
**PHASE 1 ENVIRONMENTAL SITE ASSESSMENT
FOR THE
ACCESS ALTERNATIVES**

STATE ROUTE 94 IMPROVEMENT PROJECT



June 5, 2014

Prepared for:

California Department of Transportation District 11

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SUMMARY

This report presents the findings of a Phase I Environmental Site Assessment (ESA) for the access alternatives considered in the State Route 94 Improvement Project. The study area is located approximately 1 mile south of Jamul, California. For the purposes of this assessment, all access road options were combined into one study area. The focal properties of this assessment are portions of 3 parcels: an 87-acre parcel (APN 597-060-05-00), 4-acre parcel (APN 597-060-04-00), and a 10-acre parcel (APN 597-042-13-00)—as well as the affected portions of the CalTrans right-of-way corridor of State Route 94 from 1/4-mile north of Melody Road to 1/2 mile south of the Jamul Indian Village, Melody Road, and the frontage and driveways of other affected parcels.

Natural Investigations Company has performed this Phase I ESA in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Practice E 1527-13 and in accordance with the prevailing standard of care for completing such assessments in California at this time. Exceptions to, or deletions from, this practice are described in Section 10 of this report.

The 87-acre parcel has been used for at least 60 years as cattle pasture. The 4-acre parcel served as the Jamul fire station, but is now vacant with no improvements other than remnant pavement. The 10-acre parcel has a defunct orchard and irrigation system, as well as 2 wells and old pumping equipment. The surrounding land uses are as follows: to the south, the Rancho Jamul Ecological Reserve and the Hollenbeck Canyon Wildlife Area, and private rangeland; to the north, residential subdivisions and the town of Jamul; to the east, Highway 94, the new Jamul Fire Station, private estates (Peaceful Valley Ranch Estates), and hayfields; and to the west, private estates and smaller residences. The Jamul Indian Village (JIV) contains 2 pre-fabricated buildings that are used for tribal administrative purposes. Approximately 15 pre-fabricated homes have been removed from the Village. A community center was just constructed; a church and cemetery are contiguous to this center.

No environmental liens or value reductions were found in association with the Property. No indication of heavy industrial uses was detected from title review. The Property was not listed in any of the environmental databases queried. A review of physical setting sources and historical use information (topographic maps, aerial photography, fire insurance maps, city directories, and building permits) did not detect any indications of possible recognized environmental conditions within the Study Area. Site reconnaissance was performed on May 15, 2013; no indications of possible recognized environmental conditions were noted on the Property. On May 15, 2013, the environmental assessor met with Caltrans staff: no indications of possible recognized environmental conditions were uncovered.

There were a few minor data failures with the physical setting and historical information sources. However, a combination of other data sources was available such that no significant data gap existed, and the historical research objectives were achieved. There were no data gaps that significantly affected our ability to identify recognized environmental conditions associated with the property. Except for the limitations and exceptions discussed in Section 2.4, this Phase I ESA complies with the ASTM Standard 1527-13. No additional services beyond the scope of the ASTM Standard 1527-13 were conducted as part of this assessment.

The Study Area is located in a rural area and has historical development of rangeland, roadways, residences, tribal administrative buildings, an orchard, and a fire station. The only known historical usage of hazardous materials or petroleum products was that that was associated with the fueling station at the fire station, which was a permitted facility that was regularly inspected by the County.

One minimal, or *de minimis*, environmental condition exists pursuant to the ASTM standard:

- the Study Area has been subject to illegal dumping of residential garbage. Most of the visible material consists of household trash and abandoned automobile parts and household appliances. Note that

both the California Integrated Waste Management Board (CalRecycle) and the Upper San Luis Rey Community Services District are funding a project to remove such nuisance solid waste and prevent future illicit dumping.

It is Natural Investigations Company's opinion that there are no historical or current recognized environmental conditions in connection with the Study Area pursuant to the ASTM Practice E 1527-13. Records review, database searches, or interviews failed to identify any environmental conditions in connection with the Study Area. Therefore, no further site investigation is recommended by Natural Investigations Co.

Although the ASTM standard practice for Phase I ESA's considers lead paint an out-of-scope subject, California Department of Transportation (Caltrans) requested a discussion of the potential hazard of lead in construction/demolition materials for this project.

Historical lead emissions from automobiles are a recognized source of contamination in soils along heavily-used roadways (i.e., aerially deposited lead or ADL). Thus, surface and near-surface soils along such roadways have the potential to contain elevated concentrations of lead. Implementation of the project may require the excavation and export of soils from the project area; soil within, and adjacent to, the Caltrans rights-of-way usually contain ADL. According to Caltrans' requirements, prior to construction ADL levels must be determined in order to handle the soil appropriately. Caltrans has a variance with the DTSC that will allow the Department to keep soil with hazardous levels of ADL within the right-of-way depending on the level of contamination that is found.

Yellow traffic paint used prior to 1999 contained high concentrations of lead. Implementation of the project may require the removal of traffic stripe paint from the underlying asphalt concrete by grinding or sand blasting, which would create a paint waste stream. All traffic striping and traffic marking paints contain lead, but it is not known whether it is at hazardous levels or not. According to Caltrans' requirements, this paint waste must be sampled and analyzed prior to disposal. Disposal of removed traffic stripe paint materials is also dependent on the method utilized to remove these materials (i.e. focused stripe removal vs. pavement grinding).

According to Caltrans' requirements, no soil shall be disturbed or exported from the State right-of-way project area before an ADL study is completed. No paint striping shall be removed before a lead compliance plan is implemented. Cal/OSHA and Caltrans require a lead compliance plan when lead is known to be present. The potential presence of elevated lead concentrations requires sampling and analytical testing of any exported soil and any traffic paint materials to determine appropriate health and safety procedures and proper management and disposal practices. A project-specific Lead Compliance Plan will be required and must be prepared by a Certified Industrial Hygienist and properly implemented by the contractor. As specified in this plan, lead-containing materials must be sampled and analyzed prior to disposal. A dust control plan and health and safety plan should also be prepared and implemented to minimize worker exposure to lead and any other hazardous materials.

Two common hazards should also be noted: portions of the Study Area near the Willow Creek channel may be located within a 100-year or 500-year floodplain, and the region is prone to flash floods; and the Study Area contains dense, dry vegetation that may fuel wildfire, and the region is located within an area of moderate to high level of fire hazard.

This summary should only be read in conjunction with the full text of the report. The scope of work, significant assumptions, limitations, and exceptions should be understood prior to reading the site-specific information, findings, opinions, and conclusions. Except for any limitations and exceptions discussed in Section 2.4, this Phase I ESA complies with the ASTM Standard 1527-13. No additional services beyond the scope of the ASTM Standard 1527-13 were conducted as part of this assessment.

1. INTRODUCTION

1.1. PURPOSE

The ASTM (2013) defines the purpose of the Phase I ESA as quoted:

"The purpose of this practice is to define good commercial and customary practice in the United States of America for conducting an environmental site assessment of a parcel of commercial real estate with respect to the range of contaminants within the scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)(42 U.S.C. §9601) and petroleum products. As such, this practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability (hereinafter, the 'landowner liability protections,' or 'LLPs'): that is, the practice that constitutes 'all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice' as defined at 42 USC § 9601(35)(B)." (page 1, ASTM, 2013).

In 2002, the Small Business Liability Relief and Brownfields Revitalization Act was passed, and it directed the United States Environmental Protection Agency (USEPA) to promulgate a rule defining due diligence for compliance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This rule, which is generally referred to as All Appropriate Inquiry (AAI), was adopted in 2002; it states that ASTM E1527-13 complies with the USEPA requirements for AAI. In some cases the ASTM 1527-13 is more stringent than AAI.

1.2. DETAILED SCOPE OF SERVICES

The ASTM (2013) describes the general scope of services in the following excerpts:

"A Phase I Environmental Site Assessment shall have four components: records review; site reconnaissance; interviews; and report." (page 12, ASTM, 2013).

"In defining a standard of good commercial and customary practice for conducting an environmental site assessment of a parcel of a property, the goal of the processes established by this practice is to identify recognized environmental conditions. The term recognized environmental conditions means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies." (page 1, ASTM, 2013).

"The scope of this practice includes research and reporting requirements that support the user's ability to qualify for the LLPs. As such, sufficient documentation of all sources, records, and resources utilized in conducting the inquiry required by this practice must be provided in the written report." (page 2, ASTM, 2013).

The scope of services was limited to a qualitative evaluation of environmental conditions of the Study Area. The specific scope of services performed for this Phase I ESA included the following tasks:

- Records research, including review of title records (title report provided by user), historical aerial photography, topographic maps, fire insurance maps and municipal and county case files, where available
- Requisition and analysis of an environmental database query report from a reputable research company

- Site reconnaissance, including photographic documentation
- Interviews, where possible, with previous and current property owners and tenants
- Interaction with applicable municipal and state agency personnel to review available environmental records and permits
- Preparation and submittal of a Phase I ESA report summarizing the results of the records research, site reconnaissance, and interviews, the rendering of a professional opinion on any recognized environmental conditions and impacts upon the property, and the inclusion of all reference material.

The scope of services does not include other services that are not described in this report. Section 1.3 details significant assumptions, limitations, and exceptions to the performance of this Phase I ESA.

1.3. SIGNIFICANT ASSUMPTIONS, LIMITATIONS, AND EXCEPTIONS

ASTM Standard Practice E 1527-13 cites many assumptions, limitations, and exceptions in the performance of a Phase I ESA. Some of the most important are quoted in the following excerpts:

"This practice does not address whether requirements in addition to appropriate inquiry have been met in order to qualify for the LLPs (for example, the duties specified in 42 U.S.C. § 9607(b)(3)(a) and (b))." (page 1, ASTM, 2013).

"This practice does not address requirements of any state or local laws or of any federal laws other than the all appropriate inquiry provisions of the LLPs. Users are cautioned that federal, state, and local laws may impose environmental assessment obligations that are beyond the scope of this practice. Users should also be aware that there are likely to be other legal obligations with regard to hazardous substances or petroleum products discovered on property that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for non-compliance." (pages 1-2, ASTM, 2013).

"No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a property, and this practice recognizes reasonable limits of time and cost." (page 9, ASTM, 2013).

"Appropriate inquiry does not mean an exhaustive assessment of a clean property. There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of this practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an environmental site assessment and the reduction of uncertainty about unknown conditions resulting from additional information." (page 9, ASTM, 2013).

"Not every property will warrant the same level of assessment. Consistent with good commercial or customary practice, the appropriate level of environmental site assessment will be guided by the type of property subject to assessment, the expertise and risk tolerance of the user, and the information developed in the course of the inquiry" (page 10, ASTM, 2013).

"This practice does not include any testing or sampling of materials (for example, soil, water, air, building materials)." (page 12, ASTM, 2013).

"There may be environmental issues or conditions at a property that parties may wish to assess in connection with commercial real estate that are outside of the scope of this practice (the non-scope considerations). As noted by the legal analysis in Appendix X1 of this practice, some substances may be present on the property in quantities and under conditions that may lead to contamination of

the property or of nearby properties but are not included in CERCLA's definition of hazardous substances (42 U.S.C. § 9601(14)) or do not otherwise present potential CERCLA liability. In any case, they are beyond the scope of this practice." (page 21, ASTM, 2013).

"Whether or not a user elects to inquire into non-scope considerations in connection with this practice or any other environmental site assessment, no assessment of such non-scope considerations is required for appropriate inquiry as defined by this practice." (page 21, ASTM, 2013).

"There may be standards of protocols for assessment of potential hazards and conditions associated with non-scope conditions developed by governmental entities, professional organizations, or other private entities." (page 21, ASTM, 2013).

"Following are several non-scope considerations that persons may want to assess in connection with commercial real estate. No implication is intended as to the relative importance of inquiry into such non-scope considerations, and this list of non-scope considerations is not intended to be all-inclusive: asbestos-containing materials; radon; lead-based paint; lead in drinking water; wetlands; regulatory compliance; cultural and historical resources; industrial hygiene; health and safety; ecological resources; endangered species; indoor air quality; biological agents; and mold." (page 22, ASTM, 2013).

Natural Investigations Company, as an independent and impartial contractor, has completed this Phase I ESA in accordance with ASTM guidelines and in accordance with the prevailing standard of care for completing such assessments in California at this time. Natural Investigations Company shall not be subject to any express or implied warranties whatsoever. Phase I ESAs are non-comprehensive by nature and are unlikely to identify all environmental problems or eliminate all risk. This report is a qualitative assessment. Although risk can never be eliminated, more detailed and extensive investigations yield more information, which may help the User understand and better manage risks associated with the property. No warranty, either expressed or implied, is made. Land use, Site conditions, and other factors will change over time. This report should not be relied upon after **180 days** from the date of issuance, unless additional services are performed as defined in ASTM E 1527-13 - Section 4.7.

The property owner is solely responsible for notifying all governmental agencies, and the public at large, of the existence, release, treatment, or disposal of, any hazardous substance or petroleum product occurring on the Site, either before, during, or after Natural Investigation Company's services. Natural Investigation Company assumes no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury which results from pre-existing materials being encountered or being present on the Site, or from the discovery of such hazardous substances or petroleum products.

This report and other instruments or service are prepared and made available for the sole use of the User and their agents. The contents may not be used or relied upon by any other persons without the express written consent and authorization of the User.

1.4. SPECIAL TERMS AND CONDITIONS

There are no special terms or contractual conditions for this assessment.

1.5. INFORMATION RELIANCE

Information reliance is defined by ASTM as:

"An environmental professional is not required to verify independently the information provided but may rely on information provided unless he or she has actual knowledge that certain information is incorrect or unless it is obvious that certain information is incorrect based on other information obtained in the

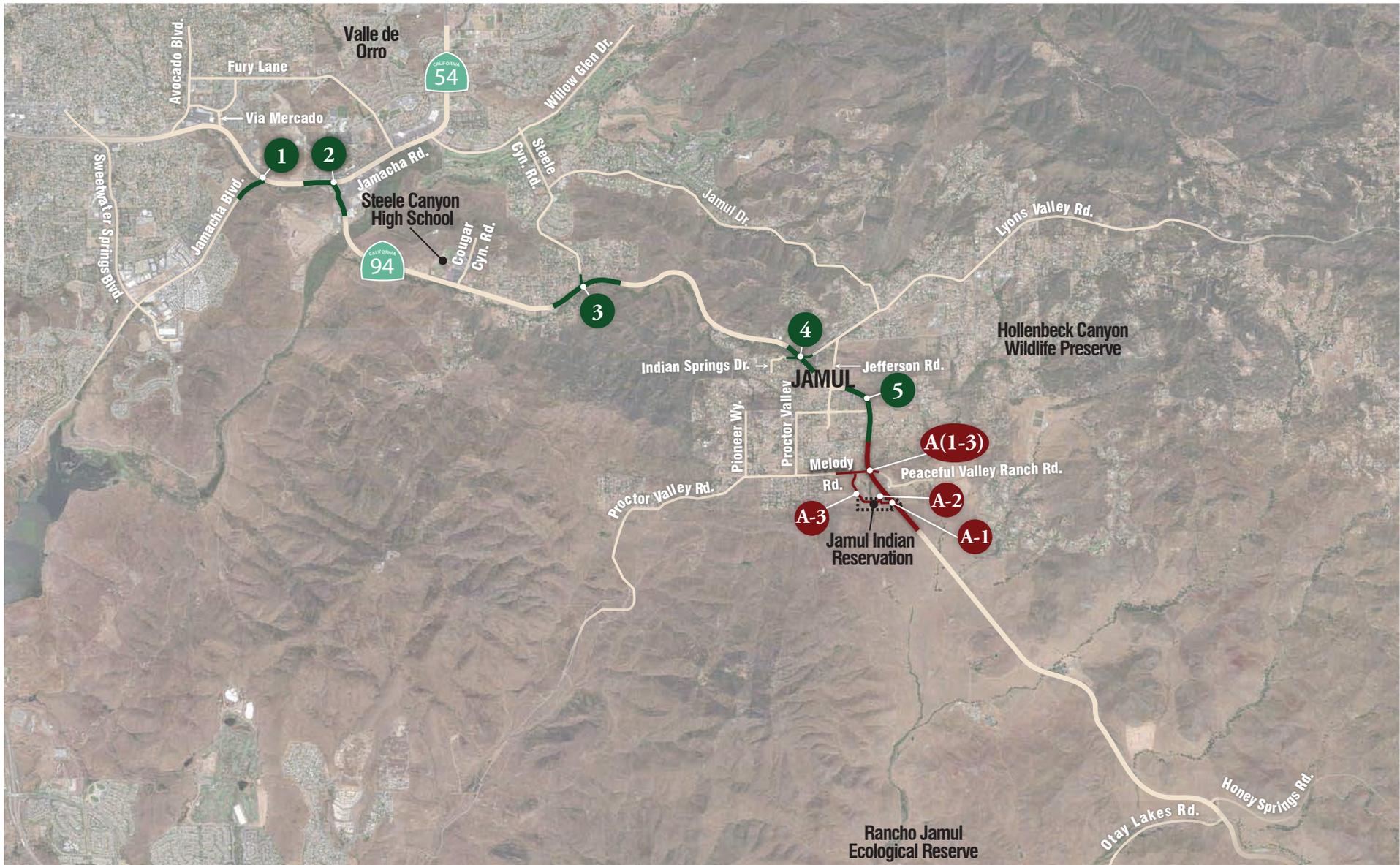
Phase I Environmental Site Assessment or otherwise actually known to the environmental professional." (page 12, ASTM, 2013).

This report is for the sole benefit and exclusive use of the User in accordance with the contract under which these services have been provided. It is possible that information exists beyond the scope of this assessment. Additional information, which was not found or available to Natural Investigations Company at the time of report preparation, may result in a modification of the conclusions and recommendations presented herein. Any reliance on this report by third parties shall be at their own risk.

2. SITE DESCRIPTION

2.1. LOCATION AND LEGAL DESCRIPTION

The study area is located approximately 1 mile south of Jamul, California (Figure 2.1). The SR-94 access road improvements would tie into a new access road to the Jamul Indian Village on either: (1) Reservation Road, which connects the JIV to SR-94; (2) Daisy Drive on the adjacent 4-acre parcel (north of the JIV) contiguous with the JIV and SR-94; or (3) via a new roadway constructed from Melody Road south to the JIV. For the purposes of this assessment, all access options were combined into one study area (Figure 2.1). The focal properties of this assessment are portions of 3 parcels—an 87-acre parcel (APN 597-060-05-00), 4-acre parcel (APN 597-060-04-00), and a 10-acre parcel (APN 597-042-13-00)—as well as the affected portions of the CalTrans right-of-way corridor of State Route 94 from 1/4-mile north of Melody Road to 1/2 mile south of the Jamul Indian Village, Melody Road, and the frontage and driveways of other affected parcels, as shown in Figures 3A through 3E.



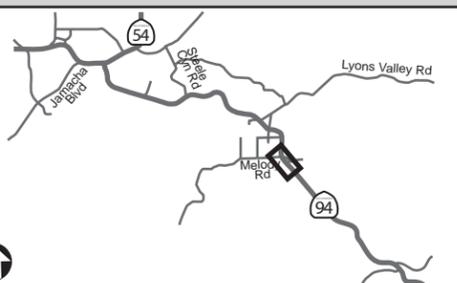
LEGEND

- # Intersection Improvement Options
- # Access Improvements Options



NOT TO SCALE

FIGURE 2-1
Vicinity Map
SR 94 Improvements



LEGEND

- Proposed Culvert Widening or Replacement
- Proposed Street Improvement
- Proposed Outside Mainline Shoulder Widening
- Proposed Outside Lane Widening
- Proposed Retaining Wall
- Proposed Grading Limits (cut)
- Proposed Grading Limits (fill)
- Existing Right-of-way
- Existing Irrevocable Offer of Dedication
- Proposed Bioswale
- Proposed Acquisition Area
- Proposed Temporary Easement
- Proposed Restriping
- Property Boundary

LAND USE LEGEND

SF	Single Family Residential
Comm	Commercial
Ch	Church
Sc	School
PW	Public Works Facility
Of	Office
FS	Fire Station
Ag	Agricultural

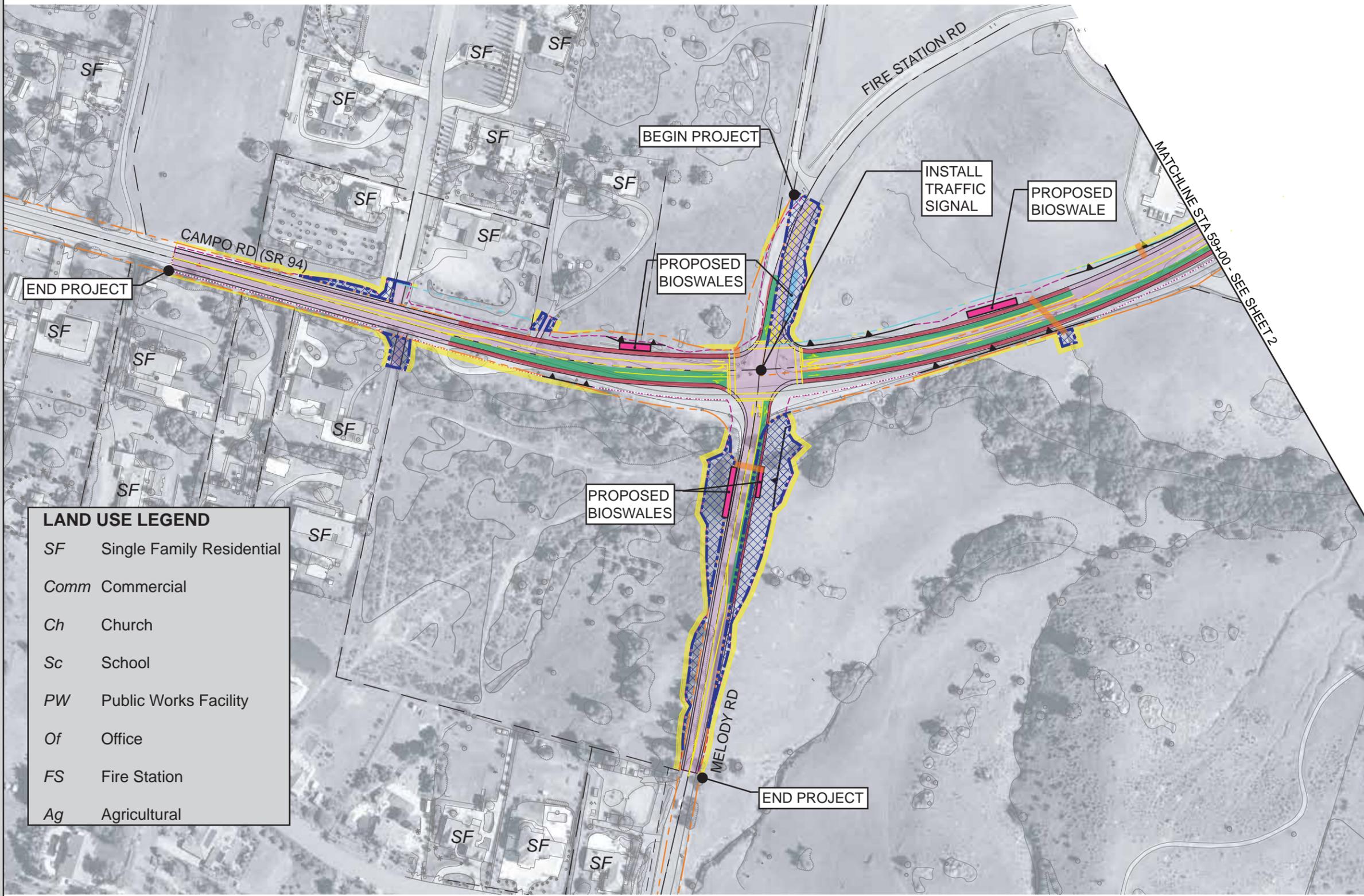
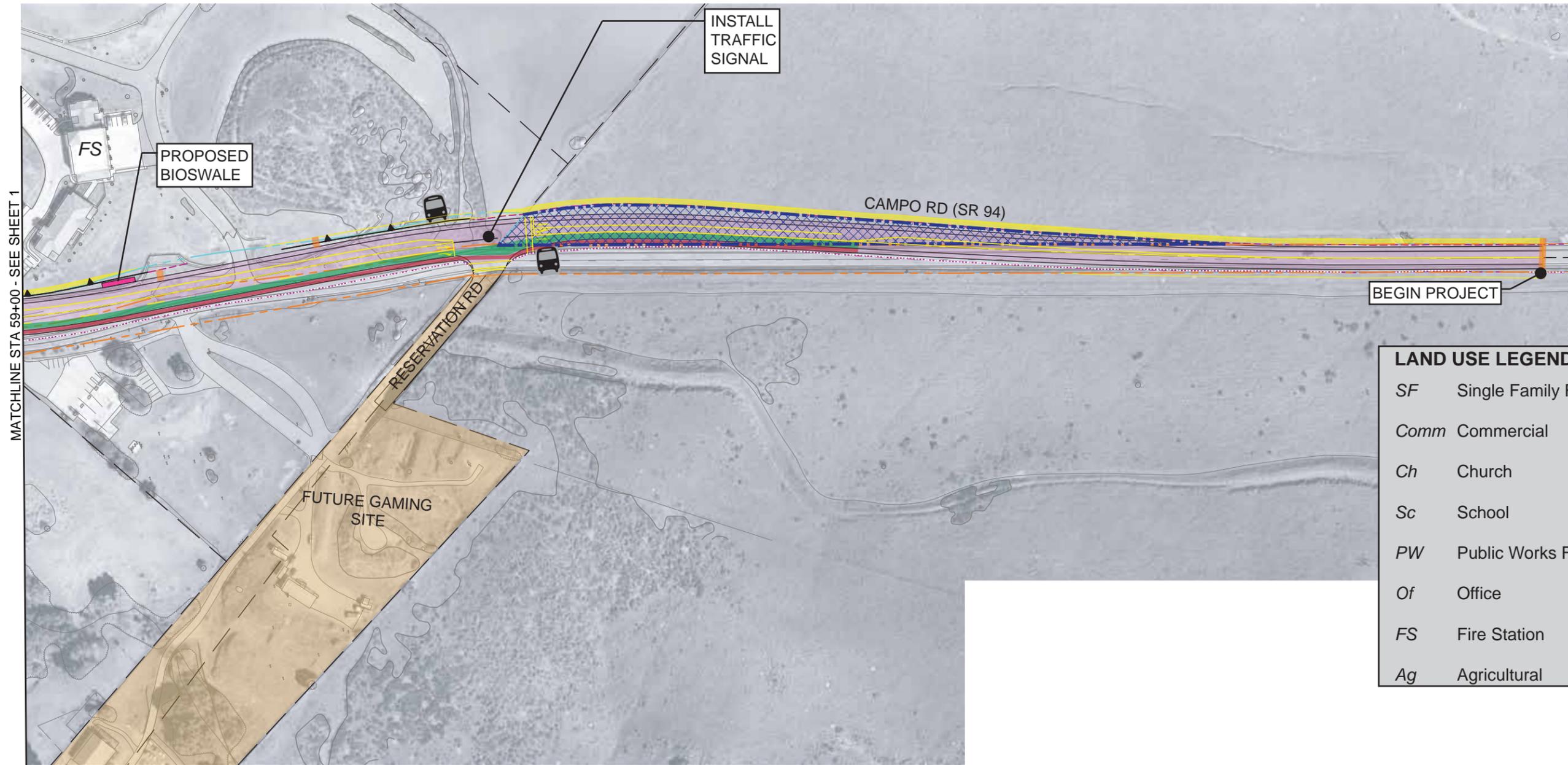


FIGURE 3A
Unique Design Features of Access Road:
Alternative 1 Sheet 1
SR 94 Improvements



LAND USE LEGEND	
SF	Single Family Residential
Comm	Commercial
Ch	Church
Sc	School
PW	Public Works Facility
Of	Office
FS	Fire Station
Ag	Agricultural

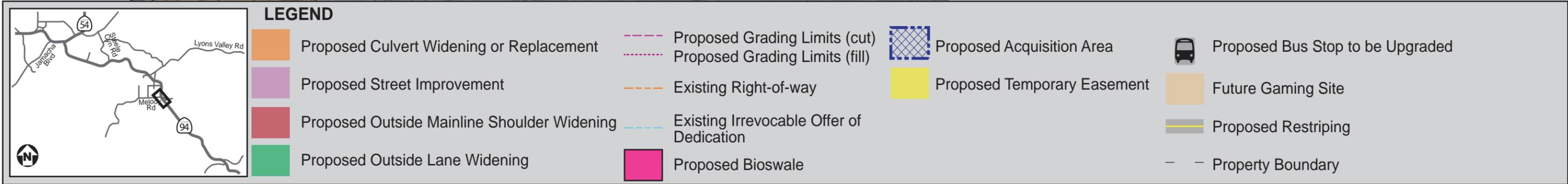
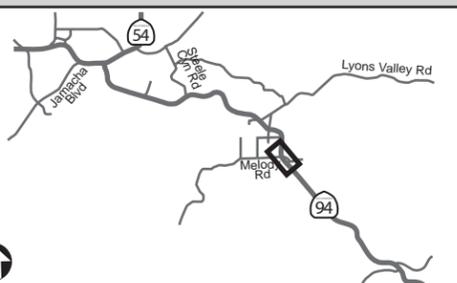


FIGURE 3A
Unique Design Features of Access Road:
Alternative 1, Sheet 2
SR 94 Improvements



LEGEND

- Proposed Culvert Widening or Replacement
- Proposed Street Improvement
- Proposed Outside Mainline Shoulder Widening
- Proposed Outside Lane Widening
- Proposed Retaining Wall
- Proposed Grading Limits (cut)
- Proposed Grading Limits (fill)
- Existing Right-of-way
- Existing Irrevocable Offer of Dedication
- Proposed Bioswale
- Proposed Acquisition Area
- Proposed Restriping
- Property Boundary

LAND USE LEGEND

SF	Single Family Residential
Comm	Commercial
Ch	Church
Sc	School
PW	Public Works Facility
Of	Office
FS	Fire Station
Ag	Agricultural

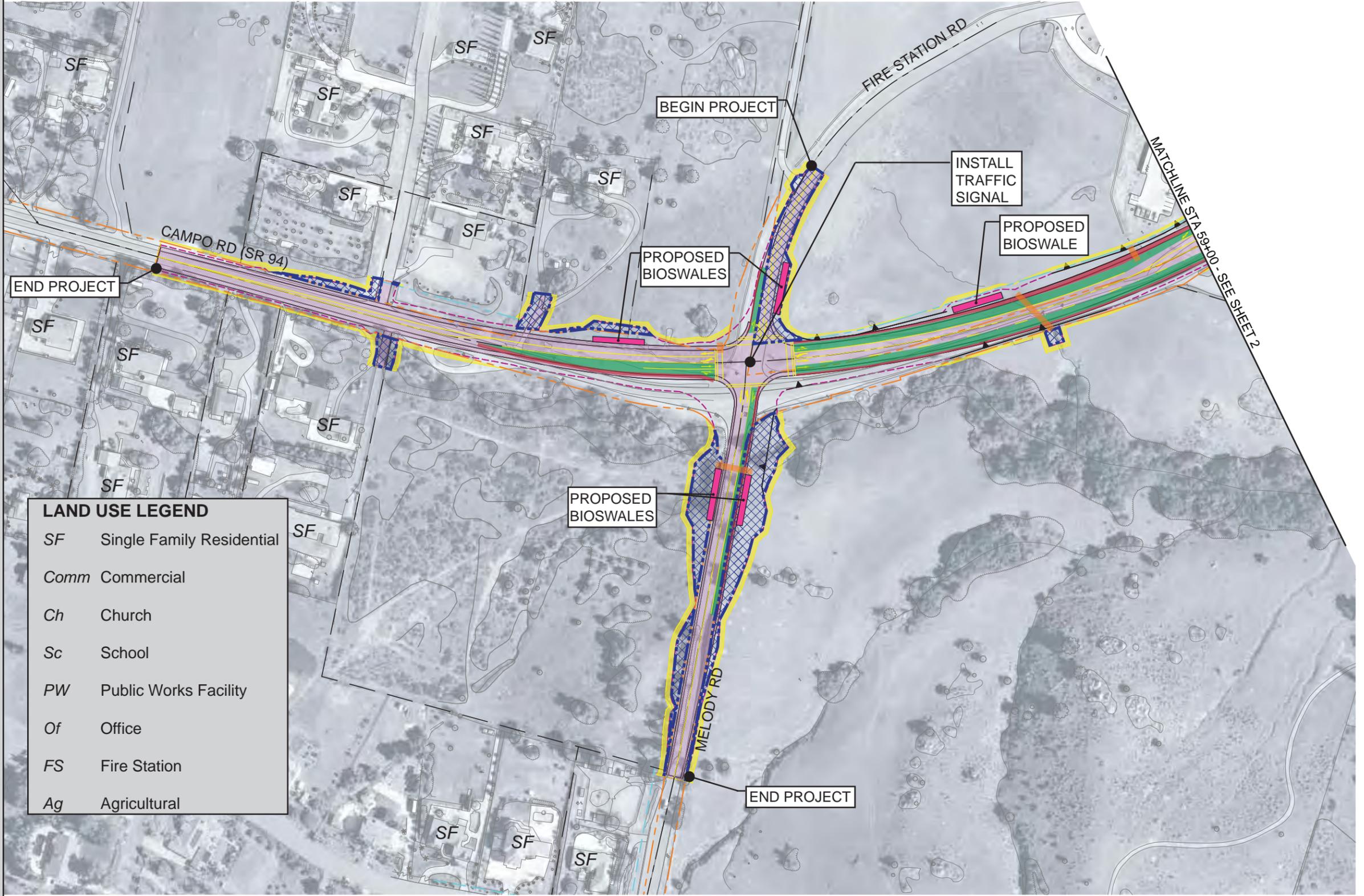


FIGURE 3B
Unique Design Features of Access Road:
Alternative 2, Option 1, Sheet 1
SR 94 Improvements

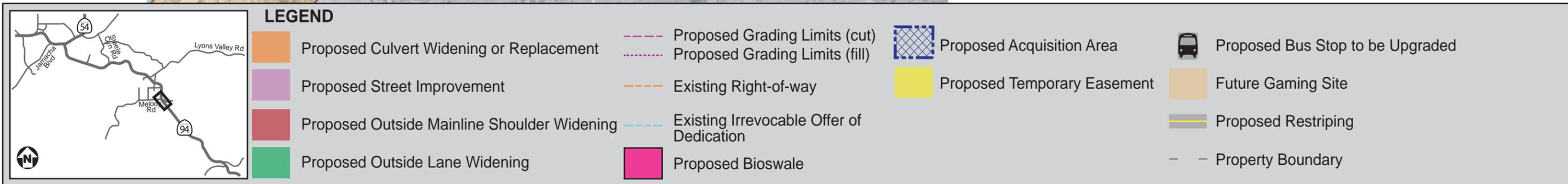
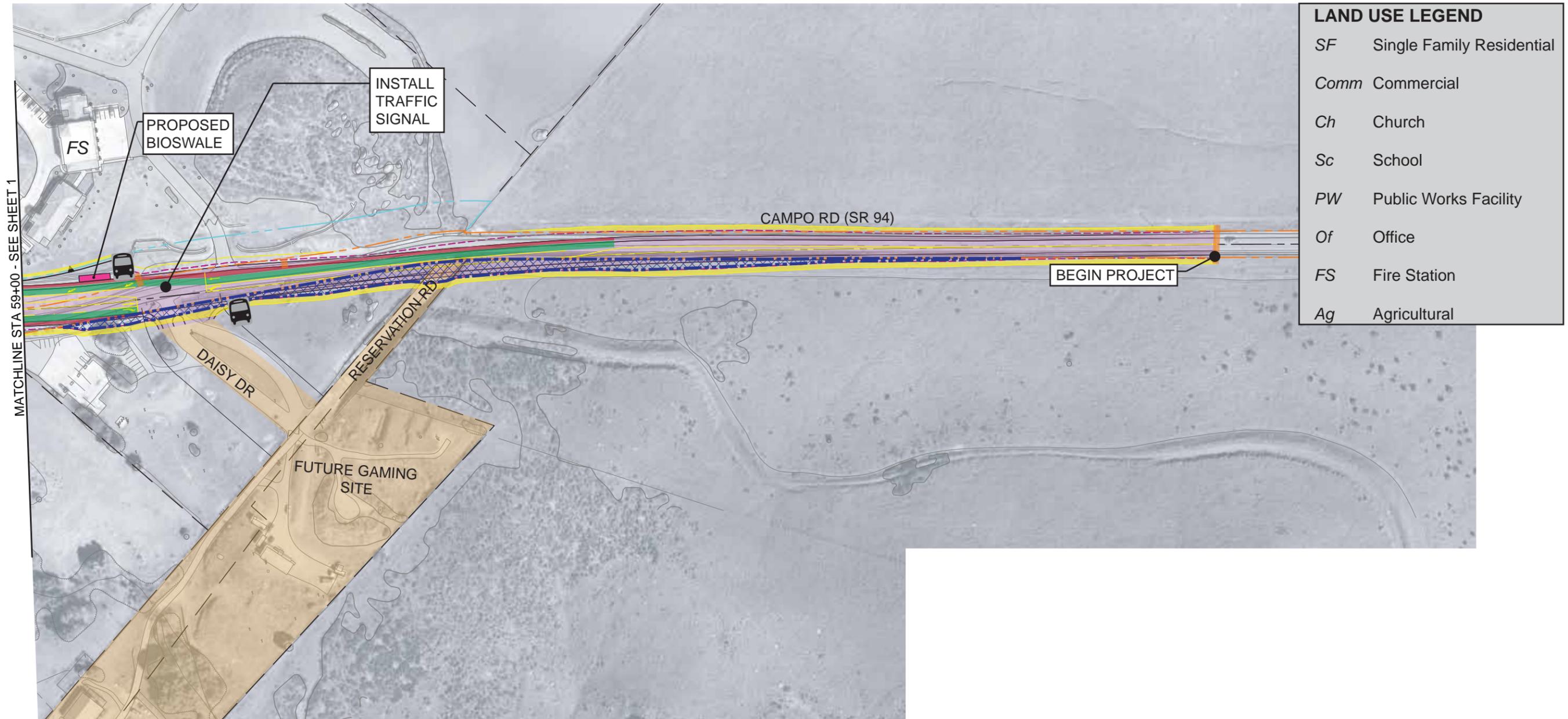
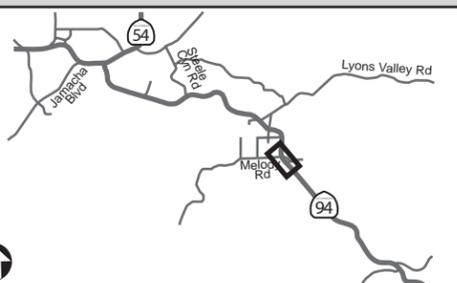


FIGURE 3B
Unique Design Features of Access Road:
Alternative 2, Option 1, Sheet 2
 SR 94 Improvements



LEGEND

- Proposed Culvert Widening or Replacement
- Proposed Street Improvement
- Proposed Outside Mainline Shoulder Widening
- Proposed Outside Lane Widening
- Proposed Retaining Wall
- Proposed Grading Limits (cut)
- Proposed Grading Limits (fill)
- Existing Right-of-way
- Existing Irrevocable Offer of Dedication
- Proposed Bioswale
- Proposed Acquisition Area
- Proposed Temporary Easement
- Proposed Restriping
- Property Boundary

LAND USE LEGEND

SF	Single Family Residential
Comm	Commercial
Ch	Church
Sc	School
PW	Public Works Facility
Of	Office
FS	Fire Station
Ag	Agricultural

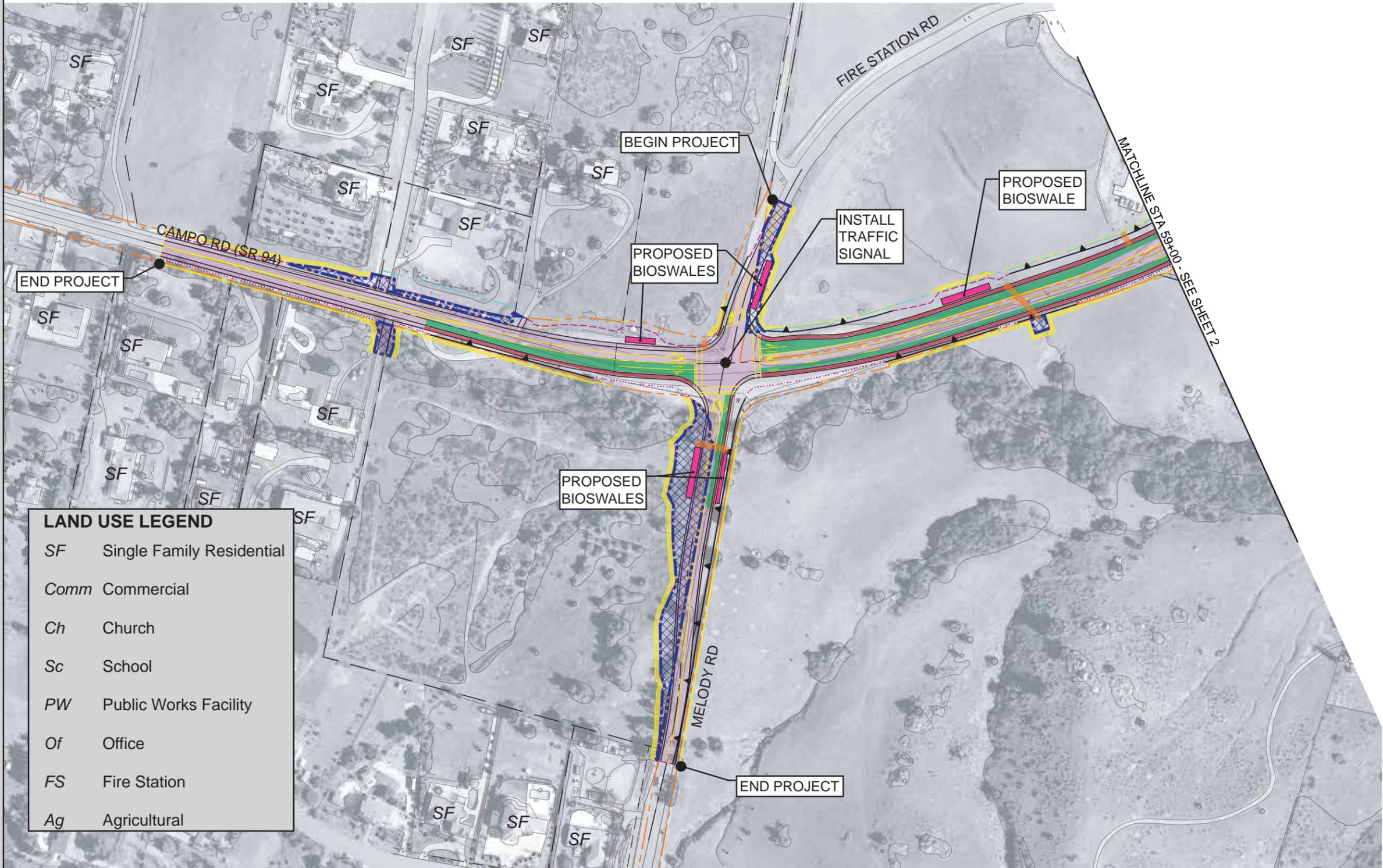
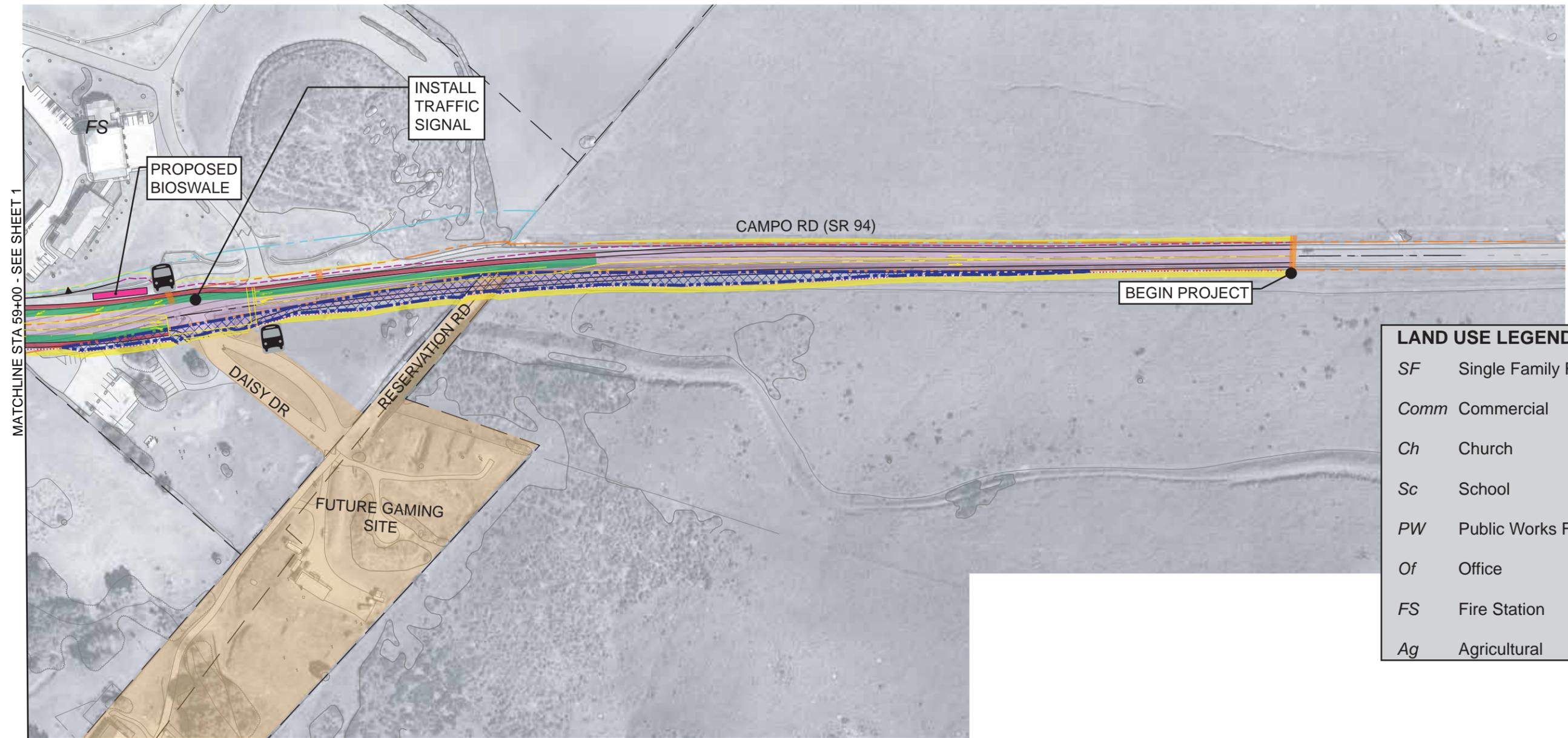


FIGURE 3C
Unique Design Features of Access Road:
Alternative 2, Option 2, Sheet 1
 SR 94 Improvements



LAND USE LEGEND	
SF	Single Family Residential
Comm	Commercial
Ch	Church
Sc	School
PW	Public Works Facility
Of	Office
FS	Fire Station
Ag	Agricultural

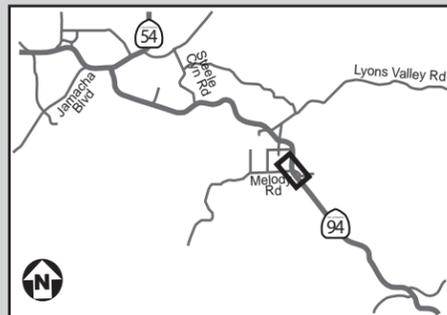
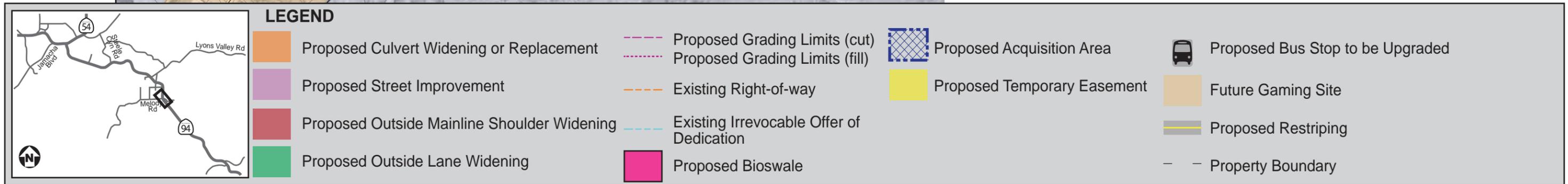
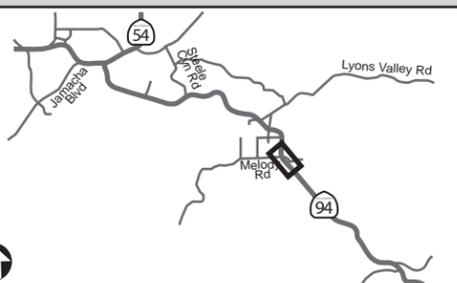
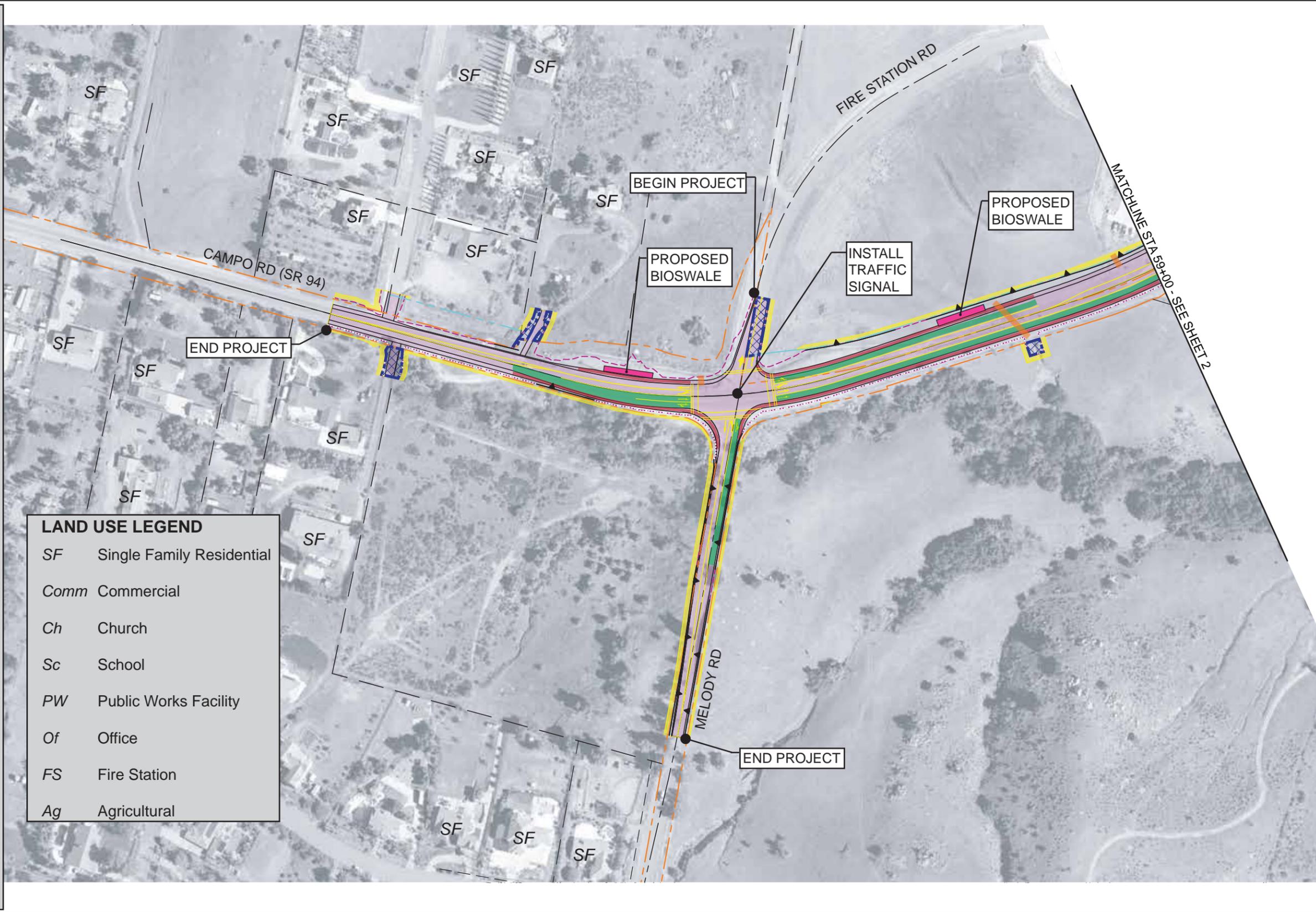


FIGURE 3C
Unique Design Features of Access Road:
Alternative 2, Option 2, Sheet 2
 SR 94 Improvements



LEGEND

- Proposed Culvert Widening or Replacement
- Proposed Street Improvement
- Proposed Outside Mainline Shoulder Widening
- Proposed Outside Lane Widening
- Proposed Retaining Wall
- Proposed Grading Limits (cut)
- Proposed Grading Limits (fill)
- Existing Right-of-way
- Existing Irrevocable Offer of Dedication
- Proposed Bioswale
- Proposed Acquisition Area
- Proposed Temporary Easement
- Proposed Restriping
- Property Boundary

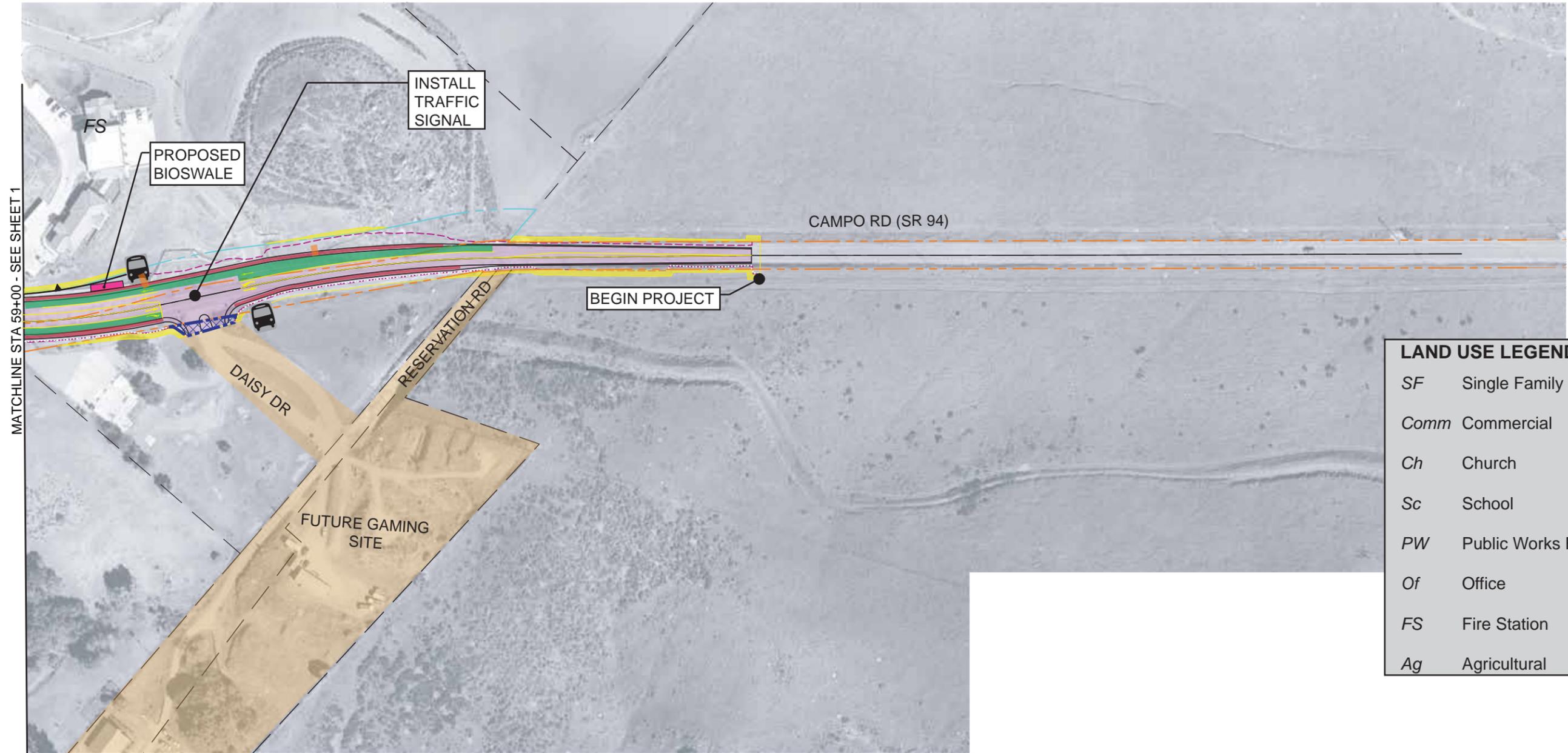


LAND USE LEGEND

SF	Single Family Residential
Comm	Commercial
Ch	Church
Sc	School
PW	Public Works Facility
Of	Office
FS	Fire Station
Ag	Agricultural



FIGURE 3D
Unique Design Features of Access Road:
Alternative 2, Option 3, Sheet 1
SR 94 Improvements



LAND USE LEGEND	
SF	Single Family Residential
Comm	Commercial
Ch	Church
Sc	School
PW	Public Works Facility
Of	Office
FS	Fire Station
Ag	Agricultural

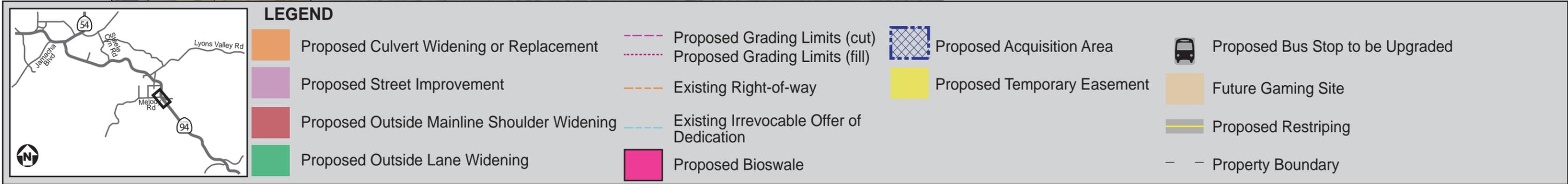
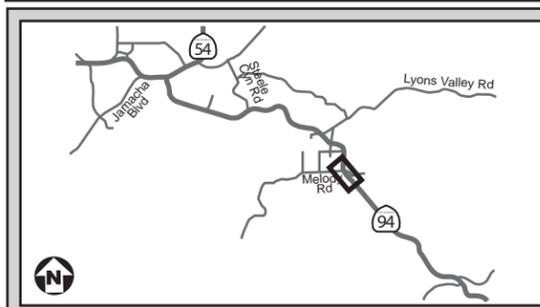


FIGURE 3D
Unique Design Features of Access Road:
Alternative 2, Option 3, Sheet 2
 SR 94 Improvements



LEGEND

- Proposed Culvert Widening or Replacement
- Proposed Street Improvement
- Proposed Outside Mainline Shoulder Widening
- Proposed Outside Lane Widening
- Proposed Retaining Wall
- Proposed Grading Limits (cut)
- Proposed Grading Limits (fill)
- Existing Right-of-way
- Existing Irrevocable Offer of Dedication
- Proposed Bioswale
- Proposed Acquisition Area
- Proposed Temporary Easement
- Proposed Restriping
- Property Boundary

LAND USE LEGEND	
SF	Single Family Residential
Comm	Commercial
Ch	Church
Sc	School
PW	Public Works Facility
Of	Office
FS	Fire Station
Ag	Agricultural

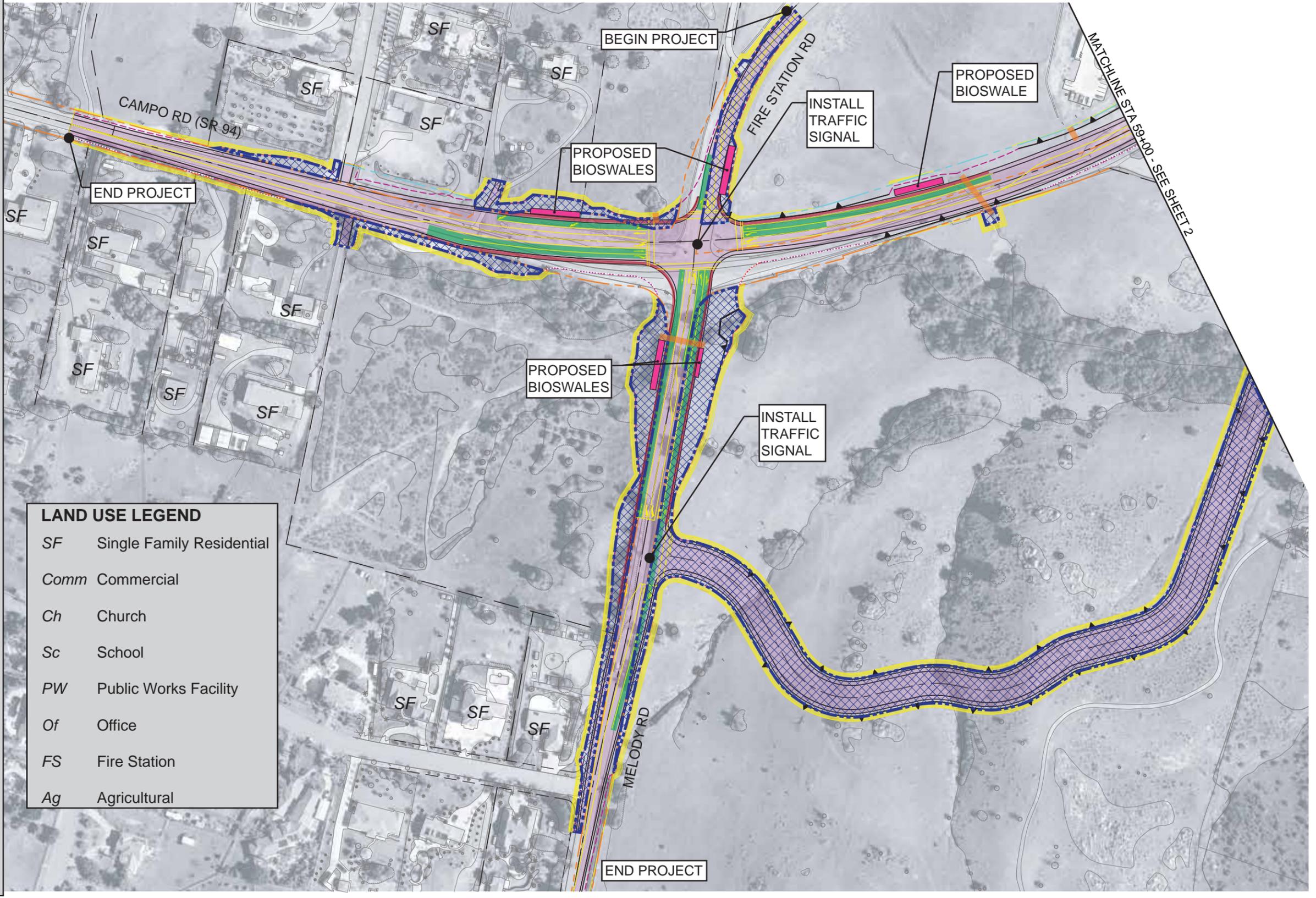
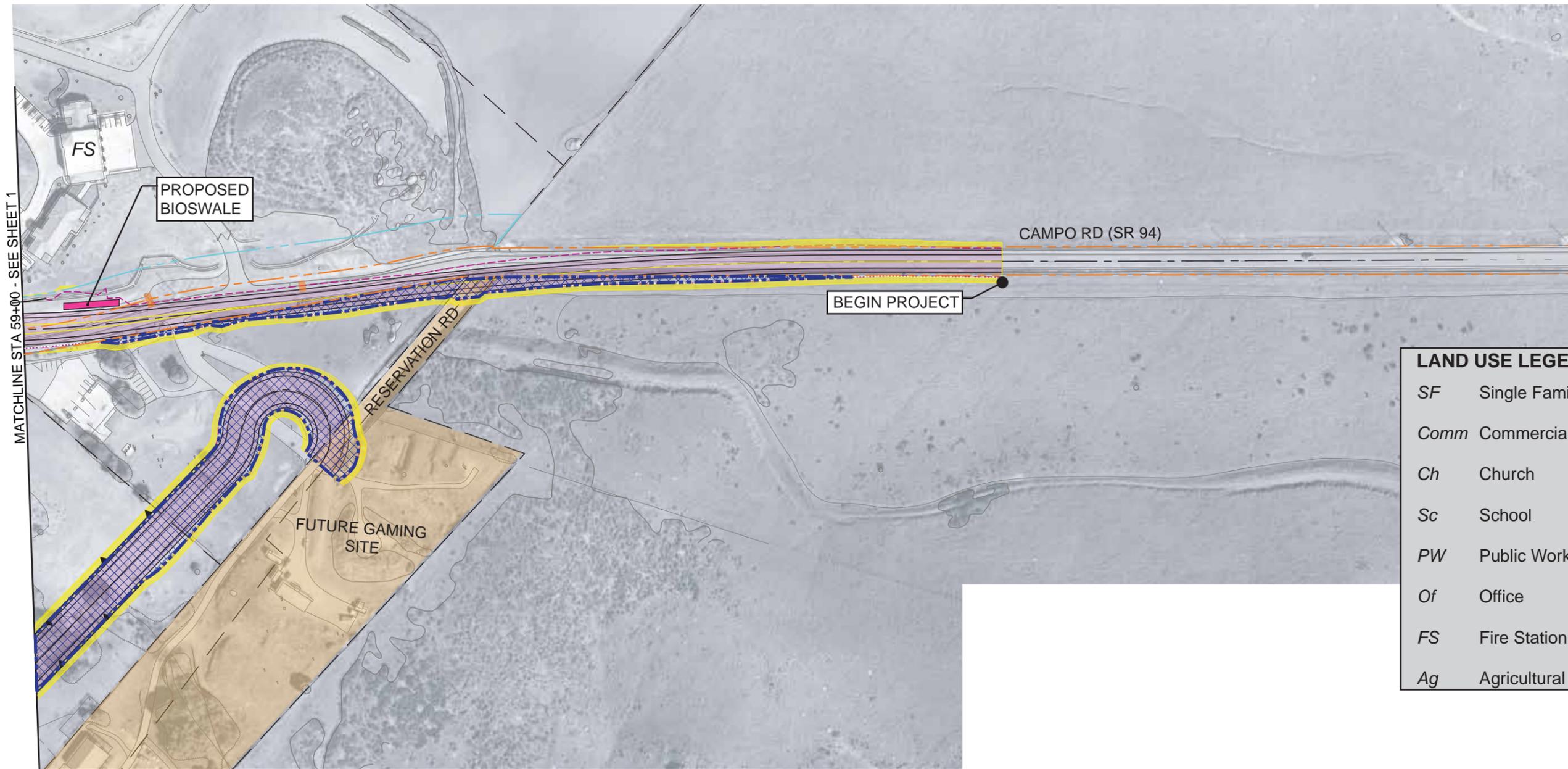


FIGURE 3E
Unique Design Features of Access Road:
Alternative 3 Sheet 1
SR 94 Improvements



LAND USE LEGEND	
SF	Single Family Residential
Comm	Commercial
Ch	Church
Sc	School
PW	Public Works Facility
Of	Office
FS	Fire Station
Ag	Agricultural

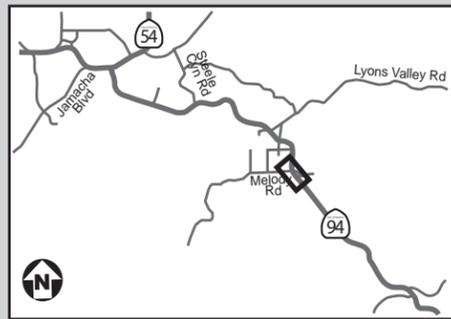
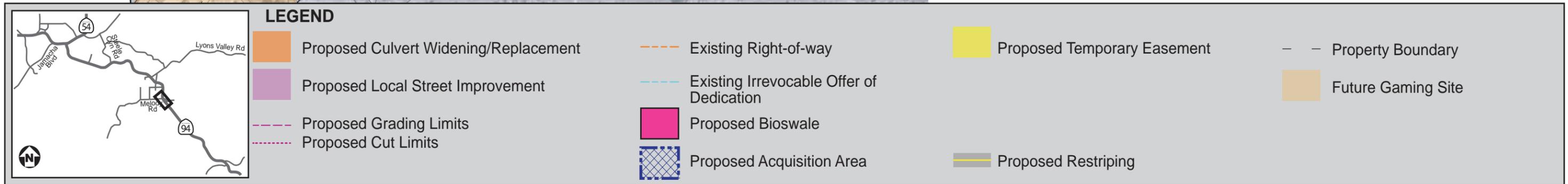


FIGURE 3E
Unique Design Features of Access Road:
Alternative 3 Sheet 2
SR 94 Improvements

2.2. SITE AND VICINITY GENERAL CHARACTERISTICS

The Study Area is located within the Peninsular Ranges geographic subregion, which is contained within the Southwestern geographic subdivision of the larger California Floristic Province (Hickman 1993). The region is in climate Zone 21 – “Ocean-influenced southern California”, characterized by infrequent frost, with mild to hot, dry summers and mild, wet winters moderated by marine air influx (Hickman, 1993; Brenzel, 2001). The topography of the Study Area is variable and slopes generally to the south. The elevation ranges from approximately 840 feet to 1,120 feet above mean sea level. The general direction of surface runoff in the Study Area is to the south via Willow Creek, an intermittent drainage tributary to Jamul Creek. Surrounding parcels consist of a combination of residences on lots several acres in size, rangeland, or lands in their natural state. Dirt roads serve as fire breaks. Jamul is a residential rural community, which serves as a “bedroom community” to the greater metropolitan San Diego area and also includes ranching and cattle raising.

2.3. CURRENT USE OF THE STUDY AREA AND IMPROVEMENTS

The 4-acre parcel and the 10-acre parcel are not currently in active use and existing improvements have been removed or abandoned. The 87-acre parcel is used as cattle pasture. Weeds and tall grass appear to have been periodically mowed or cut back. The 87-acre parcel has been used for at least 60 years as cattle pasture. The 4-acre parcel served as the Jamul fire station, but is now vacant with no improvements other than remnant pavement. The 10-acre parcel has a defunct orchard and irrigation system, as well as 2 wells and old pumping equipment.

2.4. CURRENT USES OF ADJOINING PROPERTIES

The surrounding land uses are as follows: to the south, the Jamul Indian Village (JIV), Rancho Jamul Ecological Reserve and the Hollenbeck Canyon Wildlife Area, and private rangeland; to the north, residential subdivisions and the town of Jamul; to the east, Highway 94, the new Jamul Fire Station, private estates (Peaceful Valley Ranch Estates), and hayfields; and to the west, private estates and smaller residences.

The Jamul Indian Village is used for administrative purposes, and also a church, cemetery, and community center. The Jamul Indian Village contains 2 pre-fabricated buildings that are used for tribal administrative purposes. Approximately 15 pre-fabricated homes have been removed from the Village. A community center was just constructed.

3. USER-PROVIDED INFORMATION

The “User” is defined as the party seeking to use Practice E 1527 to complete an environmental site assessment of the property. A user may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager.

In the case of this assessment, the User is the project proponent, Jamul Indian Village, its consultants, such as Environmental Data Systems Inc., and the lead CEQA agency, Caltrans.

3.1. USER’S RESPONSIBILITIES

User’s responsibilities are defined by the ASTM E 1527-13 standard, and include the following, as quoted:

“Any environmental liens or activity and use limitations so identified shall be reported to the environmental professional conducting a Phase I Environmental Site Assessment. Unless added by a change in the scope of work to be performed by the environmental professional, this practice does not impose on the environmental professional the responsibility to undertake a review of recorded land title records and judicial records for environmental liens or activity and use limitations.” (p. 11, ASTM, 2013)

“If the user is aware of any specialized knowledge or experience that is material to recognized environmental conditions in connection with the property, it is the user’s responsibility to communicate any information based on such specialized knowledge or experience to the environmental professional.” (p. 11, ASTM, 2013)

“The user should try to identify an explanation for a lower price which does not reasonable reflect fair market value if the property were not contaminated, and make a written record of such explanation.” (p. 11, ASTM, 2013)

“If the user is aware of any commonly known or reasonably ascertainable information within the local community about the property that is material to recognized environmental conditions in connection with the property, it is the user’s responsibility to communicate such information to the environmental professional.” (p. 11, ASTM, 2013)

“Either the user shall make known to the environmental professional the reason why the user wants to have the Phase I Environmental Site Assessment performed or, if the user does not identify the purpose of the Phase I Environmental Site Assessment, the environmental professional shall assume the purpose is to qualify for an LLP to CERCLA liability and state this in the report.” (page 11, ASTM, 2013).

In order to exert an LLP, the User must satisfy a number of statutory requirements that are generally referred to as Continuing Obligations, which are outside the Scope of Services of the Phase I ESA. Examples of Continuing Obligations include providing legally required notices stopping continuing releases and complying with land use restrictions. Failure to comply with these and other statutory post-acquisition requirements will jeopardize liability protection. It is the responsibility of the User to comply with the Continuing Obligations requirements of ASTM E1527-13 and All Appropriate Inquiry.

3.2. REQUESTED DOCUMENTS AND INFORMATION

The following documents and information were requested of Caltrans on May 16, 2013:

- Previous environmental site assessments or environmental compliance audit reports
- Environmental permits or hazardous waste generator notices/reports
- Registrations for aboveground or underground storage tanks
- Location of septic systems, oil wells, or water wells
- Registrations for underground injection systems
- Material Safety Data Sheets; Community Right to Know Plans or Safety, Preparedness and prevention Plans; Spill Protection, Countermeasures and Control Plans
- Hazardous Material Business Plans
- Geotechnical studies or hydrological studies
- Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the Property or relating to environmental liens encumbering the Property.
- Risk assessments
- Recorded Activity Use Limitations
- Proceedings regarding hazardous substances and petroleum products including any pending, threatened or past: litigation; administrative proceedings; or notices from any governmental entity regarding possible violations of environmental laws or other possible liability related to hazardous substances or petroleum products.

No documents specific to the Study Area were provided in response to Natural Investigations' information request. Documents were either provided in an earlier version of this assessment, or they were not available or they did not exist / did not apply to the Study Area.

3.3. TITLE RECORDS

No title reports were provided to Natural Investigations Co. Surrounding parcel information is listed in Table 3-1, according to the County Assessor database. No indication of heavy industrial uses was detected from title review.

A title report was not provided by the User. Title records of the Study Area were previously searched by Dr. Graening on 4 May 2010 at the County of San Diego Assessor's Office and Recorder's Office. An attempt was made to build the chain of title back at least 50 years from the present, with focus upon the names of entities in deeds and leases that might indicate industrial uses, and any statement of reduced value or liens on the title, especially environmental protection liens recorded pursuant to CERCLA. No indication of industrial uses was detected from chain of title review. The chain of title for the 10-acre parcel (APN 597-04-213) is typical for the entire Study Area (Table 1), and documents ownership by families for non-industrial uses.

Table 3-1. Chain of Title for 10-acre parcel (APN 597-04-213)

Grantor Grantee	Deed Type	Document Type
Sacco Adolph & Dorothy and Louis Dolores Lakes Resort Kean Arqevitz Calif. LLC	Grant Deed	2000
Nicholas Pellegrino Sacco et ux	Grant Deed	1989
APN changed to 597-040-99-00		1989
Unknown APN change in 1950s-1960s		unknown

3.4. ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

An environmental lien is a charge, security, or encumbrance upon the title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon the property. No environmental liens or activity and use limitations were made aware to Natural Investigations Company. No evidence of environmental liens was identified during the title review, interview process, or records review.

3.5. SPECIALIZED KNOWLEDGE OR ACTUAL KNOWLEDGE

No specialized knowledge or actual knowledge that is material to recognized environmental conditions in connection with the Study Area was provided by the User to Natural Investigations Company.

The following environmental assessments analyzed parcels that included the entirety of, or portions of, the Study Area (presented in Appendix 15.1.2).

Level I Survey – 2002. Prepared by ESA, Inc.

A Level I Survey was conducted for the Jamul Indian Village project area in 2000 by ESA Inc. for Jamul Indian Village Environmental Assessment (BIA 2001), and updated by Analytical Environmental Services Inc. in 2002 for the Jamul Indian Village Environmental Impact Statement (BIA 2003). These previous assessment areas consisted of the 87-acre parcel, the 4-acre parcel, the 10-acre parcel, and the Jamul Indian Village. The surveys included a contaminant survey checklist, field reconnaissances,

and database queries by EDR, in accordance with the ASTM Standard Practice for Environmental Site Assessments E 1527-00 and the Bureau of Indian Affairs guidelines. Existing hazardous materials usage was reported as follows:

- Minor quantities of household debris (consisting of paper refuse, glass bottles, aluminum cans, etc.) were observed to be scattered along the eastern edge of the project area (along Highway 94), at the northern end of the project area (along Melody Road), and around the southern end of the project area (along the un-named dirt road near the fire station, residential area and cemetery). Such trash is typical of vacant land located near major roadways. Discarded chemical products or drums were not observed on the subject Study Area.
- Each of the 15 residential structures [within the Jamul Indian Village] has a five-hundred-gallon propane tank associated with it (BIA 2003).

The report concluded that no recognized environmental conditions existed at the site other than *de minimis* (i.e., insignificant) conditions such as roadside litter. No further investigation was recommended.

Level I Hazardous Materials Assessment – 2007. Prepared by Natural Investigations Co.

In 2007, a Level I hazardous materials assessment was conducted by Natural Investigations Co. (2007) of the majority of the current Study Area. The hazards/hazardous materials assessment consisted of a field reconnaissance, database queries, and impact analysis. The field survey detected no significant environmental conditions other than *de minimis* presence of trash. Database searches produced no reported sites within the project area or immediate vicinity, except licensed use of fuel storage tanks by the Jamul fire station and household propane usage.

Level I Hazardous Materials Assessment – 2009. Prepared by Natural Investigations Co.

A follow-up Level I hazardous materials assessment was conducted for the proposed project by Natural Investigations Co. in 2009. This assessment included a database query and field reconnaissance to update previous assessments, and to survey areas that were not previously surveyed. Since the previous survey was completed, the homes and buildings on the JIV have been removed, and the fire station on the 4-acre parcel was removed and relocated across SR-94, and roadway improvements were made on the JIV and the 4-acre parcel.

Phase I Environmental Site Assessment for the Jamul Gaming Project, San Diego Co., CA, 2010. Prepared for Environmental Data Systems Inc. & Jamul Indian Village. Prepared by Natural Investigations Co.

In 2010, a Phase I ESA was conducted by Natural Investigations Co. of the current Study Area, but not the Jamul Indian Village itself. Records review, database searches, and interviews failed to identify any environmental conditions in connection with the Study Area other than *de minimis* disposal of household solid waste onto the Study Area. The assessment concluded that no further site investigation was warranted.

Phase I Environmental Site Assessment for the Jamul Gaming Project and Access Project, San Diego Co., CA, 2012. Prepared for Environmental Data Systems Inc. & Jamul Indian Village. Prepared by Natural Investigations Co.

In 2012, a Phase I ESA was conducted by Natural Investigations Co. of the current Study Area, including the Jamul Indian Village itself. Records review, database searches, and interviews failed to identify any environmental conditions in connection with the Study Area other than *de minimis* disposal of household solid waste onto the Study Area. The assessment concluded that no further site investigation was warranted.

These documents are incorporated by reference.

3.6. VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

No valuation reductions for environmental issues were made aware to Natural Investigations Company. No valuation reductions were identified during the interview process or by the title review.

3.7. OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

The 87-acre parcel, and the 10-acre parcel are owned by Lakes Entertainment, LLC. The Jamul Indian Village and the 4-acre parcel are owned by the Jamul Indian Village. The owner of the road rights-of-way is either Caltrans or County of San Diego.

3.8. REASON FOR PERFORMING PHASE I ESA

Natural Investigations Company performed this Phase I ESA at the request of Environmental Data Systems, Inc. This assessment was performed in support of the requirements of the California Environmental Quality Act and the National Environmental Policy Act as they apply to the proposed access improvement project and the accompanying environmental impact reports and statement. Specifically, this Phase I ESA is intended to be used to evaluate the hazards and hazardous materials setting in the Study Area, determine potential impacts of hazards and hazardous materials upon the proposed project, and identify potential mitigation measures to reduce negative impacts of hazardous materials to a less-than-significant level.

4. RECORDS REVIEW

The purpose of the records review is to obtain and review records that will help identify recognized environmental conditions in connection with the property.

4.1. STANDARD ENVIRONMENTAL RECORD SOURCES

As part of this assessment, Natural Investigations Company retained the services of Environmental Data Resources, Incorporated (EDR), which queries and maintains comprehensive environmental databases and historical information, including proprietary databases, aerial photography, topographic maps, Sanborn Maps, and city directories. EDR's Phase I ESA standard package - "Radius Map with GeoCheck" was ordered and performed on April 18, 2013. In this report, EDR presents the results of searches of all reasonably ascertainable environmental databases (federal, state, local, and private) for records of potential environmental impacts of the Property and vicinity. EDR performed these database searches within the prescribed radii of ASTM Practice E 1527-13 (ASTM, 2013). The databases queried by EDR included the following:

Federal ASTM Standard and Supplemental – National Priority List (NPL); proposed NPL; Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS); CERCLIS No Further Remedial Action Planned; Corrective Action Report; Resource Conservation and Recovery Act (RCRA) Information; RCRA Large Quantity Generator; Emergency Response Notification System; Superfund Consent Decrees; Records of Decision; NPL Deletions, Hazardous Materials Information Reporting System; Material Licensing Tracking System; Mines Master Index File; Federal Superfund Liens; PCB Activity Database System; Department of Defense Sites; Indian Reservations; Uranium Mill Tailings Sites; Engineering Controls Sites List; Open Dump Inventory; Formerly Used Defense Sites; RCRA Administrative Action Tracking System; Toxic Chemical Release Inventory System; Toxic Substances Control Act (TSCA); Section 7 Tracking Systems; Federal Insecticide, Fungicide, and Rodenticide Act / TSCA; US Brownfields; US Institutional Control Sites; Voluntary Clean-up Program Properties; State ASTM Standard and Supplemental – Proposition 65 Records; Toxic Pits Cleanup Act Sites; Bond Expenditure Plan; List of Underground Storage Tank (UST) Facilities; Voluntary Cleanup Program Facilities; Leaking UST on Indian Land; UST on Indian Land; Waste Discharge System; Deed Restriction Listing; Properties Needing Further Evaluation; No Further Action Determination; Well Investigation Program Case List; Emissions Inventory Data; School Property Evaluation Program; Former Manufactured Gas Sites.

The complete EDR Radius Map report is provided in Appendix 15.2.1. Results are summarized in EDR's overview map (Figure 4-1). The Study Area was not listed in any of the databases queried by EDR. The Study Area was previously listed in a few databases:

- Jamul Fire Station No. 66, 14145 Hwy 99, NPDES, HIST UST, SWEEPS, San Diego Co. Hazardous Materials Management Division Database, enrolled under construction general stormwater permit, registered diesel and gasoline underground storage tanks (USTs).

In the vicinity of the Study Area the following sites were listed, as summarized in EDR's Executive Summary:

- Peaceful Valley Ranch, San Diego Co. Hazardous Materials Management Division Database, leaking UST incident, petroleum substance release to soil, case open.
- Ameri/Mex, 14063 Hwy 94, HAZNET database, waste oil generator & disposal
- Rancho Jamul Auto Care, 13975 Campo Rd., HAZNET database, waste oil and solvents generator & disposal
- Fletcher Hills Medical Group 13967, San Diego Co. HMMD, hazmat inventory, unspecified
- Las Montanas Golf Course, Vista Rancho Miguel Road, SWEEPS UST database;
- Jamul Burnsite, Jamul Drive, LDS, FINDS, SWF/LF databases, licensed landfill;
- Rancho Miguel Estates, Jamacha Road and Steele Canyon, San Diego Co. Hazardous Materials Management Division Database, leaking UST incident, case closed;
- Jamul Christian School, P.O. Box 74, FINDS database, registered pesticide use;
- Gus Batton, 13212 Highway 94, San Diego Co. Dept. of Environmental Health database, leaking UST incident, oil release to soil, case closed

All of the sites are either historic hazardous materials release cases or involve permitted uses of hazardous materials.

It should be noted that the computerized geocoding technology used in the database search is based on available census data and is only accurate to ± 300 feet. The EDR report indicates that poor or inadequate address information was provided for various properties that are potentially located in the vicinity of the Study Area; therefore, these sites could not be readily mapped by EDR. Because the location of these sites with respect to the Study Area could not be determined, the evaluation of the unmappable sites is limited in terms of determining the potential impact on the Study Area. Although the list of the unmappable sites was reviewed for adjacent or nearby properties observed during the site reconnaissance, locating each of the unmapped sites identified by EDR is not considered practicable. None of these orphan sites appear to be connected to the Study Area in any way.

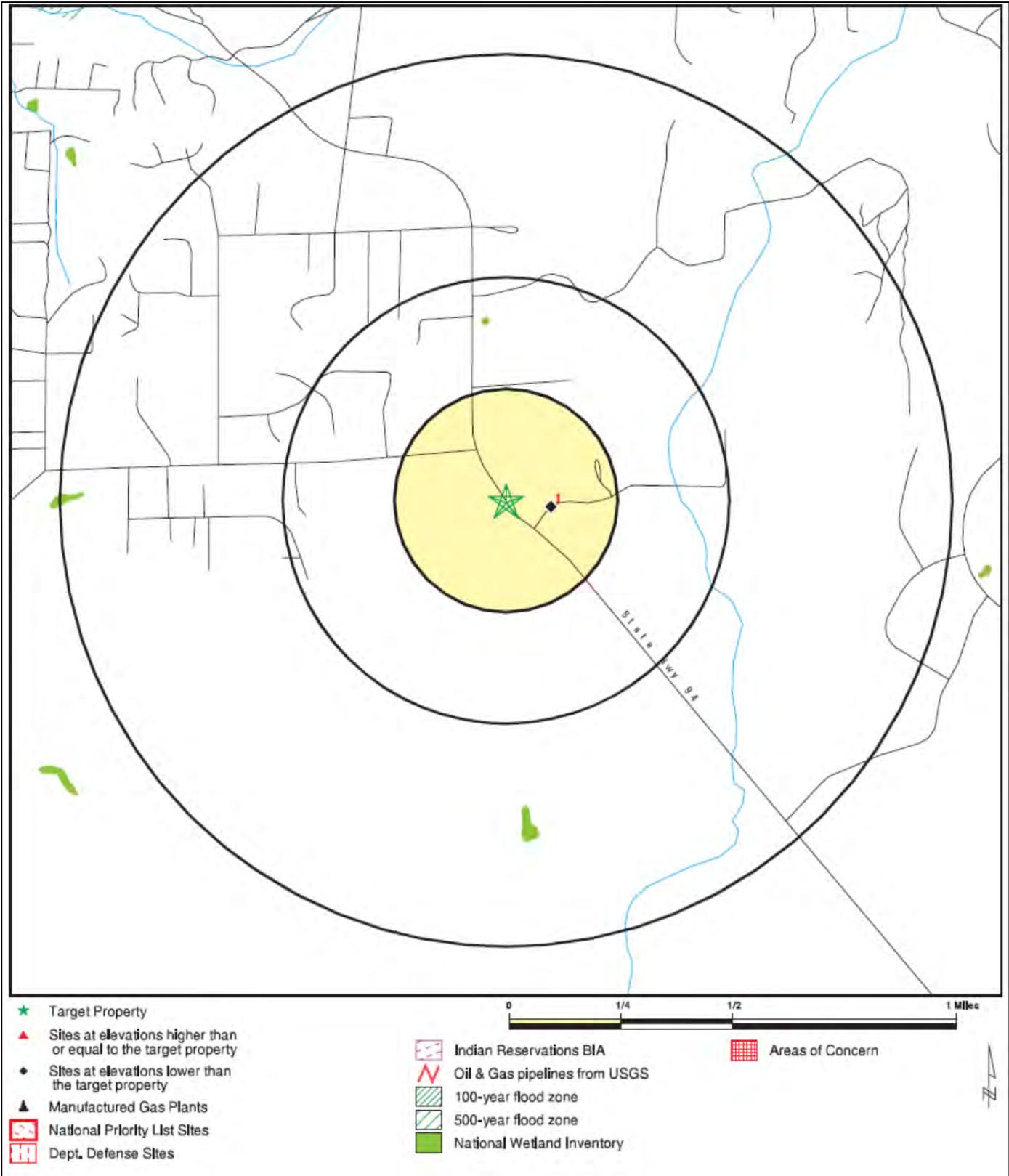


Figure 4-1. Overview Map, EDR Radius Report

4.2. ADDITIONAL ENVIRONMENTAL RECORD SOURCES

4.2.1.State of California Department of Toxic Substances Control Records

4.2.1.1. *Envirostor Database*

EnviroStor is an online search and Geographic Information System tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. Public Access to EnviroStor is accessible via the DTSC Web Page located at: <http://www.envirostor.dtsc.ca.gov/public/>. The EnviroStor database includes the following site types: Federal Superfund sites (National Priority List); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. You can obtain information that includes site name, site type, status, address, any restricted use (recorded deed restrictions), past use(s) that caused contamination, potential contaminants of concern, potential environmental media affected, site history, planned and completed activities. The EnviroStor database also contains current and historical information relating to Permitted and Corrective Action facilities. The EnviroStor database includes current and historical information on the following permit-related documents: facility permits; permit renewal applications; permit modifications to an existing permit; closure of hazardous waste management units (HWMUs) or entire facilities; facility corrective action (investigation and/or cleanup); and/or post-closure permits or other required postclosure activities.

The EnviroStor database was queried on May 30, 2013. The following screen capture (Figure 4-2) summarizes the results of the query. No reported cases were found on the Property. No new information was retrieved beyond that already found from EDR's report, summarized in the previous section of this assessment. The following cases were returned within 4,000 feet of the Study Area:

- Raul Rodriquez, 13886 Campo Rd., Jamul: LUST Cleanup Site; Cleanup Status: Completed - Case Closed
- Peaceful Valley Ranch, northeast corner of Peaceful Valley Ranch Rd. and Hwy 94, Jamul: Cleanup Program Site; Cleanup Status: Open - Site Assessment; Case opened 6/12/2006; site assessment began; no potential contaminants of concern specified.

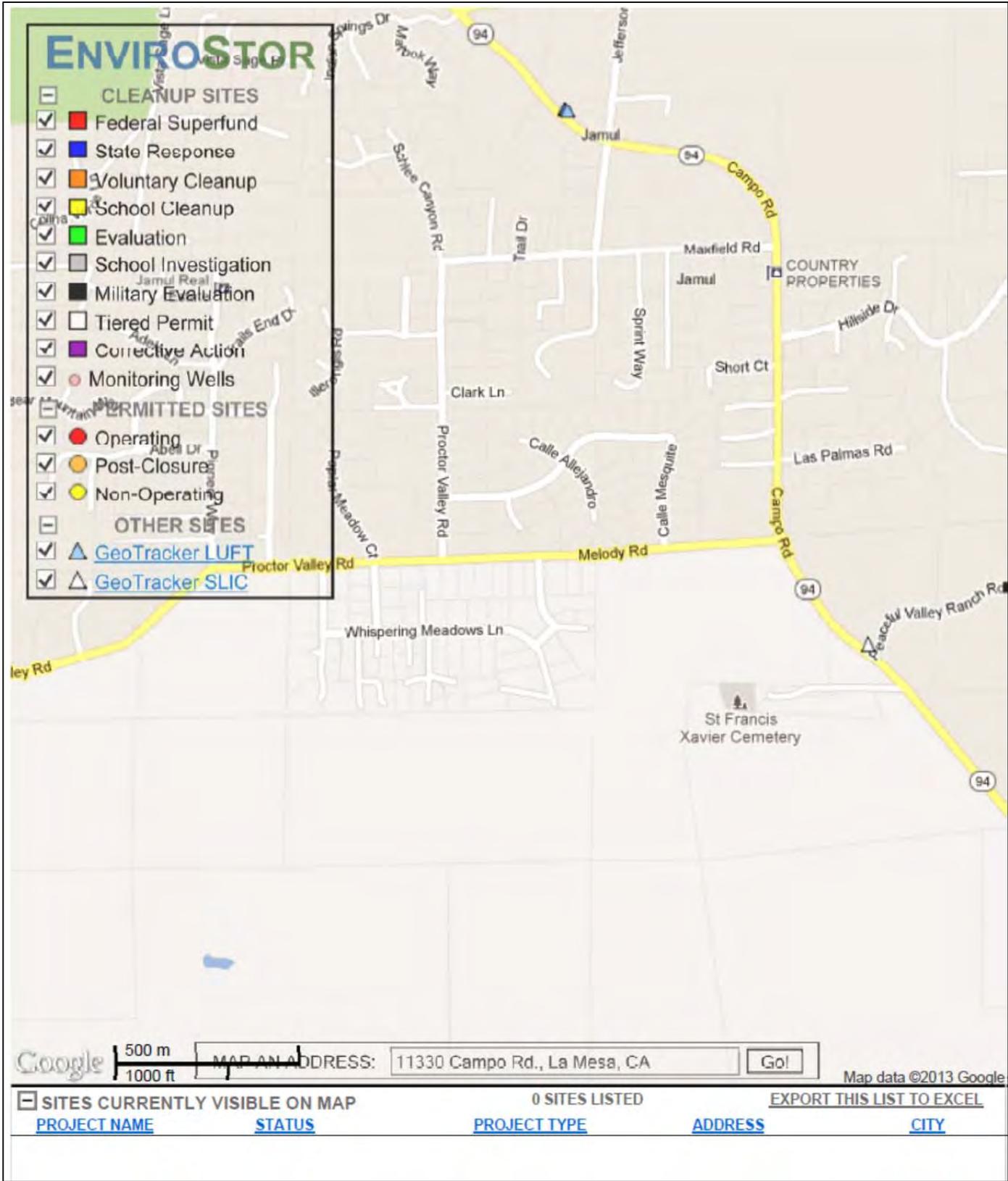


Figure 4-2. Screen capture of EnviroStor database query

4.2.2. California State Water Resources Control Board / Regional Board Records

4.2.2.1. *GeoTracker Database*

GeoTracker is a geographic information system (GIS) maintained by the California State Water Resources Control Board (SWRCB) that provides online access to environmental data at the Internet address (URL) = <http://www.geotracker.swrcb.ca.gov>. GeoTracker is the interface to the Geographic Environmental Information Management System (GEIMS), a data warehouse which tracks regulatory data about underground fuel tanks, fuel pipelines, and public drinking water supplies. GeoTracker and GEIMS were developed pursuant to a mandate by the California State Legislature (AB 592, SB 1189) to investigate the feasibility of establishing a statewide GIS for leaking underground fuel tank (LUFT) sites. GEIMS can store extensive data related to LUFT sites, or any other contaminant release. In addition, GEIMS is used to store and display information from various agencies including water quality information, water use information, and infrastructure data needed to assess both water supplies and contaminant sites. For the SWRCB's groundwater quality assessment goal, GEIMS has been populated with LUFT, public drinking water wells, and fuel pipelines for California. Site information from the Spills, Leaks, Investigations, and Cleanups (SLIC) Program is also included in GeoTracker.

The GeoTracker database was queried for environmental data pertaining to the Site on May 30, 2013. Using both spatial queries and text-based searches of bounding street addressees in GeoTracker, no reported cases were found on the Study Area or adjoining properties (Figure 4-3). The nearest reported cases are shown in the following table. The nearest is the Peaceful Valley Ranch case, from the Leaking Underground Fuel Tank database, which involved a petroleum release to soil circa 2006; the case has not been formally closed.

Table 4-1. GeoTracker Cases in the Vicinity of the Study Area

SITE NAME	ADDRESS	CITY	CLEANUP STATUS
DIANES MARKET	13886 CAMPO RD	JAMUL	
JAMUL BURN SITE	CORNER OF JAMUL DR & MEX CAN	JAMUL	OPEN - INACTIVE
GEORGE BARBER LIVING TRUST	13330 PROCTOR VALLEY RD	JAMUL	COMPLETED - CASE CLOSED
PEACEFUL VALLEY RANCH	0 PEACEFUL VALLEY RANCH (NE CORNER @ HY 94)	JAMUL	OPEN - SITE ASSESSMENT
RAUL RODRIQUEZ	13886 CAMPO RD	JAMUL	COMPLETED - CASE CLOSED
RAUL RODRIQUEZ	13886 CAMPO RD	JAMUL	COMPLETED - CASE CLOSED
RAUL RODRIQUEZ	13886 CAMPO RD	JAMUL	COMPLETED - CASE CLOSED
JAMUL PRIMARY SCHOOL	14581 LYONS VALLEY RD	JAMUL	COMPLETED - CASE CLOSED
GUS BATTON	13212 HY 94	JAMUL	COMPLETED - CASE CLOSED
BECKER PROPERTY	14232 OLIVE VISTA DR	JAMUL	COMPLETED - CASE CLOSED
JAMUL PRIMARY SCHOOL	14581 LYONS VALLEY RD	JAMUL	COMPLETED - CASE CLOSED

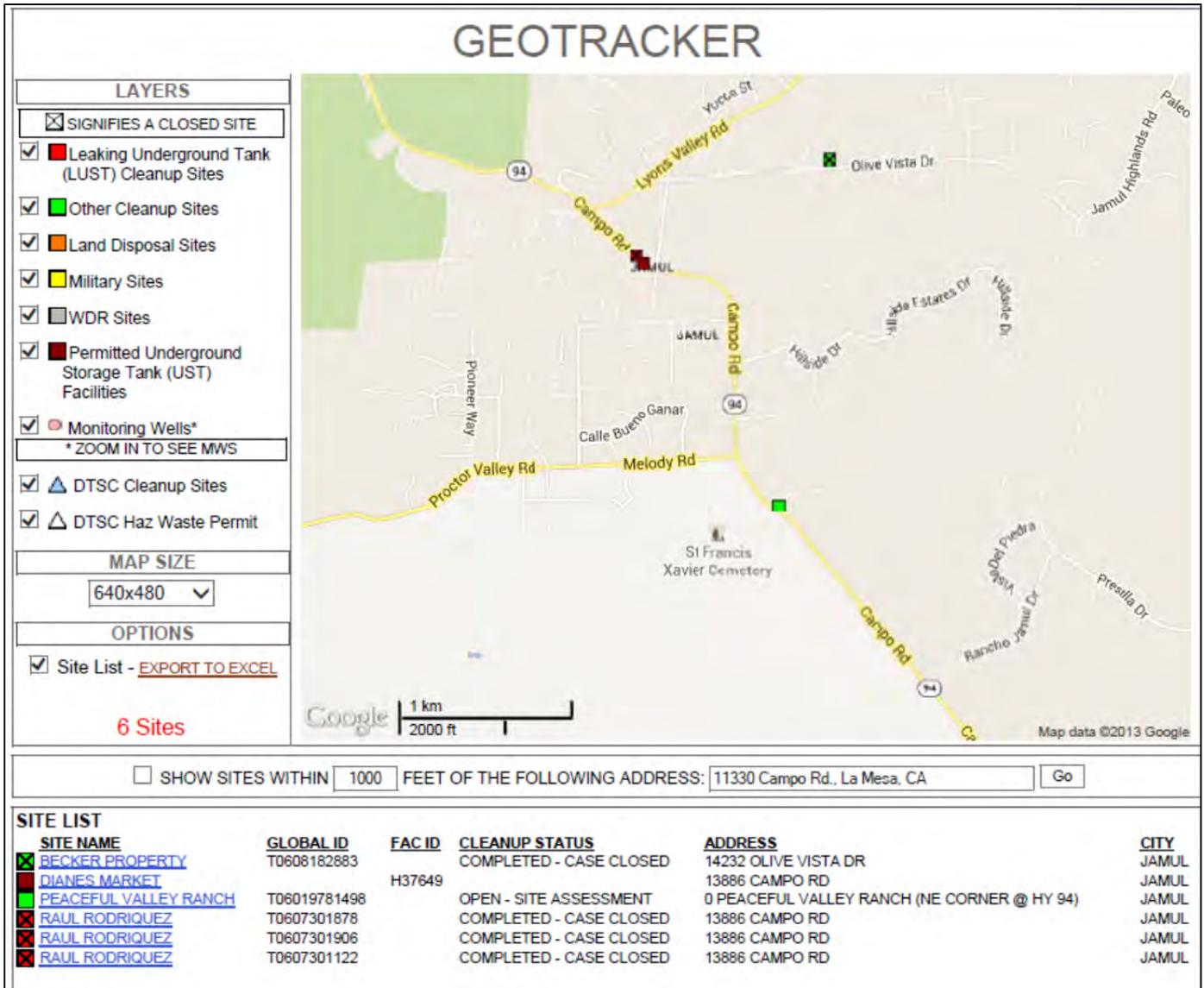


Figure 4-3. Spatial results of GeoTracker query

4.2.3. County / CUPA Records Search

The Unified Program (<http://www.calepa.ca.gov/CUPA/>) consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. Cal/EPA and other state agencies set the standards for their programs while local governments implement the standards—these local implementing agencies are called Certified Unified Program Agencies (CUPA). For San Diego County, the County’s Hazardous Materials Division is the CUPA.

The Hazardous Materials Division has made available on the Internet the Hazardous Materials Establishment Database, which contains database information such as: CUPA Facility Permit Number, Business Address, Business Name, Hazardous Waste & Materials Inventory (for active sites only), and Underground Storage Tank Information. The database is updated on a quarterly basis, and is available on the Internet at URL = http://www.sdcounty.ca.gov/deh/doing_business/hazmat_search.html. The Hazardous Materials Division has also made available on the Internet the Scanned Files Search, which is a digitizing of the former paper files, including written Inspection Reports, Notices, Correspondence, Permit

Applications, Underground Storage Tank Permits, Enforcement Case Information (completed cases), etc. The database is updated on a quarterly basis, and is available on the Internet at URL = http://www.sdcounty.ca.gov/deh/doing_business/hazmat_search.html. No relevant information was retrieved other than documents pertaining to the old Jamul Fire Station: 2 USTs removed in 1986, and replaced with ASTs; ASTs removed under permit in 2007.

4.3. PHYSICAL SETTING SOURCES

4.3.1. Geology, Soils, Topography, and Hydrology

The Study Area is located in the Peninsular Ranges geomorphic province, and specifically, in a shallow valley in the coastal mountains. Habitats in the vicinity consist primarily of disturbed roadside areas, developed areas, coastal sage scrub, coast oak woodland, and annual grassland. Naturally occurring soil in the vicinity include Fallbrook rocky sandy loam (FaC2, FaD2, FeE2), Ramona sandy loam (RaC2), Placentia sandy loam (PeC2, PfC), and Fallbrook-Vista sandy loam (FvE), and Cienega very rocky coarse sandy loam (CmrG), which has a high to very high erosion hazard (USDA, 1973). The topography of the Study Area is variable; elevation ranges from about 1,040 feet in the north along to about 860 feet in the lowest portion (Figure 4-4). No specific hydrogeologic data were readily available. Public and private groundwater wells and public water supplies identified in EDR's query of readily-available databases are over ½ mile from the Study Area.

The State Public Water Supply database lists the following wells in the Jamul area (from previous EDR reports): Circle J Ranch (no address); Sunrise Estates Municipal Water Supply (no address); Skyline Ranch Campground (no address); Indian Hills Camp at 15763 Lyons Valley Road, and Diamond Jack RV Ranch at 15724 Lyons Valley Rd.

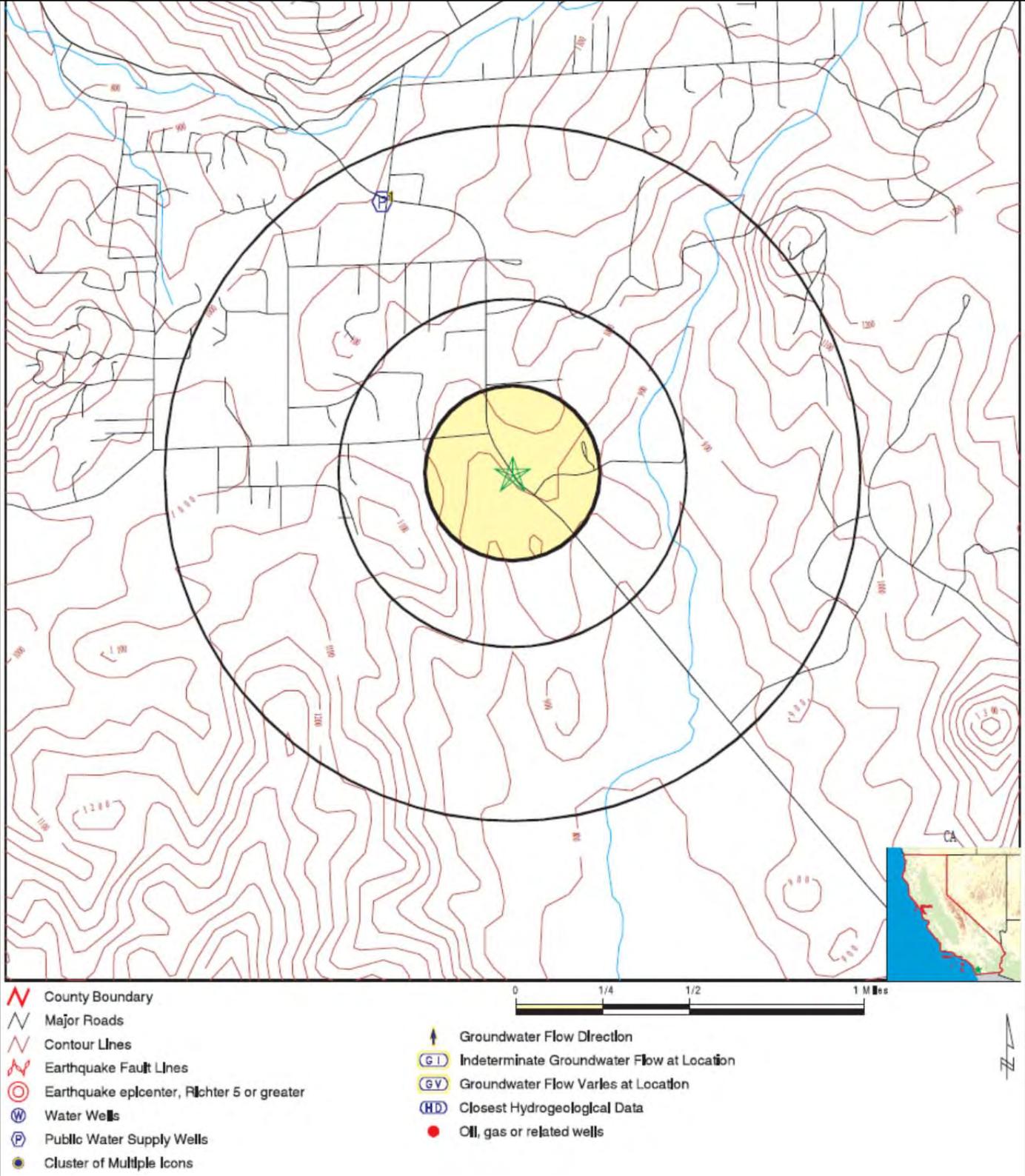


Figure 4-4. EDR’s Physical Setting Map

4.4. HISTORICAL USE INFORMATION ON THE PROPERTY

The objective of consulting historical sources is to develop a history of the previous uses of the property and surrounding area, in order to help identify the likelihood of past uses having led to recognized environmental conditions in connection with the property.

4.4.1. Topographic Map Analysis

Historical and current topographic maps of the Study Area were analyzed to determine any of the following: topography and inferred surface water and ground water flow direction; current and historical land use; and current and historical structures, utilities, and roads. All available USGS topographic quadrangle maps were obtained through EDR (Appendix 15.3), and span almost 1 century. The resolution of these maps was so coarse that only general land uses could be inferred. The topo sequence shows little change in land use in the Study Area, other than the gradual increase of residential subdivisions. No visual clues as to any possible recognized environmental conditions were evident from any of these topographic maps.

4.4.2. Aerial Photography Analysis

Historical aerial photographs of the Study Area were analyzed to determine the any of the following: current and historical land use; any current and historical structures, utilities, and roads; and any current or historical drum storage, above ground tanks, garbage dumps or landfills, or pits, ponds, or lagoons. The aerial photo chronology was provided by EDR (Appendix 15.3). The resolution of these maps was so coarse that only general land uses could be inferred. This historical aerial photo sequence, beginning with 1953, documents relatively little change in land use of the Study Area, except for an increase of residential development in the vicinity. On the 4-acre parcel, the fire station is not visible in 1990 aerial photos, but is visible by 1994, and through 2002; the station was removed circa 2006-2007. On the 10-acre parcel, aerial photography spanning the last 50 years shows the majority of the parcel being used as an orchard and the rest pasture; by the 1980s, several structures were built in the southwest, which appear to be a residence. The Jamul Indian Village shows the addition of several residences over the years; all structures were torn down and removed circa 2007. No visual clues as to any possible recognized environmental conditions were found.

4.4.3. Fire Insurance (Sanborn Company) Maps

Fire insurance maps are historical city and building layout maps produced for private fire insurance companies (primarily by the former Sanborn Company). These historical city maps can indicate the presence of structures on, or uses of, properties at specified dates. EDR now owns the Sanborn Company, and provides any available fire insurance maps for the target address. EDR's Sanborn report indicated that there was no coverage of the Study Area by Sanborn maps (Appendix 15.3).

4.4.4. City Directories

City directories have been published for cities and towns across the US since the 1700s. Originally a list of residents, the city directory developed into a tool for locating individuals and businesses in a particular urban or suburban area. Current directories are generally divided into three sections: a business index, a list of resident names and addresses, and a street index. With each address, the directory lists the name of the resident or, if a business is operated from this address, the name and type of business. While city directory coverage is comprehensive for large cities, it may be incomplete or unavailable for small towns and unincorporated, rural areas. The target address was the 14000 to 15000 block of Campo Road (SR-94); the EDR City Directory report is presented in Appendix 15.3. No relevant information was found pertaining to this address range other than the following:

- Year 2005 Haines Criss-Cross Directory - Jamul Tribal Hall at 14191 Campo Road and Fire Station Dulzura at 14145 Campo Road
- Year 1990 Haines Criss-Cross Directory – residences at 14135 and 14136 Campo Road

4.5. HISTORICAL USE INFORMATION ON ADJOINING PROPERTIES

No additional relevant information was found. Other historical use information on adjoining properties is summarized in other sections of this report.

5. SITE RECONNAISSANCE

The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental conditions in connection with the property.

5.1. METHODOLOGY AND LIMITING CONDITIONS

The site visit is limited to visual and/or physical observation of the exterior and interior of the Property and its improvements, the past and current uses of the Property and adjoining properties, and the condition of the Property. The site visit evaluated the Property and adjoining properties for potential hazardous materials/waste and petroleum product use, storage, disposal, or accidental release, including the following: presence of tank and drum storage; mechanical or electrical equipment likely to contain liquids; evidence of soil or pavement staining or stressed vegetation; ponds, pits, lagoons, or sumps; suspicious odors; fill and depressions; or any other condition indicative of potential contamination. The site visit did not evaluate the presence of asbestos-containing materials, radon, lead-based paint, mold, indoor air quality, or structural defects, or other non-scope items.

In 2007, 2009, 2010, 2011 and most recently, May 15, 2013, registered environmental assessor G.O. Graening performed site reconnaissances of the Study Area. All accessible portions of the Study Area were observed by a pedestrian survey; adjoining properties were observed primarily by binocular or windshield (automobile) survey. Photographic documentation (Appendix 15.4) accompanies the following summary of the site reconnaissance.

5.2. EXTERIOR OBSERVATIONS

The Study Area and its improvements are generally well kept and litter free. The following text discusses focus areas of the site reconnaissance.

5.2.1. Stained Soil / Distressed Vegetation / Odors

No stained soil, distressed vegetation, or unusual odors was noted.

5.2.2. Roads

Roads within the Study Area are unimproved dirt roads or paved with asphalt or concrete, and show no suspicious staining.

5.2.3. Wells / Potable Water Supply

Regionally, potable water is supplied by private groundwater wells or by the municipal water district. No water wells were visible on the Study Area other than 2 on the 10-acre parcel (see following photo).



Groundwater pump and appurtenances on the 10-acre parcel

5.2.4.Sewage Disposal System

Historical residences located on Jamul Indian Village were serviced by septic systems/leachfields; most current residences are now served by the municipal sanitary sewer system.

5.2.5.Storage Tanks, Containers, or Drums

No storage tanks or drum storage was noted on the Study Area or adjoining properties during the site reconnaissance. There is no municipal subterranean natural gas utility service to the JIV or the surrounding area. Residences in the vicinity use individual propane storage tanks, serviced by private propane distribution companies. Historical residences on the Jamul Indian Village used such propane tanks

It is beyond the scope of this assessment to open any container.

5.2.6.Hazardous Substances and Petroleum Products

No hazardous substances or petroleum product usage or storage was noted within the Study Area or adjoining properties during the site reconnaissance.

No petroleum product usage or storage was noted on the Study Area or adjoining properties during the site reconnaissance. The historical fire station that was located on the 4-acre parcel used 2 fuel USTs until 1986, then switched to 2 ASTs; these were removed when the fire station was relocated across Highway 94 circa 2006-2007. No staining of the concrete pads or surrounding pavement was evident during the site reconnaissance.

Small quantities of potentially hazardous materials such as cleaning supplies, landscape maintenance chemicals, and vehicle maintenance chemicals are associated with residences in the vicinity of the Study Area.



Concrete pad that housed the Fire Station's diesel ASTs on the 4-acre parcel.

5.2.7. Electrical or Mechanical Equipment Likely to Contain Fluids

Polychlorinated biphenyls, or PCBs, were commonly used historically in electrical equipment such as transformers, fluorescent lamp ballasts, and capacitors. According to United States EPA regulation 40 CFR, Part 761, there are three categories for classifying such equipment: <50 ppm of PCBs is considered "Non-PCB"; between 50 and 500 ppm is considered "PCB-Contaminated"; and >500 ppm is considered "PCB-Containing". Pursuant to 15 U.S.C. 2605(e)(2)(A), the manufacture, process, or distribution in commerce or use of any polychlorinated biphenyl in any manner other than in a totally enclosed manner was prohibited after January 1, 1977.

Electricity is supplied to residences in the vicinity by the San Diego Gas and Electric Company via a single 12 kV above-ground transmission line running along SR-94. Pacific Bell provides telecommunications to the vicinity via above-ground lines along SR-94; these utility poles also carry cable television by Cox communications. No poly-chlorinated biphenyl (PCB)-containing equipment (electric or hydraulic) was observed during the site reconnaissance. Pole-mounted transformers were observed in the vicinity, but all appear to be modern and non-leaking.

5.2.8. Pits / Ponds / Lagoons

No pits, ponds, or lagoons were observed during the site reconnaissance.

5.2.9. Storm Water / Pools of Liquid

No municipal stormwater facilities were noted on the Study Area or on adjacent properties, except for road culverts that direct water to the nearest natural channels such as Willow Creek.

5.2.10. Solid Waste

Companies such as Jones Disposal Company and Waste Management Inc. provide solid waste collection for the region, and the collected waste is hauled to the Otay landfill and the Sycamore Sanitary landfill. No municipal solid waste service was noted for the Study Area. Some solid waste has been dumped off the edge of the Campo Road at various places along the Study Area in an unauthorized manner. Most of the

visible material consists of household waste. The largest items dumped onto the Study Area are automobile tires and household appliances. These items are considered a nuisance, but not a recognized environmental condition.

5.3. INTERIOR OBSERVATIONS

No buildings exist on the 4-acre parcel, 10-acre parcel, or the 87-acre parcel. Two pre-fabricated buildings (trailer-mounted) are located on the Jamul Indian Village, used as administrative office space. The interiors were previously viewed and no hazardous materials use or storage was noted.

5.4. LIMITATIONS

There were no limitations that affected the conclusions of this assessment.

6. INTERVIEWS

The ASTM explains that, "*The objective of interviews is to obtain information indicating the likelihood of identifying recognized environmental conditions in connection with the property*" (page 16, ASTM, 2013). The following text summarizes interviews performed and questionnaires answered.

On May 15, 2013, Dr. Graening met with Caltrans staff. Caltrans staff did not disclose any environmental conditions or provide any documentation of the Study Area.

The Tribe provided information about the Study Area in other formats in previous assessments.

7. FINDINGS

The Study Area is located in a rural area and has historical development of rangeland, roadways, residences, tribal administrative buildings, an orchard, and a fire station. The only known historical usage of hazardous materials or petroleum products was that that was associated with the fueling station at the fire station, which was a permitted facility that was regularly inspected by the County.

7.1. RATIONALE FOR DETERMINATION OF SIGNIFICANT FINDINGS

Offsite properties identified in the vicinity of the Property were evaluated to determine if they are likely to have adversely affected the Property. The criteria used to evaluate whether an offsite property pose potential environmental concerns to the Property include:

- Distance from the Property: Offsite properties within one-quarter mile of the Property were evaluated. The one-quarter-mile radius was used because it is unlikely a hazardous material released to the subsurface will migrate laterally within the soil for a significant distance, although in some cases, a hazardous material can migrate in groundwater in a generally downgradient direction for distances greater than one-quarter mile.
- Expected depth and direction of groundwater and surface water flow: The identification of a site as potentially upgradient or downgradient is based on the expected direction of groundwater flow determined by site-specific measurement, where available, or inferred from the regional topography.
- The presence of documented contaminant releases at the identified sites.
- The media that the documented contaminant releases affected (i.e., soil and/or groundwater). For the evaluation of potential environmental contamination in the Property, offsite properties with releases to soil only are assumed to pose no significant impact on the Property, as the contaminants are unlikely to migrate towards the Property.

Based on the review and evaluation of information available in the environmental databases and regulatory agency files, no adverse environmental effect is expected because the identified vicinity sites are in assumed down-gradient or cross-gradient locations, have obtained case closure, were contained at the

ground surface, or releases to the subsurface affected soil only, in which case the contaminants are unlikely to migrate towards the Property in groundwater. In addition, offsite properties located further than one-quarter mile from the study are not expected to adversely affect the Property conditions, as it is unlikely a hazardous material released to the subsurface will migrate laterally within the soil for a significant distance, although a hazardous material can migrate in groundwater in a generally downgradient direction.

It should be noted that Leaking Underground Storage Tank and DTSC EnviroStor sites closed by the RWQCB or local agencies prior to April 1, 2008, would not necessarily have been closed based on a risk assessment that considered volatile organic compounds and the vapor intrusion pathway. Assembly Bill 422, which now requires such a risk assessment, did not take effect until January 1, 2008. Evaluation of the vapor intrusion pathway is not included in the scope of this hazardous materials/wastes study.

7.2. DE MINIMIS ENVIRONMENTAL CONDITIONS

De minimis environmental conditions are conditions that are not believed to present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies (ASTM, 2013). One minimal, or *de minimis*, environmental condition exists pursuant to the ASTM standard:

- the Study Area has been subject to illegal dumping of residential garbage. Most of the visible material consists of household trash and abandoned automobile parts and household appliances. Note that both the California Integrated Waste Management Board (CalRecycle) and the Upper San Luis Rey Community Services District are funding a project to remove such nuisance solid waste and prevent future illicit dumping.

7.3. HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS

ASTM (2013) defines a historical recognized condition as

“...an environmental condition which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently. The final decision rests with the environmental professional and will be influenced by the current impact of the historical recognized environmental condition on the property. If a past release of any hazardous substances or petroleum products has occurred in connection with the property and has been remediated, with such remediation accepted by the responsible regulatory agency (for example, as evidenced by the issuance of a no further action letter or equivalent), this condition shall be considered an historical recognized environmental condition.” (p. 5, ASTM 2013)

No historical recognized environmental conditions were found in connection with the Study Area pursuant to the ASTM Practice E 1527-13.

7.4. KNOWN OR SUSPECT RECOGNIZED ENVIRONMENTAL CONDITIONS

No recognized environmental conditions were found in connection with the Study Area pursuant to the ASTM Practice E 1527-13.

8. OPINION AND RECOMMENDATION

8.1. IMPACT OF ENVIRONMENTAL CONDITIONS ON PROPERTY

It is Natural Investigations Co.'s opinion that there are no current recognized environmental conditions, in connection with the Study Area pursuant to the ASTM Practice E 1527-13. Records review, site reconnaissance, and interviews failed to identify any current environmental conditions in connection with the Study Area.

8.2. ADDITIONAL INVESTIGATION

It is Natural Investigations Co.'s opinion that there are no historical or current recognized environmental conditions in connection with the Study Area pursuant to the ASTM Practice E 1527-13. Records review, database searches, or interviews failed to identify any environmental conditions in connection with the Study Area. No significant data gaps or data failures were identified that affect the ability of the Environmental Professional to identify recognized environmental conditions. There are no unusual circumstances where greater certainty is required regarding recognized environmental conditions. Therefore, no additional assessment is recommended at this time by Natural Investigations Co.

Although the ASTM standard practice for Phase I ESA's considers lead paint an out-of-scope subject (ASTM, 2013), California Department of Transportation (Caltrans) requested a discussion of the potential hazard of lead in construction/demolition materials for this project.

8.2.1. Potential Hazard of Lead in Construction/Demolition Materials

8.2.1.1. *Potential Lead Soil Impacts "Earth Material Containing Lead"*

Leaded gasoline was used as a vehicle fuel in the USA from the 1920s through the 1980s. Although lead is no longer used in gasoline formulations, historical lead emissions from automobiles are a recognized source of contamination in soils along heavily-used roadways (i.e., aerially deposited lead or ADL). Thus, surface and near-surface soils along such roadways have the potential to contain elevated concentrations of lead. Ongoing testing by Caltrans throughout California has indicated that ADL exists along major freeway routes. At sites where soil has not been disturbed, the ADL is generally limited to the upper 2 feet of soil within unpaved shoulder and median areas.

Implementation of the project may require the excavation and export of soils from the project area; soil within, and adjacent to, the Caltrans rights-of-way usually contain ADL. It is not known whether the level of lead at the project area is at a hazardous level. Prior to construction ADL levels must be determined in order to handle the soil appropriately. Caltrans has a variance with the DTSC that will allow the Department to keep soil with hazardous levels of ADL within the right-of-way depending on the level of contamination that is found.

8.2.1.2. *Potential Lead-based Traffic Stripe Paint Impacts*

Current Caltrans paint specifications require paints to have lead concentrations less than 20 mg/kg. Old non-yellow paints (e.g., white, blue, black, etc.) had higher concentrations of lead, but not high enough for removed paint to be classified as a hazardous waste. Residue from the removal of these paints is a non-hazardous waste. Yellow traffic paint used prior to 1999 contained high concentrations of lead. Application of yellow thermoplastic material containing high concentrations of lead was phased out during 2004 to 2006. The lead concentrations in these paints and thermoplastics are high enough to make these materials hazardous wastes when they are removed.

Implementation of the project may require the removal of traffic stripe paint from the underlying asphalt concrete by grinding or sand blasting, which would create a paint waste stream. All traffic striping and traffic marking paints contain lead, but it is not known whether it is at hazardous levels or not. According to Caltrans' requirements, this paint waste must be sampled and analyzed prior to disposal. Disposal of removed traffic stripe paint materials is also dependent on the method utilized to remove these materials (i.e. focused stripe removal vs. pavement grinding).

8.2.1.3. *Recommended Mitigation*

According to Caltrans' requirements, no soil shall be disturbed or exported from the State right-of-way project area before an ADL study is completed. No paint striping shall be removed before a lead compliance plan is implemented. Cal/OSHA and Caltrans require a lead compliance plan when lead is

known to be present. The potential presence of elevated lead concentrations requires sampling and analytical testing of any exported soil and any traffic paint materials to determine appropriate health and safety procedures and proper management and disposal practices. A project-specific Lead Compliance Plan will be required and must be prepared by a Certified Industrial Hygienist and properly implemented by the contractor. The requirements for the lead compliance plan can be found in the Caltrans Standard Specifications in Section 7-1.02K(6)(j)(ii) and CCR Title 8, Section 1532.1. Note that just one lead compliance plan that addresses all types of lead exposures on the project is to be prepared.

As specified in this plan, lead-containing materials must be sampled and analyzed prior to disposal. If the analytical results show that lead levels are below the regulated hazardous level the materials may be disposed with other construction and demolition debris. If the analytical results show that lead levels are above the regulated hazardous level, the waste must be transported under manifest to a Class I landfill appropriately permitted to receive the material.

The project-specific Lead Compliance Plan is intended, among other things, to minimize worker exposure to lead. The plan should include protocols for environmental and personnel monitoring, requirements for the use of personal protective equipment, and other health and safety protocols and procedures for the handling of lead-containing materials. A dust control plan and health and safety plan should also be prepared and implemented to minimize worker exposure to lead and any other hazardous materials.

8.2.2. Other Potential Hazards

Two common hazards should also be noted: portions of the Study Area near the Willow Creek channel may be located within a 100-year or 500-year floodplain, and the region is prone to flash floods; and the Study Area contains dense, dry vegetation that may fuel wildfire, and the region is located within an area of moderate to high level of fire hazard.

9. CONCLUSIONS

Natural Investigations Company has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13 of the Study Area: a combined access road study corridor involving portions of 3 parcels—an 87-acre parcel (APN 597-060-05-00), 4-acre parcel (APN 597-060-04-00), and a 10-acre parcel (APN 597-042-13-00)—as well as the affected portions of the CalTrans right-of-way corridor of State Route 94 from 1/4-mile north of Melody Road to 1/2 mile south of the Jamul Indian Village, Melody Road, and the frontage and driveways of other affected parcels. Any exceptions to, or deletions from, this practice are described in Section 10 of this report. This assessment has revealed that there are no historic recognized environmental conditions and no current recognized environmental conditions in connection with the Study Area pursuant to the ASTM Practice E 1527-13. No further site investigation is recommended.

9.1. DATA FAILURE OR OTHER DATA GAPS

ASTM (2013) defines data failure as the failure to achieve the historical research objectives even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. Data failure is one type of data gap. ASTM (2013) defines a data gap as a lack, of or inability to obtain, information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance (for example, an inability to conduct the site visit), and interviews (for example, an inability to interview the key site manager, regulatory officials, etc.)

The available historical USGS quadrangle maps and aerial photography were too coarse in resolution to discern any specific land uses or structures on the Property or adjacent properties, and Sanborn fire insurance maps did not cover the Property. These constitute data failures. However, a combination of

other historical data sources was available such that no significant data gap existed, and the historical research objectives were achieved.

10. DEVIATIONS

There were no deletions or deviations from the standard practice.

11. ADDITIONAL SERVICES

No additional services beyond the scope of the ASTM Standard 1527-13 were conducted as part of this assessment.

There may be environmental issues or conditions at a property that parties may wish to assess in connection with commercial real estate that are outside the scope of this practice. No implication is intended as to the relative importance of inquiry into such non-scope considerations, and this list of non-scope considerations is not intended to be all-inclusive: asbestos-containing building materials, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, biological agents, and mold.

Phase I ESAs are non-comprehensive by nature and are unlikely to identify all environmental problems or eliminate all risk. Natural Investigations Company offers a range of investigative and consulting services to suit the needs of our clients, including more quantitative investigations. Although risk can never be eliminated, more detailed and extensive investigations yield more information, which may help the User understand and better manage risks associated with their property. Since such detailed services involve greater expense and time, we ask that our clients participate in the identification of the level of service that will provide them with what they consider to be an acceptable level of risk. Please contact the signatory of this report if you would like to discuss the issue of risk further. Land use, site conditions, and other factors will change over time. This report should not be relied upon after 180 days from the date of issuance, unless additional services are performed as defined in Section 4.7 of ASTM E 1527-13.

12. REFERENCES

American Society for Testing and Materials. 2013. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Designation E 1527-13. West Conshohocken, Pennsylvania. 35 pp.

Department of Toxic Substances Control. 2013. EnviroStor Database Website, <http://www.envirostor.dtsc.ca.gov/public/>.

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Natural Investigations Company. 2012. Phase 1 Environmental Site Assessment for the Jamul Gaming Project and Access Project, San Diego Co., California. Prepared for Environmental Data Systems Inc. & Jamul Indian Village. 27 pp. + appendices.

State Water Resources Control Board. 2013. GeoTracker Database Website, <http://geotracker.swrcb.ca.gov/>.

USEPA. 2002. OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance). EPA530-D-02-004. Office of Solid Waste and Emergency Response. 178 pp. Available on the Internet at: <http://www.epa.gov/epawaste/hazard/correctiveaction/eis/vapor.htm>.

USEPA. 2013. Envirofacts Data Warehouse Multisystem Query Website, <http://www.epa.gov/enviro/html/multisystem.html>.

USEPA. 2013. The Enforcement and Compliance History Online (ECHO) database maintained by the USEPA, <http://www.epa-echo.gov/echo/>.

13. SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

As required by 40 CFR 312.21(d), this report shall include the following statements of the environmental professional responsible for conducting the Phase I ESA and preparation of the report (page 21, ASTM, 2013):

I declare that, to the best of my professional knowledge, I meet the definition of 'Environmental Professional' as defined in §312.10 of 40 CFR.

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



G. O. Graening, PhD, MSE
Registered Environmental Assessor, Number 08060



14. QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

Dr. Gary O. Graening was certified by California Department of Toxic Substances Control as a Registered Environmental Assessor I (registration # 08060,) from 2005 to 2012 (when DTSC retired the certification program). Dr. Graening holds a PhD in Biological Sciences and a Master of Science in Engineering. Dr. Graening has over 13 years of experience in environmental research and site assessment, including preparation of program-level Phase I ESAs, limited Phase II investigations, as well as environmental impact assessments for National Environmental Policy Act compliance and California Environmental Quality Act compliance. Dr. Graening has completed the 40-hour OSHA Hazardous Waste Operations and Emergency Response certification (with 8-hour annual refresher courses). Dr. Graening's full résumé, and the Company's statement of qualifications, is available on the Internet at the Company's website: www.naturalinvestigations.com.

15. APPENDICES

All appendices are presented as electronic files on the attached compact disc.

15.1. USER-PROVIDED INFORMATION

15.1.1. Title Reports

15.1.2. Previous Phase I ESAs

15.2. REGULATORY RECORDS DOCUMENTATION

15.2.1. EDR Radius Map Reports

15.2.2. County / CUPA Records

15.3. HISTORICAL RESEARCH DOCUMENTATION

15.3.1. Historical Topographic Maps

15.3.2. Historical Aerial Photographs

15.3.3. Fire Insurance (Sanborn Company) Maps

15.3.4. City Directories

15.4. SITE RECONNAISSANCE PHOTOGRAPHY

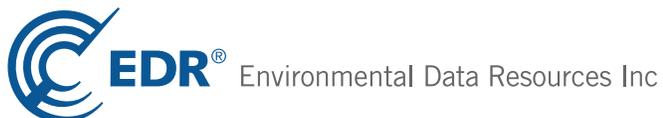
15.5. INTERVIEW DOCUMENTATION

Jamul Indian Village Access

14100 Campo Road
Jamul, CA 91935

Inquiry Number: 3580276.1s
April 18, 2013

EDR Summary Radius Map Report



440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
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 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

14100 CAMPO ROAD
JAMUL, CA 91935

COORDINATES

Latitude (North): 32.7054000 - 32° 42' 19.44"
Longitude (West): 116.8697000 - 116° 52' 10.92"
Universal Transverse Mercator: Zone 11
UTM X (Meters): 512212.7
UTM Y (Meters): 3618445.8
Elevation: 961 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: TP
Source: USGS 7.5 min quad index

Target Property: W
Source: USGS 7.5 min quad index

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year: 2010
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
14100 CAMPO ROAD
JAMUL, CA 91935

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft.) DIRECTION
1	PEACEFUL VALLEY RENC	14026 PEACEFUL VALLE	SAN DIEGO CO. SAM	Lower	536, East

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

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.

SAN DIEGO CO. SAM: A review of the SAN DIEGO CO. SAM list, as provided by EDR, and dated 03/23/2010 has revealed that there is 1 SAN DIEGO CO. SAM site within approximately 0.5 miles of the target property.

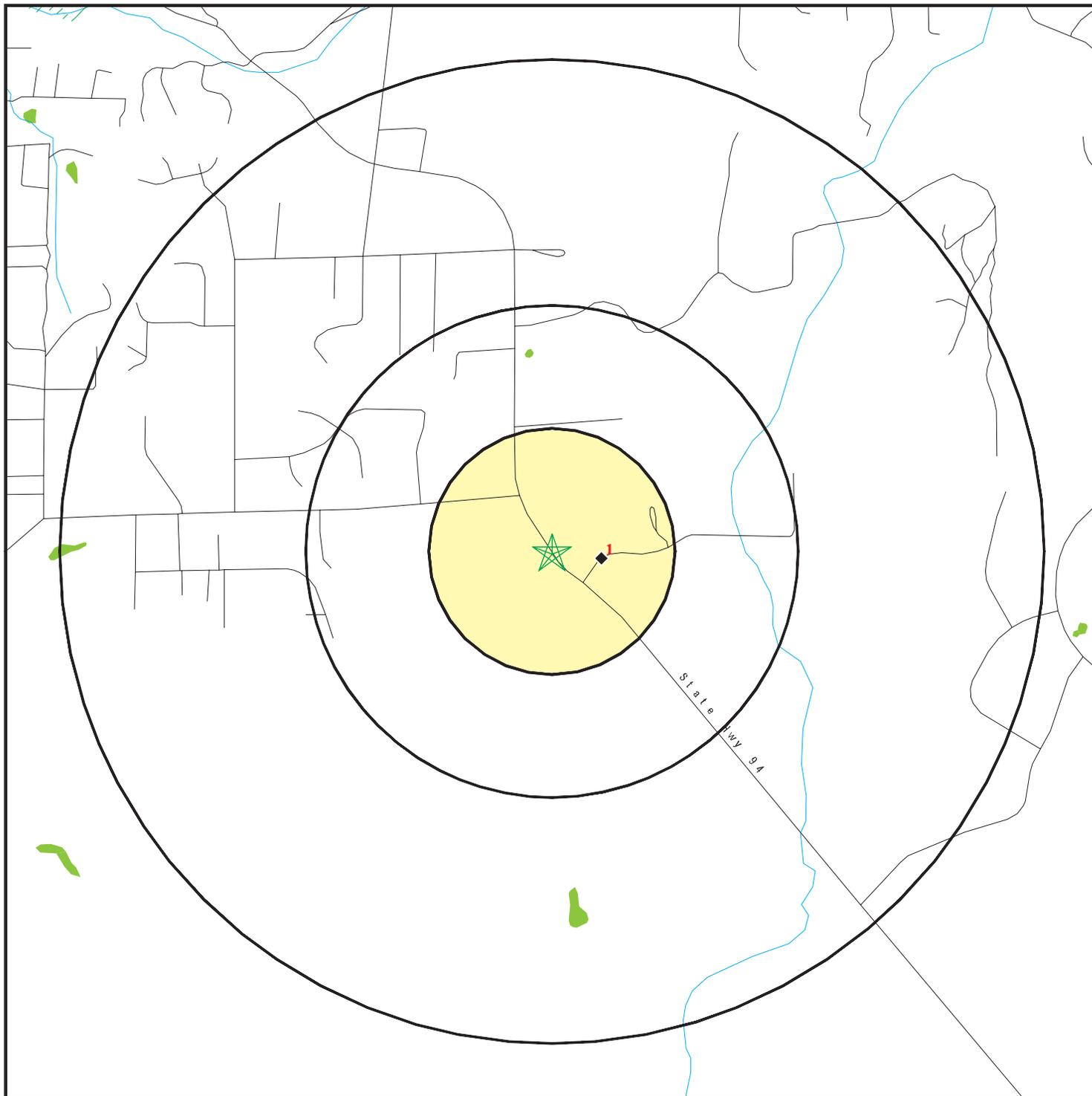
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PEACEFUL VALLEY RENC	14026 PEACEFUL VALLE	E 0 - 1/8 (0.102 mi.)	1	8

Count: 6 records.

ORPHAN SUMMARY

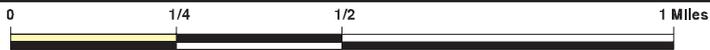
City	EDR ID	Site Name	Site Address	Zip	Database(s)
JAMUL	1004439457	JAMUL CHRISTIAN SCHOOL	P.O. BOX 74	91935	FINDS
JAMUL	S105155612	JAMUL BURNSITE	JAMUL DR		SWF/LF
JAMUL	1006829595	JAMUL BURNSITE	JAMUL DR.	91935	FINDS
JAMUL	S109521465	PEACEFUL VALLEY RANCH	ZERO PEACEFUL VALLEY RNCH & H	91935	SLIC
SAN DIEGO COUNTY	M300003197	MUHT-HEI, INC.	CAMPO MATERIALS PIT		US MINES
SAN DIEGO COUNTY	2011975012	MARINA VILLAGE	MARINA VILLAGE		ERNS

OVERVIEW MAP - 3580276.1s



- ★ 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
- ▲ Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

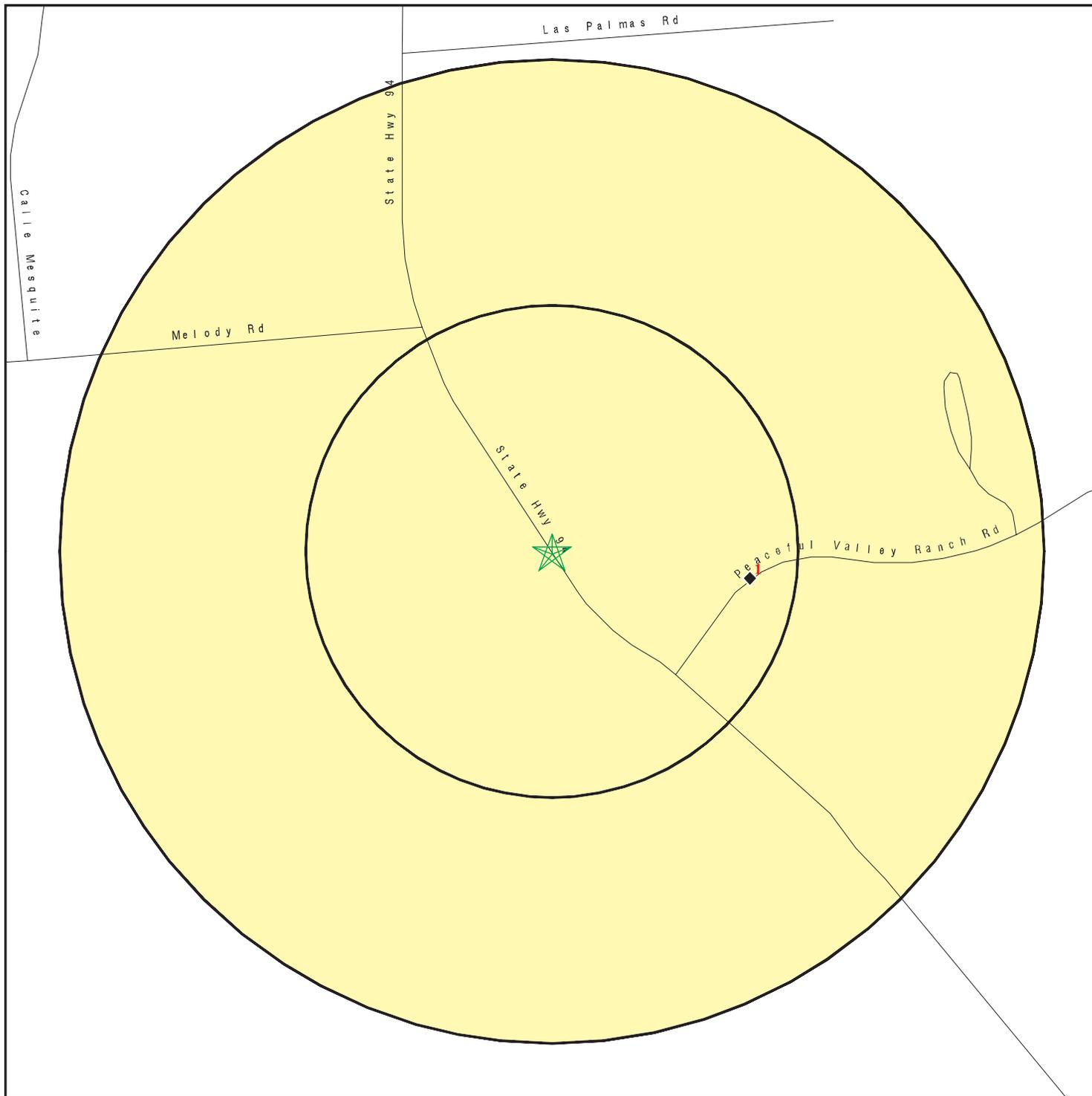


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Jamul Indian Village Access
 ADDRESS: 14100 Campo Road
 Jamul CA 91935
 LAT/LONG: 32.7054 / 116.8697

CLIENT: Natural Investigations
 CONTACT: G.O. Graening
 INQUIRY #: 3580276.1s
 DATE: April 18, 2013 12:27 pm

DETAIL MAP - 3580276.1s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ⚙ Manufactured Gas Plants
- ⚠ Sensitive Receptors
- 🚧 National Priority List Sites
- 🏠 Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- 🏠 Indian Reservations BIA
- 🔴 Areas of Concern
- 🛢 Oil & Gas pipelines from USGS
- 🌊 100-year flood zone
- 🌊 500-year flood zone

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: Jamul Indian Village Access
 ADDRESS: 14100 Campo Road
 Jamul CA 91935
 LAT/LONG: 32.7054 / 116.8697

CLIENT: Natural Investigations
 CONTACT: G.O. Graening
 INQUIRY #: 3580276.1s
 DATE: April 18, 2013 12:29 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site List</i>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL RESPONSE</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>State- and tribal - equivalent CERCLIS ENVIROSTOR</i>								
ENVIROSTOR	1.000		0	0	0	0	NR	0
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC	0.500		0	0	0	NR	NR	0
SAN DIEGO CO. SAM	0.500		1	0	0	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
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
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
San Diego Co. HMMMD	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
SWEEPS UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0

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
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

1 PEACEFUL VALLEY RENCH
East 14026 PEACEFUL VALLEY RANCH RD
< 1/8 JAMUL, CA 91935
0.102 mi.
536 ft.

SAN DIEGO CO. SAM S109118211
N/A

Relative:
Lower

[Click here for full text details](#)
SAN DIEGO CO. SAM
Facility Status: Preliminary Assessment

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	AST	Aboveground Petroleum Storage Tank Facilities	State Water Resources Control Board	08/01/2009	09/10/2009	10/01/2009
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	06/30/2012	09/12/2012	10/03/2012
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	12/06/2012	01/29/2013	03/19/2013
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	01/02/2013	01/03/2013	02/22/2013
CA	DEED	Deed Restriction Listing	Department of Toxic Substances Control	03/11/2013	03/12/2013	03/25/2013
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	12/11/2012	12/12/2012	01/04/2013
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2008	09/29/2010	10/18/2010
CA	ENF	Enforcement Action Listing	State Water Resources Control Board	01/08/2013	01/29/2013	03/19/2013
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	03/13/2013	03/14/2013	03/27/2013
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	03/01/2007	06/01/2007	06/29/2007
CA	Financial Assurance 2	Financial Assurance Information Listing	California Integrated Waste Management Board	02/19/2013	02/20/2013	03/20/2013
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	03/13/2013	03/14/2013	03/27/2013
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2011	06/22/2012	07/06/2012
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	02/25/2013	02/26/2013	03/25/2013
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	01/15/2013	01/15/2013	02/22/2013
CA	LDS	Land Disposal Sites Listing	State Water Quality Control Board	03/18/2013	03/19/2013	03/27/2013
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	03/15/2013	03/15/2013	03/27/2013
CA	LUST	Geotracker's Leaking Underground Fuel Tank Report	State Water Resources Control Board	03/18/2013	03/19/2013	03/27/2013
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 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
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 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
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
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 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
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	MCS	Military Cleanup Sites Listing	State Water Resources Control Board	03/18/2013	03/19/2013	03/27/2013
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	03/06/2013	03/12/2013	03/25/2013
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	10/21/1993	11/01/1993	11/19/1993
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	02/18/2013	02/18/2013	03/20/2013
CA	PROC	Certified Processors Database	Department of Conservation	03/18/2013	03/19/2013	03/27/2013
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	03/13/2013	03/14/2013	03/27/2013
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	03/13/2013	03/14/2013	03/27/2013
CA	SLIC	Statewide SLIC Cases	State Water Resources Control Board	03/18/2013	03/19/2013	03/27/2013
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 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victory	05/24/2005	05/25/2005	06/16/2005
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
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	02/18/2013	02/18/2013	03/20/2013
CA	SWRCY	Recycler Database	Department of Conservation	03/18/2013	03/19/2013	03/27/2013
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	Deaprtment of Conservation	03/05/2013	03/19/2013	03/27/2013
CA	UST	Active UST Facilities	SWRCB	03/18/2013	03/19/2013	04/18/2013
CA	UST MENDOCINO	Mendocino County UST Database	Department of Public Health	09/23/2009	09/23/2009	10/01/2009
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	03/13/2013	03/14/2013	03/27/2013
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
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	11/11/2011	05/18/2012	05/25/2012
US	BRS	Biennial Reporting System	EPA/ANTIS	12/31/2009	03/01/2011	05/02/2011
US	CERCLIS	Comprehensive Environmental Response, Compensation, and Liab	EPA	02/04/2013	03/01/2013	03/13/2013
US	CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned	EPA	02/05/2013	03/01/2013	03/13/2013
US	COAL ASH DOE	Sleam-Electric Plan Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	08/17/2010	01/03/2011	03/21/2011
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	12/31/2011	01/15/2013	03/13/2013
US	CORRACTS	Corrective Action Report	EPA	02/12/2013	02/21/2013	02/27/2013
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
US	DELISTED NPL	National Priority List Deletions	EPA	02/01/2013	03/01/2013	03/13/2013
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Exclusive Historic Gas Stations	EDR, Inc.			
US	EDR US Hist Auto Stat	EDR Proprietary Historic Gas Stations - Cole				
US	EDR US Hist Cleaners	EDR Proprietary Historic Dry Cleaners - Cole				
US	EDR US Hist Cleaners	EDR Exclusive Historic Dry Cleaners	EDR, Inc.			
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	07/31/2012	08/13/2012	09/18/2012
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	12/31/2012	01/17/2013	02/15/2013
US	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	07/31/2012	10/09/2012	12/20/2012
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FEMA UST	Underground Storage Tank Listing	FEMA	01/01/2010	02/16/2010	04/12/2010
US	FINDS	Facility Index System/Facility Registry System	EPA	10/23/2011	12/13/2011	03/01/2012
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	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	12/31/2011	02/26/2013	03/13/2013
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	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	12/31/2012	01/03/2013	02/27/2013
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	07/20/2011	11/10/2011	01/10/2012
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	09/28/2012	11/01/2012	04/12/2013
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	02/05/2013	02/06/2013	04/12/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	02/06/2013	02/08/2013	04/12/2013
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	09/12/2011	09/13/2011	11/11/2011
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	12/31/2012	02/28/2013	04/12/2013
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	08/27/2012	08/28/2012	10/16/2012
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	03/01/2013	03/01/2013	04/12/2013
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	INDIAN RESERV	Indian Reservations	USGS	12/31/2005	12/08/2006	01/11/2007
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	09/28/2012	11/07/2012	04/12/2013
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	02/05/2013	02/06/2013	04/12/2013
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	02/06/2013	02/08/2013	04/12/2013
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	08/02/2012	08/03/2012	11/05/2012
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	05/10/2011	05/11/2011	06/14/2011
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	12/31/2012	02/28/2013	04/12/2013
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	08/27/2012	08/28/2012	10/16/2012
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	02/21/2013	02/26/2013	04/12/2013
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	09/28/2012	10/02/2012	10/16/2012
US	INDIAN VCP R7	Voluntary Cleanup Priority Listing	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	02/16/2012	03/26/2012	06/14/2012
US	LUCIS	Land Use Control Information System	Department of the Navy	12/09/2005	12/11/2006	01/11/2007
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	06/21/2011	07/15/2011	09/13/2011
US	NPL	National Priority List	EPA	02/01/2013	03/01/2013	03/13/2013
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	PADS	PCB Activity Database System	EPA	11/01/2010	11/10/2010	02/16/2011
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	02/01/2011	10/19/2011	01/10/2012
US	PRP	Potentially Responsible Parties	EPA	12/02/2012	01/03/2013	03/13/2013
US	Proposed NPL	Proposed National Priority List Sites	EPA	02/01/2013	03/01/2013	03/13/2013
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RADINFO	Radiation Information Database	Environmental Protection Agency	01/08/2013	01/09/2013	04/12/2013
US	RCRA NonGen / NLR	RCRA - Non Generators	Environmental Protection Agency	02/12/2013	02/15/2013	02/27/2013
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	02/12/2013	02/15/2013	02/27/2013
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	02/12/2013	02/15/2013	02/27/2013
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	02/12/2013	02/15/2013	02/27/2013
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	02/12/2013	02/15/2013	02/27/2013
US	RMP	Risk Management Plans	Environmental Protection Agency	05/08/2012	05/25/2012	07/10/2012
US	ROD	Records Of Decision	EPA	12/18/2012	03/13/2013	04/12/2013
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	03/07/2011	03/09/2011	05/02/2011
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2009	09/01/2011	01/10/2012
US	TSCA	Toxic Substances Control Act	EPA	12/31/2006	09/29/2010	12/02/2010
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	09/14/2010	10/07/2011	03/01/2012
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (EPA	11/15/2012	11/16/2012	02/15/2013
US	US AIRS MINOR	Air Facility System Data	EPA	11/15/2012	11/16/2012	02/15/2013
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/10/2012	12/11/2012	12/20/2012
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	11/14/2012	12/11/2012	02/15/2013
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	12/19/2012	12/26/2012	02/27/2013
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	11/20/2012	11/30/2012	02/27/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	09/01/2007	11/19/2008	03/30/2009
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	12/19/2012	12/26/2012	02/27/2013
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	08/18/2011	09/08/2011	09/29/2011
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	02/18/2013	02/18/2013	03/21/2013
NJ	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2011	07/19/2012	08/28/2012
NY	NY MANIFEST	Facility and Manifest Data	Department of Environmental Conservation	02/01/2013	02/07/2013	03/15/2013
PA	PA MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2011	07/23/2012	09/18/2012
RI	RI MANIFEST	Manifest information	Department of Environmental Management	12/31/2011	06/22/2012	07/31/2012
WI	WI MANIFEST	Manifest Information	Department of Natural Resources	12/31/2011	07/19/2012	09/27/2012
US	Oil/Gas Pipelines	GeoData Digital Line Graphs from 1:100,000-Scale Maps	USGS			
US	Electric Power Lines	Electric Power Transmission Line Data	Rextag Strategies Corp.			
US	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
US	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
US	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
US	Public Schools	Sensitive Receptor: Public Schools	National Center for Education Statistics			
US	Private Schools	Sensitive Receptor: Private Schools	National Center for Education Statistics			
CA	Daycare Centers	Sensitive Receptor: Licensed Facilities	Department of Social Services			
US	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
US	NWI	National Wetlands Inventory	U.S. Fish and Wildlife Service			
US	USGS 7.5' Topographic Map	Scanned Digital USGS 7.5' Topographic Map (DRG)	USGS			

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

JAMUL INDIAN VILLAGE ACCESS
14100 CAMPO ROAD
JAMUL, CA 91935

TARGET PROPERTY COORDINATES

Latitude (North):	32.7054 - 32° 42' 19.44"
Longitude (West):	116.8697 - 116° 52' 10.92"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	512212.7
UTM Y (Meters):	3618445.8
Elevation:	961 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	32116-F7 DULZURA, CA
Most Recent Revision:	1988
West Map:	32116-F8 JAMUL MOUNTAINS, CA
Most Recent Revision:	1994

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

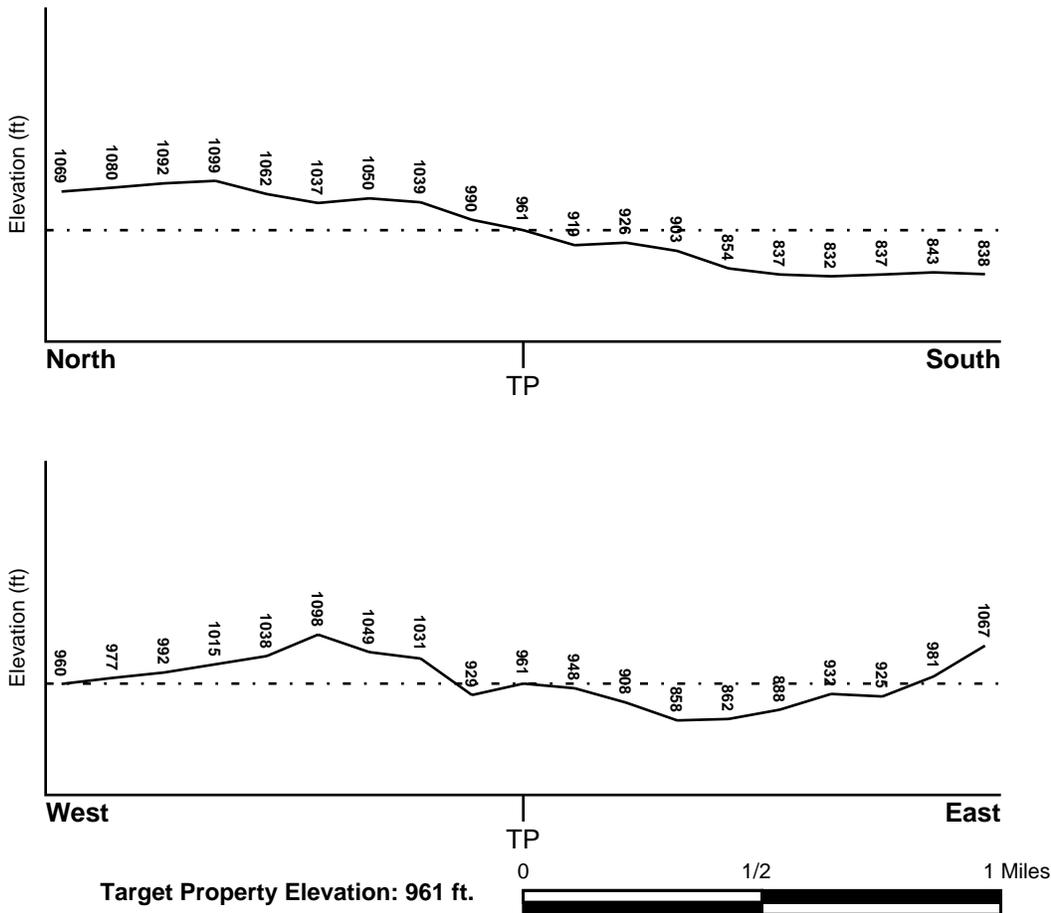
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General 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>Target Property County</u> SAN DIEGO, CA	FEMA Flood <u>Electronic Data</u> YES - refer to the Overview Map and Detail Map
--	--

Flood Plain Panel at Target Property: 06073C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u> DULZURA	NWI Electronic <u>Data Coverage</u> YES - refer to the Overview Map and Detail Map
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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

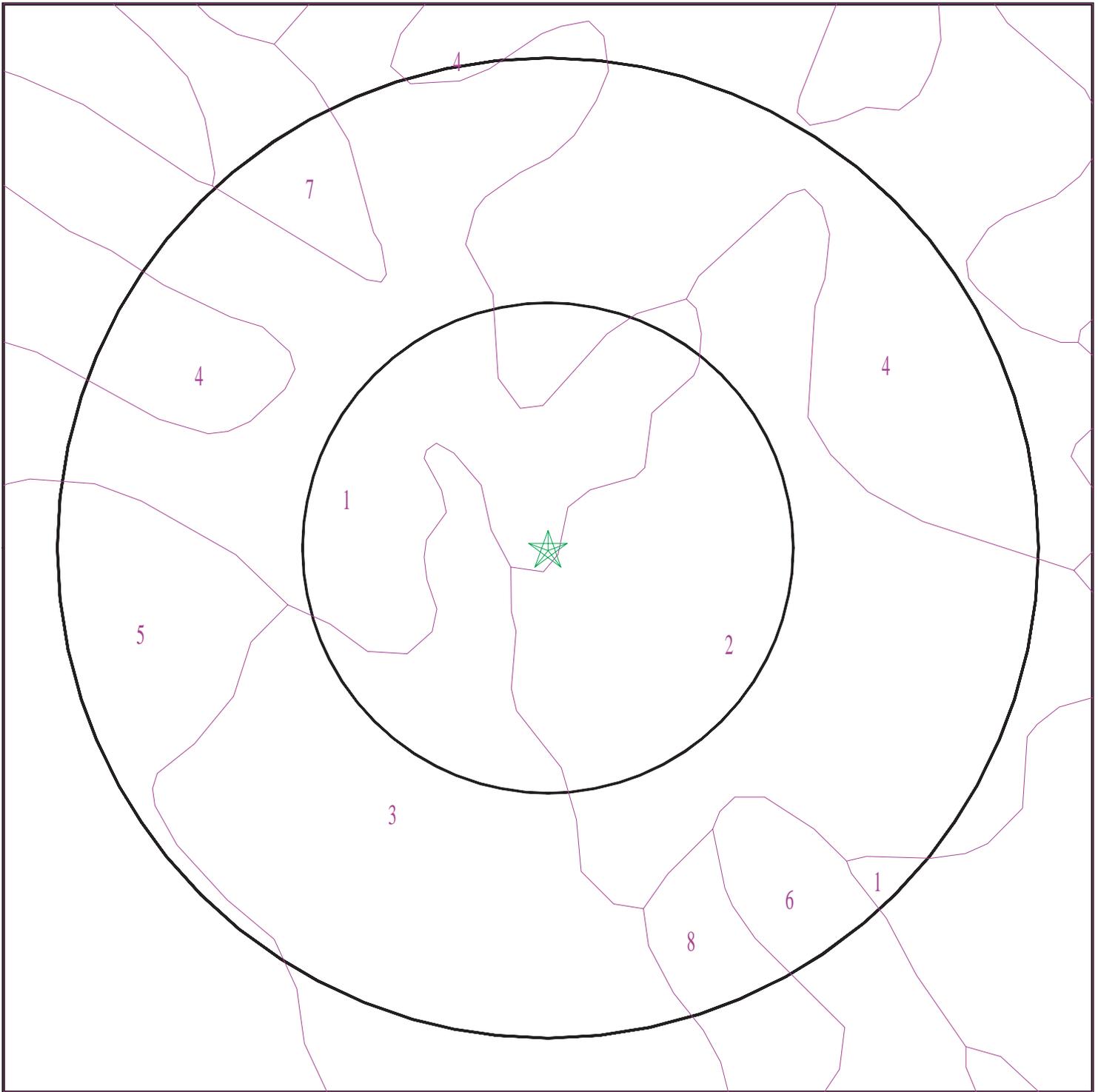
Era: Mesozoic
System: Cretaceous
Series: Cretaceous granitic rocks
Code: Kg *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

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 - 3580276.1s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: Jamul Indian Village Access
ADDRESS: 14100 Campo Road
Jamul CA 91935
LAT/LONG: 32.7054 / 116.8697

CLIENT: Natural Investigations
CONTACT: G.O. Graening
INQUIRY #: 3580276.1s
DATE: April 18, 2013 12:29 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: RAMONA

Soil Surface Texture: 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: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 7.3 Min: 6.6
2	9 inches	59 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 7.3 Min: 6.6
3	59 inches	74 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 7.3 Min: 6.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: FALLBROOK

Soil Surface Texture: 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: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
2	5 inches	11 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
3	11 inches	27 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
4	27 inches	46 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
5	46 inches	51 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 3

Soil Component Name: LAS POSAS

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: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	3 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
2	3 inches	33 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
3	33 inches	37 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:

Soil Map ID: 4

Soil Component Name: FALLBROOK

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: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	1 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
2	1 inches	24 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
3	24 inches	27 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
4	27 inches	31 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:

Soil Map ID: 5

Soil Component Name: CIENEBA

Soil Surface Texture: coarse 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:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 5 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	coarse sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: Min:	Max: Min:
2	7 inches	11 inches	weathered bedrock	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: Min:	Max: Min:

Soil Map ID: 6

Soil Component Name: LAS POSAS

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: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	3 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	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	3 inches	33 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:
3	33 inches	37 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: Min:	Max: Min:

Soil Map ID: 7

Soil Component Name: WYMAN

Soil Surface Texture: 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: 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	12 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 6.6

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	12 inches	40 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 6.6
3	40 inches	66 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 6.6
4	66 inches	72 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 6.6

Soil Map ID: 8

Soil Component Name: CIENEBA

Soil Surface Texture: coarse sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

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	9 inches	coarse sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: Min:	Max: Min:
2	9 inches	14 inches	weathered bedrock	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: Min:	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>
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	CA3700174	1/2 - 1 Mile NNW

Note: PWS System location is not always the same as well location.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

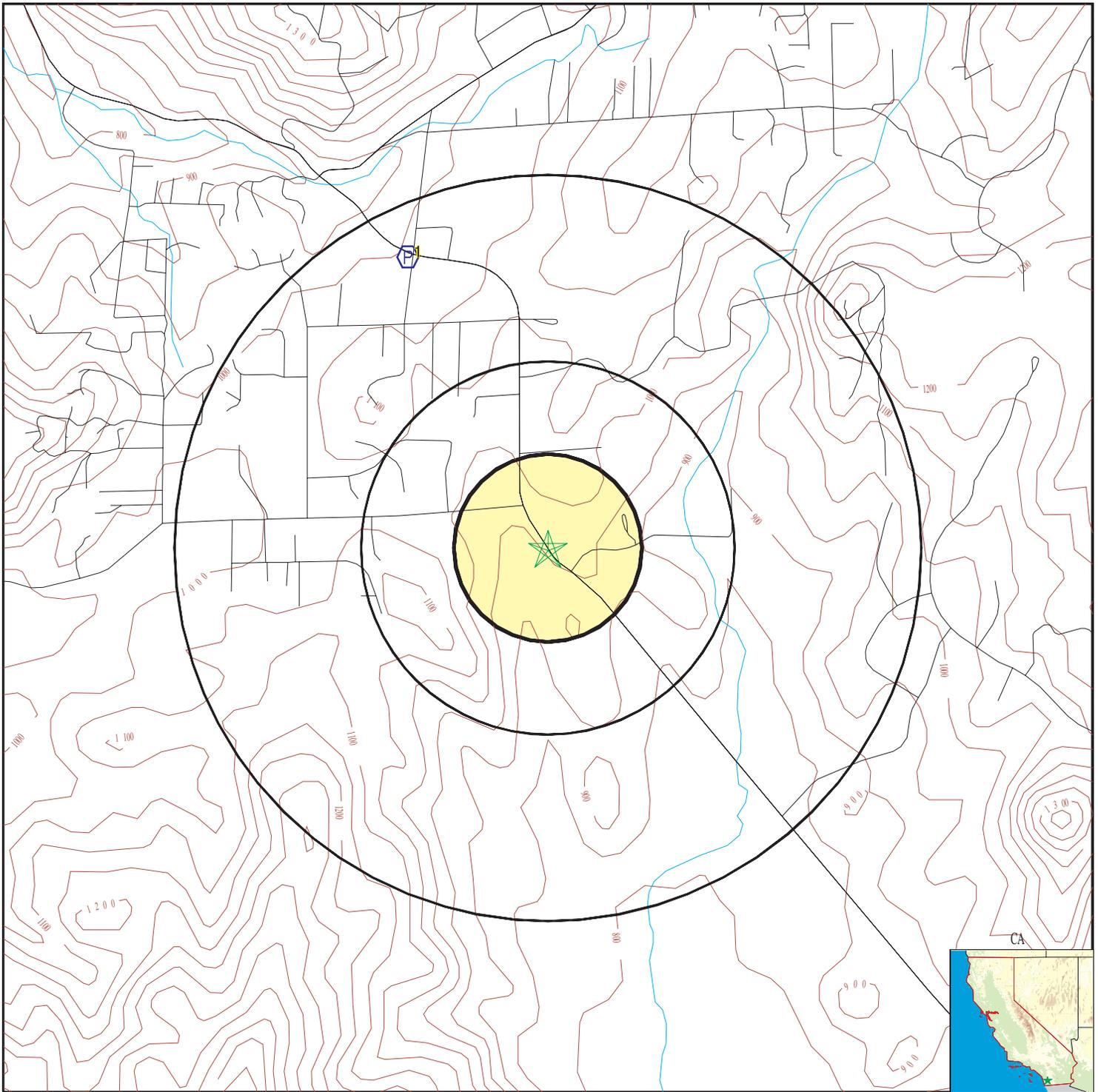
MAP ID

WELL ID

LOCATION
FROM TP

No Wells Found

PHYSICAL SETTING SOURCE MAP - 3580276.1s



- 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: Jamul Indian Village Access
 ADDRESS: 14100 Campo Road
 Jamul CA 91935
 LAT/LONG: 32.7054 / 116.8697

CLIENT: Natural Investigations
 CONTACT: G.O. Graening
 INQUIRY #: 3580276.1s
 DATE: April 18, 2013 12:29 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database

EDR ID Number

1
NNW
1/2 - 1 Mile
Higher

[Click here for full text details](#)

FRDS PWS

CA3700174

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
91935	6	0

Federal EPA Radon Zone for SAN DIEGO County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SAN DIEGO COUNTY, CA

Number of sites tested: 30

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.677 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.400 pCi/L	100%	0%	0%
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R 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 Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Health Services

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

RADON

State Database: CA Radon

Source: Department of Health Services

Telephone: 916-324-2208

Radon Database for California

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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