (415) 947-8000  
Last EDR Contact: 12/04/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Quarterly

## ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 10/06/2019  
Date Data Arrived at EDR: 10/08/2019  
Date Made Active in Reports: 01/02/2020  
Number of Days to Update: 86

Source: Environmental Protection Agency  
Telephone: 202-564-2280  
Last EDR Contact: 01/07/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

|   |  |
|---|--|
| Date of Government Version: 12/31/2017  | Source: Department of Defense          |
| Date Data Arrived at EDR: 01/17/2019    | Telephone: 703-704-1564                |
| Date Made Active in Reports: 04/01/2019 | Last EDR Contact: 01/13/2020           |
| Number of Days to Update: 74            | Next Scheduled EDR Contact: 04/27/2020 |
|   | Data Release Frequency: Varies         |

## DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

|   |   |
|---|---|
| Date of Government Version: 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: 11/20/2019            |
| Number of Days to Update: 71            | Next Scheduled EDR Contact: 03/09/2020  |
|   | 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: 08/19/2019  | Source: EPA                            |
| Date Data Arrived at EDR: 08/20/2019    | Telephone: 800-385-6164                |
| Date Made Active in Reports: 11/11/2019 | Last EDR Contact: 11/19/2019           |
| Number of Days to Update: 83            | Next Scheduled EDR Contact: 03/02/2020 |
|   | 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: 09/23/2019  | Source: CAL EPA/Office of Emergency Information |
| Date Data Arrived at EDR: 09/24/2019    | Telephone: 916-323-3400                         |
| Date Made Active in Reports: 11/06/2019 | Last EDR Contact: 12/20/2019                    |
| Number of Days to Update: 43            | Next Scheduled EDR Contact: 04/06/2020          |
|   | 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: 11/14/2019                 |
| Number of Days to Update: 64            | Next Scheduled EDR Contact: 02/24/2020       |
|   | Data Release Frequency: Varies               |

## CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/31/2019  
Date Data Arrived at EDR: 11/01/2019  
Date Made Active in Reports: 12/11/2019  
Number of Days to Update: 40

Source: San Francisco County Department of Environmental Health  
Telephone: 415-252-3896  
Last EDR Contact: 10/31/2019  
Next Scheduled EDR Contact: 02/17/2020  
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

Date of Government Version: 09/27/2019  
Date Data Arrived at EDR: 10/01/2019  
Date Made Active in Reports: 11/07/2019  
Number of Days to Update: 37

Source: South Coast Air Quality Management District  
Telephone: 909-396-3211  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
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: 09/06/2019  
Date Data Arrived at EDR: 10/11/2019  
Date Made Active in Reports: 12/12/2019  
Number of Days to Update: 62

Source: Department of Toxic Substance Control  
Telephone: 916-327-4498  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Annually

## 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: 08/28/2019  
Date Data Arrived at EDR: 08/30/2019  
Date Made Active in Reports: 10/29/2019  
Number of Days to Update: 60

Source: Antelope Valley Air Quality Management District  
Telephone: 661-723-8070  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Varies

## EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 06/24/2019  
Date Made Active in Reports: 08/22/2019  
Number of Days to Update: 59

Source: California Air Resources Board  
Telephone: 916-322-2990  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 03/29/2020  
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: 07/19/2019  
Date Data Arrived at EDR: 07/22/2019  
Date Made Active in Reports: 09/26/2019  
Number of Days to Update: 66

Source: State Water Resources Control Board  
Telephone: 916-445-9379  
Last EDR Contact: 10/30/2019  
Next Scheduled EDR Contact: 02/02/2020  
Data Release Frequency: Varies

## Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/02/2020  
Number of Days to Update: 72

Source: Department of Toxic Substances Control  
Telephone: 916-255-3628  
Last EDR Contact: 10/17/2019  
Next Scheduled EDR Contact: 02/03/2020  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

|   |  |
|---|--|
| Date of Government Version: 11/08/2019  | Source: California Integrated Waste Management Board |
| Date Data Arrived at EDR: 11/12/2019    | Telephone: 916-341-6066                              |
| Date Made Active in Reports: 01/08/2020 | Last EDR Contact: 11/07/2019                         |
| Number of Days to Update: 57            | Next Scheduled EDR Contact: 02/24/2020               |
|   | 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: 12/31/2017  | Source: California Environmental Protection Agency |
| Date Data Arrived at EDR: 05/29/2019    | Telephone: 916-255-1136                            |
| Date Made Active in Reports: 07/22/2019 | Last EDR Contact: 01/09/2020                       |
| Number of Days to Update: 54            | Next Scheduled EDR Contact: 04/20/2020             |
|   | Data Release Frequency: Annually                   |

## ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

|   |  |
|---|--|
| Date of Government Version: 08/19/2019  | Source: Department of Toxic Substances Control |
| Date Data Arrived at EDR: 08/20/2019    | Telephone: 877-786-9427                        |
| Date Made Active in Reports: 10/18/2019 | Last EDR Contact: 11/19/2019                   |
| Number of Days to Update: 59            | Next Scheduled EDR Contact: 03/02/2020         |
|   | Data Release Frequency: Quarterly              |

## HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

|   |  |
|---|--|
| Date of Government Version: 04/01/2001  | Source: Department of Toxic Substances Control |
| Date Data Arrived at EDR: 01/22/2009    | Telephone: 916-323-3400                        |
| Date Made Active in Reports: 04/08/2009 | Last EDR Contact: 01/22/2009                   |
| Number of Days to Update: 76            | Next Scheduled EDR Contact: N/A                |
|   | Data Release Frequency: No Update Planned      |

## HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

|   |  |
|---|--|
| Date of Government Version: 08/19/2019  | Source: Department of Toxic Substances Control |
| Date Data Arrived at EDR: 08/20/2019    | Telephone: 916-323-3400                        |
| Date Made Active in Reports: 10/18/2019 | Last EDR Contact: 11/19/2019                   |
| Number of Days to Update: 59            | Next Scheduled EDR Contact: 03/02/2020         |
|   | 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: 10/07/2019  | Source: Department of Toxic Substances Control |
| Date Data Arrived at EDR: 10/08/2019    | Telephone: 916-440-7145                        |
| Date Made Active in Reports: 11/07/2019 | Last EDR Contact: 01/07/2020                   |
| Number of Days to Update: 30            | Next Scheduled EDR Contact: 04/20/2020         |
|   | 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: 09/09/2019  | Source: Department of Conservation     |
| Date Data Arrived at EDR: 09/09/2019    | Telephone: 916-322-1080                |
| Date Made Active in Reports: 11/05/2019 | Last EDR Contact: 12/10/2019           |
| Number of Days to Update: 57            | Next Scheduled EDR Contact: 03/23/2020 |
|   | 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: 07/19/2019  | Source: Department of Public Health    |
| Date Data Arrived at EDR: 09/04/2019    | Telephone: 916-558-1784                |
| Date Made Active in Reports: 11/05/2019 | Last EDR Contact: 12/04/2019           |
| Number of Days to Update: 62            | Next Scheduled EDR Contact: 03/16/2020 |
|   | Data Release Frequency: Varies         |

## NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

|   |   |
|---|---|
| Date of Government Version: 11/11/2019  | Source: State Water Resources Control Board |
| Date Data Arrived at EDR: 11/12/2019    | Telephone: 916-445-9379                     |
| Date Made Active in Reports: 01/08/2020 | Last EDR Contact: 11/12/2019                |
| Number of Days to Update: 57            | Next Scheduled EDR Contact: 02/24/2020      |
|   | 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: 09/03/2019  | Source: Department of Pesticide Regulation |
| Date Data Arrived at EDR: 09/04/2019    | Telephone: 916-445-4038                    |
| Date Made Active in Reports: 11/05/2019 | Last EDR Contact: 12/04/2019               |
| Number of Days to Update: 62            | Next Scheduled EDR Contact: 03/16/2020     |
|   | Data Release Frequency: Quarterly          |

## PROC: Certified Processors Database

A listing of certified processors.

|   |  |
|---|--|
| Date of Government Version: 09/09/2019  | Source: Department of Conservation     |
| Date Data Arrived at EDR: 09/09/2019    | Telephone: 916-323-3836                |
| Date Made Active in Reports: 11/05/2019 | Last EDR Contact: 12/10/2019           |
| Number of Days to Update: 57            | Next Scheduled EDR Contact: 03/23/2020 |
|   | 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: 09/16/2019  | Source: State Water Resources Control Board |
| Date Data Arrived at EDR: 09/18/2019    | Telephone: 916-445-3846                     |
| Date Made Active in Reports: 11/06/2019 | Last EDR Contact: 12/11/2019                |
| Number of Days to Update: 49            | Next Scheduled EDR Contact: 03/30/2020      |
|   | 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: 08/20/2019  | Source: Department of Conservation     |
| Date Data Arrived at EDR: 08/20/2019    | Telephone: 916-445-2408                |
| Date Made Active in Reports: 11/18/2019 | Last EDR Contact: 12/10/2019           |
| Number of Days to Update: 90            | Next Scheduled EDR Contact: 03/23/2020 |
|   | Data Release Frequency: Varies         |

## UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

|   |  |
|---|--|
| Date of Government Version: 09/09/2019  | Source: State Water Resource Control Board |
| Date Data Arrived at EDR: 09/09/2019    | Telephone: 866-480-1028                    |
| Date Made Active in Reports: 11/01/2019 | Last EDR Contact: 12/10/2019               |
| Number of Days to Update: 53            | Next Scheduled EDR Contact: 03/23/2020     |
|   | 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: 05/08/2018  | Source: RWQCB, Central Valley Region   |
| Date Data Arrived at EDR: 07/11/2018    | Telephone: 559-445-5577                |
| Date Made Active in Reports: 09/13/2018 | Last EDR Contact: 01/07/2020           |
| Number of Days to Update: 64            | Next Scheduled EDR Contact: 04/20/2020 |
|   | 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: 11/14/2019                |
| Number of Days to Update: 9             | Next Scheduled EDR Contact: 03/02/2020      |
|   | 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: 12/17/2019                    |
| Number of Days to Update: 13            | Next Scheduled EDR Contact: 04/06/2020          |
|   | Data Release Frequency: No Update Planned       |

## MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

|   |   |
|---|---|
| Date of Government Version: 09/09/2019  | Source: State Water Resources Control Board |
| Date Data Arrived at EDR: 09/09/2019    | Telephone: 866-480-1028                     |
| Date Made Active in Reports: 11/01/2019 | Last EDR Contact: 12/10/2019                |
| Number of Days to Update: 53            | Next Scheduled EDR Contact: 03/23/2020      |
|   | Data Release Frequency: Varies              |

## PROJECT: Project Sites (GEOTRACKER)

Projects sites

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
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: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/06/2019  
Number of Days to Update: 58

Source: State Water Resources Control Board  
Telephone: 916-341-5810  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
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: 09/03/2019  
Date Data Arrived at EDR: 09/04/2019  
Date Made Active in Reports: 11/05/2019  
Number of Days to Update: 62

Source: State Water Resources Control Board  
Telephone: 866-794-4977  
Last EDR Contact: 12/04/2019  
Next Scheduled EDR Contact: 03/16/2020  
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: 10/21/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/03/2020  
Number of Days to Update: 73

Source: California Environmental Protection Agency  
Telephone: 916-323-2514  
Last EDR Contact: 10/22/2019  
Next Scheduled EDR Contact: 02/03/2020  
Data Release Frequency: Varies

## NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

## OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
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: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

## SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
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: 09/09/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/01/2019  
Number of Days to Update: 53

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Varies

## MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

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: 11/22/2019  
Next Scheduled EDR Contact: 03/09/2020  
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.

# 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 Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### *Exclusive Recovered Govt. Archives*

#### RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 01/13/2014  
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/30/2013  
Number of Days to Update: 182

Source: State Water Resources Control Board  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## 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: 01/06/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/02/2019  
Date Data Arrived at EDR: 10/03/2019  
Date Made Active in Reports: 11/06/2019  
Number of Days to Update: 34

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 01/06/2020  
Next Scheduled EDR Contact: 04/24/2047  
Data Release Frequency: Semi-Annually

## AMADOR COUNTY:

### CUPA AMADOR: CUPA Facility List Cupa Facility List

Date of Government Version: 09/06/2019  
Date Data Arrived at EDR: 09/10/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 51

Source: Amador County Environmental Health  
Telephone: 209-223-6439  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
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: 01/06/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: No Update Planned

## CALVERAS COUNTY:

### CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 08/05/2019  
Date Data Arrived at EDR: 08/07/2019  
Date Made Active in Reports: 10/09/2019  
Number of Days to Update: 63

Source: Calveras County Environmental Health  
Telephone: 209-754-6399  
Last EDR Contact: 12/03/2019  
Next Scheduled EDR Contact: 04/06/2020  
Data Release Frequency: Quarterly

## COLUSA COUNTY:

### CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 08/14/2019  
Date Data Arrived at EDR: 08/20/2019  
Date Made Active in Reports: 10/18/2019  
Number of Days to Update: 59

Source: Health & Human Services  
Telephone: 530-458-0396  
Last EDR Contact: 10/31/2019  
Next Scheduled EDR Contact: 02/17/2020  
Data Release Frequency: Semi-Annually

## CONTRA COSTA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/20/2019  
Date Data Arrived at EDR: 08/23/2019  
Date Made Active in Reports: 10/22/2019  
Number of Days to Update: 60

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 10/28/2019  
Next Scheduled EDR Contact: 02/10/2020  
Data Release Frequency: Semi-Annually

## DEL NORTE COUNTY:

### CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 10/11/2019  
Date Data Arrived at EDR: 10/29/2019  
Date Made Active in Reports: 12/11/2019  
Number of Days to Update: 43

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426  
Last EDR Contact: 10/25/2019  
Next Scheduled EDR Contact: 02/10/2020  
Data Release Frequency: Varies

## EL DORADO COUNTY:

### CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 09/06/2019  
Date Data Arrived at EDR: 09/12/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 49

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-6623  
Last EDR Contact: 10/28/2019  
Next Scheduled EDR Contact: 02/10/2020  
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: 10/08/2019  
Date Data Arrived at EDR: 10/10/2019  
Date Made Active in Reports: 12/11/2019  
Number of Days to Update: 62

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 01/03/2020  
Next Scheduled EDR Contact: 04/13/2020  
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: 10/17/2019  
Next Scheduled EDR Contact: 02/03/2020  
Data Release Frequency: No Update Planned

## HUMBOLDT COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 07/08/2019  
Date Data Arrived at EDR: 07/10/2019  
Date Made Active in Reports: 09/20/2019  
Number of Days to Update: 72

Source: Humboldt County Environmental Health  
Telephone: N/A  
Last EDR Contact: 10/30/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Semi-Annually

## IMPERIAL COUNTY:

### CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/02/2020  
Number of Days to Update: 72

Source: San Diego Border Field Office  
Telephone: 760-339-2777  
Last EDR Contact: 10/17/2019  
Next Scheduled EDR Contact: 02/03/2020  
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: 11/14/2019  
Next Scheduled EDR Contact: 06/04/2018  
Data Release Frequency: Varies

## KERN COUNTY:

### UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 10/28/2019  
Date Data Arrived at EDR: 11/05/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 64

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 10/31/2019  
Next Scheduled EDR Contact: 02/17/2020  
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: 08/14/2019  
Date Data Arrived at EDR: 08/20/2019  
Date Made Active in Reports: 10/18/2019  
Number of Days to Update: 59

Source: Kings County Department of Public Health  
Telephone: 559-584-1411  
Last EDR Contact: 11/25/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Varies

## LAKE COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 08/16/2019  
Date Data Arrived at EDR: 08/20/2019  
Date Made Active in Reports: 10/18/2019  
Number of Days to Update: 59

Source: Lake County Environmental Health  
Telephone: 707-263-1164  
Last EDR Contact: 01/08/2020  
Next Scheduled EDR Contact: 04/27/2020  
Data Release Frequency: Varies

## LASSEN COUNTY:

### CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 07/22/2019  
Date Data Arrived at EDR: 07/23/2019  
Date Made Active in Reports: 09/26/2019  
Number of Days to Update: 65

Source: Lassen County Environmental Health  
Telephone: 530-251-8528  
Last EDR Contact: 10/17/2019  
Next Scheduled EDR Contact: 02/03/2020  
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: 12/11/2019  
Next Scheduled EDR Contact: 03/30/2020  
Data Release Frequency: No Update Planned

### HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 09/26/2019  
Date Data Arrived at EDR: 10/04/2019  
Date Made Active in Reports: 11/07/2019  
Number of Days to Update: 34

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 01/06/2020  
Next Scheduled EDR Contact: 04/20/2020  
Data Release Frequency: Semi-Annually

### LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/15/2019  
Date Data Arrived at EDR: 10/16/2019  
Date Made Active in Reports: 12/12/2019  
Number of Days to Update: 57

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 01/14/2020  
Next Scheduled EDR Contact: 04/27/2020  
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: 01/01/2019  
Date Data Arrived at EDR: 01/15/2019  
Date Made Active in Reports: 03/07/2019  
Number of Days to Update: 51

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 01/13/2020  
Next Scheduled EDR Contact: 04/27/2020  
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: 12/20/2019           |
| Number of Days to Update: 58            | Next Scheduled EDR Contact: 04/06/2020 |
|   | 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: 10/18/2019                          |
| Number of Days to Update: 42            | Next Scheduled EDR Contact: 01/27/2020                |
|   | 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: 12/20/2019           |
| Number of Days to Update: 58            | Next Scheduled EDR Contact: 04/06/2020 |
|   | 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: 12/20/2019           |
| Number of Days to Update: 58            | Next Scheduled EDR Contact: 04/06/2020 |
|   | 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: 10/01/2019  | Source: Community Health Services      |
| Date Data Arrived at EDR: 10/29/2019    | Telephone: 323-890-7806                |
| Date Made Active in Reports: 01/08/2020 | Last EDR Contact: 01/14/2020           |
| Number of Days to Update: 71            | Next Scheduled EDR Contact: 04/27/2020 |
|   | 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: 01/13/2020               |
| Number of Days to Update: 21            | Next Scheduled EDR Contact: 04/27/2020     |
|   | 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: 10/17/2019               |
| Number of Days to Update: 65            | Next Scheduled EDR Contact: 02/03/2020     |
|   | 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: 10/17/2019             |
| Number of Days to Update: 64            | Next Scheduled EDR Contact: 02/03/2020   |
|   | 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: 08/22/2019  | Source: Madera County Environmental Health |
| Date Data Arrived at EDR: 08/26/2019    | Telephone: 559-675-7823                    |
| Date Made Active in Reports: 10/29/2019 | Last EDR Contact: 11/14/2019               |
| Number of Days to Update: 64            | Next Scheduled EDR Contact: 03/02/2020     |
|   | 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: 12/19/2019                     |
| Number of Days to Update: 29            | Next Scheduled EDR Contact: 04/13/2020           |
|   | Data Release Frequency: Semi-Annually            |

MERCED COUNTY:

CUPA MERCED: CUPA Facility List  
CUPA facility list.

|   |  |
|---|--|
| Date of Government Version: 11/18/2019  | Source: Merced County Environmental Health |
| Date Data Arrived at EDR: 11/20/2019    | Telephone: 209-381-1094                    |
| Date Made Active in Reports: 01/03/2020 | Last EDR Contact: 11/14/2019               |
| Number of Days to Update: 44            | Next Scheduled EDR Contact: 03/02/2020     |
|   | Data Release Frequency: Varies             |

MONO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA MONO: CUPA Facility List CUPA Facility List

Date of Government Version: 08/21/2019  
Date Data Arrived at EDR: 09/03/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 58

Source: Mono County Health Department  
Telephone: 760-932-5580  
Last EDR Contact: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: Varies

## MONTEREY COUNTY:

### CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 11/06/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 58

Source: Monterey County Health Department  
Telephone: 831-796-1297  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 04/13/2020  
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: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
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: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: No Update Planned

## NEVADA COUNTY:

### CUPA NEVADA: CUPA Facility List

CUPA facility list.

Date of Government Version: 10/30/2019  
Date Data Arrived at EDR: 10/30/2019  
Date Made Active in Reports: 12/11/2019  
Number of Days to Update: 42

Source: Community Development Agency  
Telephone: 530-265-1467  
Last EDR Contact: 10/25/2019  
Next Scheduled EDR Contact: 02/10/2020  
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: 07/10/2019  
Date Data Arrived at EDR: 08/07/2019  
Date Made Active in Reports: 10/09/2019  
Number of Days to Update: 63

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/04/2019  
Next Scheduled EDR Contact: 02/17/2020  
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups  
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/10/2019  
Date Data Arrived at EDR: 08/09/2019  
Date Made Active in Reports: 10/09/2019  
Number of Days to Update: 61

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/04/2019  
Next Scheduled EDR Contact: 02/17/2020  
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities  
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 10/04/2019  
Date Data Arrived at EDR: 11/05/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 64

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/05/2019  
Next Scheduled EDR Contact: 02/17/2020  
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: 09/03/2019  
Date Data Arrived at EDR: 09/05/2019  
Date Made Active in Reports: 11/05/2019  
Number of Days to Update: 61

Source: Placer County Health and Human Services  
Telephone: 530-745-2363  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
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: 10/17/2019  
Next Scheduled EDR Contact: 02/03/2020  
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: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 12/13/2019  
Number of Days to Update: 52

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 12/16/2019  
Next Scheduled EDR Contact: 03/30/2020  
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: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/03/2020  
Number of Days to Update: 73

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 12/16/2019  
Next Scheduled EDR Contact: 03/30/2020  
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: 08/06/2019  
Date Data Arrived at EDR: 10/01/2019  
Date Made Active in Reports: 11/07/2019  
Number of Days to Update: 37

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 12/23/2019  
Next Scheduled EDR Contact: 04/13/2020  
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: 08/07/2019  
Date Data Arrived at EDR: 10/01/2019  
Date Made Active in Reports: 11/08/2019  
Number of Days to Update: 38

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 12/23/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Quarterly

## SAN BENITO COUNTY:

### CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 07/16/2019  
Date Data Arrived at EDR: 07/16/2019  
Date Made Active in Reports: 09/24/2019  
Number of Days to Update: 70

Source: San Benito County Environmental Health  
Telephone: N/A  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 02/17/2020  
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: 08/29/2019  
Date Data Arrived at EDR: 08/30/2019  
Date Made Active in Reports: 10/29/2019  
Number of Days to Update: 60

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 11/04/2019  
Next Scheduled EDR Contact: 02/17/2020  
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: 09/03/2019  
Date Data Arrived at EDR: 09/04/2019  
Date Made Active in Reports: 11/05/2019  
Number of Days to Update: 62

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 12/04/2019  
Next Scheduled EDR Contact: 03/16/2020  
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: 10/31/2019  
Next Scheduled EDR Contact: 02/03/2020  
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: 10/16/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 12/13/2019  
Number of Days to Update: 52

Source: Department of Environmental Health  
Telephone: 858-505-6874  
Last EDR Contact: 10/17/2019  
Next Scheduled EDR Contact: 02/03/2020  
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: 11/25/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: No Update Planned

## SAN FRANCISCO COUNTY:

### LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008  
Date Data Arrived at EDR: 09/19/2008  
Date Made Active in Reports: 09/29/2008  
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County  
Telephone: 415-252-3920  
Last EDR Contact: 10/31/2019  
Next Scheduled EDR Contact: 02/17/2020  
Data Release Frequency: No Update Planned

### UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/01/2019  
Date Data Arrived at EDR: 08/02/2019  
Date Made Active in Reports: 10/08/2019  
Number of Days to Update: 67

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 01/07/2020  
Next Scheduled EDR Contact: 02/17/2020  
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: 12/11/2019  
Next Scheduled EDR Contact: 03/30/2020  
Data Release Frequency: Semi-Annually

## SAN LUIS OBISPO COUNTY:

### CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 08/14/2019  
Date Data Arrived at EDR: 08/20/2019  
Date Made Active in Reports: 10/18/2019  
Number of Days to Update: 59

Source: San Luis Obispo County Public Health Department  
Telephone: 805-781-5596  
Last EDR Contact: 12/11/2019  
Next Scheduled EDR Contact: 03/02/2020  
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: 09/03/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 11/05/2019  
Number of Days to Update: 57

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
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: 12/05/2019  
Next Scheduled EDR Contact: 03/23/2020  
Data Release Frequency: Semi-Annually

## SANTA BARBARA COUNTY:

### 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: 11/14/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: No Update Planned

## SANTA CLARA COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA SANTA CLARA: Cupa Facility List Cupa facility list

Date of Government Version: 08/14/2019  
Date Data Arrived at EDR: 08/20/2019  
Date Made Active in Reports: 10/18/2019  
Number of Days to Update: 59

Source: Department of Environmental Health  
Telephone: 408-918-1973  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 03/02/2020  
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: 11/20/2019  
Next Scheduled EDR Contact: 03/09/2020  
Data Release Frequency: No Update Planned

## SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 10/30/2019  
Date Data Arrived at EDR: 11/01/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 68

Source: City of San Jose Fire Department  
Telephone: 408-535-7694  
Last EDR Contact: 10/31/2019  
Next Scheduled EDR Contact: 02/17/2020  
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: 11/14/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Varies

## SHASTA COUNTY:

### 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: 11/14/2019  
Next Scheduled EDR Contact: 03/02/2020  
Data Release Frequency: Varies

## SOLANO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 11/25/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Quarterly

## UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 08/28/2019  
Date Data Arrived at EDR: 08/30/2019  
Date Made Active in Reports: 10/29/2019  
Number of Days to Update: 60

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

### CUPA SONOMA: Cupa Facility List

Cupa Facility list

Date of Government Version: 06/18/2019  
Date Data Arrived at EDR: 06/25/2019  
Date Made Active in Reports: 07/24/2019  
Number of Days to Update: 29

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-565-1174  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 04/06/2020  
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: 10/01/2019  
Date Data Arrived at EDR: 10/02/2019  
Date Made Active in Reports: 11/07/2019  
Number of Days to Update: 36

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 12/17/2019  
Next Scheduled EDR Contact: 04/06/2020  
Data Release Frequency: Quarterly

## STANISLAUS COUNTY:

### CUPA STANISLAUS: CUPA Facility List

Cupa facility list

Date of Government Version: 11/04/2019  
Date Data Arrived at EDR: 11/07/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 62

Source: Stanislaus County Department of Environmental Protection  
Telephone: 209-525-6751  
Last EDR Contact: 01/13/2020  
Next Scheduled EDR Contact: 04/27/2020  
Data Release Frequency: Varies

## SUTTER COUNTY:

### UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 08/29/2019  
Date Data Arrived at EDR: 09/03/2019  
Date Made Active in Reports: 11/06/2019  
Number of Days to Update: 64

Source: Sutter County Environmental Health Services  
Telephone: 530-822-7500  
Last EDR Contact: 12/02/2019  
Next Scheduled EDR Contact: 03/16/2020  
Data Release Frequency: Semi-Annually

## TEHAMA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA TEHAMA: CUPA Facility List Cupa facilities

Date of Government Version: 05/20/2019  
Date Data Arrived at EDR: 05/21/2019  
Date Made Active in Reports: 07/18/2019  
Number of Days to Update: 58

Source: Tehama County Department of Environmental Health  
Telephone: 530-527-8020  
Last EDR Contact: 11/14/2019  
Next Scheduled EDR Contact: 02/17/2020  
Data Release Frequency: Varies

## TRINITY COUNTY:

### CUPA TRINITY: CUPA Facility List Cupa facility list

Date of Government Version: 10/17/2019  
Date Data Arrived at EDR: 10/22/2019  
Date Made Active in Reports: 01/02/2020  
Number of Days to Update: 72

Source: Department of Toxic Substances Control  
Telephone: 760-352-0381  
Last EDR Contact: 10/17/2019  
Next Scheduled EDR Contact: 02/03/2020  
Data Release Frequency: Varies

## TULARE COUNTY:

### CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 08/12/2019  
Date Data Arrived at EDR: 08/14/2019  
Date Made Active in Reports: 10/17/2019  
Number of Days to Update: 64

Source: Tulare County Environmental Health Services Division  
Telephone: 559-624-7400  
Last EDR Contact: 11/04/2019  
Next Scheduled EDR Contact: 02/17/2020  
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: Divison of Environmental Health  
Telephone: 209-533-5633  
Last EDR Contact: 10/17/2019  
Next Scheduled EDR Contact: 02/03/2020  
Data Release Frequency: Varies

## VENTURA COUNTY:

### 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: 05/29/2019  
Date Data Arrived at EDR: 07/29/2019  
Date Made Active in Reports: 09/30/2019  
Number of Days to Update: 63

Source: Ventura County Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 10/21/2019  
Next Scheduled EDR Contact: 02/03/2020  
Data Release Frequency: Quarterly

### LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/01/2011  
Date Data Arrived at EDR: 12/01/2011  
Date Made Active in Reports: 01/19/2012  
Number of Days to Update: 49

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 04/13/2020  
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  
Date Data Arrived at EDR: 06/24/2008  
Date Made Active in Reports: 07/31/2008  
Number of Days to Update: 37

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 11/07/2019  
Next Scheduled EDR Contact: 02/24/2020  
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: 09/26/2019  
Date Data Arrived at EDR: 10/23/2019  
Date Made Active in Reports: 12/13/2019  
Number of Days to Update: 51

Source: Ventura County Resource Management Agency  
Telephone: 805-654-2813  
Last EDR Contact: 10/21/2019  
Next Scheduled EDR Contact: 02/03/2020  
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: 07/26/2019  
Date Data Arrived at EDR: 09/09/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 52

Source: Environmental Health Division  
Telephone: 805-654-2813  
Last EDR Contact: 12/10/2019  
Next Scheduled EDR Contact: 03/23/2020  
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: 09/25/2019  
Date Data Arrived at EDR: 10/01/2019  
Date Made Active in Reports: 10/31/2019  
Number of Days to Update: 30

Source: Yolo County Department of Health  
Telephone: 530-666-8646  
Last EDR Contact: 12/19/2019  
Next Scheduled EDR Contact: 04/13/2020  
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 11/04/2019  
Date Data Arrived at EDR: 11/06/2019  
Date Made Active in Reports: 01/08/2020  
Number of Days to Update: 63

Source: Yuba County Environmental Health Department  
Telephone: 530-749-7523  
Last EDR Contact: 10/25/2019  
Next Scheduled EDR Contact: 02/10/2020  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 05/14/2019  | Source: Department of Energy & Environmental Protection |
| Date Data Arrived at EDR: 05/14/2019    | Telephone: 860-424-3375                                 |
| Date Made Active in Reports: 08/05/2019 | Last EDR Contact: 11/11/2019                            |
| Number of Days to Update: 83            | Next Scheduled EDR Contact: 02/24/2020                  |
|   | Data Release Frequency: No Update Planned               |

### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

|   |  |
|---|--|
| Date of Government Version: 12/31/2018  | Source: Department of Environmental Protection |
| Date Data Arrived at EDR: 04/10/2019    | Telephone: N/A                                 |
| Date Made Active in Reports: 05/16/2019 | Last EDR Contact: 01/06/2020                   |
| Number of Days to Update: 36            | Next Scheduled EDR Contact: 04/20/2020         |
|   | 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  | Source: Department of Environmental Conservation |
| Date Data Arrived at EDR: 05/01/2019    | Telephone: 518-402-8651                          |
| Date Made Active in Reports: 06/21/2019 | Last EDR Contact: 10/29/2019                     |
| Number of Days to Update: 51            | Next Scheduled EDR Contact: 02/10/2020           |
|   | Data Release Frequency: Quarterly                |

### PA MANIFEST: Manifest Information

Hazardous waste manifest information.

|   |  |
|---|--|
| Date of Government Version: 06/30/2018  | Source: Department of Environmental Protection |
| Date Data Arrived at EDR: 07/19/2019    | Telephone: 717-783-8990                        |
| Date Made Active in Reports: 09/10/2019 | Last EDR Contact: 01/14/2020                   |
| Number of Days to Update: 53            | Next Scheduled EDR Contact: 04/07/2020         |
|   | Data Release Frequency: Annually               |

### RI MANIFEST: Manifest information

Hazardous waste manifest information

|   |  |
|---|--|
| Date of Government Version: 12/31/2018  | Source: Department of Environmental Management |
| Date Data Arrived at EDR: 10/02/2019    | Telephone: 401-222-2797                        |
| Date Made Active in Reports: 12/10/2019 | Last EDR Contact: 11/14/2019                   |
| Number of Days to Update: 69            | Next Scheduled EDR Contact: 03/02/2020         |
|   | Data Release Frequency: Annually               |

### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

|   |   |
|---|---|
| Date of Government Version: 05/31/2018  | Source: Department of Natural Resources |
| Date Data Arrived at EDR: 06/19/2019    | Telephone: N/A                          |
| Date Made Active in Reports: 09/03/2019 | Last EDR Contact: 12/18/2019            |
| Number of Days to Update: 76            | Next Scheduled EDR Contact: 03/23/2020  |
|   | Data Release Frequency: Annually        |

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### 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

**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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map  
Source: U.S. Geological Survey

## STREET AND ADDRESS INFORMATION

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

PARCEL MAP 36161  
NOT REPORTED  
WINCHESTER, CA 92596

### TARGET PROPERTY COORDINATES

|                               |                             |
|-------------------------------|-----------------------------|
| Latitude (North):             | 33.621952 - 33° 37' 19.03"  |
| Longitude (West):             | 117.099795 - 117° 5' 59.26" |
| Universal Tranverse Mercator: | Zone 11                     |
| UTM X (Meters):               | 490743.3                    |
| UTM Y (Meters):               | 3720051.2                   |
| Elevation:                    | 1421 ft. above sea level    |

### USGS TOPOGRAPHIC MAP

|                      |                               |
|----------------------|-------------------------------|
| Target Property Map: | 5640928 BACHELOR MOUNTAIN, CA |
| Version Date:        | 2012                          |
| Northeast Map:       | 5640944 WINCHESTER, 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).

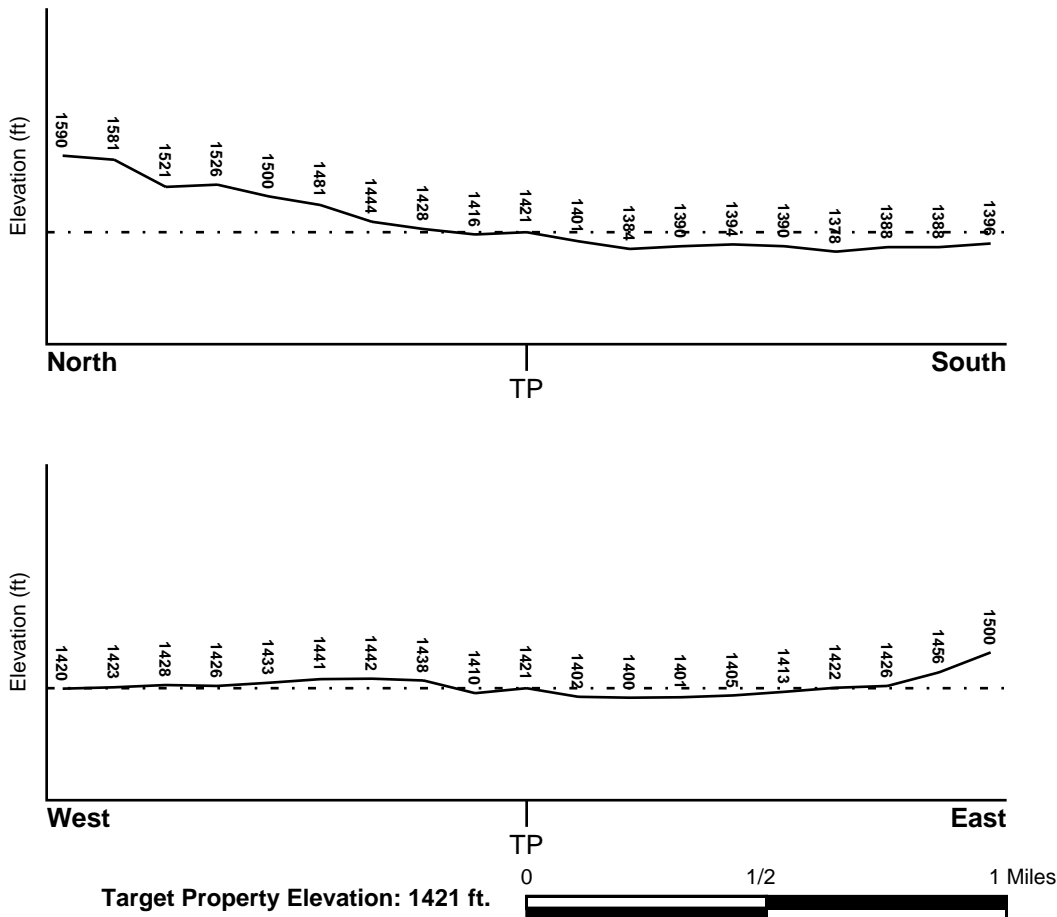
## TOPOGRAPHIC INFORMATION

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 SE

## 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> |
| 0602452755A                                 | FEMA Q3 Flood data      |
| <u>Additional Panels in search area:</u>    | <u>FEMA Source Type</u> |
| 0602452125B                                 | FEMA Q3 Flood data      |

## **NATIONAL WETLAND INVENTORY**

|                                    |  |
|------------------------------------|--|
| <u>NWI Quad at Target Property</u> | <u>NWI Electronic Data Coverage</u>            |
| BACHELOR MOUNTAIN                  | YES - refer to the Overview Map and Detail Map |

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### ***Site-Specific Hydrogeological Data\*:***

|                |            |
|----------------|------------|
| Search Radius: | 1.25 miles |
| Status:        | Not found  |

## **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

| <u>MAP ID</u> | <u>LOCATION FROM TP</u> | <u>GENERAL DIRECTION GROUNDWATER FLOW</u> |
|---------------|-------------------------|---|
| Not Reported  |                         |   |

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

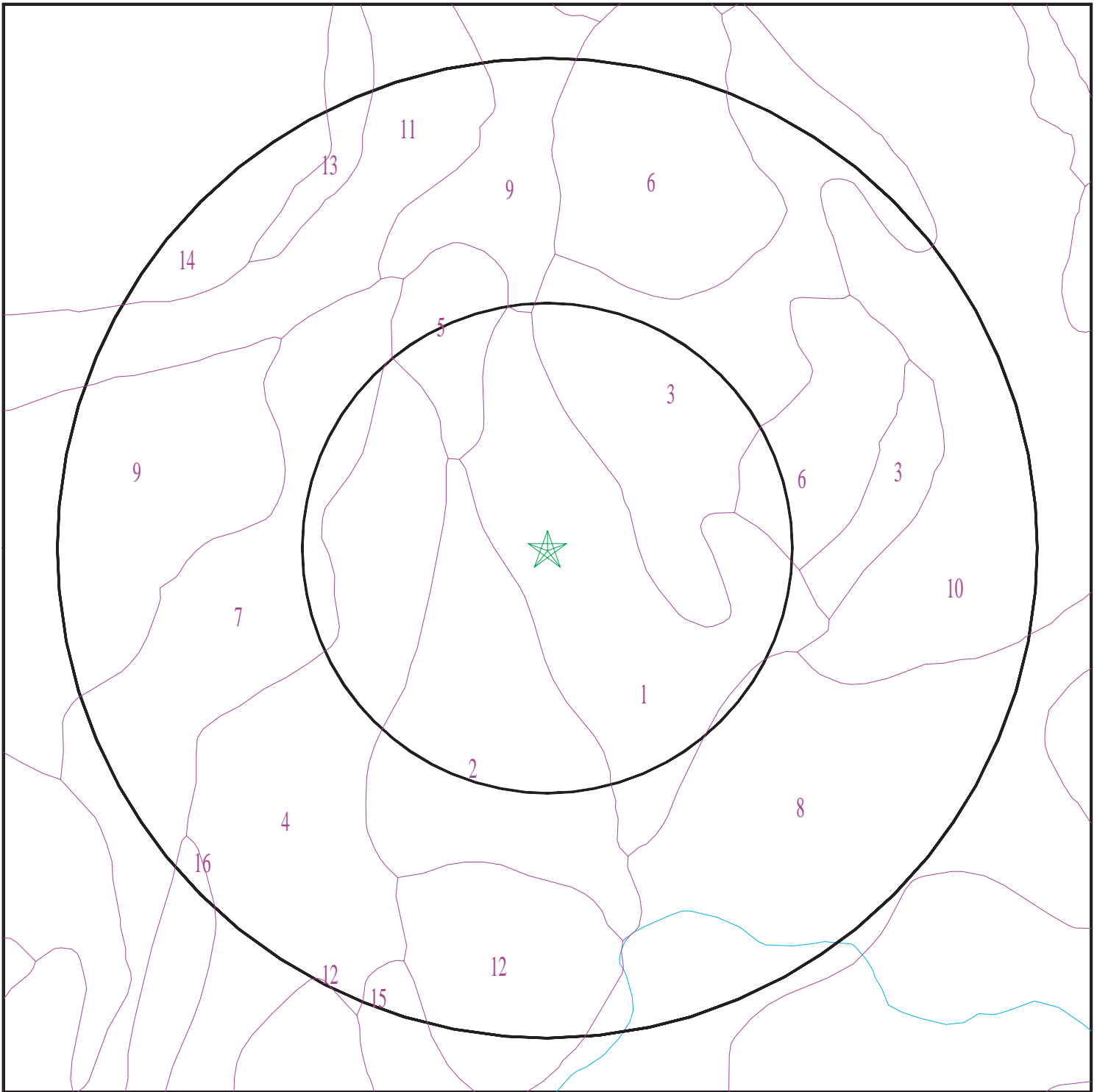
Era: Mesozoic  
System: Lower Jurassic and Upper Triassic  
Series: Lower Mesozoic  
Code: IMze (*decoded above as Era, System & Series*)

#### **GEOLOGIC AGE IDENTIFICATION**

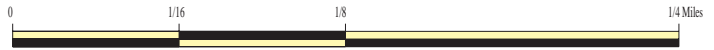
Category: Eugeosynclinal Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 5938099.2s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Parcel Map 36161  
ADDRESS: Not Reported  
Winchester CA 92596  
LAT/LONG: 33.621952 / 117.099795

CLIENT: Geotek  
CONTACT: Kyle Mchargue  
INQUIRY #: 5938099.2s  
DATE: January 16, 2020 1:13 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: ESCONDIDO

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 77 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  | 5 inches  | fine sandy loam     | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 4<br>Min: 1.4                           | Max: Min:          |
| 2                      | 5 inches  | 33 inches | silt loam           | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 4<br>Min: 1.4                           | Max: Min:          |
| 3                      | 33 inches | 38 inches | unweathered bedrock | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 4<br>Min: 1.4                           | Max: Min:          |

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### Soil Map ID: 2

Soil Component Name: BUCHENAU

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |           |           |                    |   |              |   |                    |
|------------------------|-----------|-----------|--------------------|---|--------------|---|--------------------|
| Layer                  | Boundary  |           | Soil Texture Class | Classification  |              | Saturated hydraulic conductivity<br>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. | Not reported | Max: 0.01<br>Min: 0                             | Max: Min:          |
| 2                      | 7 inches  | 44 inches | loam               | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 0.01<br>Min: 0                             | Max: Min:          |
| 3                      | 44 inches | 61 inches | cemented           | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 0.01<br>Min: 0                             | Max: Min:          |

### Soil Map ID: 3

Soil Component Name: FRIANT

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 33 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  | 12 inches | fine sandy loam     | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 0.42<br>Min: 0                          | Max: Min:          |
| 2                      | 12 inches | 16 inches | unweathered bedrock | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 0.42<br>Min: 0                          | Max: Min:          |

**Soil Map ID: 4**

Soil Component Name: PORTERVILLE

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information |           |           |                    |  |              |   |                    |
|------------------------|-----------|-----------|--------------------|--|--------------|---|--------------------|
| Layer                  | Boundary  |           | Soil Texture Class | Classification   |              | Saturated hydraulic conductivity<br>micro m/sec | Soil Reaction (pH) |
|                        | Upper     | Lower     |                    | AASHTO Group   | Unified Soil |   |                    |
| 1                      | 0 inches  | 7 inches  | clay               | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | Not reported | Max: 0.42<br>Min: 0.01                          | Max: Min:          |
| 2                      | 7 inches  | 33 inches | silty clay         | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | Not reported | Max: 0.42<br>Min: 0.01                          | Max: Min:          |
| 3                      | 33 inches | 38 inches | weathered bedrock  | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | Not reported | Max: 0.42<br>Min: 0.01                          | Max: Min:          |

### Soil Map ID: 5

Soil Component Name: ALTAMONT

Soil Surface Texture: clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

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<br>micro m/sec | Soil Reaction (pH) |
|                        | Upper     | Lower     |                    | AASHTO Group   | Unified Soil |   |                    |
| 1                      | 0 inches  | 18 inches | clay               | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | Not reported | Max: 4<br>Min: 1.4                              | Max: Min:          |
| 2                      | 18 inches | 22 inches | silty clay         | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | Not reported | Max: 4<br>Min: 1.4                              | Max: Min:          |
| 3                      | 22 inches | 27 inches | weathered bedrock  | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | Not reported | Max: 4<br>Min: 1.4                              | Max: Min:          |

**Soil Map ID: 6**

Soil Component Name: LODO

Soil Surface Texture: gravelly 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 excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 38 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  | gravelly loam       | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 4<br>Min: 1.4                           | Max: Min:          |
| 2                      | 7 inches | 18 inches | unweathered bedrock | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 4<br>Min: 1.4                           | Max: Min:          |

**Soil Map ID: 7**

Soil Component Name: AULD

Soil Surface Texture: clay

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |          |           |                    |  |              |  |                    |
|------------------------|----------|-----------|--------------------|--|--------------|--|--------------------|
| Layer                  | Boundary |           | Soil Texture Class | Classification   |              | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
|                        | Upper    | Lower     |                    | AASHTO Group   | Unified Soil |  |                    |
| 1                      | 0 inches | 27 inches | clay               | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | Not reported | Max: 0.42<br>Min: 0                          | Max: Min:          |

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information |           |           |                    |  |              |  |                    |
|------------------------|-----------|-----------|--------------------|--|--------------|--|--------------------|
| Layer                  | Boundary  |           | Soil Texture Class | Classification   |              | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
|                        | Upper     | Lower     |                    | AASHTO Group   | Unified Soil |  |                    |
| 2                      | 27 inches | 44 inches | loam               | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | Not reported | Max: 0.42<br>Min: 0                          | Max: Min:          |
| 3                      | 44 inches | 48 inches | weathered bedrock  | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | Not reported | Max: 0.42<br>Min: 0                          | Max: Min:          |

**Soil Map ID: 8**

Soil Component Name: GRANGEVILLE

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |          |           |                    |   |   |  |                      |
|------------------------|----------|-----------|--------------------|---|---|--|----------------------|
| Layer                  | Boundary |           | Soil Texture Class | Classification  |   | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH)   |
|                        | Upper    | Lower     |                    | AASHTO Group  | Unified Soil  |  |                      |
| 1                      | 0 inches | 35 inches | fine sandy loam    | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 42<br>Min: 14                           | Max: 8.4<br>Min: 6.6 |

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information |           |           |                    |   |   |   |                      |
|------------------------|-----------|-----------|--------------------|---|---|---|----------------------|
| Layer                  | Boundary  |           | Soil Texture Class | Classification  |   | Saturated hydraulic conductivity<br>micro m/sec | Soil Reaction (pH)   |
|                        | Upper     | Lower     |                    | AASHTO Group  | Unified Soil  |   |                      |
| 2                      | 35 inches | 64 inches | sandy loam         | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt. | Max: 42<br>Min: 14                              | Max: 8.4<br>Min: 6.6 |

### Soil Map ID: 9

Soil Component Name: LAS POSAS

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |           |           |                    |   |              |   |                    |
|------------------------|-----------|-----------|--------------------|---|--------------|---|--------------------|
| Layer                  | Boundary  |           | Soil Texture Class | Classification  |              | Saturated hydraulic conductivity<br>micro m/sec | Soil Reaction (pH) |
|                        | Upper     | Lower     |                    | AASHTO Group  | Unified Soil |   |                    |
| 1                      | 0 inches  | 11 inches | loam               | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |
| 2                      | 11 inches | 31 inches | clay loam          | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information |           |           |                    |   |              |   |                    |
|------------------------|-----------|-----------|--------------------|---|--------------|---|--------------------|
| Layer                  | Boundary  |           | Soil Texture Class | Classification  |              | Saturated hydraulic conductivity<br>micro m/sec | Soil Reaction (pH) |
|                        | Upper     | Lower     |                    | AASHTO Group  | Unified Soil |   |                    |
| 3                      | 31 inches | 53 inches | weathered bedrock  | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |

**Soil Map ID: 10**

Soil Component Name: GARRETSON

Soil Surface Texture: very fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |          |           |                      |   |   |   |                      |
|------------------------|----------|-----------|----------------------|---|---|---|----------------------|
| Layer                  | Boundary |           | Soil Texture Class   | Classification  |   | Saturated hydraulic conductivity<br>micro m/sec | Soil Reaction (pH)   |
|                        | Upper    | Lower     |                      | AASHTO Group  | Unified Soil  |   |                      |
| 1                      | 0 inches | 9 inches  | very fine sandy loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 14<br>Min: 4                               | Max: 7.8<br>Min: 6.1 |
| 2                      | 9 inches | 59 inches | loam                 | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 14<br>Min: 4                               | Max: 7.8<br>Min: 6.1 |

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**Soil Map ID: 11**

Soil Component Name: CAJALCO

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |           |           |                    |   |              |   |                    |
|------------------------|-----------|-----------|--------------------|---|--------------|---|--------------------|
| Layer                  | Boundary  |           | Soil Texture Class | Classification  |              | Saturated hydraulic conductivity<br>micro m/sec | Soil Reaction (pH) |
|                        | Upper     | Lower     |                    | AASHTO Group  | Unified Soil |   |                    |
| 1                      | 0 inches  | 12 inches | fine sandy loam    | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |
| 2                      | 12 inches | 22 inches | loam               | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |
| 3                      | 22 inches | 61 inches | weathered bedrock  | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |

**Soil Map ID: 12**

Soil Component Name: MONSERATE

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |           |           |                    |   |  |  |                      |
|------------------------|-----------|-----------|--------------------|---|--|--|----------------------|
| Layer                  | Boundary  |           | Soil Texture Class | Classification  |  | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH)   |
|                        | Upper     | Lower     |                    | AASHTO Group  | Unified Soil   |  |                      |
| 1                      | 0 inches  | 9 inches  | sandy loam         | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 14<br>Min: 4                            | Max: 8.4<br>Min: 6.6 |
| 2                      | 9 inches  | 27 inches | sandy clay loam    | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 14<br>Min: 4                            | Max: 8.4<br>Min: 6.6 |
| 3                      | 27 inches | 44 inches | indurated          | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 14<br>Min: 4                            | Max: 8.4<br>Min: 6.6 |
| 4                      | 44 inches | 57 inches | cemented           | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 14<br>Min: 4                            | Max: 8.4<br>Min: 6.6 |
| 5                      | 57 inches | 70 inches | loamy coarse sand  | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 14<br>Min: 4                            | Max: 8.4<br>Min: 6.6 |

**Soil Map ID: 13**

Soil Component Name: CAJALCO

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |           |           |                    |   |              |   |                    |
|------------------------|-----------|-----------|--------------------|---|--------------|---|--------------------|
| Layer                  | Boundary  |           | Soil Texture Class | Classification  |              | Saturated hydraulic conductivity<br>micro m/sec | Soil Reaction (pH) |
|                        | Upper     | Lower     |                    | AASHTO Group  | Unified Soil |   |                    |
| 1                      | 0 inches  | 12 inches | fine sandy loam    | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |
| 2                      | 12 inches | 20 inches | loam               | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |
| 3                      | 20 inches | 61 inches | weathered bedrock  | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |

---

### Soil Map ID: 14

Soil Component Name: CAJALCO

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

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<br>micro m/sec | Soil Reaction (pH) |
|                        | Upper     | Lower     |                    | AASHTO Group  | Unified Soil |   |                    |
| 1                      | 0 inches  | 12 inches | fine sandy loam    | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |
| 2                      | 12 inches | 18 inches | loam               | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |
| 3                      | 18 inches | 61 inches | weathered bedrock  | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |

**Soil Map ID: 15**

Soil Component Name: PORTERVILLE

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information |           |           |                    |  |   |  |                      |
|------------------------|-----------|-----------|--------------------|--|---|--|----------------------|
| Layer                  | Boundary  |           | Soil Texture Class | Classification   |   | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH)   |
|                        | Upper     | Lower     |                    | AASHTO Group   | Unified Soil  |  |                      |
| 1                      | 0 inches  | 14 inches | clay               | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay. | Max: 1.4<br>Min: 0.42                        | Max: 8.4<br>Min: 6.6 |
| 2                      | 14 inches | 66 inches | clay               | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay. | Max: 1.4<br>Min: 0.42                        | Max: 8.4<br>Min: 6.6 |

**Soil Map ID: 16**

Soil Component Name: CAJALCO

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information |          |           |                    |   |              |  |                    |
|------------------------|----------|-----------|--------------------|---|--------------|--|--------------------|
| Layer                  | Boundary |           | Soil Texture Class | Classification  |              | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
|                        | Upper    | Lower     |                    | AASHTO Group  | Unified Soil |  |                    |
| 1                      | 0 inches | 12 inches | fine sandy loam    | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | Not reported | Max: 0.42<br>Min: 0                          | Max: Min:          |

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information |           |           |                    |   |              |   |                    |
|------------------------|-----------|-----------|--------------------|---|--------------|---|--------------------|
| Layer                  | Boundary  |           | Soil Texture Class | Classification  |              | Saturated hydraulic conductivity<br>micro m/sec | Soil Reaction (pH) |
|                        | Upper     | Lower     |                    | AASHTO Group  | Unified Soil |   |                    |
| 2                      | 12 inches | 18 inches | loam               | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |
| 3                      | 18 inches | 61 inches | weathered bedrock  | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | Not reported | Max: 0.42<br>Min: 0                             | Max: Min:          |

### 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> |
|---------------|-----------------|-------------------------|
| A2            | USGS40000136091 | 1/4 - 1/2 Mile SE       |
| 3             | USGS40000136053 | 1/4 - 1/2 Mile South    |
| 4             | USGS40000136179 | 1/4 - 1/2 Mile NNE      |
| B8            | USGS40000136117 | 1/2 - 1 Mile East       |
| B9            | USGS40000136122 | 1/2 - 1 Mile East       |
| B10           | USGS40000136121 | 1/2 - 1 Mile East       |
| 11            | USGS40000136169 | 1/2 - 1 Mile NE         |
| 12            | USGS40000136203 | 1/2 - 1 Mile NNW        |
| C13           | USGS40000136028 | 1/2 - 1 Mile SSW        |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## FEDERAL USGS WELL INFORMATION

| MAP ID | WELL ID         | LOCATION<br>FROM TP |
|--------|-----------------|---------------------|
| D16    | USGS40000136173 | 1/2 - 1 Mile ENE    |
| E18    | USGS40000136149 | 1/2 - 1 Mile ENE    |
| F19    | USGS40000135997 | 1/2 - 1 Mile South  |
| 25     | USGS40000136172 | 1/2 - 1 Mile ENE    |
| H26    | USGS40000136202 | 1/2 - 1 Mile NE     |
| I27    | USGS40000136093 | 1/2 - 1 Mile ESE    |
| I28    | USGS40000136083 | 1/2 - 1 Mile ESE    |
| 29     | USGS40000136201 | 1/2 - 1 Mile NE     |
| J30    | USGS40000135957 | 1/2 - 1 Mile South  |
| J32    | USGS40000135952 | 1/2 - 1 Mile South  |
| K33    | USGS40000135949 | 1/2 - 1 Mile South  |
| 34     | USGS40000136181 | 1/2 - 1 Mile WNW    |

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

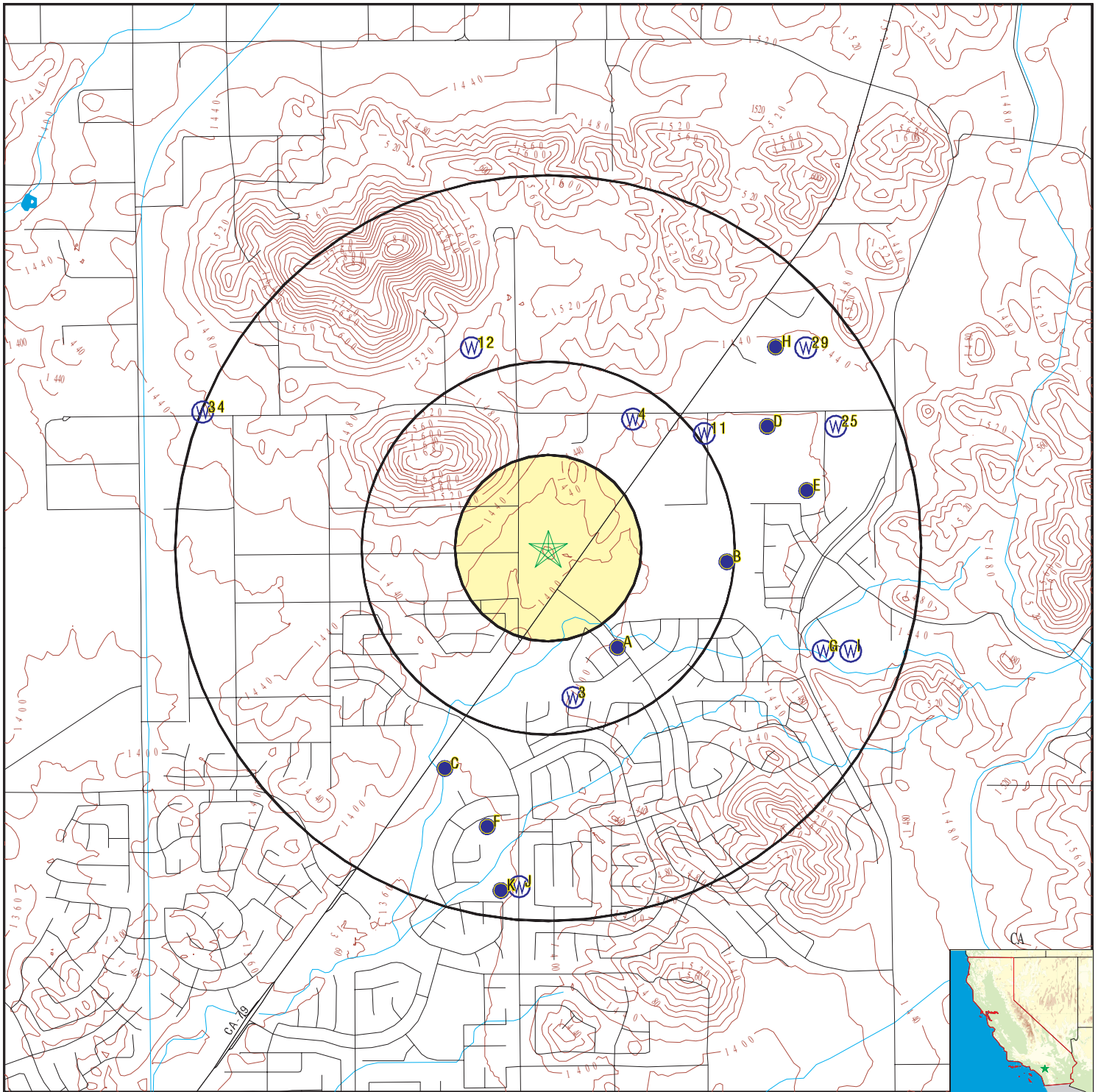
| MAP ID              | WELL ID | LOCATION<br>FROM TP |
|---------------------|---------|---------------------|
| No PWS System Found |         |                     |

Note: PWS System location is not always the same as well location.

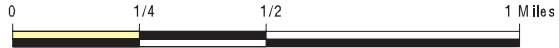
## STATE DATABASE WELL INFORMATION

| MAP ID | WELL ID         | LOCATION<br>FROM TP |
|--------|-----------------|---------------------|
| A1     | CADWR8000004527 | 1/4 - 1/2 Mile SSE  |
| B5     | CADWR8000004551 | 1/4 - 1/2 Mile East |
| B6     | CADWR8000004552 | 1/4 - 1/2 Mile East |
| B7     | CADWR8000004545 | 1/4 - 1/2 Mile East |
| D14    | CADWR8000004590 | 1/2 - 1 Mile ENE    |
| C15    | CADWR8000004493 | 1/2 - 1 Mile SSW    |
| E17    | CADWR8000004571 | 1/2 - 1 Mile ENE    |
| F20    | CADWR8000004474 | 1/2 - 1 Mile SSW    |
| G21    | CADWR8000004528 | 1/2 - 1 Mile ESE    |
| H22    | CADWR8000004605 | 1/2 - 1 Mile NE     |
| G23    | CADWR8000004524 | 1/2 - 1 Mile ESE    |
| H24    | CADWR8000004604 | 1/2 - 1 Mile NE     |
| K31    | CADWR8000004452 | 1/2 - 1 Mile South  |

# PHYSICAL SETTING SOURCE MAP - 5938099.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons



- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



SITE NAME: Parcel Map 36161  
 ADDRESS: Not Reported  
 Winchester CA 92596  
 LAT/LONG: 33.621952 / 117.099795

CLIENT: Geotek  
 CONTACT: Kyle Mchargue  
 INQUIRY #: 5938099.2s  
 DATE: January 16, 2020 1:13 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**A1**  
**SSE**  
**1/4 - 1/2 Mile**  
**Lower**

**CA WELLS      CADWR8000004527**

|               |                 |                        |              |
|---------------|-----------------|------------------------|--------------|
| State Well #: | 06S02W28L001S   | Station ID:            | 5844         |
| Well Name:    | Not Reported    | Well Use:              | Unknown      |
| Well Type:    | Unknown         | Well Depth:            | 0            |
| Basin Name:   | Temecula Valley | Well Completion Rpt #: | Not Reported |

**A2**  
**SE**  
**1/4 - 1/2 Mile**  
**Lower**

**FED USGS      USGS40000136091**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              |                             |              |
| Organization Name:     | USGS California Water Science Center |                             |              |
| Monitor Location:      | 006S002W28L001S                      | Type:                       | Well         |
| Description:           | Not Reported                         | HUC:                        | 18070302     |
| Drainage Area:         | Not Reported                         | Drainage Area Units:        | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Aquifer:               | California Coastal Basin aquifers    |                             |              |
| Formation Type:        | Not Reported                         | Aquifer Type:               | Not Reported |
| Construction Date:     | Not Reported                         | Well Depth:                 | 29           |
| Well Depth Units:      | ft                                   | Well Hole Depth:            | Not Reported |
| Well Hole Depth Units: | Not Reported                         |                             |              |

|   |              |                     |              |
|---|--------------|---------------------|--------------|
| Ground water levels,Number of Measurements: | 1            | Level reading date: | 1968-01-01   |
| Feet below surface:                         | 26.00        | Feet to sea level:  | Not Reported |
| Note:                                       | Not Reported |                     |              |

**3**  
**South**  
**1/4 - 1/2 Mile**  
**Lower**

**FED USGS      USGS40000136053**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              |                             |              |
| Organization Name:     | USGS California Water Science Center |                             |              |
| Monitor Location:      | 006S002W28N001S                      | Type:                       | Well         |
| Description:           | Not Reported                         | HUC:                        | 18070302     |
| Drainage Area:         | Not Reported                         | Drainage Area Units:        | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Aquifer:               | California Coastal Basin aquifers    |                             |              |
| Formation Type:        | Not Reported                         | Aquifer Type:               | Not Reported |
| Construction Date:     | Not Reported                         | Well Depth:                 | 27           |
| Well Depth Units:      | ft                                   | Well Hole Depth:            | Not Reported |
| Well Hole Depth Units: | Not Reported                         |                             |              |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**4**  
**NNE**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000136179**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              |                             |              |
| Organization Name:     | USGS California Water Science Center |                             |              |
| Monitor Location:      | 006S002W28C002S                      | Type:                       | Well         |
| Description:           | Not Reported                         | HUC:                        | 18070302     |
| Drainage Area:         | Not Reported                         | Drainage Area Units:        | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Aquifer:               | Other aquifers                       | Formation Type:             | Not Reported |
| Aquifer Type:          | Not Reported                         | Construction Date:          | Not Reported |
| Well Depth:            | 160                                  | Well Depth Units:           | ft           |
| Well Hole Depth:       | Not Reported                         | Well Hole Depth Units:      | Not Reported |

**B5**  
**East**  
**1/4 - 1/2 Mile**  
**Lower**

**CA WELLS      CADWR8000004551**

|               |                 |                        |              |
|---------------|-----------------|------------------------|--------------|
| State Well #: | 06S02W28G001S   | Station ID:            | 5841         |
| Well Name:    | Not Reported    | Well Use:              | Unknown      |
| Well Type:    | Unknown         | Well Depth:            | 0            |
| Basin Name:   | Temecula Valley | Well Completion Rpt #: | Not Reported |

**B6**  
**East**  
**1/4 - 1/2 Mile**  
**Lower**

**CA WELLS      CADWR8000004552**

|               |                 |                        |              |
|---------------|-----------------|------------------------|--------------|
| State Well #: | 06S02W28G002S   | Station ID:            | 27724        |
| Well Name:    | Not Reported    | Well Use:              | Unknown      |
| Well Type:    | Unknown         | Well Depth:            | 0            |
| Basin Name:   | Temecula Valley | Well Completion Rpt #: | Not Reported |

**B7**  
**East**  
**1/4 - 1/2 Mile**  
**Lower**

**CA WELLS      CADWR8000004545**

|               |                 |                        |              |
|---------------|-----------------|------------------------|--------------|
| State Well #: | 06S02W28G003S   | Station ID:            | 5842         |
| Well Name:    | Not Reported    | Well Use:              | Unknown      |
| Well Type:    | Unknown         | Well Depth:            | 0            |
| Basin Name:   | Temecula Valley | Well Completion Rpt #: | Not Reported |

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**B8**  
**East**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000136117**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              | Type:                       | Well         |
| Organization Name:     | USGS California Water Science Center | HUC:                        | 18070302     |
| Monitor Location:      | 006S002W28G003S                      | Drainage Area Units:        | Not Reported |
| Description:           | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Drainage Area:         | Not Reported                         | Formation Type:             | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Construction Date:          | 19490101     |
| Aquifer:               | Other aquifers                       | Well Depth Units:           | ft           |
| Aquifer Type:          | Not Reported                         | Well Hole Depth Units:      | Not Reported |
| Well Depth:            | 175                                  |                             |              |
| Well Hole Depth:       | Not Reported                         |                             |              |

|   |              |                     |              |
|---|--------------|---------------------|--------------|
| Ground water levels,Number of Measurements: | 1            | Level reading date: | 1968-01-01   |
| Feet below surface:                         | 31.00        | Feet to sea level:  | Not Reported |
| Note:                                       | Not Reported |                     |              |

**B9**  
**East**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000136122**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              | Type:                       | Well         |
| Organization Name:     | USGS California Water Science Center | HUC:                        | 18070302     |
| Monitor Location:      | 006S002W28G002S                      | Drainage Area Units:        | Not Reported |
| Description:           | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Drainage Area:         | Not Reported                         | Formation Type:             | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Construction Date:          | 19480101     |
| Aquifer:               | Other aquifers                       | Well Depth Units:           | ft           |
| Aquifer Type:          | Not Reported                         | Well Hole Depth Units:      | Not Reported |
| Well Depth:            | 125                                  |                             |              |
| Well Hole Depth:       | Not Reported                         |                             |              |

|   |              |                     |              |
|---|--------------|---------------------|--------------|
| Ground water levels,Number of Measurements: | 1            | Level reading date: | 1968-01-01   |
| Feet below surface:                         | 23.00        | Feet to sea level:  | Not Reported |
| Note:                                       | Not Reported |                     |              |

**B10**  
**East**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000136121**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              | Type:                       | Well         |
| Organization Name:     | USGS California Water Science Center | HUC:                        | 18070302     |
| Monitor Location:      | 006S002W28G001S                      | Drainage Area Units:        | Not Reported |
| Description:           | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Drainage Area:         | Not Reported                         | Formation Type:             | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Construction Date:          | Not Reported |
| Aquifer:               | Other aquifers                       | Well Depth Units:           | ft           |
| Aquifer Type:          | Not Reported                         | Well Hole Depth Units:      | Not Reported |
| Well Depth:            | 17                                   |                             |              |
| Well Hole Depth:       | Not Reported                         |                             |              |



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

|   |              |                     |              |
|---|--------------|---------------------|--------------|
| Ground water levels,Number of Measurements: | 1            | Level reading date: | 1968-01-01   |
| Feet below surface:                         | 10.00        | Feet to sea level:  | Not Reported |
| Note:                                       | Not Reported |                     |              |

**11**  
**NE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000136169**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              |                             |              |
| Organization Name:     | USGS California Water Science Center |                             |              |
| Monitor Location:      | 006S002W28C001S                      | Type:                       | Well         |
| Description:           | Not Reported                         | HUC:                        | 18070302     |
| Drainage Area:         | Not Reported                         | Drainage Area Units:        | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Aquifer:               | Other aquifers                       | Formation Type:             | Not Reported |
| Aquifer Type:          | Not Reported                         | Construction Date:          | Not Reported |
| Well Depth:            | 11                                   | Well Depth Units:           | ft           |
| Well Hole Depth:       | Not Reported                         | Well Hole Depth Units:      | Not Reported |

**12**  
**NNW**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000136203**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              |                             |              |
| Organization Name:     | USGS California Water Science Center |                             |              |
| Monitor Location:      | 006S002W20R001S                      | Type:                       | Well         |
| Description:           | Not Reported                         | HUC:                        | 18070302     |
| Drainage Area:         | Not Reported                         | Drainage Area Units:        | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Aquifer:               | Other aquifers                       | Formation Type:             | Not Reported |
| Aquifer Type:          | Not Reported                         | Construction Date:          | Not Reported |
| Well Depth:            | Not Reported                         | Well Depth Units:           | Not Reported |
| Well Hole Depth:       | Not Reported                         | Well Hole Depth Units:      | Not Reported |

**C13**  
**SSW**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000136028**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              |                             |              |
| Organization Name:     | USGS California Water Science Center |                             |              |
| Monitor Location:      | 006S002W29R001S                      | Type:                       | Well         |
| Description:           | Not Reported                         | HUC:                        | 18070302     |
| Drainage Area:         | Not Reported                         | Drainage Area Units:        | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Aquifer:               | California Coastal Basin aquifers    | Aquifer Type:               | Not Reported |
| Formation Type:        | Not Reported                         | Well Depth:                 | 19           |
| Construction Date:     | Not Reported                         | Well Hole Depth:            | Not Reported |
| Well Depth Units:      | ft                                   |                             |              |
| Well Hole Depth Units: | Not Reported                         |                             |              |

|   |              |                     |              |
|---|--------------|---------------------|--------------|
| Ground water levels,Number of Measurements: | 1            | Level reading date: | 1968-01-01   |
| Feet below surface:                         | 16.00        | Feet to sea level:  | Not Reported |
| Note:                                       | Not Reported |                     |              |

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**D14**  
**ENE**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      CADWR8000004590**

|               |                 |                        |              |
|---------------|-----------------|------------------------|--------------|
| State Well #: | 06S02W28B001S   | Station ID:            | 27723        |
| Well Name:    | Not Reported    | Well Use:              | Unknown      |
| Well Type:    | Unknown         | Well Depth:            | 0            |
| Basin Name:   | Temecula Valley | Well Completion Rpt #: | Not Reported |

**C15**  
**SSW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      CADWR8000004493**

|               |                 |                        |              |
|---------------|-----------------|------------------------|--------------|
| State Well #: | 06S02W29R001S   | Station ID:            | 27726        |
| Well Name:    | Not Reported    | Well Use:              | Unknown      |
| Well Type:    | Unknown         | Well Depth:            | 0            |
| Basin Name:   | Temecula Valley | Well Completion Rpt #: | Not Reported |

**D16**  
**ENE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000136173**

|                        |                                      |                              |              |
|------------------------|--------------------------------------|------------------------------|--------------|
| Organization ID:       | USGS-CA                              | Type:                        | Well         |
| Organization Name:     | USGS California Water Science Center | HUC:                         | 18070302     |
| Monitor Location:      | 006S002W28B001S                      | Drainage Area Units:         | Not Reported |
| Description:           | Not Reported                         | Contrib Drainage Area Units: | Not Reported |
| Drainage Area:         | Not Reported                         | Formation Type:              | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Construction Date:           | Not Reported |
| Aquifer:               | Other aquifers                       | Well Depth Units:            | ft           |
| Aquifer Type:          | Not Reported                         | Well Hole Depth Units:       | Not Reported |
| Well Depth:            | 20                                   |                              |              |
| Well Hole Depth:       | Not Reported                         |                              |              |

|   |              |                     |              |
|---|--------------|---------------------|--------------|
| Ground water levels,Number of Measurements: | 1            | Level reading date: | 1968-01-01   |
| Feet below surface:                         | 12.00        | Feet to sea level:  | Not Reported |
| Note:                                       | Not Reported |                     |              |

**E17**  
**ENE**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      CADWR8000004571**

|               |                 |                        |              |
|---------------|-----------------|------------------------|--------------|
| State Well #: | 06S02W28A002S   | Station ID:            | 5840         |
| Well Name:    | Not Reported    | Well Use:              | Unknown      |
| Well Type:    | Unknown         | Well Depth:            | 0            |
| Basin Name:   | Temecula Valley | Well Completion Rpt #: | Not Reported |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**E18**  
**ENE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000136149**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              |                             |              |
| Organization Name:     | USGS California Water Science Center | Type:                       | Well         |
| Monitor Location:      | 006S002W28A002S                      | HUC:                        | 18070302     |
| Description:           | Not Reported                         | Drainage Area Units:        | Not Reported |
| Drainage Area:         | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Formation Type:             | Not Reported |
| Aquifer:               | Other aquifers                       | Construction Date:          | 19550101     |
| Aquifer Type:          | Not Reported                         | Well Depth Units:           | ft           |
| Well Depth:            | 61                                   | Well Hole Depth Units:      | Not Reported |
| Well Hole Depth:       | Not Reported                         |                             |              |

|   |              |                     |              |
|---|--------------|---------------------|--------------|
| Ground water levels,Number of Measurements: | 1            | Level reading date: | 1968-01-01   |
| Feet below surface:                         | 13.00        | Feet to sea level:  | Not Reported |
| Note:                                       | Not Reported |                     |              |

**F19**  
**South**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS      USGS40000135997**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              |                             |              |
| Organization Name:     | USGS California Water Science Center | Type:                       | Well         |
| Monitor Location:      | 006S002W32A001S                      | HUC:                        | 18070302     |
| Description:           | Not Reported                         | Drainage Area Units:        | Not Reported |
| Drainage Area:         | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Contrib Drainage Area: | Not Reported                         |                             |              |
| Aquifer:               | California Coastal Basin aquifers    | Aquifer Type:               | Not Reported |
| Formation Type:        | Not Reported                         | Well Depth:                 | 199          |
| Construction Date:     | 19500101                             | Well Hole Depth:            | Not Reported |
| Well Depth Units:      | ft                                   |                             |              |
| Well Hole Depth Units: | Not Reported                         |                             |              |

|   |              |                     |              |
|---|--------------|---------------------|--------------|
| Ground water levels,Number of Measurements: | 1            | Level reading date: | 1968-01-01   |
| Feet below surface:                         | 18.00        | Feet to sea level:  | Not Reported |
| Note:                                       | Not Reported |                     |              |

**F20**  
**SSW**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS      CADWR8000004474**

|               |                 |                        |              |
|---------------|-----------------|------------------------|--------------|
| State Well #: | 06S02W32A001S   | Station ID:            | 9607         |
| Well Name:    | Not Reported    | Well Use:              | Unknown      |
| Well Type:    | Unknown         | Well Depth:            | 0            |
| Basin Name:   | Temecula Valley | Well Completion Rpt #: | Not Reported |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**G21**  
**ESE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADWR8000004528**

|               |               |                        |              |
|---------------|---------------|------------------------|--------------|
| State Well #: | 06S02W28J002S | Station ID:            | 5843         |
| Well Name:    | Not Reported  | Well Use:              | Unknown      |
| Well Type:    | Unknown       | Well Depth:            | 0            |
| Basin Name:   | Not Reported  | Well Completion Rpt #: | Not Reported |

**H22**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADWR8000004605**

|               |                 |                        |              |
|---------------|-----------------|------------------------|--------------|
| State Well #: | 06S02W21Q001S   | Station ID:            | 5835         |
| Well Name:    | Not Reported    | Well Use:              | Unknown      |
| Well Type:    | Unknown         | Well Depth:            | 0            |
| Basin Name:   | Temecula Valley | Well Completion Rpt #: | Not Reported |

**G23**  
**ESE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADWR8000004524**

|               |                 |                        |              |
|---------------|-----------------|------------------------|--------------|
| State Well #: | 06S02W28J001S   | Station ID:            | 27725        |
| Well Name:    | Not Reported    | Well Use:              | Unknown      |
| Well Type:    | Unknown         | Well Depth:            | 0            |
| Basin Name:   | Temecula Valley | Well Completion Rpt #: | Not Reported |

**H24**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS      CADWR8000004604**

|               |                 |                        |              |
|---------------|-----------------|------------------------|--------------|
| State Well #: | 06S02W21R001S   | Station ID:            | 27720        |
| Well Name:    | Not Reported    | Well Use:              | Unknown      |
| Well Type:    | Unknown         | Well Depth:            | 0            |
| Basin Name:   | Temecula Valley | Well Completion Rpt #: | Not Reported |

**25**  
**ENE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000136172**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              | Type:                       | Well         |
| Organization Name:     | USGS California Water Science Center | HUC:                        | 18070302     |
| Monitor Location:      | 006S002W28A001S                      | Drainage Area Units:        | Not Reported |
| Description:           | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Drainage Area:         | Not Reported                         | Formation Type:             | Not Reported |
| Contrib Drainage Area: | Not Reported                         |                             |              |
| Aquifer:               | Other aquifers                       |                             |              |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

|                  |              |                        |              |
|------------------|--------------|------------------------|--------------|
| Aquifer Type:    | Not Reported | Construction Date:     | Not Reported |
| Well Depth:      | 10           | Well Depth Units:      | ft           |
| Well Hole Depth: | Not Reported | Well Hole Depth Units: | Not Reported |

**H26**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000136202**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              | Type:                       | Well         |
| Organization Name:     | USGS California Water Science Center | HUC:                        | 18070302     |
| Monitor Location:      | 006S002W21Q001S                      | Drainage Area Units:        | Not Reported |
| Description:           | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Drainage Area:         | Not Reported                         | Formation Type:             | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Construction Date:          | Not Reported |
| Aquifer:               | Other aquifers                       | Well Depth Units:           | ft           |
| Aquifer Type:          | Not Reported                         | Well Hole Depth Units:      | Not Reported |
| Well Depth:            | 27                                   |                             |              |
| Well Hole Depth:       | Not Reported                         |                             |              |

|   |              |                     |              |
|---|--------------|---------------------|--------------|
| Ground water levels,Number of Measurements: | 1            | Level reading date: | 1968-01-01   |
| Feet below surface:                         | 21.00        | Feet to sea level:  | Not Reported |
| Note:                                       | Not Reported |                     |              |

**I27**  
**ESE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000136093**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              | Type:                       | Well         |
| Organization Name:     | USGS California Water Science Center | HUC:                        | 18070302     |
| Monitor Location:      | 006S002W28J002S                      | Drainage Area Units:        | Not Reported |
| Description:           | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Drainage Area:         | Not Reported                         | Formation Type:             | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Construction Date:          | Not Reported |
| Aquifer:               | Other aquifers                       | Well Depth Units:           | ft           |
| Aquifer Type:          | Not Reported                         | Well Hole Depth Units:      | Not Reported |
| Well Depth:            | 68                                   |                             |              |
| Well Hole Depth:       | Not Reported                         |                             |              |

|   |              |                     |              |
|---|--------------|---------------------|--------------|
| Ground water levels,Number of Measurements: | 1            | Level reading date: | 1968-01-01   |
| Feet below surface:                         | 18.00        | Feet to sea level:  | Not Reported |
| Note:                                       | Not Reported |                     |              |

**I28**  
**ESE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS      USGS40000136083**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              | Type:                       | Well         |
| Organization Name:     | USGS California Water Science Center | HUC:                        | 18070302     |
| Monitor Location:      | 006S002W28J001S                      | Drainage Area Units:        | Not Reported |
| Description:           | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Drainage Area:         | Not Reported                         | Formation Type:             | Not Reported |
| Contrib Drainage Area: | Not Reported                         |                             |              |
| Aquifer:               | Other aquifers                       |                             |              |

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

|                  |              |                        |              |
|------------------|--------------|------------------------|--------------|
| Aquifer Type:    | Not Reported | Construction Date:     | 19170101     |
| Well Depth:      | 25           | Well Depth Units:      | ft           |
| Well Hole Depth: | Not Reported | Well Hole Depth Units: | Not Reported |

|  |              |                     |              |
|--|--------------|---------------------|--------------|
| Ground water levels, Number of Measurements: | 1            | Level reading date: | 1968-01-01   |
| Feet below surface:                          | 21.00        | Feet to sea level:  | Not Reported |
| Note:  | Not Reported |                     |              |

**29  
NE  
1/2 - 1 Mile  
Higher**

**FED USGS      USGS40000136201**

|                        |                                      |                              |              |
|------------------------|--------------------------------------|------------------------------|--------------|
| Organization ID:       | USGS-CA                              |                              |              |
| Organization Name:     | USGS California Water Science Center |                              |              |
| Monitor Location:      | 006S002W21R001S                      | Type:                        | Well         |
| Description:           | Not Reported                         | HUC:                         | 18070302     |
| Drainage Area:         | Not Reported                         | Drainage Area Units:         | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Contrib Drainage Area Units: | Not Reported |
| Aquifer:               | Other aquifers                       | Formation Type:              | Not Reported |
| Aquifer Type:          | Not Reported                         | Construction Date:           | Not Reported |
| Well Depth:            | 40                                   | Well Depth Units:            | ft           |
| Well Hole Depth:       | Not Reported                         | Well Hole Depth Units:       | Not Reported |

|  |              |                     |              |
|--|--------------|---------------------|--------------|
| Ground water levels, Number of Measurements: | 1            | Level reading date: | 1968-01-01   |
| Feet below surface:                          | 28.00        | Feet to sea level:  | Not Reported |
| Note:  | Not Reported |                     |              |

**J30  
South  
1/2 - 1 Mile  
Lower**

**FED USGS      USGS40000135957**

|                        |                                      |                              |              |
|------------------------|--------------------------------------|------------------------------|--------------|
| Organization ID:       | USGS-CA                              |                              |              |
| Organization Name:     | USGS California Water Science Center |                              |              |
| Monitor Location:      | 006S002W33E001S                      | Type:                        | Well         |
| Description:           | Not Reported                         | HUC:                         | 18070302     |
| Drainage Area:         | Not Reported                         | Drainage Area Units:         | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Contrib Drainage Area Units: | Not Reported |
| Aquifer:               | California Coastal Basin aquifers    | Aquifer Type:                | Not Reported |
| Formation Type:        | Not Reported                         | Well Depth:                  | 63           |
| Construction Date:     | Not Reported                         | Well Hole Depth:             | Not Reported |
| Well Depth Units:      | ft                                   |                              |              |
| Well Hole Depth Units: | Not Reported                         |                              |              |

|  |              |                     |              |
|--|--------------|---------------------|--------------|
| Ground water levels, Number of Measurements: | 1            | Level reading date: | 1968-01-01   |
| Feet below surface:                          | 21.00        | Feet to sea level:  | Not Reported |
| Note:  | Not Reported |                     |              |

**K31  
South  
1/2 - 1 Mile  
Lower**

**CA WELLS      CADWR8000004452**

|               |               |             |         |
|---------------|---------------|-------------|---------|
| State Well #: | 06S02W33E001S | Station ID: | 31397   |
| Well Name:    | Not Reported  | Well Use:   | Unknown |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

|             |              |                        |              |
|-------------|--------------|------------------------|--------------|
| Well Type:  | Unknown      | Well Depth:            | 0            |
| Basin Name: | Not Reported | Well Completion Rpt #: | Not Reported |

**J32**  
**South**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS    USGS40000135952**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              |                             |              |
| Organization Name:     | USGS California Water Science Center |                             |              |
| Monitor Location:      | 006S002W32H002S                      | Type:                       | Well         |
| Description:           | Not Reported                         | HUC:                        | 18070302     |
| Drainage Area:         | Not Reported                         | Drainage Area Units:        | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Aquifer:               | California Coastal Basin aquifers    |                             |              |
| Formation Type:        | Not Reported                         | Aquifer Type:               | Not Reported |
| Construction Date:     | Not Reported                         | Well Depth:                 | Not Reported |
| Well Depth Units:      | Not Reported                         | Well Hole Depth:            | Not Reported |
| Well Hole Depth Units: | Not Reported                         |                             |              |

**K33**  
**South**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS    USGS40000135949**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              |                             |              |
| Organization Name:     | USGS California Water Science Center |                             |              |
| Monitor Location:      | 006S002W32H001S                      | Type:                       | Well         |
| Description:           | Not Reported                         | HUC:                        | 18070302     |
| Drainage Area:         | Not Reported                         | Drainage Area Units:        | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Aquifer:               | California Coastal Basin aquifers    |                             |              |
| Formation Type:        | Not Reported                         | Aquifer Type:               | Not Reported |
| Construction Date:     | Not Reported                         | Well Depth:                 | 76           |
| Well Depth Units:      | ft                                   | Well Hole Depth:            | Not Reported |
| Well Hole Depth Units: | Not Reported                         |                             |              |

**34**  
**WNW**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS    USGS40000136181**

|                        |                                      |                             |              |
|------------------------|--------------------------------------|-----------------------------|--------------|
| Organization ID:       | USGS-CA                              |                             |              |
| Organization Name:     | USGS California Water Science Center |                             |              |
| Monitor Location:      | 006S002W20N001S                      | Type:                       | Well         |
| Description:           | Not Reported                         | HUC:                        | 18070302     |
| Drainage Area:         | Not Reported                         | Drainage Area Units:        | Not Reported |
| Contrib Drainage Area: | Not Reported                         | Contrib Drainage Area Unts: | Not Reported |
| Aquifer:               | Other aquifers                       | Formation Type:             | Not Reported |
| Aquifer Type:          | Not Reported                         | Construction Date:          | Not Reported |
| Well Depth:            | Not Reported                         | Well Depth Units:           | Not Reported |
| Well Hole Depth:       | Not Reported                         | Well Hole Depth Units:      | Not Reported |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

Federal EPA Radon Zone for RIVERSIDE County: 2

- 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 RIVERSIDE COUNTY, CA

Number of sites tested: 12

| <u>Area</u>             | <u>Average Activity</u> | <u>% &lt;4 pCi/L</u> | <u>% 4-20 pCi/L</u> | <u>% &gt;20 pCi/L</u> |
|-------------------------|-------------------------|----------------------|---------------------|-----------------------|
| Living Area - 1st Floor | 0.117 pCi/L             | 100%                 | 0%                  | 0%                    |
| Living Area - 2nd Floor | 0.450 pCi/L             | 100%                 | 0%                  | 0%                    |
| Basement                | 1.700 pCi/L             | 100%                 | 0%                  | 0%                    |



# 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.

### STATE RECORDS

#### Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

#### California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

## OTHER STATE DATABASE INFORMATION

#### California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

#### 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

#### 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.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### 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 E**

## **PROJECT TEAM QUALIFICATIONS**



# Kyle R. McHargue

Project Geologist

## Education

B.A., Geology, University of Hawaii,  
Manoa

## Certifications

10-Hour OSHA Safety Training  
Nuclear Gauge Certified  
Radiation Safety Officer Certified  
First Aid/CPR

## Professional Experience

Mr. Kyle McHargue has over 5 years of geotechnical experience and has worked on or managed a diverse range of geotechnical projects throughout Southern California through Riverside, San Bernardino, Orange, San Diego and Alameda counties. His geotechnical experience has ranged from staff and project geologist. Mr. McHargue's responsibilities include preparation of proposals, project management, preliminary geotechnical investigations, fault hazard investigations, landslide investigations, seismic refraction surveys, settlement monitoring, percolation and infiltration studies, manure and methane evaluations, and field studies as a field and project geologist for a diverse range of grading projects. Mr. McHargue has performed Phase I Environmental Site Assessments for various property acquisitions and transfers in Riverside Orange, San Diego and San Bernardino Counties. Mr. McHargue also has extensive field and office experience in land surveying and Storm Water Pollution Prevention Program (SWPPP) inspections.

## Representative Project Experience-

- Corona, Riverside County, California - Project Manager. Directed a geotechnical investigation, fault hazard and landslide investigation, slope stability analysis and Phase I Environmental Site Assessment for the Chaudhuri Estates hillside residential development.
- Wildomar, Riverside County, California – Field Geologist. Supervised rough grading operations for 84-lot residential subdivision. In field challenges included stabilization fill design, fault hazard mapping, and high groundwater mitigation design.
- Temecula, Riverside County, California – Project Geologist. Performed AP Fault Zone investigation, geotechnical and infiltration investigations for two adjacent commercial projects.
- Ontario, San Bernardino County, California – Project and Field Geologist. Performed geotechnical, infiltration and manure/methane investigations for 121-acre development. Also supervised rough grading operations for a residential development included field mapping, field recommendations for remedial grading and preparation of reports and geologic maps.
- Temecula, Riverside County, California – Field Geologist. Forensic distress investigation for religious center's structural & wall failures.
- Anaheim Hills, Orange County, California – Project Geologist. Planned and performed geotechnical, infiltration investigations including all report preparation and slope stability analysis.

## Employment History

**GeoTek, Inc.**, Riverside-Project Geologist Jan. 2019 – Present

**LGC Geo-Environmental, Inc.**, Temecula-Staff/Project Geologist  
Dec. 2013 – Jan. 2019



# Anna M. Scott

---

Project Geologist

## Education

B.S., Geology, University of California,  
Riverside

## Professional Experience

Ms. Anna Scott has over 30 years of geotechnical experience and has worked on or managed a wide range of geotechnical projects throughout southern California, including the High Desert, Inland Empire, Antelope Valley, Coachella Valley, Orange County and Bakersfield area. Her geotechnical experience has ranged from field and laboratory technician to field, staff and project geologist. Ms. Scott's responsibilities include preparation of proposals, preliminary geotechnical investigations, seismic studies, settlement monitor installation and studies, and field studies as a technician and geologist for large grading projects. Ms. Scott has performed Phase I and II ESAs for various property acquisitions and transfers throughout southern California.

## Representative Project Experience

Ms. Scott has worked on numerous projects throughout southern California. Her experience includes working with various entities including the public and private sectors. Her vast knowledge includes geotechnical, environmental and materials services. This experience has been attained through small and large projects over the numerous years of her career.

## Employment History

**GeoTek, Inc.**, Riverside-Project Geologist, February 2005 – Present

**GeoSoils, Inc.**, Santa Ana, September 1987 – February 2005

## **J. MICHAEL BATTEN, CAC, CEM, REPA**

---

*Principal Environmental Services Manager*

### **Education**

BS in Geology, California State University, Fresno 1988

### **Registrations**

- Certified Asbestos Consultant (CA #95-1721)
- Licensed Asbestos Abatement Consultant (NV #IJPM0655)
- Certified Environmental Manager (NV #1782)
- Asbestos Professional Inspector (IL #100-11092)
- Registered Environmental Property Assessor (#113162)
- Certified Lead Inspector Assessor (CA #4358)
- Certified Lead Inspector (EPA #LBP-I-1162326-1)
- Certified Lead Risk Assessor (EPA #LBP-R-1162326-1)

### **Certifications**

- AHERA Certified Asbestos Building Inspector, Management Planner, Project Designer, & Contractor/Supervisor
- EPA Accredited Lead-based Paint Inspector & Risk Assessor
- OSHA HAZWOPER certified worker & supervisor
- OSHA Construction Safety & Health (10-Hour)

### **Affiliations**

- American Society of Testing and Materials
- National Registry of Environmental Professionals

### **Professional Experience**

Mr. Batten has over 30 years of environmental experience, throughout which he has conducted and managed numerous environmental investigations, assessments, and remediations. He has prepared several NEPA assessments, USEPA EIS, and CEQA EIR reports. In addition, Mr. Batten has extensive experience in conducting asbestos and lead-based paint surveys and preparing management plans, including remediation design, for asbestos and lead present in buildings.

### **Project Experience**

- **Phase I Environmental Site Assessments:** Mr. Batten has conducted more than 2,000 Phase I Environmental Site Assessments in 27 states, including Brownfield studies under USEPA grants.
- **Phase II Environmental Site Assessments:** Mr. Batten has conducted more than 150 Phase II Environmental Assessments, including Brownfield studies under USEPA grants.
- **Site Characterizations and Remediations:** Mr. Batten has experience conducting numerous site characterizations and remediations, including obtaining regulatory closure.
- **NEPA Studies:** Mr. Batten has conducted more than 200 NEPA studies, including Environmental Assessments, Environmental Impact Reports/Environmental Impact Studies, in eight states. The agencies involved include USEPA, FCC, BLM, National Park Service, and California EPA.
- **Asbestos Services:** Mr. Batten has conducted over 600 asbestos surveys in several states. He has also prepared numerous Asbestos Management Plans, prepared design plans, and monitored numerous abatement projects.
- **Lead-Based Paint Services:** Mr. Batten has conducted numerous Lead-Based Paint surveys.
- **Landfills:** Mr. Batten has conducted investigations and overseen remediations on landfills in Fresno, California and Henderson, Nevada.
- **Other Services:** Mr. Batten has been called upon to conduct less usual services on occasion, including mold consultation and investigation, radon studies, vapor intrusion studies, and indoor air quality studies.

## J. MICHAEL BATTEN, continued...



### **Professional History**

**Environmental Services Manager.** GeoTek, Inc., 2001 to present.

**Director of Environmental Services.** ATC Associates, Inc., 1999 to 2001.

**Director of Operations.** Hygienetics Environmental Services, Inc., 1997 to 1999.

**Project Manager.** AllWest Environmental, Inc., 1996 to 1997.

**Project Manager.** Citadel Environmental Services, Inc., 2/1996 to 9/1996.

**Project Manager.** Boelter Environmental consultants, 3/1995 to 9/1995.

**Senior Staff Geologist.** Converse Consultants, 1992 to 1995.

**Staff Geologist.** Converse Environmental West, 1991 to 1992.

**Project Geologist.** Krazan and Associates, 1990 to 1991.

**Environmental Technician.** Krazan and Associates, 1989 to 1990.



# National Registry of Environmental Professionals

For  
Environmental Certifications

This is to Certify that

**Michael J Batten**

having successfully demonstrated to the Academic Board of this organization the required level of knowledge and ability, is here by awarded the distinction of

**Registered Environmental Property Assessor**

together with all rights, benefits and privileges attached thereto and that the name and title of the aforementioned registrant is today placed upon the register of the organization.

Given under our hands on this 15 day of June, 2013.



*Richard G. Young*  
Executive Director

113162

Registrant Number

# United States Environmental Protection Agency

This is to certify that



J M Batten

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Inspector

## In the Jurisdiction of:

All EPA Administered Lead-based Paint Activities Program States, Tribes and Territories

This certification is valid from the date of issuance and expires March 14, 2022

LBP-I-1162326-2

Certification #

December 08, 2018

Issued On

A handwritten signature in black ink, appearing to read 'Adrienne Priselac', written over a horizontal line.

Adrienne Priselac, Manager, Toxics Office

Land Division



# United States Environmental Protection Agency

This is to certify that



J M Batten

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Risk Assessor

## In the Jurisdiction of:

All EPA Administered Lead-based Paint Activities Program States, Tribes and Territories

This certification is valid from the date of issuance and expires March 14, 2022

LBP-R-1162326-2

Certification #

December 08, 2018

Issued On

A handwritten signature in black ink, appearing to read 'Adrienne Priselac'.

Adrienne Priselac, Manager, Toxics Office

Land Division







# LEAD-RELATED CONSTRUCTION CERTIFICATE

**INDIVIDUAL:**



**Michael Batten**

**CERTIFICATE TYPE:**

Lead Inspector/Assessor

**NUMBER:**

LRC-00002629

**EXPIRATION DATE:**

11/17/2020

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at [www.cdph.ca.gov/programs/clppb](http://www.cdph.ca.gov/programs/clppb) or calling (800) 597-LEAD.



525-535 West Jefferson Street • Springfield, Illinois 62761-0001 • [www.dph.illinois.gov](http://www.dph.illinois.gov)

**MICHAEL BATTEN**  
8240 EDMOND STREET  
LAS VEGAS, NV 89139

4/5/2018



ASBESTOS PROFESSIONAL LICENSE ID NUMBER: 11092

Enclosed is your Asbestos Professional License. Please note the expiration date on the card and in the image depicted below.

**COPY OF THE ASBESTOS PROFESSIONAL LICENSE**

Front of License

Back of License

|  |               |                |   |  |  |                   |
|--|---------------|----------------|---|--|--|-------------------|
|         |               |                | <b>ASBESTOS PROFESSIONAL LICENSE</b>  |  | <b>ENDORSEMENTS</b>  | <b>TC EXPIRES</b> |
| <b>ID NUMBER</b>   | <b>ISSUED</b> | <b>EXPIRES</b> | <b>INSPECTOR</b>  |  | <b>3/20/2019</b>   |                   |
| 100 - 11092  | 4/5/2018      | 05/15/2019     |  |  | <b>Alteration of this license shall result in legal action</b><br>This license issued under authority of the State of Illinois<br>Department of Public Health<br>This license is valid only when accompanied by a valid training course certificate. |                   |
| <b>MICHAEL BATTEN</b><br>8240 EDMOND STREET<br>LAS VEGAS, NV 89139<br>Environmental Health |               |                |   |  |  |                   |

If you have any questions or need further assistance, contact the Asbestos Program at (217)782-3517 or fax (217)785-5897.

Our WEB address is: [dph.illinois.gov/topics-services/environmental-health-protection/asbestos](http://dph.illinois.gov/topics-services/environmental-health-protection/asbestos)  
EMAIL Address: [dph.asbestos@illinois.gov](mailto:dph.asbestos@illinois.gov)

State of Nevada



*Department of Conservation and Natural Resources*  
*Division of Environmental Protection*

This is to certify that

*Michael J Batten*

having given satisfactory evidence of the necessary qualifications as required by the Nevada Revised Statute 459.400 to 459.600, inclusive, and Nevada Administrative Code 459.970 to 459.9729, inclusive, has been granted certification as a

**Environmental Manager**

in the State of Nevada

In testimony whereof, witness the signature of the Administrator and the Seal of the State of Nevada.

1782

Certification Number

8/31/2021

Expiration Date

A handwritten signature in black ink, appearing to read "Greg Lovato".

Greg Lovato, Administrator



State of Nevada Department of Business & Industry  
**Industrial Relations (DIR)**

*JD*  
**STATE OF NEVADA**  
**DEPARTMENT OF BUSINESS AND INDUSTRY**  
**DIVISION OF INDUSTRIAL RELATIONS**  
Occupational Safety and Health Administration  
Asbestos Control Program

Certifies That J. Michael Batten  
Geotek Insite Inc.  
is Licensed As Asbestos Abatement Consultant

License No. IJPM-655

Expiration Date 03/07/2020

Signature Of Licensee

*J. Michael Batten*



**M & C Environmental Training**

**Asbestos Inspector**  
Refresher Training Course

**Michael Batten**

Has successfully completed the Asbestos Inspector Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., 1619 Beverly Place, Berkeley, California. Tel. # (510) 525 - 1385

Course Approval Number: CA-003-06

|   |                           |
|---|---------------------------|
| Location: Oakland, California                               | Expiration: March 7, 2020 |
| Dates: March 7, 2019  |                           |
| Director of Training: John McGinnis<br><i>John McGinnis</i> |                           |

Certificate Number 45383 IR

**M & C Environmental Training**

**Asbestos Management Planner**  
Refresher Training Course

**Michael Batten**

Has successfully completed the Asbestos Management Planner Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., 1619 Beverly Place, Berkeley, California. Tel. # (510) 525 - 1385

Course Approval Number: CA-003-08

|   |                           |
|---|---------------------------|
| Location: Oakland, California                               | Expiration: March 7, 2020 |
| Dates: March 7, 2019  |                           |
| Director of Training: John McGinnis<br><i>John McGinnis</i> |                           |

Certificate Number 45396 PR

**M & C Environmental Training**

**Asbestos Contractor/Supervisor**  
Refresher Training Course

**J. Michael Batten**

Has successfully completed the Asbestos Contractor/Supervisor Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., 1619 Beverly Place, Berkeley, California. Tel. # (510) 525 - 1385

Course Approval Number: CA-003-04

|   |                                |
|---|--------------------------------|
| Location: Oakland, California                               | Expiration: September 13, 2020 |
| Dates: September 13, 2019                                   |                                |
| Director of Training: John McGinnis<br><i>John McGinnis</i> |                                |

Certificate Number 46376 SR

**M & C Environmental Training**

**Asbestos Project Designer**  
Refresher Training Course

**J. Michael Batten**

Has successfully completed the Asbestos Project Designer Refresher course approved by the California Division of Occupational Safety and Health for purposes of certification required by Title 8, Article 2.7, Chapter 3.2, Section 341.16 and the accreditation required under the Toxic Substances Control Act, Title II. Conducted by M&C Environmental Training Inc., 1619 Beverly Place, Berkeley, California. Tel. # (510) 525 - 1385

Course Approval Number: CA-003-10

|   |                                |
|---|--------------------------------|
| Location: Oakland, California                               | Expiration: September 11, 2020 |
| Dates: September 11, 2019                                   |                                |
| Director of Training: John McGinnis<br><i>John McGinnis</i> |                                |

Certificate Number 46347 DR



**This is to Certify that**  
**Michael Batten**  
Has Satisfactorily Completed Training in Accordance  
with Applicable Rules and Regulations  
**Asbestos Building Inspector**  
**Refresher**  
Completed: 3/19/2019 Expires: 3/19/2020  
Certificate: BIR1903190998

**2019** Occupational Training & Supply, Inc.  
7233 Adams Street ♦ Willowbrook, IL 60527 ♦ (630) 655-3900

**OSHA**      **002340551**      

U.S. Department of Labor  
Occupational Safety and Health Administration

**Michael Batten**

has successfully completed a 10-hour Occupational Safety and Health  
Training Course in  
**Construction Safety & Health**

**Kenner Costen**      **12/12/09**  
(Trainer)      (Date)



# Edward H. LaMont, CEG, PG

Branch Manager

## Areas of Expertise

Geotechnical Field Investigations  
Grading and Earthwork Construction  
Industry Standard of Care  
Hillside, Liquefaction, Seismic Hazard,  
Fault Analyses and Forensic Studies.

## Education

Bachelor of Science in Geology, Cal  
State University, Northridge

## Registrations

Registered Geologist, PG 6025  
Certified Engineering Geologist, CEG  
1892

## Certifications

OSHA 40-Hr HAZWOPER Training  
OSHA 8-Hour Refresher  
First Aid/CPR

## Professional Affiliations

Association of Engineering Geologist  
South Coast Geological Society  
San Diego Association of Geologist  
Inland Geological Society  
BIA Riverside  
BIA San Diego

## Professional Experience

Mr. LaMont has been involved with numerous public works, residential and commercial earthwork projects within the southern California area. Many residential and public works projects have been successfully completed across southern and central California. Projects include fault and subsidence studies, fault evaluations, various commercial and residential site developments, FEMA levee certifications and military construction projects. These projects have generally included preliminary geotechnical investigations, slope stability evaluations, review and design recommendations, street improvements construction and testing services, and project management.

In addition, Mr. LaMont has performed governmental review of geotechnical reports for the County of Orange. Mr. LaMont has also completed geotechnical studies for the Riverside County Flood Control and Cities of Banning, Chino, Corona, Palm Springs, Lancaster and Victorville, to name a few.

## Representative Project Experience

Project experience has included residential and commercial developments, for various land developers including Melia Homes, Meritage Homes, Frontier Enterprises, DR Horton, Integral Communities, Taylor-Morrison, Warmington Homes, Shea Homes, etc. Mr. LaMont has also completed geotechnical investigations and performed project management for numerous residential tracts and commercial facilities all across Southern California.

## Professional History

**Branch Manager/Principal Geologist** - Riverside GeoTek, Inc.,  
2004 to present

**Vice President, Principal Geologist** - GeoSoils, Inc., Santa Ana,  
2003 to 2004

**Geotechnical Reviewer, Engineering Geologist** - County of  
Orange, 2001 to 2003.

**Project Geologist** - GeoSoils, Inc., Santa Ana, California, 1994 to  
2001.

**Staff/Project Geologist** - GeoSoils, Inc., Carlsbad, California, 1988  
to 1994.

# Appendix F

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Noise Study



# Morningstar Loop Convenience Store and Gas Station and the Loop Rapid Car Wash

## Noise and Vibration Study

*prepared for*

**CSL Engineering Inc.**

3410 La Sierra Avenue, #F1190

Riverside, California 92503

Contact: Jeff LeGrand, Vice President

*prepared by*

**Rincon Consultants, Inc.**

250 East 1<sup>st</sup> Street, Suite 1400

Los Angeles, California 90012

**February 2023**



**RINCON CONSULTANTS, INC.**

Environmental Scientists | Planners | Engineers

[rinconconsultants.com](http://rinconconsultants.com)

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# 1 Project Description and Impact Summary

## 1.1 Introduction

This study analyzes the potential noise and vibration impacts of the proposed Morningstar Village Project (project) in the community of Winchester, Riverside County, California. The purpose of this study is to analyze the project's noise and vibration impacts related to both temporary construction activity and long-term operation of the project. Table 1 provides a summary of project impacts.

**Table 1 Summary of Impacts**

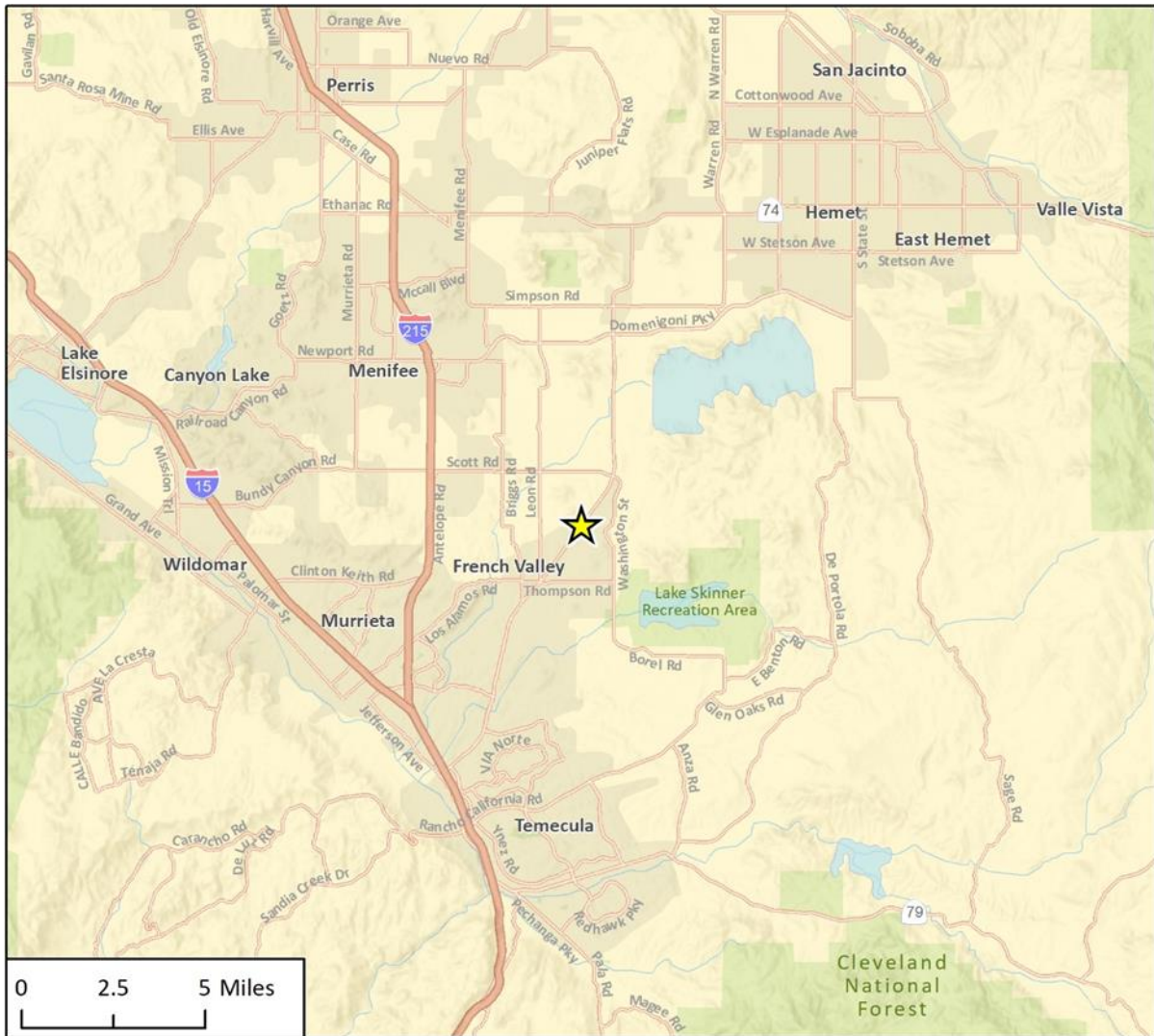
| Impact Statement   | Proposed Project's Level of Significance          | Applicable Recommendations   |
|--|---|--|
| Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?                             | Less than significant impact (Construction)       | None   |
|  | Less than significant with mitigation (Operation) | Restrict car wash operation to daytime hours (7:00 a.m. to 10:00 p.m.) |
| Would the project result in generation of excessive groundborne vibration or groundborne noise levels?   | Less than significant impact                      | None   |
| 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? | No impact   | None   |

## 1.2 Project Summary

### Project Location

The 17.37-acre project site is located at 34410 Pourroy Road in the community of Winchester in unincorporated Riverside County, California. It is located at the northwestern corner of the intersection of Pourroy Road and Winchester Road/State Route 79 (SR-79) and identified by Assessor's Parcel Numbers (APNs) 476-010-081 through 476-010-084. The site is regionally accessible by Interstate 215 (I-215), and locally accessible by Winchester Road (to the south and east), Pourroy Road/Abelia Street, Ruft Road, and Pat Road (to the west). Figure 1 shows the regional location of the project site, and Figure 2 shows the existing conditions of the project site and vicinity.

Figure 1 Regional Location



Imagery provided by Esri and its licensors © 2021.

★ Project Location

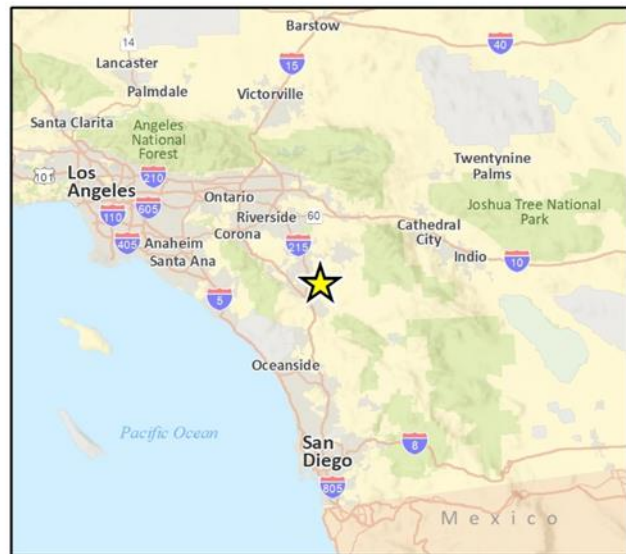


Fig 1 Regional Location



Figure 2 Project Site Location



Imagery provided by Microsoft Bing, Esri and their licensors © 2021.

Fig. 2 Project Location

## **Project Description**

The Morningstar Loop Project (hereafter referred to as “proposed project” or “project”) is a commercial development on an approximate 17.37 acre site that would involve the construction of an approximate 3,500 square foot (sf) 24 pump fuel station and a 6,100 sf convenience store with a 1,000 sf restaurant on the western side of the project site, as well as a 4,800 square foot rapid pass car-wash and 20 car vacuum stalls on the eastern portion of the site. The car wash building will have areas for an office, a breakroom, and restrooms as well as spaces for storage, car wash and vacuum equipment. The convenience store will be open 24 hours per day and the car wash would be operational from 6:00 am to 10:00 am.

The gas station component of the project will include six pumping stations with four pumps at each station, a 10,000-gallon underground storage tank (UST) for diesel fuel, a 20,000-gallon unleaded gasoline UST, a 12,000-gallon premium gasoline UST, and an aboveground storage tank (AST) to serve a propane filling station. The car wash portion of the site will accommodate one car wash lane with three queuing lanes and 20 canopied car vacuum stalls. 27,300 sf of drought-tolerant landscaping would be installed throughout the project site, as well as a 13,000-sf detention basin in the mid portion of the site. In total, 90,300 sf of the site would be paved.

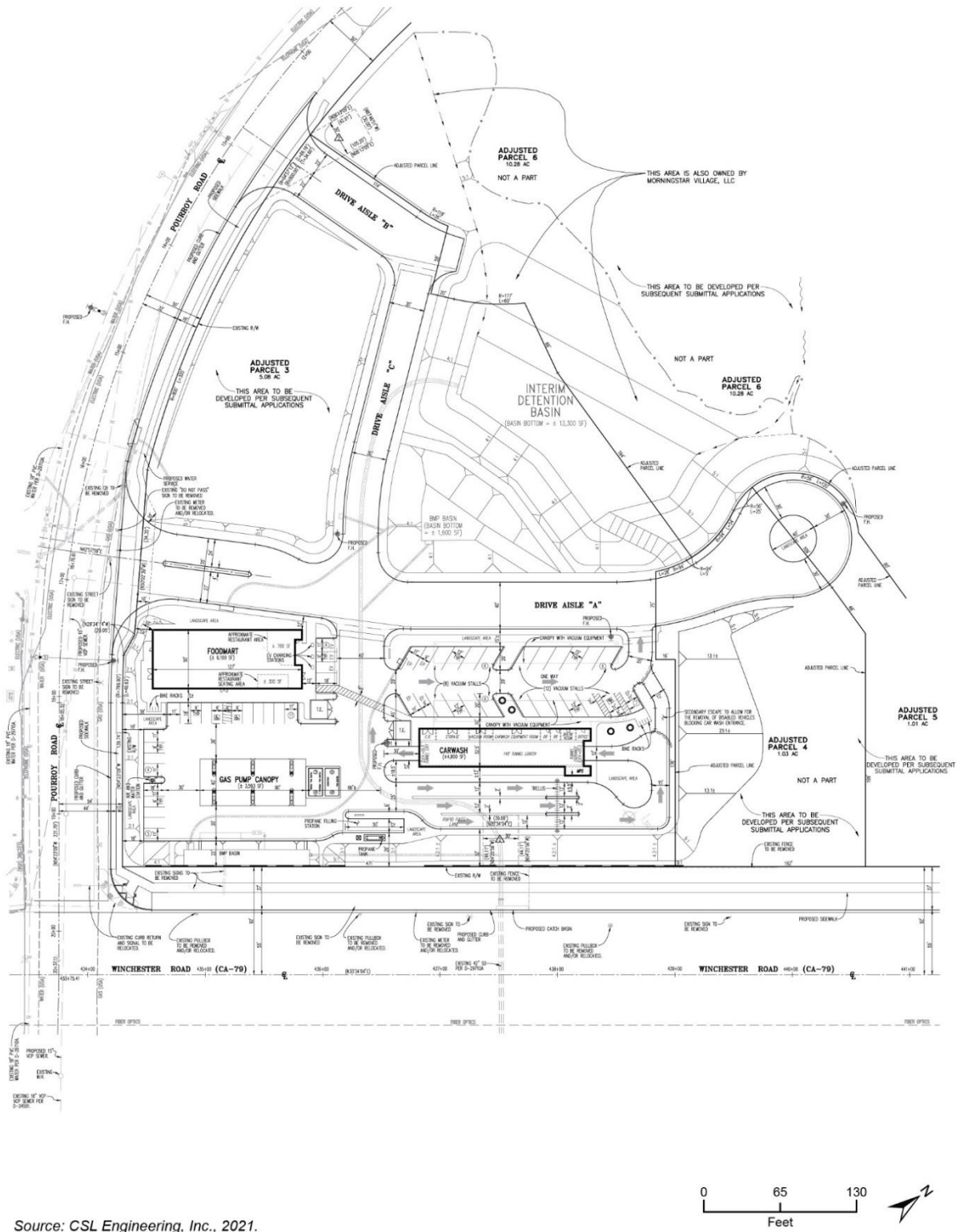
Access to the project site would be provided via two ingress/egress driveways off Pourroy Road, with interconnecting roads (Drive Isles A through C) between the gas station and the car wash areas on the site. The main access would be from Drive Isle A, with secondary access available from Drive Isle B (which would also connect to Drive Isle A through Drive Isle C). The project would provide for a total of 61 parking spaces, including three ADA-accessible spaces and three electric vehicle (EV) parking spaces equipped with chargers, as well as eight bicycle parking spaces. Of these, the gas station portion of the project site will include 30 customer parking spaces, two ADA accessible parking spaces, three EV parking spaces, and one employee parking space. The car wash will include 20 spaces for vacuuming and cleaning, and five employee parking spaces would be located on the car wash portion of the site.

One trash enclosure will be located at the southeast corner of the gas station and one trash enclosure would be located at the northwest corner of the car wash. Figure 3 shows the proposed site plan. The project site will connect to existing water, sewer, electrical, telephone, and gas utilities in the Pourroy Road right-of-way □

## **Construction**

Construction of the project is proposed to start in October 2022 and estimated to be completed in February 2024 for a total construction period of 16 months. Construction activities would include site preparation, grading, building construction, paving, and architectural coating (e.g., painting). The project would include removal of approximately 23,156 cubic yards (cy) of cut soil, all of which would be reused as fill. All construction would occur within the current conceptual limits of the project.

Figure 3 Site Plan



Source: CSL Engineering, Inc., 2021.

## 2 Background

---

### 2.1 Overview of Sound Measurement

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

In technical terms, sound levels are described as either a “sound power level” or a “sound pressure level,” which while commonly confused are two distinct characteristics of sound. Both share the same unit of measure, the dB. However, sound power, expressed as  $L_{pw}$ , is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers such as an eardrum or microphone, the sound pressure level. Sound measurement instruments only measure sound pressure, and limits used in standards are generally sound pressure levels.

#### Human Perception of Sound

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to frequencies around and below 100 Hertz (Kinsler, et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (Crocker 2007).

#### Sound Propagation and Shielding

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line, the path the sound will travel, site conditions, and obstructions). Noise levels from a point source typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance (e.g., construction, industrial machinery, ventilation units). Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and

the changes in noise levels with distance (drop-off rate) result from simply the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013).

Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, and man-made features such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA’s guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

## Descriptors

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this study are the equivalent noise level ( $L_{eq}$ ), Day-Night Average Level (DNL; may also be symbolized as  $L_{dn}$ ), and the community noise equivalent level (CNEL; may also be symbolized as  $L_{den}$ ).

$L_{eq}$  is one of the most frequently used noise metrics; it considers both duration and sound power level.  $L_{eq}$  is defined as the single steady-state A-weighted level equivalent to the same amount of acoustic energy as that contained in the actual fluctuating levels over a time period; when no period is specified, a 1-hour period is assumed.

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using DNL<sup>1</sup>, which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. It is also measured using CNEL<sup>1</sup>, which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013). Noise levels described by DNL and CNEL usually differ by about 1 dBA. The relationship between the peak-hour  $L_{eq}$  value and the DNL/CNEL depends on the distribution of traffic during the day, evening, and night.

## 2.2 Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building

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<sup>1</sup> As DNL and CNEL typically used to assess human exposure to noise A-weighted sound pressure level (dBA) is used nearly ubiquitously.

components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (Federal Transit Administration [FTA] 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances (Caltrans 2013). When a building is affected by vibration, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may actually amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2013).

## 2.3 Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Sensitive land uses are generally defined as locations where people reside or where the presence of noise could adversely affect the use of the land. The County of Riverside General Plan considers sensitive land uses to be land uses that require a serene environment as part of the overall facility or residential experience, including schools, hospitals, rest homes, long-term care facilities, mental care facilities, residential uses, libraries, passive recreation areas, and places of worship. (County of Riverside 2015). Surrounding land uses that would be considered sensitive receivers include single family residences and St. Thomas The Hermit Coptic Orthodox Church across Pourroy Road located approximately 560 feet and 500 feet, respectively, to the west, single-family residents located approximately 485 feet to the north, planned multi-family residential uses located approximately 195 feet to the southeast across Winchester Road, and Abelia Park approximately 185 feet to the southwest across Winchester Road, when measuring from the nearest project property line to the nearest property line of the planned multi-family use and the park use.

Vibration sensitive receivers are similar to noise sensitive receivers, such as residences and institutional uses (e.g., schools, libraries, and religious facilities). However, vibration sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment, affected by levels that may be well below those associated with human annoyance (FTA 2018; Caltrans 2013).

## 2.4 Project Noise Setting

The most common source of noise in the project site vicinity is vehicular traffic from Winchester Road and to a lesser extent Pourroy Road and aircraft overflights. To characterize ambient noise levels at and near the project site, three 15-minute noise level measurements were conducted on December 22, 2021. The noise meter was calibrated before and after each measurement. Noise Measurement (NM) 1 was conducted to the west of the project site adjacent to existing single family residential uses to capture ambient noise levels at noise sensitive uses. NM2 was conducted north of the project site to capture ambient noise levels near existing single-family residences. NM3 was conducted south of project site across Winchester Road at Abelia Park basketball court to capture ambient noise levels from Winchester Road. There is active construction of residential uses across Abelia Street to the east and south of Winchester Road. NM3 noise levels are considered representative of ambient noise levels at this future residential use. Table 2 summarizes the results of the noise measurements, and Table 3 shows the recorded traffic volumes from the noise measurements conducted near roadways (NM1 and NM3). Noise measurement locations are shown in Figure 4.1

**Table 2 Project Vicinity Sound Level Monitoring Results**

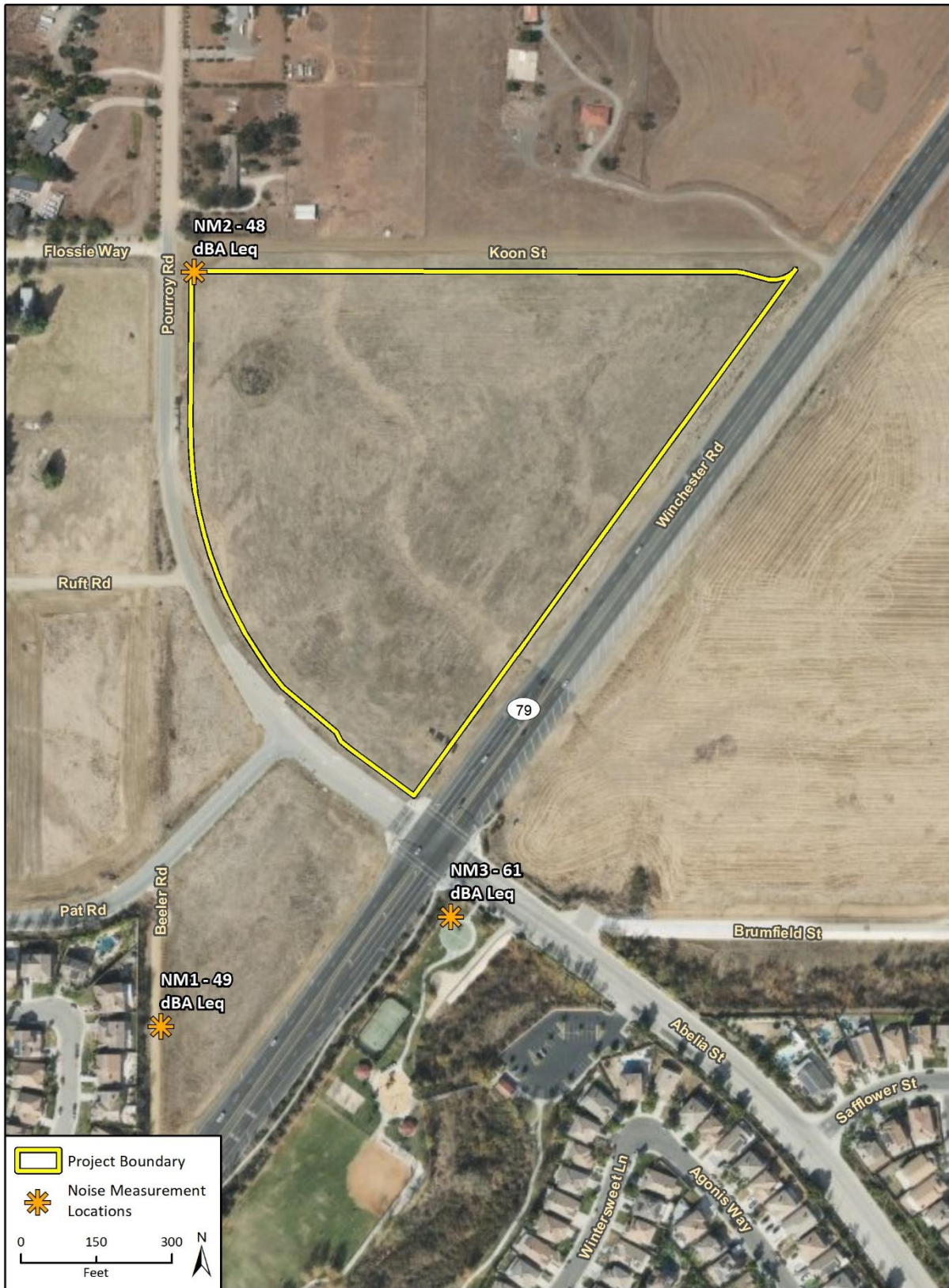
| Measurement | Location                                    | Sample Times            | Approximate Distance to Primary Noise Source | L <sub>eq</sub> (dBA) | L <sub>min</sub> (dBA) | L <sub>max</sub> (dBA) |
|-------------|---|-------------------------|--|-----------------------|------------------------|------------------------|
| NM1         | West of project site adjacent to residences | 10:40 a.m. – 10:55 a.m. | 240 feet from Winchester Road centerline     | 49                    | 31                     | 59                     |
| NM2         | Northwestern portion of the project site    | 9:18 a.m. – 9:33 a.m.   | 50 feet from Pourroy Road centerline         | 48                    | 35                     | 69                     |
| NM3         | Northern project boundary                   | 11:12 a.m. – 11:27 a.m. | 120 feet from Winchester Road centerline     | 61                    | 44                     | 81                     |

Detailed sound level measurement data are included in Appendix A.

**Table 3 Sound Level Monitoring Traffic Counts**

| Measurement Location | Roadway         | Traffic             | Autos        | Medium Trucks | Heavy Trucks |
|----------------------|-----------------|---------------------|--------------|---------------|--------------|
| NM1                  | Winchester Road | 15-minute count     | 389          | 2             | 3            |
|                      |                 | One-hour equivalent | 1,556        | 8             | 12           |
|                      |                 | <b>Percentage</b>   | <b>98.5%</b> | <b>0.5%</b>   | <b>1%</b>    |
| NM3                  | Winchester Road | 15-minute count     | 397          | 2             | 4            |
|                      |                 | One-hour equivalent | 1,588        | 8             | 16           |
|                      |                 | <b>Percentage</b>   | <b>98%</b>   | <b>1%</b>     | <b>1%</b>    |

Figure 4 Noise Measurement Locations



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Fig. 4 Noise Measurement Locations



## 2.5 Regulatory Framework

### County of Riverside General Plan Noise Element

The Noise Element chapter of the County of Riverside General Plan provides a description of existing local noise sources and incorporates comprehensive policies to limit noise exposure at noise-sensitive uses. The General Plan includes the Community Noise Exposure table (shown in Figure 5), which establishes acceptable noise, conditionally acceptable, normally unacceptable, and clearly unacceptable noise levels for various land uses. Fueling stations are generally not considered to be noise sensitive. As shown, ambient noise levels up to 70 CNEL are normally acceptable and ambient noise levels up to 76 CNEL are conditionally acceptable<sup>2</sup> for businesses. The Riverside County General Plan Noise element sets a stationary source standard not to be exceeded for a cumulative period of more than ten minutes of any hour for daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) hours of 65 dBA and 45 dBA  $L_{eq}$ , respectively for all land use designations.

### Riverside County Code of Ordinances

Chapter 9.52 of the County Code establishes county-wide standards to prevent noise that may jeopardize the health, safety or general welfare of residents and degrade their quality of life. However, this Chapter is not intended to establish thresholds of significance for the purpose of any analysis required by CEQA and no such thresholds are established. Specifically, County Code Section 9.52.040, General Sound Level Standards, establishes exterior noise standards for any fixed source of noise applicable at any point at or beyond the property line (shown in Table 4).

#### *Noise Limit Exemptions*

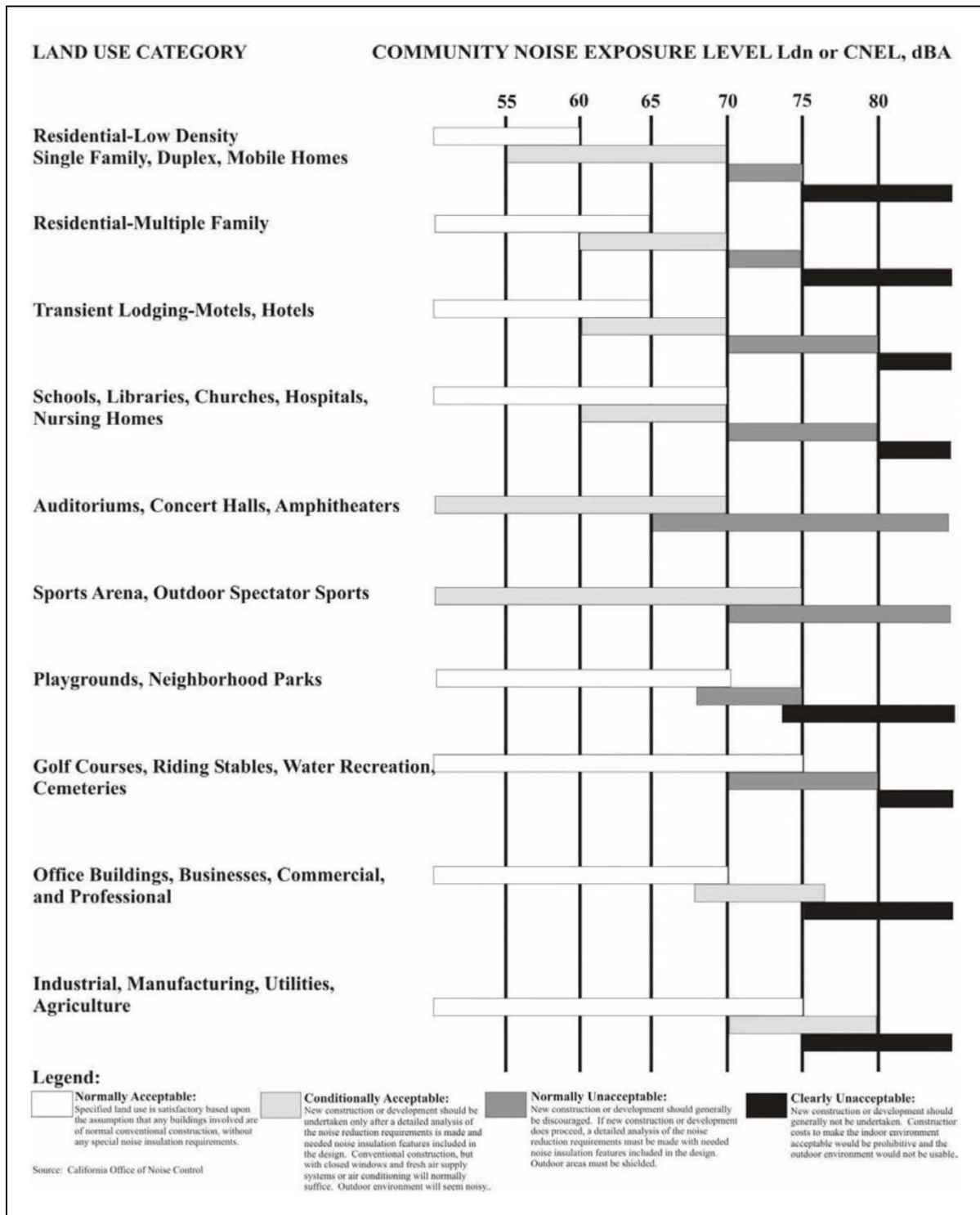
County Code Section 9.52.020 establishes that certain activities are exempt from General Sound Level Standards. Exempt activities include construction activities located greater than one-quarter mile from a dwelling, or where construction activities occur within one-quarter mile of a dwelling:

- Construction activities which occur between 6:00 a.m. and 6:00 p.m. June through September; and,
- Construction activities which occur between 7:00 a.m. and 6:00 p.m. October through May.

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<sup>2</sup> According to the Noise & Safety chapter of the Pomona General Plan, exposure to “conditionally acceptable” noise levels means that new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

**Figure 5 Riverside County Land Use Compatibility for Community Noise Exposure**



**Table 4 County of Riverside Exterior Noise Standards**

| General Plan Component | Land Use Designation                  | Density       | Maximum Noise Level (dBA) |              |
|------------------------|---------------------------------------|---------------|---------------------------|--------------|
|                        |                                       |               | 7 am – 10 pm              | 10 pm – 7 am |
| Community Development  | EDR – Estate Density Residential      | 2 acres       | 55                        | 45           |
|                        | VLDR –Very Low Density Residential    | 1 acre        | 55                        | 45           |
|                        | LDR –Low Density Residential          | ½ acre        | 55                        | 45           |
|                        | MDR –Medium Density Residential       | 2–5 du/acre   | 55                        | 45           |
|                        | MHDR –Medium High Density Residential | 5–8 du/acre   | 55                        | 45           |
|                        | HDR –High Density Residential         | 8–14 du/acre  | 55                        | 45           |
|                        | VHDR –Very High Density Residential   | 14–20 du/acre | 55                        | 45           |
|                        | HTDR –Highest Density Residential     | 20+ du/acre   | 55                        | 45           |
|                        | CR –Retail Commercial                 | -             | 65                        | 55           |
|                        | CO –Office Commercial                 | -             | 65                        | 55           |
|                        | CT –Tourist Commercial                | -             | 65                        | 55           |
|                        | CC –Community Center                  | -             | 65                        | 55           |
|                        | LI –Light Industrial                  | -             | 75                        | 55           |
|                        | HI –Heavy Industrial                  | -             | 75                        | 75           |
|                        | BP –Business Park                     | -             | 65                        | 45           |
|                        | PF –Public Facility                   | -             | 65                        | 45           |
|                        | SP –Specific Plan-Residential         | -             | 55                        | 45           |
|                        | SP –Specific Plan-Commercial          | -             | 65                        | 55           |
|                        | SP –Specific Plan-Light Industrial    | -             | 75                        | 55           |
|                        | SP –Specific Plan-Heavy Industrial    | -             | 75                        | 75           |
| Rural Community        | EDR –Estate Density Residential       | 2 acres       | 55                        | 45           |
|                        | VLDR –Very Low Density Residential    | 1 acre        | 55                        | 45           |
|                        | LDR –Low Density Residential          | ½ acre        | 55                        | 45           |
|                        | EDR –Estate Density Residential       | 2 acres       | 55                        | 45           |
|                        | VLDR –Very Low Density Residential    | 1 acre        | 55                        | 45           |
| Rural                  | RR –Rural Residential                 | 5 acres       | 45                        | 45           |
|                        | RM –Rural Mountainous                 | 10 acres      | 45                        | 45           |
|                        | RD –Rural Desert                      | 10 acres      | 45                        | 45           |
| Agriculture            | AG –Agriculture                       | 10 acres      | 45                        | 45           |
| Open Space             | C –Conservation                       | -             | 45                        | 45           |
|                        | CH –Conservation Habitat              | -             | 45                        | 45           |
|                        | REC –Recreation                       | -             | 45                        | 45           |
|                        | RUR –Rural                            | 20 acres      | 45                        | 45           |
|                        | W –Watershed                          | -             | 45                        | 45           |
|                        | MR –Mineral Resources                 | -             | 75                        | 45           |

Source: General Plan Noise Element Section 9.52.040.

## 3 Methodology

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### 3.1 Construction Noise

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation rate of 6 dBA per doubling of distance for stationary equipment.

Variation in power imposes additional complexity in characterizing the noise source level from construction equipment. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the  $L_{eq}$  of the operation (FHWA 2018). Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels.

Construction activity would result in temporary noise in the project site vicinity, exposing surrounding nearby receivers to increased noise levels. Construction noise would typically be higher during the heavier periods of initial construction (i.e., site preparation and grading) and would be lower during the later construction phases (i.e., building construction and paving). Typical heavy construction equipment during project grading could include dozers, loaders, graders, excavators, lifts, water trucks and dump trucks. It is assumed that diesel engines would power all construction equipment. Construction equipment would not all operate at the same time or location. In addition, construction equipment would not be in constant use during the 8-hour operating day.

Project construction would occur nearest to the single-family residential uses located approximately 550 feet to the west of the project site across Pourroy Road, when measuring from the acoustical center of the project site. Over the course of a typical construction day, construction equipment would be located as close as 290 feet to adjacent noise sensitive properties to the west but would typically be located at an average distance farther away due to the nature of construction and the lot size of the project. Therefore, it is assumed that over the course of a typical construction day the construction equipment would operate at an average distance of 350 feet from adjacent noise sensitive properties.

Construction noise is typically loudest during activities that involve excavation and moving soil, such as site preparation and grading. A potential construction scenario includes a dozer, grader, excavator, front-end loader, and a dump truck working during grading to excavate and move soil. At a distance of 100 feet, a dozer, grader, excavator, front-end loader, and a dump truck would generate a noise level of 79 dBA  $L_{eq}$  (RCNM calculations are included in Appendix B).

### 3.2 Groundborne Vibration

The project does not include any substantial vibration sources associated with operation. Thus, construction activities have the greatest potential to generate groundborne vibration affecting nearby receivers, especially during grading and excavation of the project site. The greatest vibratory

source during construction in the project vicinity would be a large bulldozer. Neither blasting nor pile driving would be required for construction of the project. Construction vibration estimates are based on vibration levels reported by Caltrans and the FTA (Caltrans 2020a, FTA 2018). Table 5 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration (FTA 2018).

**Table 5 Vibration Levels Measured during Construction Activities**

| Equipment       | PPV at 25 ft. (in/sec) |
|-----------------|------------------------|
| Large Bulldozer | 0.089                  |
| Loaded Trucks   | 0.076                  |
| Small Bulldozer | 0.003                  |

Source: FTA 2018

Vibration limits used in this analysis to determine a potential impact to local land uses from construction activities, such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation, are based on information contained in Caltrans' *Transportation and Construction Vibration Guidance Manual* and the Federal Transit Administration and the FTA *Transit Noise and Vibration Impact Assessment Manual* (Caltrans 2013; FTA 2018). Maximum recommended vibration limits by the American Association of State Highway and Transportation Officials (AASHTO) are identified in Table 6.

**Table 6 AASHTO Maximum Vibration Levels for Preventing Damage**

| Type of Situation  | Limiting Velocity (in/sec) |
|--|----------------------------|
| Historic sites or other critical locations                   | 0.1                        |
| Residential buildings, plastered walls                       | 0.2–0.3                    |
| Residential buildings in good repair with gypsum board walls | 0.4–0.5                    |
| Engineered structures, without plaster                       | 1.0–1.5                    |

Source: Caltrans 2020a

Based on AASHTO recommendations, limiting vibration levels to below 0.2 in/sec PPV at residential structures would prevent structural damage regardless of building construction type. These limits are applicable regardless of the frequency of the source. However, as shown in Table 7 and Table 8, potential human annoyance associated with vibration is usually different if it is generated by a steady state or a transient vibration source.

**Table 7 Human Response to Steady State Vibration**

| PPV (in/sec)                  | Human Response         |
|-------------------------------|------------------------|
| 3.6 (at 2 Hz)–0.4 (at 20 Hz)  | Very disturbing        |
| 0.7 (at 2 Hz)–0.17 (at 20 Hz) | Disturbing             |
| 0.10                          | Strongly perceptible   |
| 0.035                         | Distinctly perceptible |
| 0.012                         | Slightly perceptible   |

Source: Caltrans 2020a

**Table 8 Human Response to Transient Vibration**

| PPV (in/sec) | Human Response         |
|--------------|------------------------|
| 2.0          | Severe                 |
| 0.9          | Strongly perceptible   |
| 0.24         | Distinctly perceptible |
| 0.035        | Barely perceptible     |

Source: Caltrans 2020a

As shown in Table 8, the vibration level threshold at which transient vibration sources (such as construction equipment) are considered to be distinctly perceptible is 0.24 in/sec PPV. This analysis uses the distinctly perceptible threshold for purposes of assessing vibration impacts.

Although groundborne vibration is sometimes noticeable in outdoor environments, groundborne vibration is almost never annoying to people who are outdoors; therefore, the vibration level threshold for human perception is assessed at occupied structures (FTA 2018). Therefore, all vibration impacts are assessed at the structure of an affected property.

### 3.3 Operational Noise Sources

On-site noise sources would include general conversations, landscape maintenance, waste hauling, car wash equipment, and heating, ventilation, and air conditioning (HVAC) equipment. There are no large gathering areas on the project site and these sources would be transient in nature as people transit from vehicles to the store or fuel pumps. Therefore, general conversations would not represent a substantial noise source. Landscape maintenance and waste hauling typically occur during the less noise sensitive daytime hours and would be active for short periods of time. Thus, the primary noise source of concern would be associated with car wash equipment and HVAC mechanical equipment noise.

On-site noise sources were modeled with SoundPLAN. Propagation of modeled stationary noise sources was based on ISO Standard 9613-2, "Attenuation of Sound during Propagation Outdoors, Part 2: General Method of Calculation." The assessment methodology assumes that all receivers would be downwind of stationary sources. This is a conservative assumption for total noise impacts since only some receivers would be downwind at any one time.

#### Car Wash Equipment

The primary noise-generating components of the car wash would be the blowers used to dry the cars. For this analysis, a PDQ LaserWash 360 with four on-board dryers as the blowers was assumed. According to the manufacturer's specifications (see Appendix C for manufacturer's specifications), the blowers generate a noise level of 88 dBA  $L_{eq}$  at five feet from the exit with the doors open and 75 dBA  $L_{eq}$  at five feet from the exit with the doors closed. For a conservative analysis, it was assumed that the car wash would operate with the doors open. This analysis also conservatively assumes the equipment would operate continuously for a full hour (100 percent for 60 minutes) during daytime hours of operation. For this analysis, the car wash would be operational during the daytime hours of 7:00 a.m. to 10:00 p.m. only. The car wash would not operate during the nighttime hours of 10:00 p.m. to 7:00 a.m.

## Vacuums

The project would include 20 vacuums (individual units to clean car interiors) located outside to the north of the car wash. The project would include a mechanical room that would house the motor and generate negligible noise levels associated with the motor. For this analysis, a J.E. Adams Industries' Commercial VACs is assumed for the project vacuums (see Appendix D for manufacturer's specifications). The product used for modeling is Model No. 9235-2, which has a sound power level of 73.8 dBA at the vacuum nozzle. This analysis conservatively assumes the equipment would operate continuously for a full hour (100 percent for 60 minutes) during daytime hours of operation.

## Heating, Ventilation, and Air Conditioning Units

HVAC units would be associated with the proposed on-site convenience store and rooms associated with the car wash (office and breakroom). The AC condensers associated with on-site buildings are anticipated to be roof mounted. Specific planning data for the future HVAC systems are not available at this stage of project design; however, new development typically requires one ton of HVAC per 600 square feet of building space. This analysis conservatively assumes the convenience store would have a 10-ton condenser. The proposed car wash was assumed to have a 2-ton condenser. Based on review of various manufacturer specifications, representative sound power levels for the 10-ton Trane T/YHC120E of 87 dB and the 2-ton Carrier 38HRD024 of 69 dB were selected for analysis. The manufacturer's noise data is provided below in Table 9 (see Appendix E for specification sheets). For a conservative scenario, the units were assumed to operate at 100 percent of an hour for 24 hours.

**Table 9 HVAC Noise Levels**

| Representative Unit | Noise Levels in dB <sup>1</sup> Measured at Octave Frequencies |        |        |       |       |       |       | Overall Noise Level (dBA) <sup>1</sup> |
|---------------------|--|--------|--------|-------|-------|-------|-------|--|
|                     | 125 Hz   | 250 Hz | 500 Hz | 1 KHz | 2 KHz | 4 KHz | 8 KHz |  |
| 38HRD024            | 57.5   | 61.5   | 63.0   | 61.0  | 60.0  | 56.0  | 45.0  | 69                                     |
| T/YHC120E           | 87.0   | 91.0   | 85.0   | 80.0  | 77.0  | 73.0  | 66.0  | 87                                     |

Hz = Hertz; KHz = kilohertz

See Appendix D for manufactures specifications.

## 3.4 Traffic Noise

Noise affecting the project site is primarily from traffic on Winchester Road. The project would generate new vehicle trips that would increase traffic volumes on nearby roadways, which would occur primarily on Winchester Road and the portion of Pourroy Road adjacent to the project site. Project trip generation was estimated using Institute of Traffic Engineers (ITE) 11<sup>th</sup> Edition daily trip generation rates for different land uses. Table 10 provides the ITE land uses, quantities, units, and trip generation rates used to determine project trip generation. Table 11 provides the project daily trip generation. Based on the ITE trip generation rates, the project would generate an estimated 3,954, 4,416, and 7,975 daily trips on weekdays, Saturdays, and Sundays, respectively.

**Table 10 Project Trip Generation Rates**

| Land Use<br>(as Depicted on the<br>Site Plan) | ITE Land Use  | Quantity | Units  | Trip Generation Rate |          |          |
|---|---|----------|--------|----------------------|----------|----------|
|   |   |          |        | Weekday              | Saturday | Sunday   |
| Gas Station,<br>Convenience Store             | Gasoline/Service Station<br>with Convenience Market | 6/8      | TSF/FP | 624.2                | 700      | 1,283.38 |
| Car Wash                                      | Automated Car Wash                                  | 2.7      | TSF    | –                    | 30.40    | –        |

TSF = thousand square feet; FP = fueling positions; Source: Institute of Traffic Engineers, Trip Generation Rates 11<sup>th</sup> Edition

**Table 11 Project Trip Generation**

| Land Use<br>(as Depicted on the Site Plan) | Daily Trips  |              |              |
|--|--------------|--------------|--------------|
|  | Weekday      | Saturday     | Sunday       |
| Gas Station, Convenience Store             | 3,808.2      | 4,270        | 7,829        |
| Car Wash                                   | 146          | 146          | 146          |
| <b>Total</b>                               | <b>3,954</b> | <b>4,416</b> | <b>7,975</b> |

Off-site traffic noise increases were modeled with the FHWA RD-77-108 Traffic Noise Prediction Model. Traffic would primarily be distributed along Winchester Road. It was assumed project generated trips would flow along Winchester Road. The traffic data and vehicle classification mix for Winchester Road (SR-79) was based on Caltrans Truck Counts (Caltrans 2020b). Winchester Road was modeled with a vehicle classification mix of 90 percent automobiles, 5 percent medium trucks, and 5 percent heavy trucks. The posted speed limit on Winchester Road is 65 miles per hour (mph). Traffic volumes were input into the model as shown in Table 12.

**Table 12 Modeled Traffic Volumes**

| Roadway         | Segment                                  | Existing | Existing with<br>Weekday<br>Project<br>Traffic | Existing with<br>Saturday<br>Project<br>Traffic | Existing with<br>Sunday<br>Project<br>Traffic | Future | Future with<br>Weekday<br>Project<br>Traffic | Future with<br>Saturday<br>Project<br>Traffic | Future with<br>Sunday<br>Project<br>Traffic |
|-----------------|--|----------|--|---|---|--------|--|---|---|
| Winchester Road | Simpson Avenue to Benton Road            | 19,800   | 19,954   | 20,416  | 23,975  | 24,736 | 28,689                                       | 29,152  | 32,710                                      |
|                 | Benton Road to Murietta Hot Springs Road | 28,000   | 31,954   | 32,416  | 35,975  | 43,287 | 47,241                                       | 47,703  | 51,262                                      |
|                 | Murietta Hot Springs Road to the west    | 30,500   | 34,454   | 34,916  | 38,475  | 47,152 | 51,106                                       | 51,568  | 55,127                                      |

Source: San Bernardino Countywide Plan Draft PEIR Appendix J and 11<sup>th</sup> Edition ITE rates.



## 3.5 Significance Thresholds

To determine whether a project would have a significant noise impact, Appendix G of the CEQA Guidelines requires consideration of whether a project would result in:

1. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
2. Generation of excessive groundborne vibration or groundborne noise levels; or,
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, expose people residing or working in the project area to excessive noise levels.

### Construction Noise

As discussed in Section 2.5, *Regulatory Setting*, Noise Element Policies require that construction activities adjacent to existing noise sensitive uses only occur between 6:00 a.m. and 6:00 p.m. June through September, and between 7:00 a.m. and 6:00 p.m. October through May. The County does not establish construction noise level limits during these periods. In the absence of applicable local noise level limits, this analysis references guidance from the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment Manual* to establish a quantified threshold against which to assess the impact of construction noise; FTA recommends that reasonable noise criteria may include those shown in Table 13.<sup>3</sup> As construction would be limited to daytime hours throughout the year, the daytime noise criteria would apply. Construction noise would be significant if it exceeded these daytime noise criteria.

**Table 13 Construction Noise Criteria**

| Land Use    | Daytime<br>L <sub>eq</sub> (8-hour) | Nighttime<br>L <sub>eq</sub> (8-hour) |
|-------------|-------------------------------------|---------------------------------------|
| Residential | 80                                  | 70                                    |
| Commercial  | 85                                  | 85                                    |
| Industrial  | 90                                  | 90                                    |

Source: FTA 2018

### On-site Operational Noise

The project includes commercial uses. The site is generally separated from most existing adjacent uses by open space or Caltrans' right-of-way for SR-79 to the south. As discussed in Section 2.5, *Regulatory Setting*, Chapter 9.52 of the County Code is intended to establish exterior noise standards shown in Table 4. As operational sources such as the car wash could operate during all hours of the day, noise levels were assessed against daytime and nighttime exterior noise standards of the County's General Plan. On-site operational noise would be significant if it exceeds General Plan Policy N 4.1 daytime and nighttime noise standards of 65 dBA and 45 dBA L<sub>eq</sub>, respectively for all land use designations.

<sup>3</sup> FTA. 2018. Transit Noise and Vibration Impact Assessment Manual. [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf) (accessed January 2021).

## **Off-site Traffic Noise**

Off-site project noise (i.e., roadway noise) would result in a significant impact if the project would cause the ambient noise level measured at the property line of affected uses to increase by 3 dBA, which would be a barely perceptible increase in traffic noise.

## **Construction Vibration**

The Caltrans *Transportation and Construction Vibration Guidance Manual* (2020) is used to evaluate potential construction vibration impacts related to both potential building damage and human annoyance. Based on the Caltrans criteria described above, construction vibration impacts would be significant if vibration levels exceed 0.2 in./sec. PPV for residential structures, which are the limits where minor cosmetic, i.e., non-structural, damage may occur to these buildings. In addition, construction vibration impacts would cause human annoyance at nearby receivers if vibration levels exceed 0.24 in./sec. PPV, which is the limit where vibration becomes distinctly perceptible from barely perceptible. Groundborne noise and vibration would be significant if it exceeded these standards.

## 4 Impact Analysis

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**County of Riverside and CEQA Appendix G Noise Threshold 1**

Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (*Less Than Significant Impact*).

### Construction

As described in Section 3.1, at a distance of 100 feet, a dozer, grader, excavator, front-end loader, and a dump truck would generate a noise level of 79 dBA  $L_{eq}$ . For the single-family residence to the west of the site, project construction noise levels would be 68 dBA  $L_{eq}$  at 350 feet (see Appendix B for construction noise modeling results). All other sensitive receivers in the project are greater than 350 feet from project construction activity. The FTA's daytime construction noise limit is 80 dBA for residential uses; therefore, project construction noise levels would not exceed construction noise thresholds. In addition, construction activities would be restricted to daytime hours per the County Code 9.52.080 (g), which restricts activities to occur between 6:00 a.m. and 6:00 p.m. June through September, and between 7:00 a.m. and 6:00 p.m. October through May. Therefore, impacts from construction noise would be less than significant.

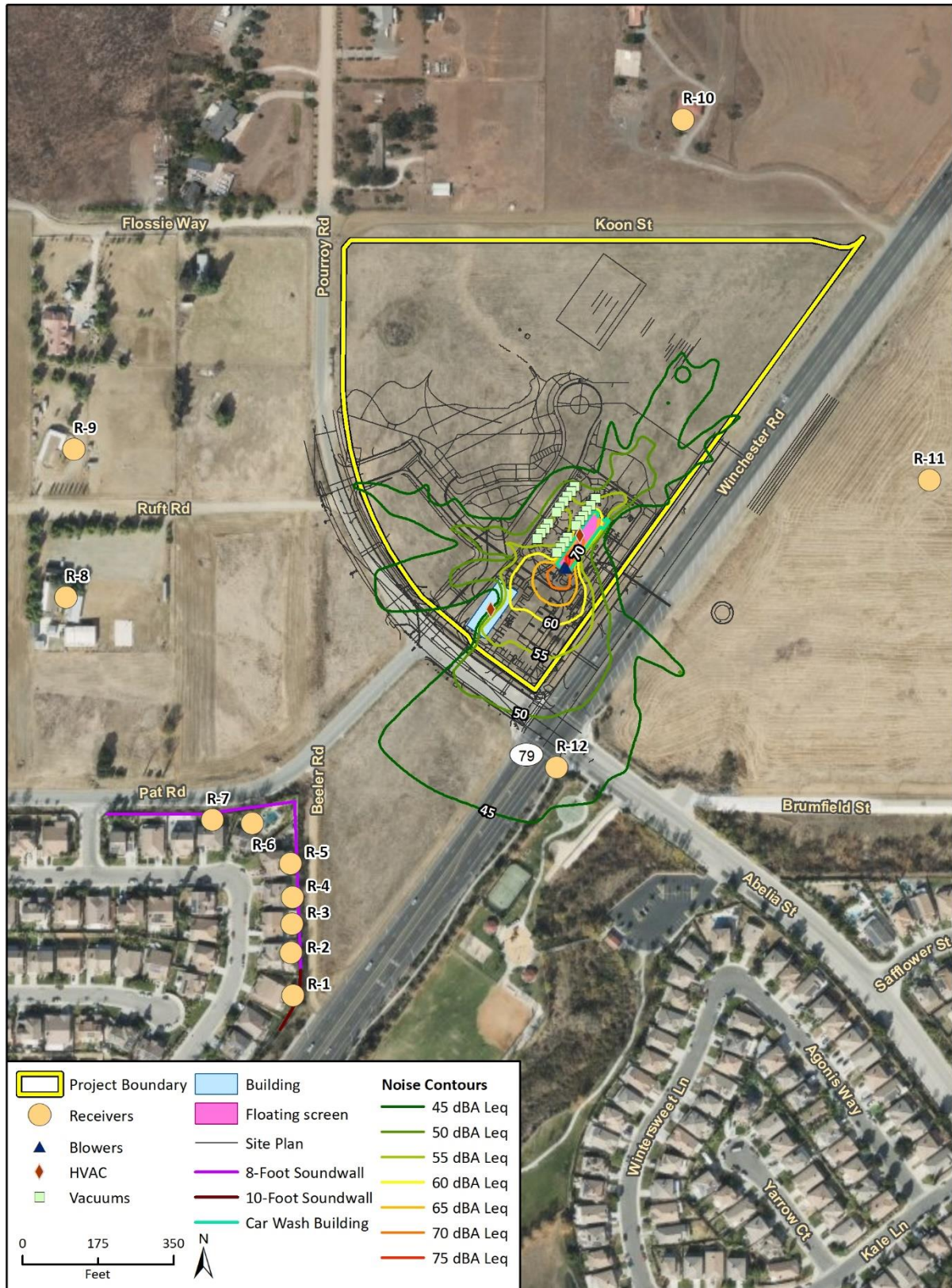
### Operation

The project would introduce sources of operational noise to the site, including cooling equipment (HVAC), car wash blowers, and car wash vacuums. Assumptions for these sources are discussed in Section 3.3, *Operational Noise Sources*.

#### *Overall Continuous On-site Operational Noise*

To determine the total continuous operational noise level at adjacent land uses, HVAC, car wash blowers, car wash vacuums, and loading area noise levels were modeled. Receiver locations and noise level contours are shown on Figure 6, noise levels are shown in Table 14, and Appendix F shows the SoundPLAN model results. The noise levels in Table 14 are compared to the County Code's exterior noise standards for informational purposes, as the County Code of Ordinance establishes county-wide standards regulating noise but does not establish thresholds for CEQA analysis. Therefore, the proposed project's operational noise would be significant if it exceeds the County's General Plan threshold.

**Figure 6 Modeled Receivers and Noise Contours**



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Fig. 6 Noise Operational Contours

**Table 14 Total Operational Noise Compared to Noise Regulations under the County Code**

| Receiver | Description                              | Noise Level (dBA $L_{eq}$ ) | Exceedance                    |                                  |
|----------|--|-----------------------------|-------------------------------|----------------------------------|
|          |  |                             | Daytime Standard <sup>1</sup> | Nighttime Standard? <sup>2</sup> |
| R-1      | Residence – west                         | 37                          | No                            | No                               |
| R-2      | Residence – west                         | 38                          | No                            | No                               |
| R-3      | Residence – west                         | 41                          | No                            | No                               |
| R-4      | Residence – west                         | 41                          | No                            | No                               |
| R-5      | Residence – west                         | 42                          | No                            | No                               |
| R-6      | Residence – west                         | 42                          | No                            | No                               |
| R-7      | Residence – west                         | 41                          | No                            | No                               |
| R-8      | Residence – west                         | 39                          | No                            | No                               |
| R-9      | Residence – northwest                    | 33                          | No                            | No                               |
| R-10     | Residence – north                        | 29                          | No                            | No                               |
| R-11     | Planned Multi-Family Residential – south | 25                          | No                            | No                               |
| R-12     | Recreational- southwest                  | 47                          | Yes                           | Yes                              |

<sup>1</sup> Daytime standard under the County Code's Noise Regulations (Section 9.52) would be exceeded if exterior noise levels exceed 55 dBA at residential uses and 45 dBA at recreational uses from 7:00 a.m. to 10:00 p.m.

<sup>2</sup> Nighttime standard under the County Code's Noise Regulations (Section 9.52) would be exceeded if exterior noise levels exceed 45 dBA from 10:00 p.m. to 7:00 a.m.

See Figure 6 for receiver locations.

As shown in Table 14, operational activities on the project site would generate an exterior noise level of 47 dBA  $L_{eq}$  at the off-site sensitive recreational receiver (Abelia Sports Park) located southwest of the project site across Winchester Road. Project-related operational noise would exceed the County's General Plan standards if it is above 65 dBA  $L_{eq}$  during the daytime hours (7:00 a.m. to 10:00 p.m.) and 45 dBA  $L_{eq}$  during nighttime hours (10:00 p.m. to 7:00 a.m.) for residential uses and recreational uses, respectively. The combined operational noise from HVAC, car wash and vacuums noise would not exceed the County Code's daytime and nighttime noise standard at residential receivers, but the daytime and nighttime standard would be exceeded at the recreational use across Winchester Road. However, this is based on the County Code's Noise Regulations which do not set the CEQA threshold. As such, the project's operation noise is compared to Policy N 4.1 of County's Noise Element, which states that on-site operational noise would be significant if it exceeds the daytime and nighttime noise standards of 65 dBA and 45 dBA  $L_{eq}$ , respectively, for all land use designations. Therefore, the project would not exceed the daytime standard of 65 dBA for noise at the recreational use southwest side of the site; however, the operational noise of 47 dBA would exceed the nighttime noise standard of 45 dBA at the recreation area. Therefore, to ensure compliance with the County's nighttime stationary noise standard, impacts from operational noise would be potentially significant. Upon implementation of the recommended measure, impacts would be less than significant.

### *Recommendation*

The following recommendation would reduce nighttime car wash noise levels at the recreational use to the southwest of the project site:

**NOI-1 CAR WASH NOISE REDUCTION**

Operational noise from the project would exceed Riverside County’s nighttime stationary noise standard at the recreational use near the project site. The following recommendation would ensure the project would comply with the Riverside County nighttime stationary noise standard:

- Limit car wash operations to daytime hours of 7:00 a.m. to 10:00 p.m.

Final project plans shall include the operation hours for the car wash to ensure that measure has been implemented prior to the start of project operation.

*Off-site Traffic Noise*

The project would generate new vehicle trips that would increase noise levels on nearby roadways, which would occur primarily on Winchester Road and the small segment of Pourroy Road adjacent to the project site from Winchester Road to Pat Road. There are no sensitive receivers along the small segment of Pourroy Road to be exposed to project traffic noise level increases, therefore, increases in Winchester Road traffic noise due to the project has been analyzed. The increase in roadway noise with the addition of project traffic is shown in Table 15 for existing scenarios. Table 16 shows the increase in roadway noise with the addition of future project traffic scenarios. See Appendix G for traffic noise model inputs and results. Due to the relatively small increase in overall project contribution traffic volumes from project-generated traffic, the greatest noise level increase would be up to 1 dBA L<sub>dn</sub>. Therefore, the project’s traffic noise increase would not exceed 3 dBA or more, and impacts would be less than significant.

**Table 15 Existing Scenario Traffic Noise Levels (dBA L<sub>dn</sub> at 100 Feet)**

| Roadway         | Segment                                  | Existing | Existing with Weekday Project Traffic | Increase with Weekday Project Traffic | Existing with Saturday Project Traffic | Increase with Saturday Project Traffic | Existing with Sunday Project Traffic | Increase with Sunday Project Traffic |
|-----------------|--|----------|---------------------------------------|---------------------------------------|--|--|--------------------------------------|--------------------------------------|
| Winchester Road | Simpson Avenue to Benton Road            | 69       | 69                                    | <1                                    | 69                                     | <1                                     | 70                                   | 1                                    |
|                 | Benton Road to Murietta Hot Springs Road | 70       | 71                                    | 1                                     | 71                                     | 1                                      | 71                                   | 1                                    |
|                 | Murietta Hot Springs Road to the west    | 71       | 71                                    | 1                                     | 71                                     | 1                                      | 72                                   | 1                                    |

See Appendix G for model inputs and results.

Source: Caltrans 2020 Traffic Counts and 11<sup>th</sup> Edition ITE rates.

**Table 16 Future Scenario Traffic Noise Levels (dBA L<sub>dn</sub> at 100 Feet)**

| Roadway         | Segment                       | Existing | Existing with Weekday Project Traffic | Increase with Weekday Project Traffic | Existing with Saturday Project Traffic | Increase with Saturday Project Traffic | Existing with Sunday Project Traffic | Increase with Sunday Project Traffic |
|-----------------|-------------------------------|----------|---------------------------------------|---------------------------------------|--|--|--------------------------------------|--------------------------------------|
| Winchester Road | Simpson Avenue to Benton Road | 70       | 70                                    | 1                                     | 71                                     | 1                                      | 71                                   | 1                                    |

|  |    |    |    |    |    |    |   |
|--|----|----|----|----|----|----|---|
| Benton Road to Murietta Hot Springs Road | 72 | 73 | <1 | 73 | <1 | 73 | 1 |
| Murietta Hot Springs Road to the west    | 73 | 73 | <1 | 73 | <1 | 73 | 1 |

See Appendix G for model inputs and results.

Source: Caltrans 2020 Traffic Counts and 11<sup>th</sup> Edition ITE rates.

### **CEQA Appendix G Noise Threshold 2**

Generation of excessive groundborne vibration or groundborne noise levels (*Less Than Significant Impact*).

Construction activities known to generate excessive groundborne vibration, such as pile driving, would not be required to implement the project. The greatest anticipated source of vibration during general project construction activities would be from a roller, which may be used within 275 feet of the nearest off-site structure being constructed south of the project site across Winchester Road. A roller creates approximately 0.21 in/sec PPV at a distance of 25 feet (Caltrans 2013). This would equal a vibration level of 0.004 in/sec PPV at 275 feet. This vibration level is lower than the human annoyance threshold of 0.24 in/sec PPV and the residential damage threshold of 0.4 in./sec. PPV. Therefore, temporary impacts associated with construction would be less than significant.

The project does not include any substantial vibration sources associated with operation. Therefore, operational vibration impacts would be less than significant.

### **CEQA Appendix G Noise Threshold 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, of the project expose people residing or working in the project area to excessive noise levels (*No Impact*).

The French Valley Airport is the nearest public airport, located approximately three miles to the southwest of the project site. As shown on Map FV-3, the noise compatibility contours figure for the French Valley Airport in the Riverside County Airport Land Use Compatibility Plan Policy Document, the project site is located outside the airport's 55 dBA CNEL noise contour (Riverside County Airport Land Use Commission 2004). Therefore, no substantial noise exposure from airport noise would occur to construction workers, users, employees, or people residing on the project sites, and no impacts would occur.

## 5 Conclusions

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The project would generate both temporary construction-related noise and long-term noise associated with operation of the project. Construction noise would not exceed FTA noise standards at the nearby land uses and impacts from construction noise would be less than significant.

Combined operational activities on the project site would generate noise levels up to 47 dBA  $L_{eq}$  at the off-site recreational receiver to the southwest of the project site. The combined operational noise from HVAC, car wash, and car wash vacuum noise would not exceed Riverside County's daytime noise standard of 55 dBA  $L_{eq}$  or nighttime noise standard of 45 dBA  $L_{eq}$  at residential uses near the project site. Combined noise levels would exceed the nighttime noise standard of 45 dBA  $L_{eq}$  at the recreational use southwest of the project site, however, project operational noise levels would be 14 dBA lower than measured ambient traffic noise levels and would project noise would be masked by Winchester Road traffic. Therefore, impacts from operation noise would be less than significant.

Project-generated traffic would generate an increase of up to 1 dBA at adjacent roadways. This is below the threshold of 3 dBA; therefore, the off-site traffic noise increase would be less than significant.

The project would generate groundborne vibration during construction. However, construction-generated groundborne vibration would not exceed the applicable vibration threshold at the nearest structures, and construction-related vibration impacts would be less than significant.

The project site is outside the noise contours for the French Valley Airport. Therefore, no substantial noise exposure would occur to construction workers, employees, or users of the project from aircraft noise.

Given the aforementioned, the project would result in less than significant impacts.



## 6 References

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# Appendix A

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Noise Measurement Data

# NM1

Freq weight : A  
 Time weight : SLOW  
 Level Range : 40-100  
 Max dB : 58.8 - 2021/12/22 10:50:50  
 Level Range : 40-100  
 SEL : 78.8  
 Leq : 49.3

| No. s | Date       | Time     | (dB) |      |      |      |      |
|-------|------------|----------|------|------|------|------|------|
| 1     | 2021/12/22 | 10:40:25 | 48.4 | 44.4 | 45.4 | 45.1 | 43.8 |
| 6     | 2021/12/22 | 10:40:40 | 43.8 | 43.4 | 45.7 | 48.9 | 51.6 |
| 11    | 2021/12/22 | 10:40:55 | 51.6 | 47.7 | 47.9 | 50.1 | 51.4 |
| 16    | 2021/12/22 | 10:41:10 | 52.0 | 54.0 | 52.6 | 54.7 | 57.6 |
| 21    | 2021/12/22 | 10:41:25 | 57.6 | 53.4 | 52.1 | 48.7 | 44.9 |
| 26    | 2021/12/22 | 10:41:40 | 44.7 | 47.8 | 48.8 | 46.6 | 46.3 |
| 31    | 2021/12/22 | 10:41:55 | 45.7 | 47.3 | 46.6 | 41.3 | 36.0 |
| 36    | 2021/12/22 | 10:42:10 | 34.6 | 34.2 | 35.4 | 31.9 | 32.2 |
| 41    | 2021/12/22 | 10:42:25 | 31.6 | 31.7 | 31.5 | 31.9 | 32.6 |
| 46    | 2021/12/22 | 10:42:40 | 32.0 | 31.9 | 34.6 | 41.6 | 44.6 |
| 51    | 2021/12/22 | 10:42:55 | 47.6 | 50.6 | 50.2 | 48.6 | 48.2 |
| 56    | 2021/12/22 | 10:43:10 | 49.6 | 51.2 | 51.4 | 51.6 | 49.1 |
| 61    | 2021/12/22 | 10:43:25 | 47.3 | 44.9 | 43.3 | 43.0 | 45.7 |
| 66    | 2021/12/22 | 10:43:40 | 48.2 | 49.4 | 48.6 | 46.5 | 48.3 |
| 71    | 2021/12/22 | 10:43:55 | 48.2 | 48.7 | 47.0 | 41.5 | 36.4 |
| 76    | 2021/12/22 | 10:44:10 | 41.2 | 46.7 | 48.1 | 50.4 | 51.0 |
| 81    | 2021/12/22 | 10:44:25 | 50.0 | 46.7 | 42.4 | 40.2 | 46.1 |
| 86    | 2021/12/22 | 10:44:40 | 47.7 | 55.5 | 51.8 | 49.9 | 47.0 |
| 91    | 2021/12/22 | 10:44:55 | 40.6 | 39.1 | 41.2 | 44.6 | 47.1 |
| 96    | 2021/12/22 | 10:45:10 | 52.7 | 55.9 | 52.0 | 51.9 | 50.8 |
| 101   | 2021/12/22 | 10:45:25 | 41.5 | 35.9 | 37.9 | 41.0 | 48.7 |
| 106   | 2021/12/22 | 10:45:40 | 50.7 | 51.5 | 48.1 | 48.6 | 54.9 |
| 111   | 2021/12/22 | 10:45:55 | 54.3 | 51.9 | 52.8 | 53.7 | 54.8 |
| 116   | 2021/12/22 | 10:46:10 | 54.8 | 53.9 | 52.1 | 51.2 | 48.1 |
| 121   | 2021/12/22 | 10:46:25 | 40.4 | 40.7 | 40.2 | 38.1 | 36.5 |
| 126   | 2021/12/22 | 10:46:40 | 35.7 | 35.1 | 39.4 | 46.1 | 50.1 |
| 131   | 2021/12/22 | 10:46:55 | 51.8 | 53.2 | 54.1 | 50.7 | 44.2 |
| 136   | 2021/12/22 | 10:47:10 | 41.0 | 35.6 | 37.8 | 42.9 | 44.8 |
| 141   | 2021/12/22 | 10:47:25 | 43.4 | 41.3 | 41.9 | 44.0 | 46.4 |
| 146   | 2021/12/22 | 10:47:40 | 48.1 | 46.5 | 43.1 | 43.7 | 41.0 |
| 151   | 2021/12/22 | 10:47:55 | 44.0 | 47.7 | 46.7 | 46.9 | 44.5 |
| 156   | 2021/12/22 | 10:48:10 | 46.4 | 50.2 | 49.8 | 49.6 | 45.9 |
| 161   | 2021/12/22 | 10:48:25 | 45.3 | 47.1 | 43.1 | 44.1 | 48.6 |
| 166   | 2021/12/22 | 10:48:40 | 50.1 | 49.7 | 49.3 | 47.0 | 46.4 |
| 171   | 2021/12/22 | 10:48:55 | 44.8 | 45.4 | 48.4 | 51.4 | 50.9 |
| 176   | 2021/12/22 | 10:49:10 | 49.3 | 46.3 | 49.7 | 52.8 | 51.4 |
| 181   | 2021/12/22 | 10:49:25 | 49.9 | 51.7 | 51.9 | 51.8 | 49.8 |
| 186   | 2021/12/22 | 10:49:40 | 49.5 | 49.1 | 49.9 | 48.3 | 47.2 |
| 191   | 2021/12/22 | 10:49:55 | 44.0 | 42.1 | 42.8 | 42.3 | 39.1 |
| 196   | 2021/12/22 | 10:50:10 | 37.8 | 35.7 | 37.9 | 44.6 | 45.0 |
| 201   | 2021/12/22 | 10:50:25 | 42.0 | 36.5 | 34.8 | 37.8 | 46.7 |
| 206   | 2021/12/22 | 10:50:40 | 48.3 | 53.0 | 56.4 | 58.0 | 54.7 |
| 211   | 2021/12/22 | 10:50:55 | 52.3 | 51.1 | 52.2 | 52.8 | 51.9 |
| 216   | 2021/12/22 | 10:51:10 | 49.5 | 50.5 | 50.7 | 48.0 | 43.9 |
| 221   | 2021/12/22 | 10:51:25 | 43.0 | 40.4 | 38.6 | 42.5 | 43.8 |
| 226   | 2021/12/22 | 10:51:40 | 44.1 | 42.9 | 44.1 | 45.3 | 48.6 |
| 231   | 2021/12/22 | 10:51:55 | 50.0 | 50.7 | 50.5 | 49.7 | 52.1 |
| 236   | 2021/12/22 | 10:52:10 | 53.2 | 55.2 | 53.3 | 51.0 | 50.1 |
| 241   | 2021/12/22 | 10:52:25 | 48.0 | 46.0 | 47.1 | 46.0 | 44.0 |
| 246   | 2021/12/22 | 10:52:40 | 43.4 | 44.6 | 47.1 | 44.5 | 40.2 |
| 251   | 2021/12/22 | 10:52:55 | 36.8 | 36.4 | 42.5 | 48.9 | 49.6 |
| 256   | 2021/12/22 | 10:53:10 | 49.3 | 42.5 | 47.6 | 57.8 | 57.2 |
| 261   | 2021/12/22 | 10:53:25 | 56.2 | 54.4 | 51.5 | 47.3 | 44.9 |
| 266   | 2021/12/22 | 10:53:40 | 40.6 | 38.0 | 41.2 | 44.4 | 46.7 |
| 271   | 2021/12/22 | 10:53:55 | 52.9 | 52.5 | 52.4 | 51.4 | 50.8 |
| 276   | 2021/12/22 | 10:54:10 | 52.8 | 54.3 | 51.7 | 50.1 | 49.3 |
| 281   | 2021/12/22 | 10:54:25 | 48.2 | 46.6 | 44.3 | 36.3 | 38.4 |
| 286   | 2021/12/22 | 10:54:40 | 37.9 | 42.3 | 44.6 | 50.2 | 48.7 |
| 291   | 2021/12/22 | 10:54:55 | 49.2 | 51.5 | 52.5 | 50.5 | 48.7 |
| 296   | 2021/12/22 | 10:55:10 | 50.0 | 48.3 | 50.5 | 49.0 | 48.7 |

# NM2

Freq Weight : A  
 Time Weight : SLOW  
 Level Range : 30-90  
 Max dB : 68.9 - 2021/12/22 09:36:57  
 Level Range : 30-90  
 SEL : 77.9  
 Leq : 48.4

| No. s | Date Time           | (dB) |      |      |      |      |
|-------|---------------------|------|------|------|------|------|
| 1     | 2021/12/22 09:26:49 | 37.5 | 38.2 | 37.9 | 39.8 | 38.3 |
| 6     | 2021/12/22 09:27:04 | 38.0 | 38.0 | 38.3 | 37.5 | 37.8 |
| 11    | 2021/12/22 09:27:19 | 37.8 | 36.4 | 36.9 | 37.1 | 37.3 |
| 16    | 2021/12/22 09:27:34 | 38.4 | 37.6 | 36.7 | 36.8 | 42.4 |
| 21    | 2021/12/22 09:27:49 | 38.5 | 39.8 | 39.3 | 38.6 | 39.2 |
| 26    | 2021/12/22 09:28:04 | 40.4 | 41.2 | 40.4 | 42.8 | 44.5 |
| 31    | 2021/12/22 09:28:19 | 44.2 | 45.2 | 44.2 | 46.8 | 48.8 |
| 36    | 2021/12/22 09:28:34 | 52.1 | 52.3 | 53.8 | 55.3 | 56.8 |
| 41    | 2021/12/22 09:28:49 | 56.2 | 55.7 | 54.5 | 50.9 | 48.1 |
| 46    | 2021/12/22 09:29:04 | 46.9 | 43.9 | 42.6 | 41.7 | 40.5 |
| 51    | 2021/12/22 09:29:19 | 39.1 | 38.2 | 38.4 | 39.1 | 39.5 |
| 56    | 2021/12/22 09:29:34 | 37.7 | 37.4 | 37.0 | 37.1 | 37.3 |
| 61    | 2021/12/22 09:29:49 | 36.6 | 36.3 | 35.6 | 36.9 | 36.7 |
| 66    | 2021/12/22 09:30:04 | 36.9 | 37.1 | 35.6 | 36.2 | 36.0 |
| 71    | 2021/12/22 09:30:19 | 35.1 | 35.7 | 35.5 | 35.4 | 36.5 |
| 76    | 2021/12/22 09:30:34 | 37.3 | 37.6 | 37.7 | 38.0 | 36.7 |
| 81    | 2021/12/22 09:30:49 | 37.7 | 40.5 | 37.7 | 37.9 | 38.6 |
| 86    | 2021/12/22 09:31:04 | 39.4 | 39.0 | 39.0 | 38.8 | 39.0 |
| 91    | 2021/12/22 09:31:19 | 38.9 | 38.8 | 38.4 | 38.2 | 38.7 |
| 96    | 2021/12/22 09:31:34 | 39.7 | 38.9 | 40.0 | 40.0 | 40.2 |
| 101   | 2021/12/22 09:31:49 | 40.9 | 43.9 | 42.4 | 46.1 | 49.1 |
| 106   | 2021/12/22 09:32:04 | 48.6 | 49.2 | 47.6 | 48.7 | 47.5 |
| 111   | 2021/12/22 09:32:19 | 47.3 | 46.8 | 47.5 | 42.3 | 40.6 |
| 116   | 2021/12/22 09:32:34 | 38.1 | 38.2 | 39.0 | 37.5 | 37.3 |
| 121   | 2021/12/22 09:32:49 | 38.1 | 37.7 | 38.6 | 38.6 | 40.5 |
| 126   | 2021/12/22 09:33:04 | 40.1 | 39.3 | 41.6 | 42.7 | 45.9 |
| 131   | 2021/12/22 09:33:19 | 46.5 | 47.3 | 49.7 | 47.6 | 49.6 |
| 136   | 2021/12/22 09:33:34 | 47.1 | 44.5 | 43.4 | 40.1 | 41.3 |
| 141   | 2021/12/22 09:33:49 | 41.7 | 41.4 | 41.8 | 41.2 | 42.5 |
| 146   | 2021/12/22 09:34:04 | 43.7 | 45.5 | 46.5 | 47.6 | 49.2 |
| 151   | 2021/12/22 09:34:19 | 48.9 | 47.1 | 47.5 | 46.5 | 45.1 |
| 156   | 2021/12/22 09:34:34 | 43.8 | 42.4 | 42.6 | 41.6 | 41.8 |
| 161   | 2021/12/22 09:34:49 | 41.5 | 41.5 | 41.2 | 43.4 | 42.4 |
| 166   | 2021/12/22 09:35:04 | 42.2 | 43.3 | 42.5 | 44.1 | 43.5 |
| 171   | 2021/12/22 09:35:19 | 41.1 | 40.9 | 40.2 | 41.5 | 44.7 |
| 176   | 2021/12/22 09:35:34 | 45.4 | 46.6 | 45.8 | 45.3 | 44.1 |
| 181   | 2021/12/22 09:35:49 | 46.1 | 44.0 | 47.0 | 48.7 | 47.6 |
| 186   | 2021/12/22 09:36:04 | 49.0 | 49.8 | 50.3 | 48.5 | 51.9 |
| 191   | 2021/12/22 09:36:19 | 51.2 | 52.6 | 55.2 | 56.0 | 57.8 |
| 196   | 2021/12/22 09:36:34 | 56.9 | 55.6 | 54.2 | 54.5 | 52.9 |
| 201   | 2021/12/22 09:36:49 | 53.8 | 56.8 | 68.6 | 59.1 | 51.4 |
| 206   | 2021/12/22 09:37:04 | 50.3 | 49.1 | 47.2 | 45.8 | 44.4 |
| 211   | 2021/12/22 09:37:19 | 43.7 | 44.9 | 42.7 | 42.5 | 41.1 |
| 216   | 2021/12/22 09:37:34 | 39.9 | 40.9 | 40.1 | 37.9 | 40.5 |
| 221   | 2021/12/22 09:37:49 | 40.8 | 38.8 | 38.8 | 38.0 | 39.2 |
| 226   | 2021/12/22 09:38:04 | 38.7 | 37.7 | 37.5 | 37.4 | 36.9 |
| 231   | 2021/12/22 09:38:19 | 37.1 | 37.4 | 37.7 | 36.8 | 36.1 |
| 236   | 2021/12/22 09:38:34 | 36.7 | 38.6 | 38.4 | 37.3 | 38.4 |
| 241   | 2021/12/22 09:38:49 | 37.1 | 38.7 | 38.4 | 39.1 | 36.9 |
| 246   | 2021/12/22 09:39:04 | 36.4 | 37.1 | 41.1 | 38.0 | 37.8 |
| 251   | 2021/12/22 09:39:19 | 38.1 | 38.4 | 38.9 | 40.1 | 40.7 |
| 256   | 2021/12/22 09:39:34 | 39.3 | 37.5 | 39.0 | 39.7 | 38.3 |
| 261   | 2021/12/22 09:39:49 | 38.5 | 39.6 | 38.5 | 38.2 | 37.8 |
| 266   | 2021/12/22 09:40:04 | 37.7 | 38.0 | 38.7 | 40.1 | 40.1 |
| 271   | 2021/12/22 09:40:19 | 38.1 | 39.4 | 42.9 | 47.8 | 49.1 |
| 276   | 2021/12/22 09:40:34 | 52.0 | 52.2 | 51.1 | 52.5 | 51.9 |
| 281   | 2021/12/22 09:40:49 | 51.1 | 48.7 | 49.7 | 47.0 | 47.2 |
| 286   | 2021/12/22 09:41:04 | 45.8 | 44.6 | 43.3 | 45.7 | 46.7 |
| 291   | 2021/12/22 09:41:19 | 45.2 | 45.1 | 46.7 | 47.4 | 45.7 |
| 296   | 2021/12/22 09:41:34 | 45.2 | 44.3 | 45.6 | 44.2 | 43.7 |

# NM3

Freq Weight : A  
 Time Weight : SLOW  
 Level Range : 40-100  
 Max dB : 81.0 - 2021/12/22 11:23:59  
 Level Range : 40-100  
 SEL : 90.3  
 Leq : 60.8

| No. s | Date Time           | (dB) |      |      |      |      |
|-------|---------------------|------|------|------|------|------|
| 1     | 2021/12/22 11:12:09 | 52.5 | 53.0 | 52.0 | 51.6 | 51.2 |
| 6     | 2021/12/22 11:12:24 | 55.9 | 59.3 | 60.2 | 60.2 | 59.5 |
| 11    | 2021/12/22 11:12:39 | 58.9 | 61.0 | 61.6 | 59.8 | 59.5 |
| 16    | 2021/12/22 11:12:54 | 57.1 | 60.4 | 56.6 | 52.6 | 54.8 |
| 21    | 2021/12/22 11:13:09 | 58.2 | 54.8 | 49.2 | 51.0 | 51.5 |
| 26    | 2021/12/22 11:13:24 | 49.8 | 48.9 | 49.5 | 55.6 | 57.5 |
| 31    | 2021/12/22 11:13:39 | 59.2 | 59.7 | 60.9 | 60.0 | 60.6 |
| 36    | 2021/12/22 11:13:54 | 55.2 | 55.2 | 54.3 | 53.2 | 55.1 |
| 41    | 2021/12/22 11:14:09 | 54.4 | 53.7 | 53.8 | 51.2 | 53.1 |
| 46    | 2021/12/22 11:14:24 | 52.7 | 48.4 | 52.5 | 57.4 | 56.6 |
| 51    | 2021/12/22 11:14:39 | 59.5 | 64.0 | 61.4 | 63.3 | 65.1 |
| 56    | 2021/12/22 11:14:54 | 62.2 | 62.4 | 65.0 | 60.9 | 58.3 |
| 61    | 2021/12/22 11:15:09 | 58.6 | 61.8 | 57.6 | 56.1 | 51.8 |
| 66    | 2021/12/22 11:15:24 | 52.6 | 53.0 | 54.1 | 54.7 | 52.9 |
| 71    | 2021/12/22 11:15:39 | 56.2 | 56.1 | 51.6 | 46.9 | 46.5 |
| 76    | 2021/12/22 11:15:54 | 46.2 | 48.1 | 51.0 | 50.0 | 52.6 |
| 81    | 2021/12/22 11:16:09 | 63.2 | 62.8 | 64.2 | 64.8 | 61.5 |
| 86    | 2021/12/22 11:16:24 | 61.5 | 62.9 | 60.6 | 60.6 | 61.8 |
| 91    | 2021/12/22 11:16:39 | 61.9 | 61.5 | 58.2 | 50.1 | 46.1 |
| 96    | 2021/12/22 11:16:54 | 46.6 | 50.9 | 51.6 | 54.7 | 55.0 |
| 101   | 2021/12/22 11:17:09 | 52.0 | 50.0 | 48.3 | 49.9 | 52.5 |
| 106   | 2021/12/22 11:17:24 | 55.0 | 57.0 | 57.8 | 58.3 | 58.3 |
| 111   | 2021/12/22 11:17:39 | 58.6 | 59.3 | 59.1 | 54.0 | 48.7 |
| 116   | 2021/12/22 11:17:54 | 46.5 | 44.5 | 44.3 | 45.1 | 46.6 |
| 121   | 2021/12/22 11:18:09 | 46.4 | 46.5 | 48.1 | 48.9 | 50.6 |
| 126   | 2021/12/22 11:18:24 | 56.4 | 55.8 | 51.2 | 52.2 | 59.9 |
| 131   | 2021/12/22 11:18:39 | 66.6 | 67.8 | 63.4 | 61.0 | 61.2 |
| 136   | 2021/12/22 11:18:54 | 60.9 | 60.7 | 63.3 | 62.1 | 62.3 |
| 141   | 2021/12/22 11:19:09 | 62.8 | 62.0 | 63.8 | 59.8 | 59.8 |
| 146   | 2021/12/22 11:19:24 | 56.2 | 53.9 | 51.0 | 48.1 | 48.7 |
| 151   | 2021/12/22 11:19:39 | 50.6 | 53.5 | 55.8 | 52.7 | 52.0 |
| 156   | 2021/12/22 11:19:54 | 51.6 | 51.4 | 51.1 | 51.3 | 51.7 |
| 161   | 2021/12/22 11:20:09 | 51.3 | 51.6 | 52.4 | 55.5 | 58.4 |
| 166   | 2021/12/22 11:20:24 | 58.7 | 58.1 | 63.4 | 62.4 | 61.7 |
| 171   | 2021/12/22 11:20:39 | 64.8 | 65.3 | 65.2 | 64.5 | 62.5 |
| 176   | 2021/12/22 11:20:54 | 61.2 | 60.9 | 59.0 | 61.6 | 61.0 |
| 181   | 2021/12/22 11:21:09 | 60.3 | 60.6 | 60.3 | 54.5 | 51.0 |
| 186   | 2021/12/22 11:21:24 | 52.2 | 53.1 | 54.9 | 57.3 | 61.3 |
| 191   | 2021/12/22 11:21:39 | 64.7 | 63.1 | 64.4 | 63.4 | 62.1 |
| 196   | 2021/12/22 11:21:54 | 60.5 | 55.6 | 49.1 | 45.7 | 44.9 |
| 201   | 2021/12/22 11:22:09 | 45.6 | 47.5 | 47.9 | 48.9 | 52.7 |
| 206   | 2021/12/22 11:22:24 | 52.3 | 51.1 | 48.4 | 45.8 | 45.1 |
| 211   | 2021/12/22 11:22:39 | 47.1 | 46.2 | 46.7 | 59.0 | 63.2 |
| 216   | 2021/12/22 11:22:54 | 61.2 | 61.2 | 58.3 | 60.5 | 59.2 |
| 221   | 2021/12/22 11:23:09 | 63.6 | 59.3 | 54.0 | 52.7 | 57.5 |
| 226   | 2021/12/22 11:23:24 | 57.0 | 51.3 | 52.4 | 52.5 | 52.7 |
| 231   | 2021/12/22 11:23:39 | 51.3 | 48.9 | 49.8 | 51.4 | 49.2 |
| 236   | 2021/12/22 11:23:54 | 67.7 | 79.0 | 66.9 | 56.0 | 52.9 |
| 241   | 2021/12/22 11:24:09 | 54.2 | 58.3 | 56.2 | 53.2 | 51.8 |
| 246   | 2021/12/22 11:24:24 | 57.7 | 57.2 | 51.5 | 50.5 | 51.3 |
| 251   | 2021/12/22 11:24:39 | 54.3 | 53.7 | 53.6 | 53.4 | 55.5 |
| 256   | 2021/12/22 11:24:54 | 53.8 | 53.9 | 53.2 | 55.7 | 59.7 |
| 261   | 2021/12/22 11:25:09 | 62.7 | 63.0 | 64.9 | 64.4 | 64.7 |
| 266   | 2021/12/22 11:25:24 | 65.3 | 64.8 | 62.1 | 61.6 | 60.8 |
| 271   | 2021/12/22 11:25:39 | 56.1 | 56.1 | 55.8 | 53.4 | 48.7 |
| 276   | 2021/12/22 11:25:54 | 49.8 | 77.1 | 68.4 | 56.9 | 51.5 |
| 281   | 2021/12/22 11:26:09 | 53.9 | 53.1 | 54.3 | 53.4 | 56.9 |
| 286   | 2021/12/22 11:26:24 | 58.0 | 56.5 | 65.2 | 62.8 | 59.1 |
| 291   | 2021/12/22 11:26:39 | 64.0 | 60.9 | 55.7 | 61.5 | 58.8 |
| 296   | 2021/12/22 11:26:54 | 59.1 | 66.7 | 63.2 | 62.8 | 63.8 |

# Appendix B

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Roadway Construction Noise Model (RCNM) Results







# Appendix C

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Car Wash Specifications

P D Q L A S E R W A S H S E R I E S

# LASERWASH<sup>®</sup> 360

# LASERWASH



*Touch-Free In-Bay Automatic Vehicle Wash System*



VEHICLE WASH SYSTEMS

PART OF OPW A DOVER COMPANY



# PERFORMANCE, DEPENDABILITY AND QUALITY

With more than 10,000 LaserWashes shipped worldwide, PDQ Manufacturing, Inc., takes great pride in being the leader in the in-bay automatic vehicle wash industry. We are dedicated to providing wash operators with the most innovative equipment that exemplifies our tradition of **Performance, Dependability and Quality**. The new LaserWash® 360 raises the standard again with new revenue-enhancement features and total cost-of-ownership improvements that offers wash operators the opportunity to realize the industry's highest return on investment.



Simplified engineering and high-quality materials provide the optimal balance between initial investment and long-term profitability. Substantially faster wash speeds increase vehicle throughput, resulting in shorter wash lines that will delight your customers and keep them coming back again and again. Smart 360™ Technology enables the LaserWash® 360 to be highly responsive to dynamic conditions in the wash bay, minimizing downtime and optimizing the wash process, resulting in higher customer satisfaction and repeat business.

#### **E-Chain**

*Left or right mounted energy chain for easy and low-cost installation*



#### **Slip-Free Belt Drive**

*Bridge and trolley movements are controlled using slip-free drive belts for improved performance and wash accuracy. Less moving parts provide a much simpler drive system.*



#### **Rollers Inside**

*Bridge and trolley movements are smooth and effortless using internally mounted dual-axis rollers. The hanging design enhances self-centering and improved roller life by protecting the rollers from the harsh wash environment.*



The LaserWash® 360's simple but sophisticated feature set provides exceptional chemical application and coverage with rounded corner profiling, Smart Dwell® chemical deployment and articulating arch functions that allow the system to cover the backs of side mirrors. The new arch-oscillation feature aggressively attacks bugs on the front of vehicles from multiple angles for superior bug removal and cleaning in areas with even the most difficult deposits. With more than 1,000 PSI (70 BAR) water pressure, the LaserWash® 360 supplies the necessary impingement to remove stubborn dirt and debris in even the most hard-to-reach areas of the vehicle. The LaserWash® 360 allows you to store and readily access your preferred or seasonal wash packages, customize wash services and adjust wash speeds in an infinite set of combinations. This functionality provides site operators with the ultimate programmable wash system for fast, consistent cleaning and exceptional performance.



### Revenue Enhancing Services

The LaserWash® 360 offers significantly faster wash speeds that minimizes your customer's valuable time at the site. Unlimited wash-package configurations and multiple service offerings allows you to provide customers a full array of choices that satisfy even their most discriminating needs. New up-sellable features include front bug prep for superior bug removal, dedicated super sealants and FlashDry® rinse options that offer a choice of multiple drying configurations. These innovative services delight your customers with the ultimate washing experience, and they will leave your site with the cleanest, shiniest and driest vehicle possible, one that they will be proud to drive.



### Turn Your Wash into a Glowing Success

Put the Shine back into your profits with the OverGlow Hi-Gloss Application System. Not only will your customers love their shiny vehicle, you will love the extra revenue this product is capable of generating. Your customers will enjoy the look of a colorful, thick sheet of solution draping their vehicle. The OverGlow system includes strategically located bright LED lights that will further enhance the customer experience, ensuring excitement as well as performance.



*Increased service offerings include undercarriage, OverGlow, triple foam, bug prep, super sealant and more.*



### Lower Cost of Ownership

As car wash operating costs continue to rise, operators are taking a much closer look at reducing electrical, water, chemical and maintenance costs to better compete and improve their profitability. The LaserWash® 360 was designed with this in mind: minimizing water requirements, reducing electrical consumption through the incorporation of variable-frequency drives and lowering chemical usage that allows the savings to drop down to the bottom line. Smart 360™ Technology dramatically reduces the need for site attendants to intervene with the wash process allowing them to focus on more important tasks.

A “keep-it-simple” design goal minimizes the need for sensors, grease fittings, swivels and valves, while the use of common electrical components throughout the system allows easier troubleshooting, minimizes regular maintenance costs and delivers consistent high-quality cleaning. Additionally, the LaserWash® 360 is built using only the best in non-corrosive materials, providing operators a rugged machine that will deliver a long, reliable life of revenue generation.

## Vehicle Positioning

One of PDQ's most recognizable innovations is the unparalleled Virtual Treadle®. This electronic vehicle-sensing technology eliminates drive-on floor-mounted mechanisms, creating a wide open and inviting bay for your customers. The Virtual Treadle process begins as the vehicle enters the wash bay. Ultrasonic sensors accurately measure the vehicle's width, and bridge sensors signal the driver to stop or back up, by activating easy to understand audible LED signs. The wash system is then activated with an electronic safety envelope surrounding the entire vehicle, allowing the LaserWash® 360 to maintain an optimum cleaning distance whether the vehicle is parked to one side or angled in the wash bay.

## Virtual Treadle Loading

The totally integrated loading system provides consumers with simple entry into the wash without the hassles of treadles, guide rails or hanging tee-bars.



# LASERGLOW

## ILLUMINATION EFFECT SYSTEM



**Get Your Wash Noticed...** Not only will the LaserGlow System help improve your customer flow, it can also be configured to work for you 24/7/365 by illuminating your wash bay day and night whether there is a vehicle in your bay or not. The system can be programmed to display multiple color combinations of flashing patterns, or constant colored illumination that matches your brand image. A glow from your wash bay can be a highly effective marketing tool to draw more attention to your wash site encouraging consumers to take notice and keep your existing customers coming back again and again.

Available on new equipment or as a retrofit kit for installed LaserWash 360's



The ultra-sophisticated LaserWash® 360 Arch Control System drives quicker throughput and amazes customers with its precise movements throughout the entire wash process. The arch is able to rotate 360 degrees while simultaneously navigating around the vehicle. The Automatic Obstacle Guidance System uses advanced technology to locate obstacles such as trailer hitches, side mirrors and other obstacles that may restrict the wash arch from properly traveling around the perimeter of the vehicle. The arch will move away from the obstacle, record the position of the obstacle to avoid it on subsequent passes and continue washing the vehicle. If the wash arch cannot avoid an obstacle it will attempt to fully retract, rinse off any solution using the overhead rain arch and prompt the customer to exit the bay. After the vehicle has exited and the bay is clear the machine will automatically reset in preparation for the next vehicle.



**STEP 1**  
Move away from the obstacle.

**STEP 2**  
Automatically back off to safely pass around the obstacle.

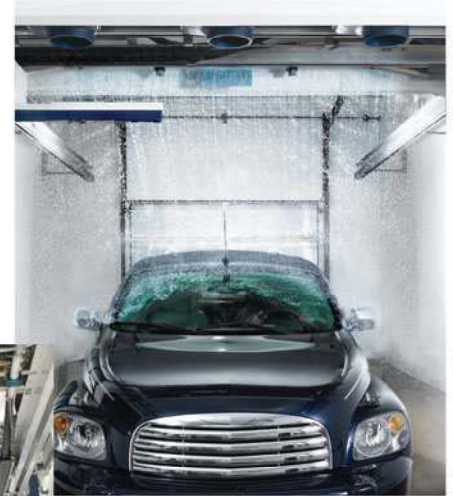
**STEP 3**  
Continue wash process and record position to avoid obstacle on the next pass.



This ensures the safest and most effective wash for all vehicle configurations. The three-axis arch movement provides rounded corner profiling that produces consistent and effective coverage by keeping the nozzles directed at the vehicle no matter which position the arch is in, a capability that sets a new, unmatched standard in the industry. No more chemicals or water sprayed on the floor! The Smart 360™ arch control makes every second productive – corner profiling eliminates wasted movement and the wash time at each corner is reduced by 60%.



PDQ's LaserWash® 360 integrated dryer option can be coupled with the unique FlashDry® High-Volume Spot-Free Rinse service. FlashDry® requires no additional time for a basic dry by completing the rinse and dry cycles in a single, simultaneous operation. Developed on the principal that it is easier to remove water that is already in motion, FlashDry® technology simultaneously rinses and removes more than 80% of the water in a single 10-second pass. Additional dryer options include a MaxAir® Stand-Alone Dryer, or the ability to use the integrated dryer as a drive-through dryer unit as the customer exits the wash bay. These options allow greater package differentiation, giving operators the ability to up-sell customers for increased revenue and profitability.



Integrated SwingAir Producers



**SwingAir Synchronized Motion Drying System**

Your customers will enjoy drier vehicles with PDQ's new SwingAir Synchronized Motion Drying System. The enhanced SwingAir oscillating feature improves dryer performance while still using less energy than most conventional dryers. This new system incorporates motion in the center two producers to help sweep water off of the vehicle's top surface, allowing the two outside producers to focus on pushing water down and off the sides of the vehicle. The SwingAir feature is available on both stand-alone and integrated MaxAir® drying systems.



The LaserWash® 360 wash control system uses a web browser interface, which allows you to access all key operating functions of the wash equipment through your web browser without any special software. Additionally, you can configure wash packages, program machine functions and monitor sales activity remotely over the Internet, getting real-time information and eliminating unnecessary visits to your wash sites. The LaserWash® 360 can also be programmed to automatically send alerts to your PC, Tablet or Smartphone to let you know if your wash is down or to provide status updates on critical issues that may be occurring at your wash locations. This capability keeps you in touch with all of your sites from anywhere at anytime.



# LaserWash® 360 Features:

## Standard Machine Features:

Standard Machine Includes: LaserWash® 360, Corrosion-Resistant Bridge & Trolley, Smart 360™ Technology (with: Smart Networking, Smart Dwell®, Smart Arch Control, Smart Drying System and Smart Cleaning System), Automatic Obstacle Guidance, SST Wall Mounts, Aluminum Rails, Virtual Treadle, Electrical Control Panels, Basic LED In-Bay Sign, General Pump



Scan this QR code with your Smartphone and view the LaserWash® 360 video

## Options:

- CAT 3535 Pump
- Water Heater
- Second/Third Pressure Fed Inlet
- Water Saver Package
- In-Bay Pump Station Covers
- 2 or 4 Nozzle Integrated Dryer
- MaxAir® Stand Alone Dryer
- SwingAir Synchronized Motion Drying System
- LED Service Confirmation Sign
- LED Entrance Sign
- LaserGlow Illumination Effect System
- High Pressure Undercarriage
- Extended Solution Package
- 3X Color Foam
- Booster Pump for Low Pressure Sites
- Dedicated Super Sealant Manifold
- Dedicated Front Bug Prep Manifold
- Rust Inhibitor
- Wheel Cleaner
- High Volume Rinse Arch
- Electric High Pressure Gatling Guns
- Free Standing Frame
- Spot Free Rinse Application
- Water Reclaim Systems
- Storage Tanks
- Wash Activation Entry Terminals
- Cortex Site Management Software
- WALs Loyalty Program

## LaserWash® 360 Specifications

### Building Requirements

|               |             |   |
|---------------|-------------|---|
| <b>Height</b> | Wall Mount  | 10'-6" Minimum (3.20 m)                           |
|               | Frame Mount | 10'-8" (3.28 m)                                   |
| <b>Width</b>  | Wall Mount  | 13'-6" Minimum to 18'-0" Maximum (4.11 to 5.49 m) |
|               | Frame Mount | 13'-6" Minimum (w/o integrated dryer) (4.11 m)    |
| <b>Length</b> | Wall Mount  | 14'-1" Minimum (w/integrated dryer) (4.28 m)      |
|               | Frame Mount | 28'-4" (full length rails)** (8.64 m)             |
|               |             | 29'-7" (full length rails)** (9.02 m)             |

Note: Equipment dimension specifications do not take into consideration any obstructions, unusual wash bay configurations, etc. \*\*Rails can be cut to length for shorter bays.

### Utility Requirements

|                   |  |
|-------------------|--|
| <b>Air</b>        | 1.5 SCFM @ 90 psi (6.21 Bar)                               |
| <b>Water</b>      | 38 GPM (143.8 LPM) @ 30 psi (2.07 Bar) - Direct Feed       |
|                   | 19 GPM (71.9 LPM) @ 10 psi (0.69 Bar) - Low Flow Tank Feed |
| <b>Electrical</b> | 3-Phase, 50/60 Hz  |

### Electrical Requirements

| Voltage        | Pump Station | Water Heater          | Bridge             | Dryer Power Feed #1 | Dryer Power Feed #2 |
|----------------|--------------|-----------------------|--------------------|---------------------|---------------------|
| <b>208/230</b> | 90/85 Amps   | 28/25 Amps            | 20 Amps            | 44/41 Amps          | 44/41 Amps          |
| <b>380</b>     | 60 Amps      | 25 Amps               | 20 Amps            | 15 Amps             | 15 Amps             |
| <b>460</b>     | 40 Amps      | 208/230V - 28/25 Amps | 208/230V - 20 Amps | 21 Amps             | 21 Amps             |
| <b>575</b>     | 30 Amps      | 208/230V - 33/30 Amps | 208/230V - 20 Amps | 17 Amps             | 17 Amps             |

### Drying Options

|  |                              |                  |
|--|------------------------------|------------------|
| 30 HP Integrated 4 – Producer MaxAir® Dryer (FlashDry Ready) | (208/230/380/460/575V 60 Hz) | (220/380V 50Hz)  |
| 15 HP Integrated 2 – Producer MaxAir® Dryer (FlashDry Ready) | (208/230/380/460/575V 60 Hz) | (220/380V 50 Hz) |
| 30 HP Stand Alone 4 – Producer MaxAir® Dryer                 | (208/230/380/460/575V 60 Hz) | (220/380V 50Hz)  |
| 45 HP Stand Alone 6 – Producer MaxAir® Dryer                 | (208/230/380/460/575V 60 Hz) | (220/380V 50 Hz) |

PDQ reserves the right to revise designs, add or delete features and change specifications at any time without notice or obligation.

Feel comfortable in your decision to purchase PDQ Equipment.  
We are proud to be part of **DOVER CORPORATION** A Fortune 500 Company.

PDQ Manufacturing, Inc. 1698 Scheuring Rd. De Pere, WI 54115 USA (920) 983-8333 1-800-227-3373 [www.pdqinc.com](http://www.pdqinc.com)

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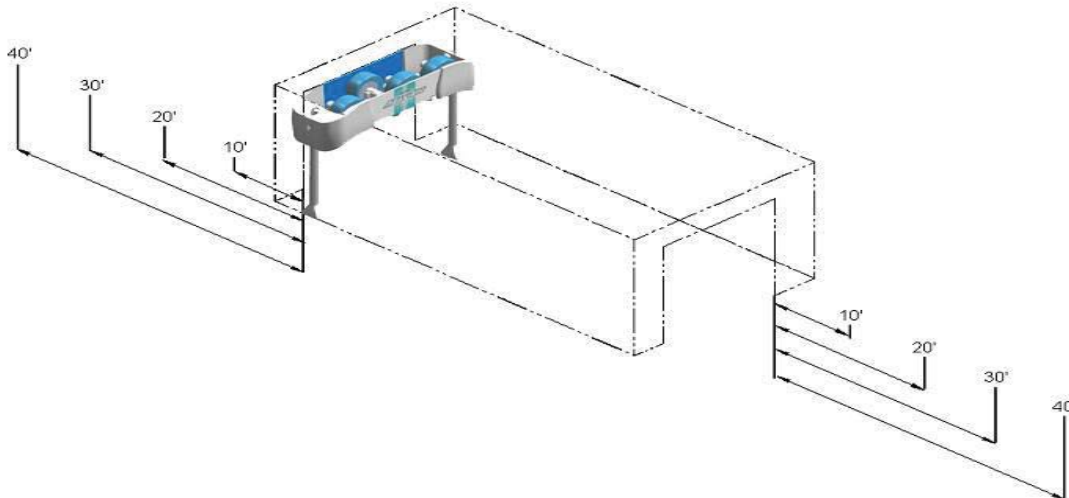
## PDQ LaserWash 360 Integrated Dryer Decibel Reading

Below is the test data and associated decibel readings of the PDQ LaserWash 360 with 4 On-Board dryers, with and without doors, on the carwash bay.

| DOOR OPEN/CLOSED | ENTRANCE/EXIT | dBA AT DISTANCE FROM DOOR OPENING |                |                |                 |
|------------------|---------------|-----------------------------------|----------------|----------------|-----------------|
|                  |               | 0'<br>(3.04M)                     | 05'<br>(6.09M) | 10'<br>(9.14M) | 20'<br>(12.19M) |
| DOOR OPEN        | ENTRANCE      | 90                                | 87             | 82             | 76              |
|                  | EXIT          | 92                                | 88             | 84             | 78              |
| DOOR CLOSED      | ENTRANCE      | 77                                | 73             | 70             | 67              |
|                  | EXIT          | 79                                | 75             | 72             | 69              |

**Bay Dimensions: 12' (3.65M) H x 15' (4.57M) W x 50' (15.24M) L**

**Building Materials: Modular steel building with fiberglass lined inner walls; Glass windows on right side**



**Note: The actual sound level will vary depending on factors including but not limited to the location of the carwash site, type of building, materials used for the site, and size of the building.**



## EQUIPMENT DECIBEL CERTIFICATION

This is to certify that the following AutoVAC equipment was measured with the following decibel levels of noise emission (+/- 2dB) in accordance with ISO 2151:2004. These ratings are taken at 15 feet from the machine with no background noise or outside interference in a 50 x 50ft interior room.

| <b>VACUUM PRODUCER</b> |              |                              |                        |                  |                  |
|------------------------|--------------|------------------------------|------------------------|------------------|------------------|
| <b>HORESPOWER</b>      | <b>STAGE</b> | <b>START/RUN dB WITH VFD</b> | <b>START dB NO VFD</b> | <b>SERIAL NO</b> | <b>PASS/FAIL</b> |
| 10                     | 3            | 64                           | 84                     |                  |                  |
| 15                     | 4            | 66                           | 88                     |                  |                  |
| 20                     | 5            | 66                           | 88                     |                  |                  |
| 25                     | 6            | 72                           | 92                     |                  |                  |
| 30                     | 7            | 74                           | 92                     |                  |                  |
| 40                     | 8            | 76                           | 95                     |                  |                  |

| <b>BLOWER</b>     |                              |                        |                  |                  |
|-------------------|------------------------------|------------------------|------------------|------------------|
| <b>HORESPOWER</b> | <b>START/RUN dB WITH VFD</b> | <b>START dB NO VFD</b> | <b>SERIAL NO</b> | <b>PASS/FAIL</b> |
| 15                | 72                           | 85                     |                  |                  |

Equipment Used to measure decibel levels

| <b>EQUIPMENT</b>  | <b>MANUFACTURER</b> | <b>MODEL NO</b> | <b>SERIAL NO</b> |
|-------------------|---------------------|-----------------|------------------|
| Sound Level Meter | Extech Instruments  | 407730          | 9848853          |

Certified By: \_\_\_\_\_

Date: \_\_\_\_\_

This certificate does not claim product approval or endorsement by NVLAP, NIST or any agency of the Federal Government. If you have any further questions, please contact AutoVAC at our toll free number 888-628-8682.



# Appendix D

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Vacuum Specifications



## COMMERCIAL VACS

| MODEL #       | VACUUM | MOTORS | STAINLESS STEEL DOME | LIGHTED DOME | ETL APPROVED | WEIGHT | AMPS REQ.  | VOLTAGE | DESCRIPTION             |
|---------------|--------|--------|----------------------|--------------|--------------|--------|------------|---------|-------------------------|
| 9225          | •      | 2      | Small                |              | •            | 128    | 20         | 120     |                         |
| 9235          | •      | 2      | Large                |              | •            | 135    | 20         | 120     |                         |
| 9235LD        | •      | 2      |                      | •            | •            | 130    | 20         | 120     |                         |
| 9235-3        | •      | 3      | Large                |              | •            | 135    | 30         | 120     |                         |
| 9235-3LD      | •      | 3      |                      | •            | •            | 130    | 30         | 120     |                         |
| 9225-2*       | •      | 2      | Small                |              | •            | 128    | 20         | 120     | Wall Mounted            |
| 9225-3*       | •      | 3      | Large                |              | •            | 135    | 30         | 120     | Wall Mounted            |
| 9235-3DH      | •      | 3      | Large                |              | •            | 133    | 30         | 120     | Dual Hose               |
| 9235-3DH-WALL | •      | 3      | Large                |              | •            | 133    | 30         | 120     | Dual Hose, Wall Mounted |
| 9235-3DH-220V | •      | 3      | Large                |              |              | 133    | 15 @ 50 Hz | 220     | Dual Hose               |
| 9225-220      | •      | 2      | Small                |              |              | 128    | 10 @ 50 Hz | 220     |                         |
| 9235-220V     | •      | 2      | Large                |              |              | 135    | 10 @ 50 Hz | 220     |                         |
| 9235-3-220V   | •      | 3      | Large                |              |              | 135    | 15 @ 50 Hz | 220     |                         |

### FEATURES

- JE Adams commercial vacuums are great for car dealerships, detail shops, car washes, oil change facilities, car rental agencies, or anywhere you want to provide your customers with a “Free” vacuum or to discontinue using and replacing shop vacs
- On/off toggle switch
- Hose: 2” x 15’, swivel cuff and nozzle included (15’, 25’, and 50’ available in 1 1/2” or 2”)
- \*9225-2 and 9225-3 are wired to an electrical switch or a toggle switch away from the vacuum
- Double service doors offer easy access to clean out compartment and 4 filter bag system (Replacement Item #8076)
- Optional motors, colored hoses, extra security, and clean-out containers are available

### OPTIONS

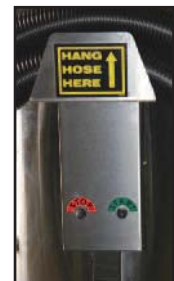
- 9225PBK Push button kit with timer available
- 9225PBK-1 Push button kit with start and stop buttons with timer available
- 9225PBK-220V Push button kit with 220V timer available



9225 COMMERCIAL VAC



9235-3DH  
DUAL HOSE  
COMMERCIAL VAC



9225PBK-1  
STOP/START  
BUTTONS

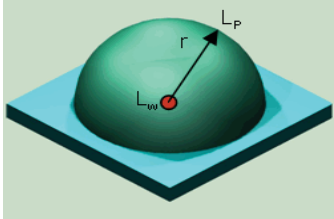


Customer: JE Adams  
 Date: 5/10/2019  
 Mtr Model Q6600-092T (2 mtrs)  
 Unit: 9235-2

Volts 120  
 Frequency 60 Hz  
 By: Jonathan Johnson  
 Test Method: ASTM F1334

JE Adams Unit 9235  
 2 Motor Unit with Q6600-092T Motors.  
 Small Steel Dome  
 Inlet in Room Fully Blocked Nozzle

## Sound Pressure At Distances From Unit (Sound Treated as Point Source)

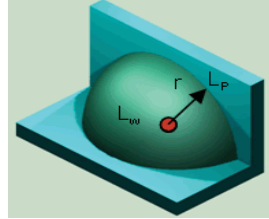


Half Sphere Q = 2

$$L_p = L_w + 10 \log \left( \frac{Q}{4\pi r^2} \right)$$

Lp = Sound Pressure dBA  
 Lw = Sound Power  
 Q = Directivity Factor  
 r = Distance from Source

**Sound Power = 98.7**



Quarter Sphere Q = 4

| Distance |        | Sound Pressure (dBA) |
|----------|--------|----------------------|
| Feet     | Meters |                      |
| 5        | 1.5    | 87.0                 |
| 10       | 3.0    | 81.0                 |
| 15       | 4.6    | 77.5                 |
| 25       | 7.6    | 73.1                 |
| 30       | 9.1    | 71.5                 |
| 35       | 10.7   | 70.1                 |
| 40       | 12.2   | 69.0                 |
| 45       | 13.7   | 67.9                 |
| 50       | 15.2   | 67.0                 |
| 55       | 16.8   | 66.2                 |
| 60       | 18.3   | 65.4                 |
| 75       | 22.9   | 63.5                 |
| 80       | 24.4   | 62.9                 |
| 85       | 25.9   | 62.4                 |
| 90       | 27.4   | 61.9                 |
| 95       | 29.0   | 61.5                 |
| 100      | 30.5   | 61.0                 |

| Distance |        | Sound Pressure (dBA) |
|----------|--------|----------------------|
| Feet     | Meters |                      |
| 5        | 1.5    | 90.0                 |
| 10       | 3.0    | 84.0                 |
| 15       | 4.6    | 80.5                 |
| 25       | 7.6    | 76.1                 |
| 30       | 9.1    | 74.5                 |
| 35       | 10.7   | 73.1                 |
| 40       | 12.2   | 72.0                 |
| 45       | 13.7   | 71.0                 |
| 50       | 15.2   | 70.0                 |
| 55       | 16.8   | 69.2                 |
| 60       | 18.3   | 68.5                 |
| 75       | 22.9   | 66.5                 |
| 80       | 24.4   | 66.0                 |
| 85       | 25.9   | 65.4                 |
| 90       | 27.4   | 64.9                 |
| 95       | 29.0   | 64.5                 |
| 100      | 30.5   | 64.0                 |

# Appendix E

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HVAC Specifications

## ELECTRICAL DATA

| 38HDR<br>UNIT<br>SIZE | V-PH-Hz      | VOLTAGE RANGE* |     | COMPRESSOR |       | OUTDOOR FAN MOTOR |           |           | MIN<br>CKT<br>AMPS | FUSE/<br>HACR BKR<br>AMPS |
|-----------------------|--------------|----------------|-----|------------|-------|-------------------|-----------|-----------|--------------------|---------------------------|
|                       |              | Min            | Max | RLA        | LRA   | FLA               | NEC<br>Hp | kW<br>Out |                    |                           |
| 018                   | 208/230-1-60 | 187            | 253 | 9.0        | 48.0  | 0.80              | 0.125     | 0.09      | 12.1               | 20                        |
| 024                   | 208/230-1-60 | 187            | 253 | 12.8       | 58.3  | 0.80              | 0.125     | 0.09      | 16.8               | 25                        |
| 030                   | 208/230-1-60 | 187            | 253 | 14.1       | 73.0  | 1.45              | 0.25      | 0.19      | 19.1               | 30                        |
| 036                   | 208/230-1-60 | 187            | 253 | 14.1       | 77.0  | 1.45              | 0.25      | 0.19      | 19.1               | 30                        |
|                       | 208/230-3-60 | 187            | 253 | 9.0        | 71.0  | 1.45              | 0.25      | 0.19      | 12.7               | 20                        |
|                       | 460-3-60     | 414            | 506 | 5.6        | 38.0  | 0.80              | 0.25      | 0.19      | 7.8                | 15                        |
| 048                   | 208/230-1-60 | 187            | 253 | 21.8       | 117.0 | 1.45              | 0.25      | 0.19      | 28.7               | 50                        |
|                       | 208/230-3-60 | 187            | 253 | 13.7       | 83.1  | 1.45              | 0.25      | 0.19      | 18.6               | 30                        |
|                       | 460-3-60     | 414            | 506 | 6.2        | 41.0  | 0.80              | 0.25      | 0.19      | 8.6                | 15                        |
| 060                   | 208/230-1-60 | 187            | 253 | 26.4       | 134.0 | 1.45              | 0.25      | 0.19      | 34.5               | 60                        |
|                       | 208/230-3-60 | 187            | 253 | 16.0       | 110.0 | 1.45              | 0.25      | 0.19      | 21.5               | 35                        |
|                       | 460-3-60     | 414            | 506 | 7.8        | 52.0  | 0.80              | 0.25      | 0.19      | 10.6               | 15                        |

\* Permissible limits of the voltage range at which the unit will operate satisfactorily

FLA - Full Load Amps

HACR - Heating, Air Conditioning, Refrigeration

LRA - Locked Rotor Amps

NEC - National Electrical Code

RLA - Rated Load Amps (compressor)

NOTE: Control circuit is 24-V on all units and requires external power source. Copper wire must be used from service disconnect to unit. All motors/compressors contain internal overload protection.

38HDR

## SOUND LEVEL

| Unit Size | Standard<br>Rating (dB) | Typical Octave Band Spectrum ( dBA ) (without tone adjustment) |      |      |      |      |      |      |
|-----------|-------------------------|--|------|------|------|------|------|------|
|           |                         | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
| 018       | 68                      | 52.0   | 57.5 | 60.5 | 63.5 | 60.5 | 57.5 | 46.5 |
| 024       | 69                      | 57.5   | 61.5 | 63.0 | 61.0 | 60.0 | 56.0 | 45.0 |
| 030       | 72                      | 56.5   | 63.0 | 65.0 | 66.0 | 64.0 | 62.5 | 57.0 |
| 036       | 72                      | 65.0   | 61.5 | 63.5 | 65.0 | 64.5 | 61.0 | 54.5 |
| 048       | 72                      | 58.5   | 61.0 | 64.0 | 67.5 | 66.0 | 64.0 | 57.0 |
| 060       | 72                      | 63.0   | 61.5 | 64.0 | 66.5 | 66.0 | 64.5 | 55.5 |

## CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)

| UNIT SIZE-VOLTAGE, SERIES | REQUIRED SUBCOOLING °F (°C) |
|---------------------------|-----------------------------|
| 018                       | 12 (6.7)                    |
| 024                       | 12 (6.7)                    |
| 030                       | 12 (6.7)                    |
| 036                       | 12 (6.7)                    |
| 048                       | 12 (6.7)                    |
| 060                       | 12 (6.7)                    |





# Product Catalog

## Packaged Rooftop Air Conditioners Precedent™ — Cooling and Gas/Electric 3 – 10 Tons — 60 Hz





## Fan Performance

**Table 136. Direct drive plenum fan settings (rpm vs. voltage)<sup>(a),(b)</sup> (continued)**

| T/YHC092F, T/YHC102F, T/YSC120F, T/YHC120E |           |
|--|-----------|
| Potentiometer Voltage                      | Motor RPM |
| 4.00                                       | 929       |
| 4.25                                       | 995       |
| 4.50                                       | 1061      |
| 4.75                                       | 1126      |
| 5.00                                       | 1191      |
| 5.25                                       | 1253      |
| 5.50                                       | 1315      |
| 5.75                                       | 1374      |
| 6.00                                       | 1432      |
| 6.25                                       | 1487      |
| 6.50                                       | 1539      |
| 6.75                                       | 1588      |
| 7.00                                       | 1633      |
| 7.25                                       | 1675      |
| 7.50                                       | 1700      |

(a) See fan tables for unit rpm and cfm units.  
 (b) Factory setting is 5V.

**Table 137. Outdoor sound power level - dB (ref. 10 - 12W)**

| Tons | Unit Model Number | Octave Center Frequency |     |     |     |      |      |      |      | Overall dBA |
|------|-------------------|-------------------------|-----|-----|-----|------|------|------|------|-------------|
|      |                   | 63                      | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |             |
| 3    | T/YSC036E         | 79                      | 85  | 79  | 79  | 77   | 71   | 67   | 58   | 81          |
| 4    | T/YSC048E         | 82                      | 84  | 83  | 80  | 76   | 72   | 66   | 58   | 82          |
| 5    | T/YSC060E         | 85                      | 82  | 81  | 81  | 77   | 72   | 67   | 61   | 82          |
| 6    | T/YSC072F         | 91                      | 95  | 90  | 87  | 84   | 79   | 75   | 68   | 89          |
| 7½   | T/YSC090F         | 91                      | 95  | 90  | 87  | 84   | 79   | 75   | 68   | 89          |
| 7½   | T/YSC092F         | 92                      | 96  | 92  | 89  | 85   | 80   | 76   | 69   | 91          |
| 8½   | T/YSC102F         | 91                      | 95  | 90  | 87  | 84   | 79   | 75   | 68   | 89          |
| 10   | T/YSC120F         | 91                      | 86  | 90  | 86  | 82   | 78   | 73   | 67   | 88          |
| 3    | T/YHC036E         | 79                      | 85  | 79  | 79  | 77   | 71   | 67   | 58   | 81          |
| 4    | T/YHC048E         | 80                      | 86  | 84  | 85  | 83   | 79   | 73   | 67   | 87          |
| 4    | T/YHC048F         | 80                      | 86  | 84  | 85  | 83   | 79   | 73   | 67   | 87          |
| 5    | T/YHC060E         | 80                      | 86  | 84  | 85  | 83   | 79   | 73   | 67   | 87          |
| 5    | T/YHC060F         | 80                      | 86  | 84  | 85  | 83   | 79   | 73   | 67   | 87          |
| 6    | T/YHC072E,F       | 91                      | 95  | 90  | 87  | 84   | 79   | 75   | 68   | 89          |
| 7½   | T/YHC092F         | 91                      | 86  | 90  | 86  | 82   | 78   | 73   | 67   | 88          |
| 8½   | T/YHC102F         | 91                      | 95  | 90  | 87  | 84   | 79   | 75   | 68   | 89          |
| 10   | T/YHC120E         | 89                      | 87  | 91  | 85  | 80   | 77   | 73   | 66   | 87          |

**Note:** Tests follow ARI270-95.

# Appendix F

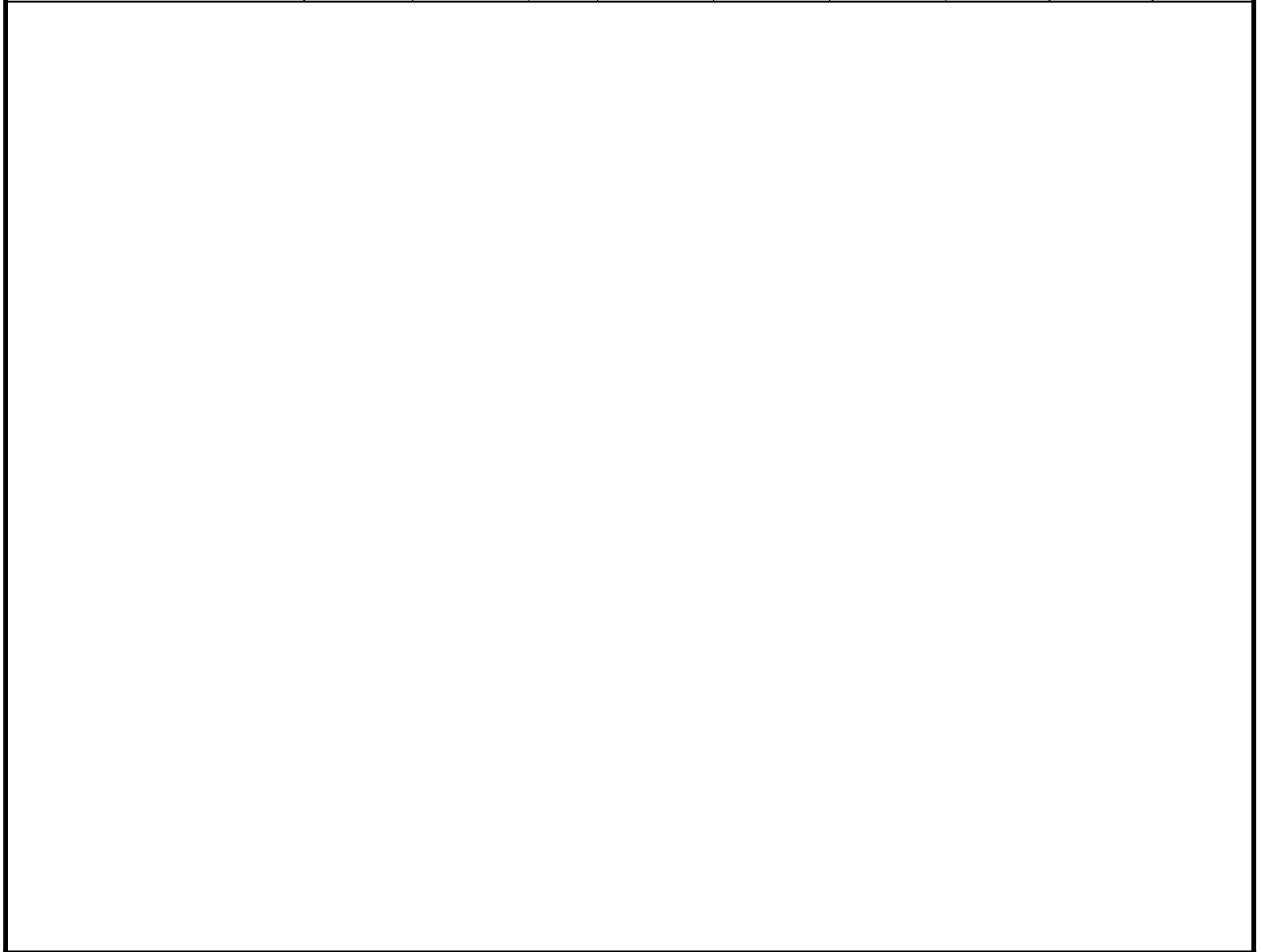
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SoundPLAN Noise Model Results

Morningstar Loop  
Assessed receiver levels  
OFF Receivers

2

| Receiver | Usage | Fl | Dir | Lr,lim<br>dB(A) | Lr,lim<br>dB(A) | Lr,lim<br>dB(A) | Leq,d<br>dB(A) | Leq,e<br>dB(A) |  |
|----------|-------|----|-----|-----------------|-----------------|-----------------|----------------|----------------|--|
| R-1      | SCR   | G  |     |                 |                 |                 | 37.2           | 37.2           |  |
| R-2      | SCR   | G  |     |                 |                 |                 | 37.8           | 37.8           |  |
| R-3      | SCR   | G  |     |                 |                 |                 | 40.9           | 40.9           |  |
| R-4      | SCR   | G  |     |                 |                 |                 | 41.2           | 41.2           |  |
| R-5      | SCR   | G  |     |                 |                 |                 | 41.9           | 41.9           |  |
| R-6      | SCR   | G  |     |                 |                 |                 | 41.6           | 41.6           |  |
| R-8      | SCR   | G  |     |                 |                 |                 | 40.9           | 40.9           |  |
| R-8      | SCR   | G  |     |                 |                 |                 | 38.9           | 38.9           |  |
| R-9      | SCR   | G  |     |                 |                 |                 | 33.1           | 33.1           |  |
| R-10     | SCR   | G  |     |                 |                 |                 | 29.0           | 29.0           |  |
| R-11     | SCR   | G  |     |                 |                 |                 | 25.0           | 25.0           |  |
| R-12     | SCR   | G  |     |                 |                 |                 | 46.7           | 46.7           |  |



|  |  |   |
|--|--|---|
|  | Rincon Consultants 9320 Chesapeake Drive, Suite 218 San Diego, CA<br>92123 USA | 1 |
|--|--|---|

## Morningstar Loop Octave spectra of the sources in dB(A) - OFF Receivers

3

| Name               | Source type | I or A           | Li    | R'w | L'w   | Lw    | KI  | KT  | LwMax | DO-Wall | Time histogram | Emission spectrum             | 63Hz  | 125Hz | 250Hz | 500Hz | 1kHz  | 2kHz  | 4kHz  | 8kHz  | 16kHz |
|--------------------|-------------|------------------|-------|-----|-------|-------|-----|-----|-------|---------|----------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                    |             | m,m <sup>2</sup> | dB(A) | dB  | dB(A) | dB(A) | dB  | dB  | dB(A) | dB      |                |                               | dB(A) | dB(A) | dB(A) | dB(A) | dB(A) | dB(A) | dB(A) | dB(A) | dB(A) |
| Blower1 at 5 feet  | Point       |                  |       |     | 96.6  | 96.6  | 0.0 | 0.0 |       | 0       | 100%/24h       | Blower (split)                |       |       |       | 96.6  |       |       |       |       |       |
| Blower 2 at 5 feet | Point       |                  |       |     | 96.6  | 96.6  | 0.0 | 0.0 |       | 0       | 100%/24h       | Blower (split)                |       |       |       | 96.6  |       |       |       |       |       |
| Blower 3 at 5 feet | Point       |                  |       |     | 96.6  | 96.6  | 0.0 | 0.0 |       | 0       | 100%/24h       | Blower (split)                |       |       |       | 96.6  |       |       |       |       |       |
| Blower 4 at 5 feet | Point       |                  |       |     | 96.6  | 96.6  | 0.0 | 0.0 |       | 0       | 100%/24h       | Blower (split)                |       |       |       | 96.6  |       |       |       |       |       |
| Car Wash Office    | Point       |                  |       |     | 66.3  | 66.3  | 0.0 | 0.0 |       | 0       | 100%/24h       | 2-ton HVAC (Carrier 38HDR024) |       | 41.4  | 52.9  | 59.8  | 61.0  | 61.2  | 57.0  | 43.9  |       |
| Foodmart           | Point       |                  |       |     | 87.3  | 87.3  | 0.0 | 0.0 |       | 0       | 100%/24h       | 10-ton HVAC (Trane T/YHC120E) | 62.8  | 70.9  | 82.4  | 81.8  | 80.0  | 78.2  | 74.0  | 64.9  |       |
| Vac-1              | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-2              | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-3              | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-4              | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-5              | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-6              | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-7              | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-8              | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-9              | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-10             | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-11             | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-12             | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-13             | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-14             | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-15             | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-16             | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-17             | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-18             | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-19             | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |
| Vac-20             | Point       |                  |       |     | 73.8  | 73.8  | 0.0 | 0.0 |       | 0       | 100%/24h       | Vacuum Nozzle                 | 55.2  | 62.0  | 68.6  | 65.3  | 64.0  | 65.9  | 65.4  | 60.6  | 51.9  |

# Appendix G

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Traffic Noise Model Results



















# Appendix G

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VMT Analysis

**DATE:** May 23, 2023  
**TO:** Sunny Goyle, Morningstar Village, LLC  
**FROM:** Alex So, Urban Crossroads, Inc.  
**JOB NO:** 14454-02 VMT

## **MORNINGSTAR LOOP CONVENIENCE STORE AND GAS STATION VEHICLE MILES TRAVELED (VMT) SCREENING EVALUATION**

Urban Crossroads, Inc. is pleased to provide the following Vehicle Miles Traveled (VMT) Screening Evaluation for the Morningstar Loop Convenience Store and Gas Station (**Project**), which is located southwest of Koon Street and Winchester Road, west of Pourroy Road in the County of Riverside.

### **PROJECT OVERVIEW**

The proposed project is to consist of a gas station with a convenience store of 6,100 square feet (**SF**) and an automated car wash of 4,800 SF (See Attachment A).

### **BACKGROUND**

The California Environmental Quality Act (CEQA) requires all lead agencies to adopt VMT as the measure for identifying transportation impacts for land use projects. To comply with CEQA, the County of Riverside developed and adopted their own Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled (December 2020) (**County Guidelines**) (1). This VMT screening evaluation has been developed based on the adopted City Guidelines.

### **VMT SCREENING**

Consistent with County Guidelines, projects should evaluate available screening criteria based on their location and project type to determine if a presumption of a less than significant transportation impact can be made. The following screening criteria are listed in the County Guidelines, and those applicable to the proposed Project (highlighted in **bold**) were selected for further review:



- **Small Projects**
- **High Quality Transit Areas (HQTA)**
- **Local Serving Retail**
- Affordable Housing (not applicable)
- Local Essential Service (not applicable)
- Map-Based Screening (not applicable)

### **SMALL PROJECTS SCREENING**

County Guidelines describes small projects as those with low trip generation (less than 110 daily trips) per existing CEQA exemptions or those forecasted to generate greenhouse gas (GHG) emissions below 3,000 Metric Tons of Carbon Dioxide Equivalent (MTCO<sub>2e</sub>) per year.<sup>1</sup>

The proposed Project is anticipated to generate more than 110 daily trips. Although the Project's size falls below the square footages that qualify for a small project less than 3,000 MTCO<sub>2e</sub>, the Project's Air Quality study estimates the project generates more than 3,000 MTCO<sub>2e</sub> per year.

**Small Projects screening criteria is not met.**

### **HIGH QUALITY TRANSIT AREAS (HQTA) SCREENING**

Projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing "major transit stop"<sup>2</sup> or an existing stop along a "high-quality transit corridor"<sup>3</sup>) may be presumed to have a less than significant impact, absent substantial evidence to the contrary. However, the presumption may not be appropriate if a project:

- Has a Floor Area Ratio (FAR) of less than 0.75.
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking).
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

The Project is not located within ½ mile of an existing major transit stop, or along a high-quality transit corridor.

**HQTA screening criteria is not met.**

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<sup>1</sup> County Guidelines; Page 19.

<sup>2</sup> Pub. Resources Code, § 21064.3 ("Major transit stop" means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.").

<sup>3</sup> Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.").

### **LOCAL SERVING RETAIL SCREENING**

County Guidelines states that local serving retail projects less than 50,000 square feet may be presumed to have a less than significant impact without substantial evidence to the contrary. In addition to local serving retail, other types of local serving uses (e.g., day care centers, non-destination hotels, affordable housing, places of worship, etc.) may also be presumed to have a less than significant impact as their uses are local serving in nature and tend to have shorter vehicle trips. The Project, as intended, is to provide retail service that would serve nearby residents and the local community; that would otherwise have to travel further distances to seek the services provided by the Project.

**Local Serving Retail screening criteria is met.**

### **CONCLUSION**

In summary, the Project meets the Local Serving screening criteria and is therefore presumed to have a less than significant VMT impact; no additional VMT analysis is required.

If you have any questions, please contact me directly at [aso@urbanxroads.com](mailto:aso@urbanxroads.com).

## REFERENCES

1. **County of Riverside.** *Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled.*  
County of Riverside : s.n., December 2020.

**ATTACHMENT A**  
**PRELIMINARY SITE PLAN**

