*Marysville Joint Unified School District*

# Hammonton-Smartsville School Project

*Draft*

## Initial Study and Mitigated Negative Declaration

**June 2012**

rincon

Environmental Scientists Planners Engineers

# Hammonton-Smartsville School Project

## *Draft*
## *Initial Study-Mitigated Negative Declaration*

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*June 2012*

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# TABLE OF CONTENTS

Page

1.0 Introduction ..... 1-1
1.1 Purpose ..... 1-1
1.2 Initial Study Format and Contents ..... 1-2

2.0 Project Description ..... 2-1
2.1 Project Location ..... 2-1
2.2 Project Contact Person ..... 2-1
2.3 Project Objectives ..... 2-4
2.4 Project Description ..... 2-4
2.5 List of Responsible Agencies and Required Permits and Approvals ..... 2-7
2.6 Use of This Document by MJUSD ..... 2-8
2.7 Determination ..... 2-8

3.0 Environmental Checklist ..... 3-1
I. Aesthetics ..... 3-4
II. Agriculture and Forest Resources ..... 3-6
III. Air Quality ..... 3-7
IV. Biological Resources ..... 3-12
V. Cultural Resources ..... 3-19
VI. Geology and Soils ..... 3-21
VII. Greenhouse Gas Emissions ..... 3-25
VIII. Hazards and Hazardous Materials ..... 3-28
IX. Hydrology and Water Quality ..... 3-34
X. Land Use and Planning ..... 3-39
XI. Mineral Resources ..... 3-41
XII. Noise ..... 3-42
XIII. Population and Housing ..... 3-48
XIV. Public Services ..... 3-49
XV. Recreation ..... 3-51
XVI. Transportation/Traffic ..... 3-52
XVII. Utilities and Services Systems ..... 3-55
XVIII. Mandatory Findings of Significance ..... 3-58

4.0 References ..... 4-1

**List of Figures**

Figure 2-1 Regional Location Map ..... 2-2
Figure 2-2 Site Location Map ..... 2-3
Figure 2-3 Site Plan ..... 2-5

**List of Tables**

Table 3-1 Special Requirements under the State School Facility Program ..... 3-1

Table 3-2 Jurisdictional Area on the Project Site....3-16
Table 3-3 Combined Annual Emissions of Greenhouse Gases....3-27
Table 3-4 Significance of Changes in Noise Exposure....3-44
Table 3-5 Comparison of Pre-Project and Post-Project Traffic Noise On Study Area Roadways....3-45

**Appendices**

Appendix A Air Quality and Greenhouse Gas Emissions Calculations
Appendix B Jurisdictional Delineation
Appendix C Preliminary Environmental Assessment
Appendix D Traffic Study
Appendix E Noise Data
Appendix F Geotechnical Evaluation
Appendix G Biological Assessment
Appendix H Preliminary Drainage Calculations

# 1.0 INTRODUCTION

## 1.1 PURPOSE

This Initial Study Mitigated Negative Declaration (IS-MND) has been prepared to identify and assess the anticipated environmental impacts of a new middle school, alternative education school, adult education center, and education support services proposed by the Marysville Joint Unified School District (MJUSD). Under the California Environmental Quality Act (CEQA), the development of the school is a discretionary action, and is therefore a "project" as defined under CEQA and subject to CEQA review. New school projects in California are also subject to environmental investigation overseen by the California Department of Toxic Substances Control (DTSC). In addition to CEQA and DTSC requirements, projects involving school site acquisition to be funded under the State School Facilities Program must also satisfy several specific requirements established in the California Education Code and California Code of Regulations. This IS-MND has been prepared to comply with these applicable regulations.

Section 15063(c) of the *CEQA Guidelines* defines an Initial Study as the proper preliminary method of analyzing the potential environmental consequences of a project. The purposes of an Initial Study are:

(1) To provide the Lead Agency with the necessary information to decide whether to prepare an Environmental Impact Report (EIR) or a Mitigated Negative Declaration;

(2) To enable the Lead Agency to modify a project, mitigating adverse impacts, thus avoiding the need to prepare an EIR; and

(3) To provide sufficient technical analysis of the environmental effects of a project to permit a judgment based on the record as a whole, that the environmental effects of a project have been adequately mitigated.

Section 15070 of the *CEQA Guidelines* states that a public agency shall prepare a negative declaration or mitigated negative declaration for a project subject to CEQA when:

(a) The Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment; or

(b) The Initial Study identifies potentially significant effects but:

1. Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed Mitigated Negative Declaration and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and

2. There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

An IS-MND may be used to satisfy the requirements of CEQA when a proposed project would have no significant unmitigable effects on the environment. As discussed further in subsequent sections of this document, implementation of the proposed project would not result in any significant effects on the environment that cannot be reduced to below a level of significance with the mitigation measures included herein.

## 1.2 INITIAL STUDY FORMAT AND CONTENTS

In addition to Section 1.0, *Introduction*, this IS-MND is organized into the following sections:

- **Section 2.0 - Project Description:** Includes a detailed description of the proposed project.

- **Section 3.0 - Environmental Checklist and Discussion:** Contains the Environmental Checklist Form together with an environmental setting and an impact discussion for each of the checklist questions. The Checklist Form is used to determine the following for the proposed project:

  1) "Potentially Significant Impacts" that may not be mitigated, even with the inclusion of mitigation measures;
  2) "Potentially Significant Impacts Unless Mitigated," which could be mitigated with incorporation of mitigation measures; and,
  3) "Less Than Significant Impacts," which would be less than significant and do not require the implementation of mitigation measures.

- **Section 4.0 - References:** Identifies the documents (printed references) and individuals (personal communications) consulted in preparing this IS/MND.

# 2.0 PROJECT DESCRIPTION

The proposed master planned project is located on a 50 acre site at 2176 Hammonton Smartsville Road in the community of Linda in unincorporated Yuba County. The Marysville Joint Unified School District's (MJUSD) project is comprised of an approximately 1,168 student Middle School, a 460 student Alternative High School, 100 student Adult Education Center / School, and Education Support Facilities, all of which will be constructed in phases. The Middle School will be a comprehensive 6-8 school with a multipurpose building and stage, gymnasium, library, science classrooms, art classrooms, Career Technical Education classrooms, and other flexible spaces. The Middle School site includes a full size soccer field, softball fields, a track, and other multiuse fields. The Alternative High School and Adult Education Center / School will be situated in the center of the property. The Education Support Facilities include District wide services for the schools, site administrators, staff and students, such as in-service and training rooms, transportation, maintenance, and a warehouse.

## 2.1 PROJECT LOCATION

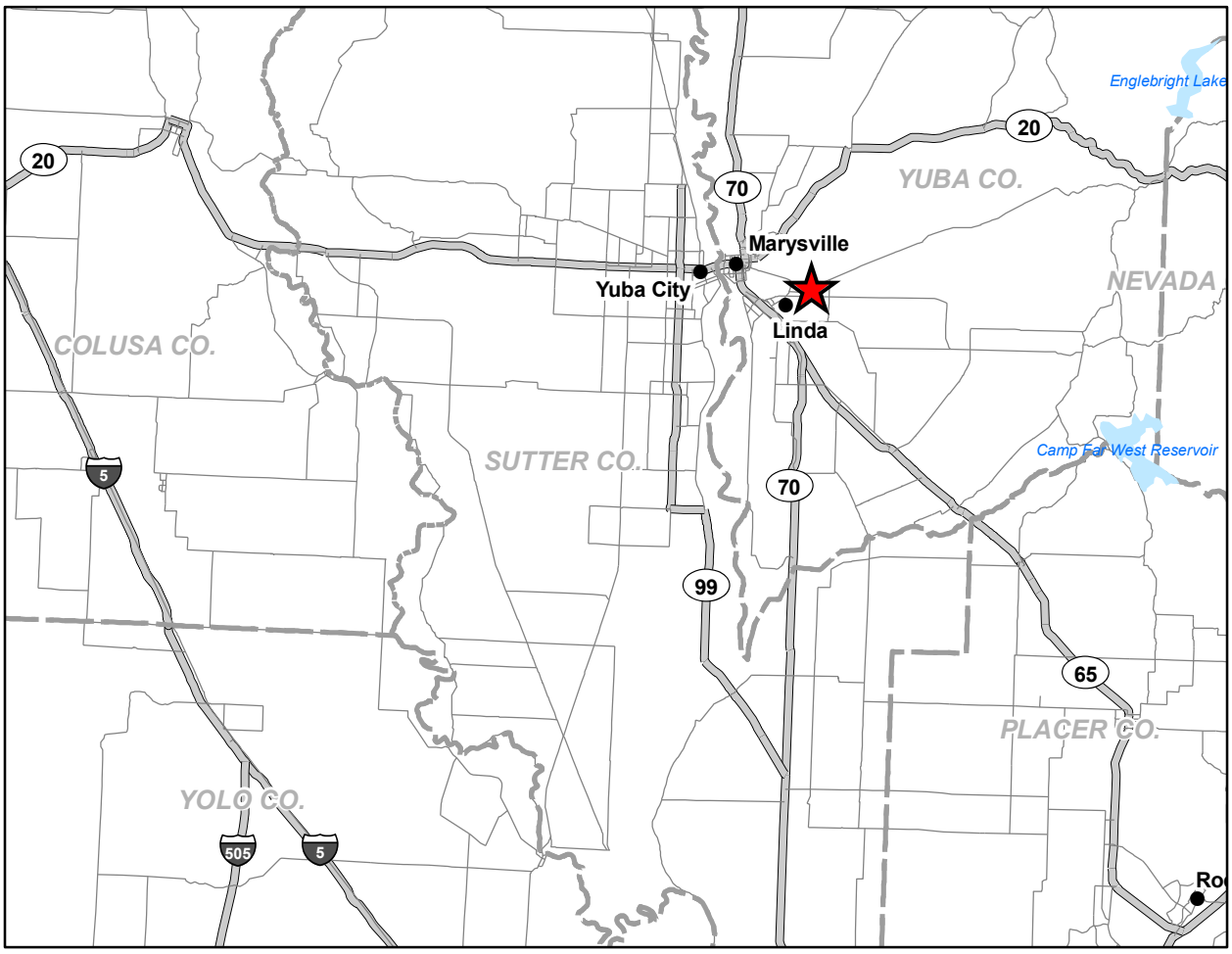
The proposed project is located in the East Linda Specific Plan Area of unincorporated Yuba County, approximately 2.5 miles southeast of the City of Marysville. Yuba County encompasses approximately 644 square miles and is bordered by Butte County to the north, Plumas and Sierra Counties to the northeast, Nevada County to the east, Placer County to the south, and Sutter County to the west. Figure 2-1 shows the regional location of the proposed project.

The project site is in an urban area approximately 1.5 miles northeast of State Route 70, south of Hammonton-Smartsville Road, and east of the City of Marysville city limit. The site is identified by the physical address of 2176 Hammonton-Smartsville Road. The 50-acre project site is bound to the north, east, and south by single-family residential developments, and to the west by a 29 acre area of open space, and single-family residences further to the west. Figure 2-2 shows the location of the project site and adjacent roadways.

The project site is located in Township 15 North and Range 4 East, and Section 21 of the United States Geological Survey (USGS) 7½-Minute topographic series, Yuba City, California Quadrangle Map.

## 2.2 PROJECT CONTACT PERSON

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*Base map source: U.S. Bureau of the Census TIGER Data, 2000, ESRI 2006.*

Regional Location Figure 2-1




*Aerial source: Map images copyright © 2012 ESRI and its licensors.*
*All rights reserved. Used by permission.*

Approximate Site Boundary

0 250 500 Feet

N

Site Location

Figure 2-2

## 2.3 PROJECT OBJECTIVES

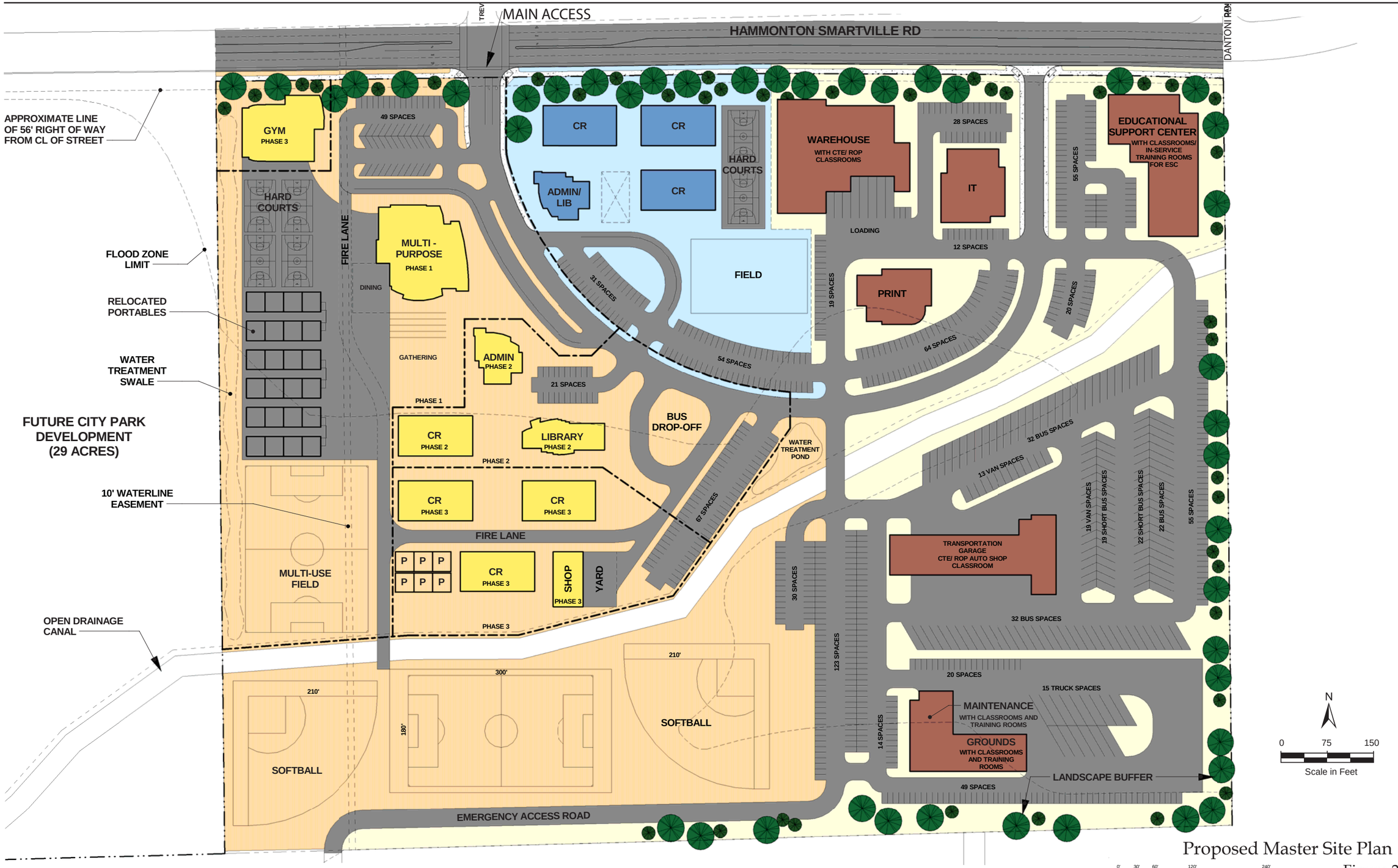
The primary objectives of the proposed project are as follows:

- *To construct a new middle school and alternative education high school facility to alleviate existing and anticipated overcrowding at existing schools;*
- *To expand opportunities for more area students to participate in a scholastic social environment, physical activities, and other campus events – opportunities made more likely by the construction of a new middle school and alternative education high school rather than an expansion of existing facilities; and*
- *To provide a new facility that reduces the distance to school for students within portions of the Marysville community.*
- *To provide expanded adult education and education support facilities for the school district.*

## 2.4 PROJECT DESCRIPTION

The proposed master planned project is located on a 50 acre site at 2176 Hammonton-Smartsville Road in the East Linda Specific Plan Area in unincorporated Yuba County. The proposed project is comprised of an approximately 1,168 student middle school, a 460 student alternative high school, 100 student adult education center and school, and education support facilities. The middle school will be a comprehensive school for grades 6 through 8 with a multipurpose building and stage, gymnasium, library, science classrooms, art classrooms, career technical education classrooms, bus drop-off and pick up area, and other multipurpose spaces. The middle school site includes a full sized soccer field, softball fields, a track, and other multiuse fields with lighting sufficient to allow nighttime events. The alternative education high school and adult education center and school will be situated in the center of the property. These two schools will have the ability to use both the facilities and the fields of the middle school after hours. The education support facilities buildings maybe two-stories in height and include district wide services for the schools, administration services, staff and students, such as in-service and training rooms, transportation storage, food storage, maintenance and ground storage, and a warehouse. Primary access to the school site would be from Hammonton-Smartsville Road, which borders the site to the north. Emergency and secondary access will be provided along the southern boundary of the project site. Figure 2-3 shows the master site plan for the proposed project.

The project site for the proposed middle school is located in the East Linda Specific Plan Area of Yuba County, southeast of the City of Marysville. The project site is zoned SP-1 with a sub-zone of SP PF (Specific Plan Public Facilities) under the Yuba County Zoning Ordinance (2008), and designated PF (Public Facilities) under the East Linda Specific Plan (1990).




Proposed Master Site Plan

Figure 2-3

*Base Drawing Source: Rainforth Architecture, January 30, 2012*

The utilities to the project site would include the following:

- **Wastewater**. The Linda County Water District would provide wastewater service to the project. The Water District would be responsible for operation and maintenance of the wastewater and effluent collection system.

- **Water**. The Linda County Water District would provide water services to the project. Customers are served through a system of water mains and landscape irrigation wells.

- **Storm Drainage.** The Yuba County Public Works Department manages the Linda Drain, as well as regional detention basins, ponds, and creeks. The MJUSD would construct the necessary on-site storm drainage facilities.

- **Gas/Electricity**. Pacific Gas & Electric Company (PG&E) would provide gas and electricity to the project. Infrastructure for energy provision to the site is pre-existing.

- **Fire Service**. The Linda Fire Department would provide fire protection services.

- **Police Service**. The Yuba County Sheriff's Department would provide law enforcement services to the project.

A construction schedule for development of the proposed schools and associated facilities has not yet been developed; therefore, the timing of the project phasing is currently uncertain. It is anticipated that construction phasing will be dependent on funding availability. Construction activities will include site clearing, grading and development of the school facilities. Construction will also include excavation and remediation of existing contaminated soils on the project site. The project is expected to require the export of 460 cubic yards of soil, which will require 23 heavy duty truck haul trips from the site.

## 2.5 LIST OF RESPONSIBLE AGENCIES AND REQUIRED PERMITS AND APPROVALS

The MJUSD is the lead agency for the project. The project requires the following approvals from various responsible agencies:

- **California Department of Education —** Approve proposed project design;
- **Offic of Public School Construction —** Review proposed project for funding;
- **Yuba County —** Review and approve all required permits, including grading and offsite design.
- **Regional Water Quality Control Board (RWQCB) –** Issuance of RWQCB, Central Valley Region, National Pollutant Discharge Elimination System (NPDES) general permit under Section 402 of the Clean Water Act (CWA) for storm water drainage during construction activities.
- **Division of State Architect –** Approve all project building plans.

## 2.6 USE OF THIS DOCUMENT BY MJUSD

This IS-MND will be used in the public review and decision-making process for the proposed project. It is the intent of the MJUSD that this document be circulated and reviewed pursuant to the State CEQA Guidelines.

## 2.7 DETERMINATION

On the basis of this initial evaluation:

| | |
|---|---|
| I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. | |
| I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in the attached Initial Study have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared. | **X** |
| I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. | |
| I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (1) have been analyzed in an earlier EIR pursuant to applicable standards and (2) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project. | |

6/25/12
Date

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# 3.0 ENVIRONMENTAL CHECKLIST

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

- ☒ **Aesthetics**
- ☐ **Agricultural Resources**
- ☒ **Air Quality**
- ☒ **Biological Resources**
- ☒ **Cultural Resources**
- ☒ **Geology and Soils**
- ☐ **Greenhouse Gas Emissions**
- ☒ **Hazards and Hazardous Materials**
- ☒ **Hydrology and Water Quality**
- ☐ **Land Use and Planning**
- ☐ **Mineral Resources**
- ☒ **Noise/Vibration**
- ☐ **Population and Housing**
- ☐ **Public Services**
- ☐ **Recreation**
- ☒ **Transportation/Circulation**
- ☐ **Utilities and Service Systems**

In addition to general CEQA requirements, projects involving school site acquisition to be funded under the State School Facilities Program must also satisfy several specific requirements established in the California Education Code and California Code of Regulations. The applicable sections of the Education Code and California Code of Regulations are listed below in Table 3-1, along with a description of the general topic and the Environmental Checklist section in which each requirement is addressed.

**Table 3-1. Special Requirements under the State School Facility Program**

| General Topic | Education Code Section | California Code of Regulations Section | Environmental Checklist Issue Area |
|---|---|---|---|
| Would the project involve the construction, reconstruction, or relocation of any school building on a site subject to moderate to high liquefaction? | * | Title 5 § 14011(i) | Geology and Soils |
| Would the project involve the construction, reconstruction, or relocation of any school building on a site subject to landslides? | * | Title 5 § 14011(i) | Geology and Soils |
| Would the project involve the construction, reconstruction, or relocation of any school building on a geologic fault or trace fault along which surface rupture can reasonably be expected to occur within the life of the school building? | § 17212 & § 17212.5 | Title 5 § 14010(f) | Geology and Soils |
| Is the project site the site of a current or former hazardous waste disposal site or solid waste disposal site and, if so, have the wastes been removed? | § 17213(a)(1) | * | Hazards and Hazardous Materials |

## Table 3-1. Special Requirements under the State School Facility Program

| General Topic | Education Code Section | California Code of Regulations Section | Environmental Checklist Issue Area |
|---|---|---|---|
| Is the project site a hazardous substance release site identified by the State Department of Health Services in a current list adopted pursuant to § 25356 for removal or remedial action pursuant to Chapter 6.8 of Division 20 of the Health and Safety Code? | § 17213(a)(2) | * | Hazards and Hazardous Materials |
| Is the boundary of the proposed school site within 500 feet of the edge of the closest traffic lane of a freeway or busy traffic corridor? If yes, would the project create an air quality health risk due to the placement of the School? | §17213(c)(1)(C) | * | Hazards and Hazardous Materials |
| Would the project create an air quality hazard due to the placement of a school within one-quarter mile of: a) permitted and non-permitted facilities identified by the jurisdictional air quality control board or air pollution control district; b) freeways and other busy traffic corridors; c) large agricultural operations; and/or d) a rail yard, which might reasonably be anticipated to emit hazardous air emissions, or handle hazardous or acutely hazardous material, substances or waste? | § 17213(b) | * | Hazards and Hazardous Materials |
| Is the school site an area designated in a city, county, or city and county general plan for agricultural use and zoned for agricultural production, and if so, do neighboring agricultural uses have the potential to result in any public health and safety issues that may affect the pupils and employees at the school site? | § 17215.5(a) | * | Hazards and Hazardous Materials |
| Is the proposed school site situated within 2,000 feet of a significant disposal of hazardous waste? | * | Title 5 § 14010(t) | Hazards and Hazardous Materials |
| Is the proposed school site a site that contains one or more pipelines, situated underground or aboveground, which carry hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line that is used only to supply natural gas to that school or neighborhood? | § 17213(a)(3) | * | Hazards and Hazardous Materials |
| Is the proposed school site located near an above-ground water or fuel storage tank or within 1,500 feet of an easement of an above-ground or underground pipeline that can pose a safety hazard to the site? | * | Title 5 § 14010(h) | Hazards and Hazardous Materials |

**Table 3-1. Special Requirements under the State School Facility Program**

| General Topic | Education Code Section | California Code of Regulations Section | Environmental Checklist Issue Area |
|---|---|---|---|
| Is the proposed school site located on a site containing or underline by naturally occurring hazardous materials? | § 17213.1(a)(B)iii | * | Hazards and Hazardous Materials |
| Is the proposed school site located on a site where the property line is less than the following distances from the edge of the respective power line easements: 1) 100 feet of a 50-133 kV line; 2) 150 feet of a 220-230 kV line; or 3) 350 feet of a 500-550 kV line? | * | Title 5 § 14010(c) | Hazards and Hazardous Materials |
| Is the proposed school site within two miles, measured by air line, of that point on an airport runway or potential runway included in an airport master plan that is nearest to the site? | § 17215(a)&(b) | * | Hazards and Hazardous Materials |
| Is the project site subject to flooding or dam inundation? | * | Title 5 § 14011(g) | Hydrology and Water Quality |
| Would the proposed school conflict with any existing or proposed land uses, such that a potential health or safety risk to students would be created? | * | Title 5 § 14010(m) | Land Use |
| Is the proposed school site located adjacent to or near a major arterial roadway or freeway whose noise generation may adversely affect the educational program? | * | Title 5§ 14010(e) | Noise |
| Is the proposed school site located adjacent to or near a major arterial roadway or freeway that may pose a safety hazard? | * | Title 5 § 14010(e) | Transportation and Circulation |
| Are traffic and pedestrian hazards mitigated per Caltrans', "School Area Pedestrian Safety" manual? | * | Title 5 § 14010(l) | Transportation and Circulation |
| Is minimum peripheral visibility maintained for driveways per Caltrans' Highway Design Manual? | * | Title 5 § 14010(k) | Transportation and Circulation |
| Is the proposed school site within 1,500 feet of a railroad track easement? | * | Title 5 § 14010(d) | Transportation and Circulation |

The following checklist was developed as a tool to screen potential environmental impacts and is consistent with questions contained in the Appendix G of the CEQA Guidelines. The questions in Table 3-1 above have been added to the checklist below to ensure that all California Education Code and California Code regulations are satisfied. An environmental impact analysis discussion and finding is included after each issue area.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **I. AESTHETICS** – Would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☒ | ☐ |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | ☒ | ☐ |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☒ | ☐ | ☐ |

**Setting**

The project site is bound to the north, east, and south by single-family residential development, and to the west by a 29-acre open space area, and single-family residences further to the west. The proposed project site is currently occupied with a single family residential unit with an associated pasture. The project site is visible primarily from Hammonton-Smartsville Road, Alberta Avenue, and Sutter Street, which are not designated as scenic roadways. The site is not visible from beyond Hammonton-Smartsville Road and other local collector streets, or parcels other than those immediately adjacent because of the flat topography of the area. The site is characterized as a visual extension of the nearby residences, pastures, and open space, and is not identified as visually unique. No significant visual resources are present in, or visible from, the site vicinity.

**Answers to Checklist Questions**

***Questions A, B and C:***

Development of the proposed school would alter the aesthetic condition of the site by replacing the existing residence and associated structures with a new middle school, alternative education school, adult education school center, and education support facilities. However, it would not affect views from any designated scenic highway, nor would it damage or block views of any designated scenic resources. The site does not provide a vantage point to a scenic vista, nor are there any rock outcroppings or other valuable scenic resources. The proposed school would be consistent with the character of existing urban development in the site vicinity. In addition, the project would also be consistent with the East Linda Specific Plan, which has

designated the project site Public Facilities – School, intended for the development of a public school. As such, the proposed project would not degrade the visual character of the area. There would be no impacts to scenic vistas, and impacts to scenic resources and the visual character of the site and its surroundings would be less than significant.

*Question D:*

The proposed development would incrementally introduce light from sources, such as security lighting around the buildings and parking areas, interior lighting, and recreational facility lighting, and nighttime lighting of athletic fields. Depending on the type of building materials used, such as reflective windows and exterior metal siding, development could introduce glare. Such light and glare could adversely affect adjacent residential uses. Impacts would be significant but mitigable.

**Mitigation**

The following measures shall be implemented to reduce adverse lighting effects to a less than significant level:

**AES-1(a)** **Security/Safety Lighting Design.** Security/safety lighting shall be designed to direct light away from adjacent residences, and shall be shielded to direct light downward to avoid direct glare. Light standards shall be designed to achieve no more than one (1) foot-candle at property boundaries, considering typical weather conditions. =

**AES-1(b)** **Athletic Field Lighting Control Measures.** Athletic field lighting shall be oriented to minimize impacts to existing and planned residential uses adjacent to the school site. Light fixtures for athletic facilities shall be equipped with glare control shields and directed in such a way to reduce impacts. The height of all lighting systems shall be minimized to the extent feasible without reducing the use of lighting for its intended purpose.

**Significance After Mitigation**

With implementation of the above measures, potential impacts related to light and glare would be reduced to a less than significant level.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **II. AGRICULTURE AND FOREST RESOURCES** -- Would the project: | | | | |
| a) Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☒ | ☐ |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | ☐ | ☐ | ☐ | ☒ |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | ☐ | ☐ | ☒ | ☐ |

**Setting**

The proposed project site has historically been used for residential uses and pasture, and is currently vacant. The site is zoned Specific Plan Public Facilities under the Yuba County Zoning Ordinance, and designated Public Facilities – School under the East Linda Specific Plan.

**Answers to Checklist Questions**

***Question A and B:***

The underlying soil at the proposed project site is comprised primarily of San Joaquin loam, with the remainder of the on-site soil being comprised of San Joaquin-Urban land complex

(LFR, 2009). The San Joaquin soil series are not classified by the National Resources Conservation Service (NRCS) as prime farmland (LFR, 2009). In addition, according to the Farmland Mapping and Monitoring Program, the project site is situated on two land use categories (Rural Residential and Urban/Built Up), neither of which are classified as prime or suitable for agricultural use (2010). In addition, because the site is contiguous with existing development and designated as Public Facilities (School) under the East Linda Specific Plan, the proposed project would not convert agriculturally designated land to non-agricultural uses. Yuba County does not participate in the California Land Conservation Act (Williamson Act) (Yuba County General Plan, 1994). No agricultural overlay zones have been established on the site. Therefore, impacts would be less than significant.

***Question C and D:***

There is no forestland or timberland located on the project site nor it is zoned for timberland production. No impacts would occur.

***Question E:***

The project would involve conversion of 50 acres of undeveloped land to school district land uses. As discussed above, the property is designated Public Facilities - School under the East Linda Specific Plan. The project site is generally surrounded by urban development, primarily consisting of residential uses. Development of the proposed project would not result in the conversion of farmland on-site or on adjacent parcels. Impacts would be less than significant.

**Mitigation**

No mitigation measures are required.

**Significance After Mitigation**

Impacts are less than significant without mitigation.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **III. AIR QUALITY --** Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☐ | ☒ | ☐ | ☐ |
| c) Result in a cumulatively considerable net | ☐ | ☒ | ☐ | ☐ |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **III. AIR QUALITY --** Would the project: | | | | |
| increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | | | |
| d) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☒ | ☐ | ☐ |
| e) Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

**Setting**

Due to climactic and topographical factors, the Northern Sacramento Valley is especially sensitive to the transport of pollutants from outside sources, as well as air pollutant emissions from within the Valley itself. Local sources of emissions include factories, automobiles, and agricultural operations.

The California Air Resources Board (CARB) provides information on the attainment status of counties regarding ambient air quality standards for certain pollutants, as established by the federal and/or state government. As of 2010, the Northern Sacramento Valley Air Basin (NSVAB) is in nonattainment for the state standard for particulate matter less than 10 microns in diameter ($PM_{10}$), and the federal standard for particulate matter less than 2.5 microns in diameter ($PM_{2.5}$). The Feather River Air Quality Management District (FRAQMD) was re-designated from nonattainment to nonattainment-transitional for the state designation for ozone. The change was confirmed by the CARB Board of Directors on March 25, 2010.

This analysis relies on the most recent Amendments to the Indirect Source Review Guidelines, adopted by the FRAQMD (June 7, 2010). Construction and operational emissions associated with the proposed project were quantified using California Emissions Estimator Model (CalEEMod), which was developed by the South Coast Air Quality Management District in collaboration with the air districts of California.

**Answers to Checklist Questions**

*Question A:*

In 2003, an update to the 1994 Air Quality Attainment Plan was prepared for the NSVAB, which includes Yuba County. The plan proposes rules and regulations that would limit the amount of

ozone emissions, in accordance with the 1994 State Implementation Plan (SIP) for ozone. The 2003 update summarizes the feasible control measure adoption status of each air district in the NSVAB, including the FRAQMD. The 2003 update was adopted by the FRAQMD, and development proposed by the project would be required to comply with its provisions.

The Air Quality Attainment Plan also addresses emissions from mobile sources, primarily motor vehicles with internal combustion engines. Data in the Plan, which was incorporated in the SIP, are based on the most currently available growth data. The proposed project would not result in an increase of population, but would rather accommodate students that could result from planned growth in the area, primarily within the East Linda Specific Plan area. The project would provide an additional school facility to augment the MJUSD's existing school facilities; consequently, it would redistribute existing school-related traffic from other parts of the County and City of Marysville and alleviate overcrowding at other schools. As a result, the proposed project is not expected to increase air emissions beyond what is currently anticipated nor would the project contribute to substantial regional increases in air pollutant emissions. Therefore, the project would be consistent with current air quality attainment and maintenance plans, because it is consistent with growth already anticipated. Impacts would be less than significant.

***Questions B and D:***

Construction activities are expected to result in temporary, short-term significant impacts to air quality in the form of ozone precursor (reactive organic gases [ROG] and nitrous oxides [$NO_X$]) emissions and $PM_{10}$ emissions. These impacts would be associated with dust generated by on-site construction and/or grading, equipment emissions during building construction, and ROG emissions from application of architectural coatings on exterior and interior surfaces. In addition, the reported emissions account for 23 heavy duty truck haul trips associated with the export of soil materials as part of site remediation. For projects where construction emissions of $NO_X$ or ROG do not exceed 25 lbs/day (4.5 tons/year) averaged over the length of the project, and the $PM_{10}$ emissions do not exceed 80 lbs/day during the construction period, the FRAQMD recommends implementation of standard construction phase mitigation measures.

Based on the CalEEMod emissions modeling, construction of the proposed project would result in an average of 2.3 tons/year of ROG, 6.3 tons/year of $NO_X$, and would not exceed 23.05 lbs/day of $PM_{10}$. These constriction emissions exceed the FRAQMD threshold for $NO_X$ by 1.8 tons/year. Mitigation Measure AQ-2 would require that all applicable construction equipment on the project site meet EPA Tier 3 emissions standards or better. Implementation of Mitigation Measure AQ-2 would reduce construction emissions of ozone precursors to an average of 2.0 tons/year of ROG and 4.2 tons/year of $NO_X$, which is less than the FRAQMD thresholds of significance for construction emissions. Therefore, impacts would be significant but mitigable.

***Question C:***

The FRAQMD has adopted significance thresholds for $NO_X$, ROG, and $PM_{10}$ emissions from development projects. Any project emitting in excess of 25 lbs/day $NO_X$ or ROG, or 80 lbs/day $PM_{10}$ would have a significant impact on air quality, and would require mitigation. Operational pollutant emissions of the proposed project were estimated using CalEEMod and the trip rates

derived from the Traffic Impact Study for the project (Appendix D) (refer to *Traffic/Circulation* section). Ozone precursor emissions are expected to total 27.6 lbs/day of ROG and 18.57 lbs/day of $NO_X$. ROG emissions would exceed the 25 lbs/day threshold. $PM_{10}$ emissions are expected to total 14.77 lbs/day, which does not exceed the FRAQMD threshold of significance (see Appendix A for full CalEEMod results). The proposed project would also augment the MJUSD's existing school facilities, which would distribute existing school-related traffic from other parts of the County and City of Marysville, and accommodate students from planned growth in the East Linda Specific Plan area. As such, it is likely the actual emissions from the proposed project would be lower than predicted by the emissions model. In addition, although the proposed development would exceed the FRAQMD thresholds of significance for ozone precursors, adherence to the East Linda Specific Plan EIR air quality mitigation measures, in addition to project compliance with the FRAQMD Standard Construction Mitigation Measures (Mitigation Measure AQ-1) and all applicable Standard Operational Mitigation Measures (Mitigation Measure AQ-3), as well as incorporation of feasible supplemental mitigation measures, would assist the FRAQMD in implementing the Air Quality Attainment Plan and reduce the impacts and the project's cumulative impacts to air quality to a less than significant level.

***Question E:***

Development of the proposed facilities is not expected to create any objectionable odors. The project does not include proposed activities that generate odors that may be considered objectionable, such as an industrial plant or an agricultural operation. Impacts would be less than significant.

**Mitigation**

The following FRAQMD emissions control measures are required to reduce air quality impacts to a less than significant level:

**AQ-1** **Standard Construction Phase Mitigation Measures**. The applicant shall implement the following standard mitigation measures to offset construction-related air quality impacts:

1. *Implement the Fugitive Dust Control Plan*
2. *Construction equipment exhaust emissions shall not exceed FRAQMD Regulation III, Rule 3.0, Visible Emissions limitations (40 percent opacity or Ringelmann 2.0)*
3. *The contractor shall be responsible to ensure that all construction equipment is properly tuned and maintained prior to and for the duration of onsite operation.*
4. *Limiting idling time to 5 minutes – save fuel and reduces emissions. (State idling rule: commercial diesel vehicles – 13 CCR Chapter 1- Section 2485 effective 02/01/2005; off road diesel vehicles – 13 CCR Chapter 9 Article 4.8 Section 2449 effective 05/01/2008)*
5. *Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.*
6. *Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public*

*transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.*

7. *Portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, may require California Air Resources Board (ARB) Portable Equipment Registration with the State or a local district permit. The owner/operating shall be responsible for arranging appropriate consultations with the ARB or the District to determine registration and permitting requirements prior to equipment operation at the site.*

**AQ-2** **Tier 3 Construction Equipment**. The Environmental Protection Agency (EPA) has developed standards for off-road construction equipment, delineated by "tiers". Tier 3 equipment emits the least amount of pollution. On-site construction equipment shall meet EPA Tier 3 emissions standards. A copy of each unit's certified tier specification, Best Available Control Technology (BACT) documentation, and CARB or AQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

**AQ-3** **Standard Operational Mitigation Measures**. The project applicant shall implement the following Standard Operational Mitigation Measures to the extent feasible. Standard Operational Mitigation Measures include:

1. *Provide bicycle lockers and/or racks,*
2. *Install lowest-emitting commercially available furnace,*
3. *Install ozone destruction catalyst on all air conditioning systems;*
4. *Install EPA Energy Star approved roofing materials or install "Green Roof" technology;*
5. *Install roof photovoltaic energy systems;*
6. *Measures exceeding Title 24 energy efficiency standards by 10% or more; and*
7. *Contract only with landscapers who operate with equipment that complies with the most recent California Air Resources Board certification standards, or standards adopted no more than three years prior to date of use;*

**AQ-4** **East Linda Specific Plan EIR Mitigation Measures**. The project shall incorporate applicable mitigation measures from the East Linda Specific Plan EIR, as follows:

1. *Pedestrian and bicycle paths (including connections thereto) shall be constructed at the time of development in accordance with the East Linda Specific Plan.*
2. *Secure bicycle parking facilities shall be constructed at the time of development.*

## Significance After Mitigation

With implementation of the above measures, potential impacts related to air quality would be reduced to a less than significant level.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **IV. BIOLOGICAL RESOURCES** -- Would the project: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☒ | ☐ | ☐ |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☒ | ☐ |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☒ | ☐ | ☐ |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☒ | ☐ |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☒ | ☐ |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural | | | | |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **IV. BIOLOGICAL RESOURCES** -- Would the project: | | | | |
| Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

The following site description and impact analysis is based upon the *Biological Resources Assessment, Hammonton-Smartsville School IS/MND, Yuba County, California* (Rincon Consultants, Inc. 2011), and the *Jurisdictional Delineation Hammonton-Smartsville School IS/MND, Yuba County, California*, refer to Appendix B and G, respectively.

**Setting**

The study area is located on the floor of the Central Valley at approximately 70 feet elevation above mean sea level and the topography on-site is flat. Immediately to the north of the property is Hammonton-Smartsville Road, to the east is rural residential development, to the south are a residential development and an undeveloped parcel, and to the west is an undeveloped parcel. The nearest water body is the Yuba River approximately two miles to the northeast. The region is characterized by a Mediterranean climate, with mild winters and hot summers. Average annual precipitation is approximately 20 inches, most of which falls in the form of rainfall from October through May (Western Regional Climate Center 2009). The natural landscape of the region, which historically consisted of grasslands and scattered shrublands, has been converted for irrigated agricultural use and rural and suburban development. No natural drainage features occur within or adjacent to the study area.

Plant Communities

Elements of three plant communities were observed within the study area (refer to Figure 2 in Appendix G). These plant communities included California Annual Grassland Series, Coastal and Valley Freshwater Marsh, and Ruderal/Developed.

*California Annual Grassland*. The California Annual Grassland plant community on-site corresponds to the non-native grassland plant community described by Holland (1986) and to the Annual Brome Grassland described by Sawyer et al. (2009). This plant community occupies approximately 46.9 acres within the study area and, as a result of historical agricultural use, was characterized by predominantly introduced herbaceous plant species.

*Coastal and Valley Freshwater Marsh*. The Coastal and Valley Freshwater Marsh on-site, as described by Holland (1986), corresponds most closely with the Soft Rush Marshes described by Sawyer et al. (2009). This plant community occupies approximately 0.3 acres and is confined entirely to the wetted portion of the Linda Drain, which traverses the property in a northeast to

southwest trend. This plant community has not been mapped as it is located exclusively within the Linda Drain. It should be noted that this plant community is routinely removed by the Yuba County Public Works Department to maintain flows within the Linda Drain, lending to the lack of diversity and artificial nature of this habitat.

*Ruderal/Developed*. The Ruderal/Developed plant community on-site is not described by either Sawyer et al. (2009) or Holland (1986) because it is a human-created habitat. This plant community occupies approximately 3.1 acres and is associated with the unoccupied residence in the northeast portion of the property and includes a home and several accessory buildings.

*Drainages and Wetlands*. A preliminary jurisdictional delineation of wetlands and other waters has been completed for the study area (Rincon 2011). Two man-made linear drainage features are present on-site, including one perennial to intermittent ditch known as the Linda Drain, and one unnamed ephemeral roadside ditch. The drainages were constructed for the purpose of transporting storm water and irrigation runoff from surrounding upland areas. The jurisdictional delineation and subsequent jurisdictional determination and agency concurrence determined that the Linda Drain is subject to the jurisdiction of the California Department of Fish and game (CDFG), Regional Water Quality Control Board (RWQCB) and United States Army Corps of Engineers (USACE), and the roadside ditch is only subject to the jurisdiction of the RWQCB. The jurisdictional delineation also identified patches of freshwater emergent wetland (described as Coastal and Valley Freshwater Marsh above) occurring within the ordinary high water mark of the Linda Drain. However, while hydrophytic vegetation is present in some wetted portions of the Linda Drain, the majority of the canal does not support hydrophytic vegetation and is not functioning as a wetland. This is consistent with the ongoing vegetation management performed by Yuba County within the canal that serves to keep the channel clear of vegetation and debris to allow for adequate flows and reduce the potential for flooding. Therefore, the Linda Drain was classified as "other waters" or non-wetland waters.

Special Status Species

*Sensitive Plant Communities*. A California Natural Diversity Database (CNDDB) records search was conducted that identified occurrences of three sensitive plant communities within the vicinity of study area: Coastal and Valley Freshwater Marsh, Great Valley Cottonwood Riparian Forest, and Great Valley Mixed Riparian Forest. A frequently disturbed version of Coastal and Valley Freshwater Marsh was observed fully contained within the Linda Drain. No other sensitive plant community was observed on-site.

*Special Status Plants*. The background research determined that thirteen (13) special status plant species are known to occur within the vicinity of the study area. Several of the special status plant species that occur in the region have highly specialized habitat requirements (e.g., adobe or alkaline soils, vernal pools) that do not occur within the study area. Ecological and status information and a complete assessment of the potential for each of these special status plant species can be found on-site in Table C-1 (Appendix G).

Of the thirteen (13) special status plant species that are known to occur in the general project vicinity, two (2) species were identified as potentially occurring within the study area: woolly rose-mallow (*Hibiscus lasiocarpos*) and Sanford's arrowhead (*Sagittaria sanfordii*). Both of these species have the potential to occur within the Coastal and Valley Freshwater Marsh habitat

located within the Linda Drain. As previously noted, no focused surveys for special status plant species were conducted in the study area. The potential for occurrence is based on a habitat suitability analysis level only.

*Special Status Animals*. Background research of the study area has identified twenty-six (26) special status animal species occurring in the vicinity of the study area. Please refer to Table C-2 (Appendix G) for ecological and status information for each species, as well as an assessment of the potential for each to be found on-site. Of these, three (3) were determined to have the potential to occur on-site: northern harrier (*Circus cyaneus*), Swainson's hawk (*Buteo swainsoni*), and white-tailed kite (*Elanus leucurus*). No focused surveys for special status animal species have been conducted on the study area. The potential for occurrence is based on a habitat suitability analysis level only.

**Answers to Checklist Questions**

***Question A:***

Two rare plant species were determined to have the potential to occur; the woolly rose-mallow and Sanford's arrowhead. Both of these species have the potential to occur within Coastal and Valley Freshwater Marsh habitats. The Linda Drain is not considered a permanent marsh habitat area, as the primary function of the Linda Drain, a man-made drainage, is to convey water. For flood control purposes however, vegetation and debris in the Linda Drain is periodically removed by the Yuba County Public Works Department to maintain flows within the Linda Drain. When the County removes vegetation and debris, the temporary marsh habitat and any plant species within the temporary marsh habitat are removed. As a result, impacts to these plant species would not be considered significant because the Linda Drain is already highly disturbed and does not permanently support these plant species.

The project site provides suitable foraging habitat for the Swainson's hawk. The Swainson's hawk is listed as "Threatened" under the California Endangered Species Act and they are well documented within the vicinity of the project site. The CNDDB identified three (3) nest locations within five (5) miles of the project site from 2004. Swainson's hawks require large tracts of open habitat for foraging. Development of the proposed project will reduce available foraging habitat for this species. Though no nests have yet been documented on-site, the trees on-site may also support nesting Swainson's hawks. Impacts to these trees during the nesting season, as well as the overall loss of foraging habitat, may result in impacts to Swainson's hawks if nests are present on or near the project site. These potential impacts are significant but mitigable.

The white-tailed kite may also nest and forage on-site. White-tailed kites are "Fully Protected" species under the California Fish and Game Code (Section 3511). This protection covers white-tailed kite individuals and nests. The trees on-site may support white tailed kite nests, and thus support white tailed kite individuals during the nesting season. If the trees are removed during the nesting season, the white tailed kite individuals and nests may be impacted if they are present. Impacts to white-tailed kite nests are considered significant but mitigable.

Other bird species protected by the USFWS through the Migratory Bird Treaty Act and/or the CDFG through the Fish and Game Code (Section 3503, 3503.5) may be found nesting in the trees and grassland on-site. Foraging habitat will be lost for these species; however, the abundance

of foraging habitat within the vicinity of the project renders such impacts minimal. Active nests may be impacted through destruction of nests during implementation of the project. Impacts would be significant but mitigable.

*Question B:*

The Coastal and Valley Freshwater Marsh present within the Linda Drain is considered a sensitive habitat by the CDFG. However, the Linda Drain is not considered a permanent habitat area, as the primary function of the Linda Drain, a man made drainage, is to convey water. Small areas of low diversity, highly disturbed marsh can form when Yuba County Public Works Department has not cleared out vegetation and debris. However, vegetation and debris is periodically removed by the Yuba County Public Works Department to maintain flows within the Linda Drain. When the County removes vegetation and debris, the temporary habitat is lost. The construction of culverts within the Linda Drain would therefore not impact sensitive and permanent marsh habitat. Although CDFG has indicated they will assert jurisdiction over the Linda Drain, it is not anticipated that CDFG will require mitigation for this particular temporary and highly disturbed habitat. Impacts would be less than significant without mitigation.

*Question C:*

The proposed project includes the construction of three culverts in the Linda Drain. The Linda Drain falls under the jurisdiction of the USACE, RWQCB and CDFG as "other" or non-wetland waters. In addition, the ephemeral roadside ditch located on the property falls under the jurisdiction of the RWQCB. The Coastal and Valley Freshwater Marsh occurs solely within the Ordinary High Water Mark (OHWM) of the Linda Drain and, thus, does not warrant separate jurisdictional status. Total impacts to jurisdictional areas are summarized in Table 3-2 below. Impacts to jurisdictional areas are considered significant but mitigable.

**Table 3-2. Jurisdictional Areas on the Project Site.**

| Jurisdictional Type | USACE[1] | RWQCB[1] | CDFG[1] |
|---|---|---|---|
| | Non-wetland Waters Acres (Linear Feet) | Non-wetland Waters Acres (Linear Feet) | Streambed/ Riparian Habitat Acres (Linear Feet) |
| Linda Drain | 0.10 (80) | 0.10 (80) | 0.10 (80) |
| East-West Ephemeral Ditch | 0 | 0.10 (1,533) | 0 |
| **Total** | 0.10 (80) | 0.20 (1,613) | 0.10 (80) |

*Question D:*

The project site is not located within a known wildlife movement corridor. The project site is surrounded by residential development. Those species that are well adapted to developed areas, such as coyotes (*Canis latrans*), red foxes (*Vulpes vulpes*), and smaller animals, may cross the site occasionally. However, the persistent presence of humans and domestic animals in the vicinity of the project would discourage use of the property by wildlife. Implementation of the project is not expected to substantially diminish wildlife movement through the area.

Furthermore, the site has historically been farmed and is not known to support a wildlife nursery site. Impacts would be less than significant.

***Question E:***

Valley oaks (*Quercus lobata*) are present along the western edge of the subject property, and several ornamental trees are present at the abandoned residence. These trees may be impacted through implementation of the proposed project. The 2030 Yuba County General Plan includes goals, policies and action items focused on the preservation of trees. Section 11.25.340 of Title XI of the Yuba County municipal code requires engineered grading plans to depict the locations of any oak tree with a minimum diameter at breast height (dbh) of five (5) inches. Despite these guidelines and ordinances, there is no tree removal permit process, nor is mitigation required for impacts to trees.

The 2030 Yuba County General Plan requires avoidance of special status species and sensitive habitats, or mitigation for such impacts if avoidance is not feasible. The mitigation measures described below will reduce impacts to special status species to a less than significant impact. Thus, the project does not conflict with local policies or ordinance and no impacts will occur.

***Question F:***

The project site is located within the boundaries of the Yuba-Sutter Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP); however, this NCCP/HCP is still in the planning stages and has not yet been adopted. As such, no impacts will occur.

**Mitigation**

The following measures should be implemented to reduce impacts to special status biological resources to a less than significant level:

**BIO-1** **Surveys and Mitigation for Impacts to Swainson's Hawk**. Because Swainson's Hawk is protected under the Migratory Bird Treaty Act (§16 United States Code 703-711), as listed in Title 50 of the Code of Federal Regulations, Parts 10.13 and 23.23, prior to commencement of construction activities, surveys for Swainson's hawks should be conducted in accordance with CDFG-approved protocols (Swainson's Hawk Technical Advisory Committee 2000) to determine if nests are present on-site. If a nest is found within the project site, the CDFG should be consulted. The CDFG recommends that no new intensive disturbances (including heavy equipment construction associated with construction) should occur within 0.25 mile of an active nest between March 1 and September 15. Outside of the period, the destruction of a known nest shall require approval from the CDFG. In addition, if it is determined in accordance with CDFG protocols that potentially significant impacts could occur to foraging habitat based on the findings of the survey, mitigation replacement ratios should conform to CDFG mitigation recommendations and shall ensure that adequate off-site compensatory mitigation area is provided to offset the impact to a less than significant level.

**BIO-2** **Nesting Bird Surveys**. Because other bird species protected under the Federal Migratory Bird Treaty Act (§16 United States Code 703-711) and Fish and Game Code (§3511, 4700, 5050, and 5515) ), including the white tailed kite, have the potential to occur within the project site, initial construction activities should occur outside of the nesting season (February 1 to September 15) as feasible. If initial vegetation/ground disturbing activities must be initiated during the nesting season, surveys of the entire project site plus a 500-foot buffer (only includes areas with access granted) for white-tailed kites and all other nesting birds should be conducted no more than two (2) weeks prior to vegetation removal and/or initiation of construction activities. If nests are found on-site, a buffer should be established around the nest site(s) for the duration of the nesting activity based on the species present as determined by a qualified biologist, typically 250-500 feet for raptors and 50-200 feet for other bird species. No construction activities should occur within this buffer until a qualified biologist has determined that the adults and fledglings are no longer reliant upon the nest site.

**BIO-3** **Jurisdictional Drainage Mitigation**. Because the project would impact areas within the Linda Drain that are within the jurisdiction of CDFG, USACE and RWQCB, and pursuant to the Clean Water Act and Fish and Game Code Section 1600, prior to issuance of grading permits, regulatory permits shall be obtained from the CDFG,USACE and RWQCB for impacts to the Linda Drain and the east-west drainage ditch on-site. Mitigation for impacts to these drainages shall be required at a minimum ratio of 1:1 (acres mitigation to acres impacted). Mitigation shall occur on-site or at an off-site location approved by the applicable agency, including CDFG, USACE and RWQCB. Alternatively, credits for impacts to jurisdictional drainages may be purchased at a mitigation bank upon approval from each regulatory agency. The nearest mitigation bank with credits available for impacts to freshwater marsh and jurisdictional riparian areas is the Sacramento River Ranch Wetlands Mitigation Bank, operated by Wildlands, Inc.

**Significance After Mitigation**

With implementation of the above measures, potential impacts related to biological resources would be reduced to a less than significant level.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **V. CULTURAL RESOURCES** -- Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | ☐ | ☐ | ☒ | ☐ |
| b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5? | ☐ | ☒ | ☐ | ☐ |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☒ | ☐ | ☐ |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☒ | ☐ | ☐ |

**Answers to Checklist Questions**

***Questions A and B:***

The records search (2009) prepared for the proposed project site indicated that the Linda Drain is over 50 years old and therefore potentially historic. Three culverts would be constructed within the Linda Drain, which could impact this potentially historic resource. These modifications to the Linda Drain require special permitting from the USACE, which also triggers the need to comply with Section 106 of the National Historic Preservation Act of 1966 (NHPA). Section 106 requires Federal agencies, which includes the USACE in this instance, to take into account the effects of their undertakings on historic resources. The Section 106 process would determine whether the Linda Drain is a historic resource and the extent of potential impacts relative to the proposed project. Because the full extent of impacts to the historic nature of the Linda Drain is not known at this time, impacts could be potentially significant.

No archaeological resources have been recorded on or near the property. However, according to the records search, there remains the possibility of encountering undiscovered archaeological resources during project construction activities. Impacts related to undiscovered archaeological resources would be potentially significant but mitigable.

***Questions C and D:***

There is no evidence to suggest that human remains or paleontological resources have been encountered in the project vicinity; however, there remains the possibility of encountering undiscovered human remains or paleontological resources during project construction

activities. Impacts related to undiscovered human remains and paleontological resources would be potentially significant but mitigable.

**Mitigation**

The following measures shall be included to reduce potential impacts to a less than significant level:

**CUL-1** **Section 106 Compliance**. The MJUSD shall contract with a qualified cultural resources specialist to prepare a report in compliance with Section 106 of the NHPA,. The qualified cultural resource specialist shall gather information to determine which resources in the project area are listed in or eligible for the National Register of Historic Places. If they are determined to be eligible, the cultural resources specialist shall determine how historic properties might be affected and explore alternatives to avoid or reduce harm to historic properties; and the MJUSD shall implement measures to deal with any adverse effects or obtain advisory comments from the Advisory Council on Historic Resources, which are sent to the head of the agency. MJUSD shall comply with all recommendations and findings of the Section 106 process so as to ensure that impacts to historic resources are minimized to the extent practical.

MJUSD shall be notified immediately if any potentially historic, prehistoric, archaeological, or paleontological artifact is uncovered during construction of the proposed project. In such an event, all construction in the area must stop and the archaeologist shall evaluate the finds and recommend appropriate action.

**CUL-2** **Undiscovered Human Remains**. If any human remains are uncovered all construction must stop and appropriate authorities must be notified. The County Coroner must be notified according to Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the procedures outlined in CEQA Guidelines Section 15064.5 (d) and (e) shall be followed.

**Significance After Mitigation**

With implementation of the above measures, potential impacts related to cultural resources would be reduced to a less than significant level.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **VI. GEOLOGY AND SOILS** – Would the project: | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? | ☐ | ☐ | ☒ | ☐ |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☒ | ☐ | ☐ |
| iv) Landslides? | ☐ | ☐ | ☒ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c) Be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property? | ☐ | ☒ | ☐ | ☐ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☒ | ☐ |
| f) Would the project involve the construction, reconstruction, or relocation of any school building on a site subject to moderate to high liquefaction? | ☐ | ☐ | ☒ | ☐ |
| g) Would the project involve the construction, reconstruction, or relocation of any school | | | | |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **VI. GEOLOGY AND SOILS** – Would the project: | | | | |
| building on a site subject to landslides? | ☐ | ☐ | ☒ | ☐ |
| h) Would the project involve the construction, reconstruction, or relocation of any school building on a geologic fault or trace fault along which surface rupture can reasonably be expected to occur within the life of the school building? | ☐ | ☐ | ☒ | ☐ |

**Setting**

The following analysis is based on the Geologic Hazards Evaluation Report For Hammonton Smartsville Property prepared by LFR (2009) , see Appendix D.

The project site is located on the eastern side of the Sacramento River Valley, which forms the northern part of the Great Valley Geomorphic Province (California Geological Survey [CGS] 2002). The Sacramento Valley generally trends north-south; it is bordered by the Coast Ranges to the west and by the Sierra Nevada and Cascade Ranges to the east. The valley is filled with a thick sedimentary sequence of continental and marine origin.

The surficial sediments on the project site include unconsolidated alluvial deposits of Holocene to Pliocene age. These are underlain by the consolidated Mehrten Formation, which contains volcanic and volcaniclastic rocks of Mio-Pliocene age. The project site is located near the confluence of the Yuba and Feather Rivers. The site is separated from both rivers by levees. The nearest levee, which lies between the Site and the Yuba River, is located approximately 1,000 feet northwest from the northwest corner of the Site.

**Answers to Checklist Questions**

***Questions A) i, ii, and H:***

According to the most recent Alquist-Priolo Fault Map, there are no Alquist-Priolo designated fault zones within Yuba County or surrounding counties. The closest active faults, as per the current California Probabilistic Seismic Hazard Assessment model, are located approximately 9 miles to the northeast of the project site. Accordingly, the project site would not be located on an active fault. Based on historic earthquakes within the project vicinity, nearby faults are expected to potentially produce strong ground shaking on the project site. Due to the distance between the site and active faults and the known characteristics of those faults, the project site has a relatively low

risk of exposing structures to damage and people to injury or death as a result of groundshaking. Impacts would be less than significant.

***Questions A) iii, iv, C, F and G:***

The surficial sediments on the project site are composed of unconsolidated Quaternary alluvial deposits. Shallow groundwater historically occurred at a depth of approximately 15 feet, and likely occurs today at roughly 50 feet below ground surface. Because the project site is characterized by both unconsolidated surficial deposits and shallow groundwater, a liquefaction risk may exist during seismic groundshaking. In addition, due to the unconsolidated surficial sediments on the project site, some seismic settlement could occur during a future earthquake, even if these sediments are above the water table. However, the extent of such settlement is unlikely to be significant. Therefore, liquefaction risks are potentially significant but mitigable and seismic settlement risks are less than significant.

The project site is located in a valley area and is relatively flat; therefore, landslides do not pose a significant risk. In addition, the project site was mapped as an area of "low" landslide risk (the lowest category) by the County of Yuba (2009a, p. 4-64). Moreover, the project site is not located outside of the land subsidence zones. Therefore, landslide and land subsidence risks are less than significant.

***Question B:***

The proposed project would include grading activities during constriction, which would expose soils and potentially result in increased erosion during a storm event. Development of the proposed project site would cumulatively disturb more than one acre, thereby triggering the need for completion of a Stormwater Pollution Prevention Plan (SWPPP), in conformance with the National Pollutant Discharge Elimination System (NPDES). The SWPPP identifies best management practices (BMPs) that control surface runoff, erosion, and sedimentation during constriction. BMPs would require Best Available Technology Economically Achievable (BAT) and the Best Conventional Pollutant Control Technology (BCT) in order to avoid discharging pollutants into waterways. With implementation of a SWPPP as required by the NPDES General Construction Permit, construction activities would reduce polluted runoff from the site to the extent practical. Therefore, impacts would be less than significant.

***Question D:***

The NRCS has mapped the project site soils as predominantly San Joaquin Loam, 0 to 1 percent slopes. San Joaquin Loam soils consist of a mixture of sand, silt, and clay that typically form on alluvial deposits derived from predominantly granitic sources. San Joaquin soils have high shrink-swell potential. In addition, the project site and most other parts of western Yuba County, were mapped as areas of moderate to high shrink-swell potential by the County of Yuba. Therefore, impacts are potentially significant but mitigable.

***Questions E:***

The facility proposed for development would not include the use of septic tanks; therefore, no

impacts would occur related to septic tank use or other alternative wastewater disposal. Wastewater disposal would be channeled into the existing wastewater conveyance system (see *Utilities and Service Systems*). Therefore, impacts would be less than significant.

**Mitigation**

The following measures shall be included in the project to reduce potential impacts to a less than significant level:

**GEO-1** **Geotechnical Study and Hazard Reduction.** A geotechnical study shall be performed pursuant to the recommendations of the Geologic Hazards Evaluation Report (2009). The geotechnical evaluation shall include a liquefaction and expansive soil analysis. At a minimum, the liquefaction analysis and expansive soil analysis shall be in accordance with County and State building codes, and the California Division of Mines and Geology Guidelines for Evaluating and Mitigating Seismic Hazards in California (as amended). The study shall include site-specific depth to groundwater and soil composition as they relate to seismically induced hazards. Areas having liquefiable sediments and expansive soils shall be identified, and structures shall be properly designed to withstand the conditions as recommended by the geotechnical evaluation. The MJUSD shall incorporate appropriate recommendations in the geotechnical investigation into the design of the project.

Suitable measures to reduce liquefaction and expansive soil impacts could include one or more of the following techniques, as determined by a registered geotechnical engineer:

- *Specialized design of foundations by a structural engineer;*
- *Removal or treatment of liquefiable soils to reduce the potential for liquefaction;*
- *Drainage to lower the groundwater table to below the level of liquefiable soil;*
- *In-situ densification of soils or other alterations to the ground characteristics; or*
- *Excavation of existing expansive soils and importation of non-expansive soils;*
- *Foundation design to accommodate certain amounts of differential expansion such as posttensional slab and/or ribbed foundations.*

**Significance After Mitigation**

With implementation of the above measures, potential impacts related to geology and soils would be reduced to a less than significant level.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **VII. GREENHOUSE GAS EMISSIONS** - Would the project: | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☒ | ☐ |

## Setting

Greenhouse gases (GHGs) are emitted by both natural processes and human activities. Of these gases, carbon dioxide ($CO_2$) and methane ($CH_4$) are emitted in the greatest quantities from human activities. Emissions of $CO_2$ are largely by-products of fossil fuel combustion, whereas $CH_4$ results from off-gassing associated with agricultural practices and landfills. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Different types of GHGs have varying global warming potentials. The global warming potential of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas ($CO_2$) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" ($CO_2E$), and is the amount of a GHG emitted multiplied by its global warming potential.

According to the CalEPA's 2010 Climate Action Team Biennial Report, potential impacts of climate change in California may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CalEPA, April 2010). While these potential impacts identify the possible effects of climate change at a global and potentially statewide level, in general, scientific modeling tools are currently unable to precisely predict what impacts would occur locally.

The FRAQMD has not yet adopted quantitative GHG emissions thresholds, and no GHG emissions reduction plan or GHG emissions thresholds have been adopted in Yuba County. The California Air Pollution Control Officers Association (CAPCOA) has provided several approaches in their white paper *CEQA and Climate Change* (January 2008) to consider potential cumulative significance of projects with respect to GHGs. The threshold of 10,000 $CO_2E$ per year has been used as a quantitative benchmark for significance because it is most suitable threshold included the white paper.

GHG emissions quantification for the project was conducted using CalEEMod, which was developed by the South Coast Air Quality Management District in collaboration with the air districts of California. For CalEEMod results, refer to Appendix A.

**Answers to Checklist Questions**

*Question A*

GHG emissions of the proposed project were estimated using identical assumptions regarding vehicle trip generation as the air quality analysis, above (refer to *Air Quality* section for additional discussion).

Construction Emissions. Based on the CalEEMod model results, construction of the proposed would result in an estimated 5,677 metric tons of $CO_2E$. As recommended by CAPCOA, amortized over a 50-year period,construction of the project would generate an estimated 114 metric tons of $CO_2E$ per year. Truck trips associated with soil removal as part of site remediation are included in this total.

Energy Use. Operation of the project would consume both electricity and natural gas. The generation of electricity through combustion of fossil fuels typically yields $CO_2$, and to a smaller extent, $N_2O$ and $CH_4$. Electricity and natural gas consumption would generate approximately 791 metric tons of $CO_2E$ per year.

Solid Waste. It is anticipated that the project would generate solid waste that would result in approximately 143 metric tons of $CO_2E$ per year according to the CalEEMod output, which uses current waste disposal rates provided by the California Department of Resources Recycling and Recovery.

Water Use. Based on the CalEEMod model estimate, water conveyance systems, such as pumps and treatment to serve the proposed project would generate approximately 27 metric tons of $CO_2E$ per year.

Transportation. Mobile source GHG emissions were estimated using total daily trips based on the traffic impact analysis prepared by Dowling Associates (Appendix A), and by the total vehicle miles traveled (VMT) estimated in CalEEMod. Based on the CalEEMod model estimate, mobile emissions resulting from on site development would generate an estimated 1,516 metric tons $CO_2E$ per year.

Combined Construction, Stationary and Mobile Source Emissions. Table 3-3 combines the construction, operational (energy use, solid waste, and water use emissions), and mobile GHG emissions associated with the proposed project.

**Table 3-3. Combined Annual Emissions of Greenhouse Gases**

| Emission Source | Annual Emissions ($CO_2E$) |
|---|---|
| **Construction** | 114 metric tons |
| **Operational** | |
| Energy | 791 metric tons |
| Solid Waste | 143 metric tons |
| Water | 27 metric tons |
| **Mobile** | 1,581 metric tons |
| **Total** | **2,656 metric tons** |

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

The combined annual emissions would total 2,656metric tons $CO_2E$ per year. This emissions estimate indicates that the majority of the project's GHG emissions are associated with vehicular travel (60%). However, the project would also reduce existing emissions by supplementing existing school facilities within the MJUSD, and thereby potentially reducing trip length to school for many students within the District. Therefore, net $CO_2$ emissions caused by the project are likely to be lower than the 2,656metric tons $CO_2E$ per year of project emissions estimated by the model.

As discussed above, in the absence of adopted thresholds of significance from FRAQMD or Yuba County, thresholds from the CAPCOA *CEQA and Climate Change* white paper were considered, and a quantitative threshold of 10,000 metric tons $CO_2E$ per year was selected as an appropriate threshold for determining the significance of GHG emissions from the proposed project. The proposed project's contribution of about 2,656 metric tons $CO_2E$ per year would not exceed the 10,000 metric tons $CO_2E$ per year CAPCOA threshold. Therefore, impacts from GHG emissions would be less than significant.

***Question B***

There are no local adopted GHG reduction plans in Yuba County. As such, the state level policy for GHG reduction is used herein. Assembly Bill (AB) 32, signed in September 2006, requires the State's global warming emissions to be reduced to 1990 levels by 2020. After completing a comprehensive review and update process, ARB approved a limit of 427 million metric tons of $CO_2E$ statewide by 2020 (ARB, October 2007), roughly a 30% reduction from 1990 levels. The GHG 10,000 metric ton threshold use above was developed to be consistent with the goals of AB 32. Because the proposed project does not exceed the threshold, the proposed project would be consistent with the goals of AB 32. Therefore, the proposed project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be less than significant.

## Mitigation

No mitigation measures are required.

## Significance After Mitigation

Impacts are less than significant without mitigation.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **VIII. HAZARDS AND HAZARDOUS MATERIALS -** Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school? | ☐ | ☐ | ☒ | ☐ |
| d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☒ | ☐ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **VIII. HAZARDS AND HAZARDOUS MATERIALS -** Would the project: | | | | |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☒ |
| h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☐ | ☐ | ☒ | ☐ |
| i) Is the project site the site of a current or former hazardous waste disposal site or solid waste disposal site and, if so, have the wastes been removed? | ☐ | ☐ | ☒ | ☐ |
| j) Is the project site a hazardous substance release site identified by the State Department of Health Services in a current list adopted pursuant to § 25356 for removal or remedial action pursuant to Chapter 6.8 of Division 20 of the Health and Safety Code? | ☐ | ☒ | ☐ | ☐ |
| k) Is the boundary of the proposed school site within 500 feet of the edge of the closest traffic lane of a freeway or busy traffic corridor? If yes, would the project create an air quality health risk due to the placement of the School? | ☐ | ☒ | ☐ | ☐ |
| l) Would the project create an air quality hazard due to the placement of a school within one-quarter mile of: a) permitted and non-permitted facilities identified by the jurisdictional air quality control board or air pollution control district; b) freeways and other busy traffic corridors; c) large agricultural operations; and/or d) a rail yard, which might reasonably be anticipated to emit hazardous air emissions, or handle hazardous or acutely hazardous material, substances or waste? | ☐ | ☒ | ☐ | ☐ |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **VIII. HAZARDS AND HAZARDOUS MATERIALS -** Would the project: | | | | |
| m) Is the school site an area designated in a city, county, or city and county general plan for agricultural use and zoned for agricultural production, and if so, do neighboring agricultural uses have the potential to result in any public health and safety issues that may affect the pupils and employees at the school site? | ☐ | ☐ | ☐ | ☒ |
| n) Is the proposed school site situated within 2,000 feet of a significant disposal of hazardous waste? | ☐ | ☐ | ☐ | ☒ |
| o) Is the proposed school site a site that contains one or more pipelines, situated underground or aboveground, which carry hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line that is used only to supply natural gas to that school or neighborhood? | ☐ | ☐ | ☐ | ☒ |
| p) Is the proposed school site located near an above-ground water or fuel storage tank or within 1,500 feet of an easement of an above-ground or underground pipeline that can pose a safety hazard to the site? | ☐ | ☒ | ☐ | ☐ |
| q) Is the proposed school site located on a site containing or underline by naturally occurring hazardous materials? | ☐ | ☐ | ☐ | ☒ |
| r) Is the proposed school site located on a site where the property line is less than the following distances from the edge of the respective power line easements: 1) 100 feet of a 50-133 kV line; 2) 150 feet of a 220-230 kV line; or 3) 350 feet of a 500-550 kV line? | ☐ | ☐ | ☐ | ☒ |
| s) Is the proposed school site within two miles, measured by air line, of that point on an airport runway or potential runway | | | | |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **VIII. HAZARDS AND HAZARDOUS MATERIALS -** Would the project: | | | | |
| included in an airport master plan that is nearest to the site? | ☐ | ☐ | ☐ | ☒ |
| t) Is the project site subject to flooding or dam inundation? | ☐ | ☒ | ☐ | ☐ |

**Setting**

Answers to the following checklist questions are based on the information contained in the Preliminary Environmental Assessment (PEA) Work Plan prepared for the proposed project, refer to (Appendix C).

**Answers to Checklist Questions**

***Questions A, B, and C:***

The proposed project would not create a significant hazard to the public or environment involving operational use of hazardous materials. The proposed project involves the construction of a public school and would not involve the use, storage, disposal, or transportation of significant quantities of hazardous materials. Future on-site uses may handle materials that are considered hazardous, though these materials would be limited to solvents, paints, chemicals used for cleaning and building maintenance, and landscaping supplies. These materials would not be substantially different from household chemicals and solvents. No activities under the proposed project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, nor would the proposed project emit hazardous emissions. Impacts would be less than significant.

***Questions D, I and J:***

The proposed school would not be built upon a former or current hazardous substance release site. However, the presence of lead, pesticides, and polychlorinated biphenyls is possible near the existing structures. In addition, PEA Work Plan (Appendix C) recommends that the soils piles near the southwestern portions of the site, soils near the on-site water well, soils near the existing trash piles and soils near the Linda Drain be tested for contamination. Soils near the former burn pit are also recommended to be tested. Moreover, the contents of the existing 55 gallon steel drum should be profiled and removed from the site. Impacts would be potentially significant but mitigable.

***Question E, F and S:***

The proposed school site is not located within two miles of an active airport or airstrip. No impacts would occur.

***Question G:***

The proposed school is located on a largely undeveloped property. Adequate emergency access would be provided to the project site, as shown on Figure 2-3. The project does not contain any characteristics that would conflict with emergency response or evacuation. No impacts would occur.

***Question H:***

The proposed project site is largely undeveloped and contains minimal vegetation, other than annual and perennial grassland; however, the southern portion of the project site is designated as a "moderate" fire hazard (California Department of Forestry and Fire Protection, 2007). However, the proposed project would remove annual and perennial grassland where development occurs that otherwise may be considered a fire hazard. In addition, the project site is largely surrounded by urban uses and would not be located adjacent to wildlands. Impacts would be less than significant.

***Question K and L:***

The proposed school would not be located within one quarter mile of a large agricultural operation or rail yard that would expose the school site to air quality hazards. However, the Feather River Air Quality Management District has identified multiple hazardous air emitters within one quarter mile of the proposed school site. These emission sources include a Linda County Water District well station diesel generator approximately 500 feet to the north of the project site, and Hammonton Smartville, Simpson-Dantoni, and North Beale Roads. Impacts would be potentially significant but mitigable.

***Question M:***

The project site is not designated for agricultural uses. The property is currently designated as Public Facilities - School under the East Linda Specific Plan. The project site is generally surrounded by urban development, primarily including residential uses. No impacts would occur.

***Question N:***

The proposed school site would not be located within 2,000 feet of a significant disposal site of hazardous waste. No impacts would occur.

***Question O:***

The proposed school site does not contain pipelines that carry hazardous materials or waste. No impacts would occur.

***Question P:***

A high-pressure, high-volume 12-inch water line is located near the western boundary of the project site. A high-pressure, high-volume water pipeline is defined by the California Department of Education as a pipeline that is equal to or greater than 12-inches in diameter. The PEA Work Plan (Appendix C), states that a stage 2 Pipeline Risk Assessment should be prepared in general accordance with the methodology presented in the California Department of Education "Guidance Protocol for School Site Pipeline Risk Analysis, Section 4.7.6". Mitigation Measure HAZ-1 below will require, as a part of the PEAto be prepared, that a pipeline risk analysis is included. Impacts would be potentially significant but mitigable.

***Question Q:***

The project site is greater than ten miles from a known naturally occurring asbestos formation. No impacts would occur.

***Question R:***

The school site would not be located within 100 feet of a 50-133 kV line, 250 feet of a 220-330 kV line, or 350 feet of a 500-550 kV line. No impacts would occur.

***Question T:***

According to FEMA, much of the project site is located within the 100-year flood zone (Zone AE). The 100-year flood zone affects most of the western part of the project site, as well as portions of the eastern part of the Site adjacent to the Upper Linda Drain. The northeastern and southeastern parts of the Site are outside of the 100-year flood zone (Zone C). The proposed project would locate school facilities, including classrooms, the library, the administrative office and other facilities within the 100-year flood zone. This impact and associated mitigation is discussed in Hydrology and Water Quality below.

The project site is located within the inundation zones of five dams, including Englebright Dam, New Bullards Bar Dam, Scotts Flat Dam, Bowman Dam and Jackson Meadows Dam. In addition, other upgradient dams have the potential to affect the Site indirectly, through levee failure. The State Division of Safety of Dams maintains jurisdictional authority over these dams. The Division provides twice a year inspection of the dams and continuous safety oversight. According to the Division, the dams under its jurisdiction are safe and have a very low probability of failure (Yuba County 1994). Impacts from inundation due to structural dam or levee failure to the proposed project would be less than significant.

**Mitigation Measures**

The following measure shall be implemented:

**HAZ-1** **Preliminary Environmental Assessment (PEA) Recommendations**. All recommendations described in the PEA Work Plan (Appendix C) for this project shall be implemented. These include:

- Determine the presence of lead, pesticides, and polychlorinated biphenyls at the specified locations in the PEA Work Plan;
- Collect shallow soil samples at the locations described in the PEA Work Plan and analyze these samples for contamination;
- Determine the contents of the existing 55 gallon steel drum and remove from the site;
- Prepare a pipeline risk analysis for the high-pressure 12-inch water pipeline that has been identified within 1,500 feet of the project site;
- Prepare a hazardous risk assessment for the hazardous air emitters within a one quarter mile radius.

If contamination or health risks exceeding regulatory action levels is found in any of the above locations, appropriate remediation shall be undertaken prior to issuance of grading permits for the contaminated area. Any remedial activity shall be conducted to the satisfaction of the appropriate regulatory oversight agency (for example, the Regional Water Quality Control Board or Department of Toxic Substances Control).

**Significance After Mitigation**

With implementation of the above measures, potential impacts related to hazardous materials would be reduced to a less than significant level. Impacts related to truck trips associated with site remediation are addressed in the Air Quality, Greenhouse Gas Emissions, Noise, and Traffic sections of this document.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **IX. HYDROLOGY AND WATER QUALITY** – Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements? | ☐ | ☐ | ☒ | ☐ |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **IX. HYDROLOGY AND WATER QUALITY** – Would the project: | | | | |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | ☐ | ☐ | ☒ | ☐ |
| d) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | ☐ | ☐ | ☒ | ☐ |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☒ | ☐ | ☐ |
| f) Otherwise substantially degrade water quality? | ☐ | ☐ | ☒ | ☐ |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | ☐ | ☐ | ☐ | ☒ |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | ☐ | ☒ | ☐ | ☐ |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **IX. HYDROLOGY AND WATER QUALITY** – Would the project: | | | | |
| i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? | ☐ | ☐ | ☐ | ☒ |
| j) Inundation by seiche, tsunami, or mudflow? | ☐ | ☐ | ☐ | ☒ |

**Setting**

The project site is generally flat, sloping gently east to southwest, which is also the general flow pattern of the Linda Drain. The site is approximately 3 miles east of the Feather River and approximately 1.5 miles southeast of the Feather River (due to the river's curvature). The Linda Drain, as well as local channels and basins control water flow in the area. The Linda Drain is under the jurisdiction of the Yuba County Public Works Department, and is an integral part of the Department's South Yuba Drainage Master Plan. The drains join to the south of the East Linda Specific Plan area to form the Olivehurst Interceptor, which then connects to Reeds Creek Channel.

The water distribution system serving the project site is operated and maintained by the Linda County Water District. The District derives all of its water from groundwater resources originating in the South Yuba County Subbasin of the Sacramento Valley Groundwater Basin, which underlies the Sacramento Valley. The South Yuba County Subbasin is bounded on the north by the Yuba River, on the west by the Feather River, on the south by the Bear River, and on the east by the Sierra Nevada mountain range.

Portions of the project site are located in the Federal Emergency Management Agency (FEMA) designated 100-year flood zone (Flood Insurance Rate Map (FIRM) 06115C0345D). The flood zones are generally associated with flow pattern of the Linda Drain. The flood zone is designated as "AE", which is defined as a 100-year flood zone with base flood plain elevations. The base flood plain elevations within the project site range from 70 to 72 feet.

**Discussion**

**Answers to Checklist Questions**

*Question A:*

The protection of water quality is under the jurisdiction of the RWQCB, and the proposed

project would be required to comply with all state and federal requirements pertaining to preservation of water quality. A National Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activities is required when a site involves clearing, grading, and disturbances to the ground of one or more acres of total land area, as discussed above in *Geology and Soils*. In addition, the state permit prohibits the discharge of materials other than storm water discharges, and prohibits all discharges that contain a hazardous substance in excess of reportable quantities established at 40 Code of Federal Regulations (CFR) 117.3 or 40 CFR 302.4. The state permit also specifies that construction activities must meet all applicable provisions of Sections 30 and 402 of the Clean Water Act (CWA). Conformance with Section 402 of the CWA would ensure that the proposed project does not violate any water quality standards or waste discharge requirements. Furthermore, it would ensure that the project would not substantially degrade surface or groundwater quality. Impacts would be less than significant.

***Question B:***

The water distribution supply system serving the project site is operated and maintained by the Linda County Water District (LCWD). LCWD derives all of its water supply from groundwater resources originating in the South Yuba Subbasin of the Sacramento Groundwater Basin. The South Yuba Subbasin is in recharge with estimated increases in the annual groundwater storage rate in recent years ranging from 15,100 acre-feet per year (AFY) to 21,200 AFY, depending on year type. As of 2011, LCWD has an allocated supply of 16,470 acre feet through the year 2035 from the South Yuba Basin. The proposed project would rely upon this existing allocation for water supply. The project would not involve on-site groundwater extraction, nor would it consume a substantial amount of groundwater beyond the existing allocation, and would not be required to drill additional wells. Impacts to groundwater resources would be less than significant.

Water supply and demand impacts are discussed below in *Utilities and Service Systems*.

***Questions C and D:***

The proposed project would not alter the course of a stream or river; however, it would modify the Linda Drain, which currently traverses the project site. The proposed project would alter the drain by constructing three culverts in the channel to allow for vehicle and pedestrian circulation on the project site. The general course of the drain would remain the same, however. This alteration would not result in substantial erosion or siltation because it would not expose new soils to erosion. In addition, the proposed culverts would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site because the drain would continue to convey existing flows, only through a modified conveyance structure.

The proposed project would have the potential to increase the rate or amount of downstream flooding because it would accommodate new stormwater runoff flows generated by the proposed project. However, as demonstrated by the preliminary drainage calculations (Appendix H), flows entering the drainage channel will not increase beyond current levels because flows will be detained on site through the construction of detention basins, thereby

limiting flow rates and the potential for downstream flooding. Impacts would be less than significant.

***Question E:***

Implementation of the proposed project would increase the area of impervious surfaces on the site when compared to existing conditions, resulting in an incremental increase in runoff, which may exceed the capacity of the Linda Drain. However, as discussed above, the drainage study (Appendix H) demonstrated that flows entering the drainage channel will not increase beyond current levels because flows will be detained on site through the construction of detention basins. Therefore, the capacity of the Linda Drain will not be exceeded. Impacts would be less than significant.

***Question F:***

The project involves development of school facilities, which due to their scope and nature would not otherwise substantially degrade water quality. Impacts to water quality would be less than significant.

***Questions G:***

The proposed project does not include a residential component. Therefore, the project would not place housing in a flood zone. No impacts would occur.

***Questions H:***

According to FEMA, much of the project site is located within the 100-year flood zone (Zone AE). The 100-year flood zone affects most of the western part of the project site, as well as portions of the eastern part of the Site adjacent to the Upper Linda Drain. The northeastern and southeastern parts of the Site are outside of the 100-year flood zone (Zone C). The proposed project would locate school facilities, including classrooms, the library, the administrative office and other facilities within the 100-year flood zone, which could expose such structures to hazards associated with flooding and/or redirect floodwater flows. Therefore, impacts would be significant but mitigable.

***Questions I:***

According to the Geologic Hazards Evaluation Report (Appendix F), the project site is located within the inundation zones of five dams, including Englebright Dam, New Bullards Bar Dam, Scotts Flat Dam, Bowman Dam and Jackson Meadows Dam. In addition, other upgradient dams have the potential to affect the Site indirectly, through levee failure. The State Division of Safety of Dams maintains jurisdictional authority over these dams. The Division provides twice a year inspection of the dams and continuous safety oversight. According to the Division, the dams under its jurisdiction are safe and have a very low probability of failure (Yuba County 1994). No impacts would result.



*Question J:*

Inundation by seiche, tsunami, or mudflow is not likely on this site due to the elevation, topography, and location of this site. No impacts would result.

**Mitigation Measures**

The following measures shall be included to reduce impacts to a less than significant level:

**HWQ-1** **Structure Base Elevation**. The finished floor elevation of all school facility structures within the 100-year flood zone shall be a minimum of 1 foot above the established flood plain elevation, as designated by FEMA.

**Significance After Mitigation**

With implementation of the above measures, potential impacts related to flooding would be reduced to a less than significant level.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **X. LAND USE AND PLANNING –** Would the proposal: | | | | |
| a) Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☐ | ☒ |
| c) Conflict with an applicable habitat conservation plan or natural community conservation plan? | ☐ | ☐ | ☐ | ☒ |
| d) Would the proposed school conflict with any existing or proposed land uses, such that a potential health or safety risk to students would be created? | ☐ | ☐ | ☐ | ☒ |

**Setting**

The proposed project is located in unincorporated Yuba County, southeast of the incorporated community of Marysville. The project site is designated Specific Plan Public Facilities under the Yuba County Zoning Ordinance, and designated Public Facilities - School under the East Linda Specific Plan (1990). The proposed project is located in a residential environment characterized by single-family residential development. The site is bound to the north, east, and south by single-family residential development, and to the west by a 29 acre area of open space, and single-family residences further to the west.

**Answers to Checklist Questions**

***Question A:***

The proposed project would function as a community facility intended to supplement the existing schools within the MJUSD and enhance the cohesiveness of the rural residential community. No established community would be divided because of the project. No impacts would occur.

***Question B:***

The Yuba County Zoning Ordinance indicates that the proposed project site is zoned Specific Plan Public Facilities. The site is within the East Linda Specific Plan, and is designated Public Facilities. In Section 12.82.090 the Zoning Ordinance states:

*Public schools, parks, civic center, fire and police stations, public utility facilities and other similar uses and structures shall be permitted in the PF sub-zone in accordance with Chapter 12.72 and with the following:*

*(1) PUBLIC UTILITIES: Public utilities such as transformers, terminal boxes, meters, fire risers, back flow preventers and other similar facilities, shall be screened and oriented away from public view except as required by the County or public utility companies.*
*(2) PUBLIC FACILITIES: Public facilities shall be designed and landscaped compatible with adjacent non-public uses.*
*(3) INSTITUTIONAL USES: Institutional uses shall be of a design and scale compatible with neighboring residential uses and shall incorporate landscaping, setbacks and siting standards similar to those required in adjacent land uses.*

The proposed school use is consistent with the land use designation and zoning of the site. No impacts would occur.

***Question C:***

The proposed project would not conflict with any Habitat Conservation Plan or Natural Community Conservation Plan because no adopted HCP or NCCP applies to the project site. No related impacts would occur.

*Question D:*

The project site is bordered primarily by existing residential development. These adjacent land uses would not pose a significant hazardous or safety risk to students. No impacts would occur.

**Mitigation**

No mitigation is required.

**Significance After Mitigation**

Impacts would be less than significant.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **XI. MINERAL RESOURCES – Would the project:** | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☒ |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☐ | ☒ |

**Setting**

The project site has been used historically for residential and pasture purposes. The proposed project site does not provide any known mineral or natural resources, such as timber, oil, or gas that would be of value to the region and the residents of the state.

**Answers to Checklist Questions**

*Questions A and B:*

There are no known mineral or natural resources on-site. No impacts would occur.

**Mitigation**

No mitigation is required.

## Significance After Mitigation

Impacts would be less than significant without mitigation.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **XII. NOISE –** Would the project result in: | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☐ | ☒ | ☐ |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☒ | ☐ | ☐ |
| c) A substantial permanent increase in ambient noise levels above levels existing without the project? | ☐ | ☐ | ☒ | ☐ |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☒ | ☐ | ☐ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise? | ☐ | ☐ | ☐ | ☒ |
| g) Is the proposed school site located adjacent to or near a major arterial roadway or freeway whose noise generation may adversely affect the educational program? | ☐ | ☐ | ☒ | ☐ |

## Setting

Community noise is usually measured using Day-Night Average Level (Ldn), which is the 24-hour average noise level with a 10-decibel (dBA) penalty for noise occurring during nighttime (10 p.m. to 7 a.m.) hours, or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a 5 dBA penalty for noise occurring from 7 p.m. to 10 p.m. and a 10 dBA penalty for noise occurring from 10 p.m. to 7 a.m. Noise levels described by Ldn and CNEL well usually do not differ by more than 1 dB.

The Yuba County General Plan Noise Element recommends 50 dBA as the maximum interior noise level for low-density residential uses, and 45 dBA as the maximum interior noise level for school uses (Yuba County General Plan Noise Element, 1994). Standards specified in this manner generally represent average hourly noise levels, and are usually applied to stationary noise sources, such as mining operations, industrial processing, or HVAC equipment.

The Office of Noise Control (ONC) in the California Department of Health Services has developed criteria and guidelines for local governments to use when setting standards for human exposure to noise. These guidelines include noise exposure levels for both exterior and interior environments.

Specifically, the guidelines identify exterior noise levels up to 65 dBA Ldn as "Normally Acceptable," while exterior noise levels up to 70 dBA Ldn are "Conditionally Acceptable." Exterior noise levels between 70 and 75 dBA Ldn are considered "Normally Unacceptable," while exterior noise levels above 75 dBA Ldn are "Clearly Unacceptable." "Conditionally Acceptable" for residential uses indicates that new construction should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems will usually suffice where noise levels are 70 dBA (Ldn or CNEL) or less. These standards are consistent with and implement the State Department of Noise Control's Noise Guidelines.

In addition, the Federal Interagency Committee on Noise (FICON) guidelines, shown in Table 3-4, are used to determine whether a given noise increase is audible. The FICON guidelines are based on studies that relate aircraft noise exposure levels to the percentage of people "highly annoyed" by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impact, it has been determined that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the Ldn. Specifically, they provide good correlation to transportation-related noise sources.

**Table 3-4.**
**Significance of Changes in Noise Exposure**

| Ambient Noise Level Without Project (Ldn or CNEL) | Significance Threshold (Increase) |
|---|---|
| < 60 dBA | + 5.0 dBA or more |
| 60 – 65 dBA | + 3.0 dBA or more |
| > 65 dBA | + 1.5 dBA or more |

*Source: Federal Interagency Committee on Noise (FICON)*

Sensitive noise receptors near the proposed project include residences located north of the project site across Hammonton-Smartsville Road, and residences located south of the site, adjacent to the site's southern boundary.

**Answers to Checklist Questions**

***Question A and C:***

*Noise at Off-Site Receptors*

School bells, whistles, and associated playground noise have the potential to influence the residences neighboring the proposed site. School bells and alarms are often placed on buildings. School buildings and asphalt playgrounds would be located at least 100 feet from existing adjacent homes to the north and south of the proposed project site. The nearest residences to the east or west of the project site are approximately 400 feet from proposed school facilities. Operational noise would be audible at adjacent residences but is not expected to exceed adopted standards. In addition, due to the anticipated minimal increase in noise coupled with the fact that the operation hours for schools are typically mid-day, impacts would be less than significant.

The periodic after-hours use of the middle school facilities by the alternative high school and adult education center/school has the potential to result in noise impacts. Typically, after-hours events take place for only a short period. Because of the limited duration of usage during after school hours, the impacts from these types of events at off-site receptors would be less than significant.

*Noise Exposure on the Proposed Project Site*

The proposed project would introduce new school uses on the project site. The Yuba County Code of Ordinances recommends 45 dBA as the maximum interior noise level for school uses. In addition, as described above, the Yuba County General Plan Noise Element recommends 45 dBA as the maximum interior noise level for school uses (Yuba County General Plan Noise Element, 1994). The ONC has also developed criteria and guidelines for local governments to use when setting standards for human exposure to noise. These identify exterior noise levels up to 65 dBA Ldn as "Normally Acceptable," while noise levels up to 70 dBA Ldn are "Conditionally Acceptable." Noise levels between 70 and 75 dBA Ldn are considered "Normally Unacceptable," while noise levels above 75 dBA Ldn are "Clearly Unacceptable."

In order to determine potential future noise levels at the proposed school, roadway noise levels along Hammonton-Smartsville Road were estimated using the Traffic Noise Model Version 2.5 Look-Up Tables (U.S. Department of Transportation, Federal Highway Administration [FHWA], April 2004).

The site plan for the project (Figure 2-3 in Section 2.0, *Project Description*) shows that proposed buildings are set back approximately 100 feet from the centerline of Hammonton-Smartsville Road. Projected noise levels under existing conditions plus traffic from the proposed project would be approximately 65 dBA Leq at 100 feet from the roadway centerline. For most noise-sensitive uses, including schools, conventional construction, but with closed windows and fresh air supply systems, will usually reduce exterior noise by approximately 25 dBA. This would result in an interior noise level of 40 dBA. Therefore, the proposed school uses would not be exposed to noise levels that exceed the County Code of Ordinances 45 dBA Ldn recommended maximum interior noise level or the ONC criteria for exterior noise levels. Impacts would be less than significant.

*Ambient Noise Increases*

The primary noise source affecting the project site and the surrounding area is traffic on adjacent roadways. Project development would increase noise in the vicinity due to increased vehicular traffic. The primary roadways affected by the project would be Hammonton-Smartsville Road, Alberta Avenue, and N. Beale Road. These three roadways have existing adjacent residences or sensitive receptors that would be affected by an increase in traffic-related noise. The project's effects on traffic-related noise levels are assessed based on volume levels at sensitive receptors adjacent to affected roadways. The proposed project would generate an estimated 740 vehicle trips in the morning peak hour and 605 vehicle trips in the evening peak hour, based on the traffic analysis prepared for the project by Dowling Associates (Appendix D).

Roadway noise levels were modeled using the Traffic Noise Model Version 2.5 Look-Up Tables. Table 3-5 shows the existing and anticipated future (cumulative) noise levels along project-area roadways, as well as estimated noise levels along roadways that would experience increases in noise due to project-generated traffic. A noise model summary and results are included in Appendix E.

**Table 3-5. Comparison of Pre-Project and Post-Project Traffic Noise on Study Area Roadways**

| Roadway | Projected Noise Level (dBA Leq) | | | | Change In Noise Level (dBA Leq) | |
|---|---|---|---|---|---|---|
| | Existing (1) | Existing + Project (2) | Cumulative (3) | Cumulative + Project (4) | Due to Project Traffic (2-1) | Due to Project Traffic Under Cumulative Conditions (4-3) |
| Hammonton-Smartsville Road between Simpson Lane and Trevor Drive | 64.5 | 67.3 | 69.0 | 69.8 | 2.8 | 0.8 |

**Table 3-5. Comparison of Pre-Project and Post-Project Traffic Noise on Study Area Roadways**

| Roadway | Projected Noise Level (dBA Leq) | | | | Change In Noise Level (dBA Leq) | |
|---|---|---|---|---|---|---|
| | Existing (1) | Existing + Project (2) | Cumulative (3) | Cumulative + Project (4) | Due to Project Traffic (2-1) | Due to Project Traffic Under Cumulative Conditions (4-3) |
| Hammonton-Smartsville Road between Trevor Drive and Alberta Avenue | 63.9 | 65.1 | 67.8 | 68.4 | 1.2 | 0.6 |
| Alberta Avenue between Hammonton-Smartsville Road and N. Beale Road | 55.4 | 58.3 | 59.7 | 61.0 | 2.9 | 1.3 |
| N. Beale Road between Sutter Street and Alberta Avenue | 64.8 | 65.1 | 68.8 | 69.0 | 0.3 | 0.2 |

*Estimates of noise generated by traffic from roadway centerline at 60 feet. Refer to Appendix E for full noise model output. Noise levels presented do not account for attenuation provided by existing barriers or future barriers; therefore, actual noise levels at sensitive receptor locations influenced by study area roadways may in many cases be lower than presented herein.*
*Source: Federal Highway Administration Traffic Noise Model Version 2.5 Look-Up Tables.*

The guidelines shown in Table 3-4 are used to determine whether noise associated with increased traffic would be significant. Accordingly, because existing roadway noise levels fall within the range of 60-65 dBA, a 3 dBA noise increase attributable to the project would be considered significant. As shown in Table 3-5, for the change in ambient noise under existing plus project and cumulative plus project conditions, the proposed project would not result in a noise increase greater than 3 dBA at any of the study area roadway segments. Therefore, impacts would be less than significant.

*Question B and D:*

During construction, graders and compactors may be used that would generate groundborne vibration or groundborne noise levels that may affect adjacent residents. These impacts would be temporary and potentially significant, but mitigable.

Residential development surrounding the proposed site could be exposed to construction noise from development under the proposed project. The main sources of noise during construction activities would be the heavy machinery used in grading and clearing the site, as well as equipment used for soil excavation. Noise may also be generated from light, medium and heavy duty truck trips coming to and from the construction site, including heavy duty truck haul trips associated with the export of soil materials as part of site remediation. Average noise levels associated with the use of heavy equipment at construction sites can range from about 78 to 88 dBA at 50 feet from the source, depending upon the types of equipment in operation at any given time and phase of construction (USEPA, 1971). The residences to the north and south of the project site are noise-sensitive uses that may experience a short-term noise annoyance during construction. The closest residences to project construction would be residences located immediately south of the southern border of the project site.

Construction activities may occur within approximately 100 feet of these residences. Noise attenuates based on a standard rate of 6 dB per doubling of distance (line-of-sight method of sound attenuation), resulting in construction noise levels of up to 82 dBA at the nearest residences. Construction noise level estimates do not account for the presence of intervening structures or topography, which could reduce noise levels at receptor locations. Therefore, the noise levels presented herein represent a conservative estimate of actual construction noise. Construction-related impacts are potentially significant but mitigable.

*Questions E and F:*

The proposed project site is over 2.5 miles northeast of the Yuba County Airport, which is the nearest airport to the site. The site is not within the Overflight Zone for the airport, and is not identified as an area where noise impacts are expected (Sacramento Area Council of Governments, 1994). The Airport Land Use Commission for Yuba County does not restrict land uses in the area to address potential noise impacts. No impacts would occur.

*Question G:*

The project site is not located adjacent to a freeway or major arterial roadway. Hammonton-Smartsville Road is the nearest adjacent roadway, and is classified as a collector roadway in the Yuba County General Plan. Therefore, this impact would be less than significant.

**Mitigation**

**NOI-1** **Construction Timing**. Construction activities for site preparation and for future development of the project site shall be limited to the daytime hours between 7:00 a.m. to 6:00 p.m. Monday through Friday, and 8:00 a.m. to 6:00 p.m. Saturday. No construction shall occur on Sundays or State holidays (i.e. Thanksgiving, Labor Day). Construction equipment maintenance shall be limited to the same hours.

**NOI-2** **Acoustical Shelters**. Stationary construction equipment should not generate noise that exceeds 65 dBA at the project boundaries.

**NOI-3** **Diesel Equipment Restrictions**. All diesel equipment shall be operated with closed engine doors and shall be equipped with factory-recommended mufflers.

**NOI-4** **Electrical Powered Equipment**. Whenever feasible, electrical power shall be used to run air compressors and similar power tools.

**NOI-5** **Additional As-Needed Attenuation Measures**. For all construction activity on the project site, additional noise attenuation techniques shall be employed as needed to ensure that noise remains within allowable levels.

**Significance After Mitigation**

With implementation of the above measures, potential impacts related to noise would be reduced to a less than significant level.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIII. POPULATION AND HOUSING** — Would the project: | | | | |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☒ | ☐ |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☒ | ☐ |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☒ | ☐ |

**Setting**

According to the U.S. Bureau of the Census, the population of Yuba County in 2000 was 60,219. As of 2011, the population of Yuba County is 72,479 (California Department of Finance, 2012).

**Answers to Checklist Questions**

***Question A:***

The proposed project would include future development of a new middle school, alternative education school, adult school and education services facilities, which would be designed to adequately serve both the current and forecasted future population in the area. While the future development of the school would not generate a direct need for additional housing, the project may cause slight immigration of persons for jobs created by the educational facilities over time. It is expected that the population growth attributable to the project would be minimal, and would not alter the location, distribution, density, or growth rate of the projected population for the area. Additionally, workers performing project construction would most likely come from the local community or nearby communities and would not create an indirect

need for short- or long-term housing. Impacts related to population growth would be less than significant.

***Questions B and C:***

One unoccupied single-family residence is located on the project site. As such, the proposed project would not displace a substantial number of people or houses. Impacts would be less than significant.

**Mitigation**

No mitigation is required.

**Significance After Mitigation**

Impacts would be less than significant without mitigation.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIV. PUBLIC SERVICES** | | | | |
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| i) Fire protection? | ☐ | ☐ | ☒ | ☐ |
| ii) Police protection? | ☐ | ☐ | ☒ | ☐ |
| iii) Schools? | ☐ | ☐ | ☐ | ☒ |
| iv) Parks? | ☐ | ☐ | ☒ | ☐ |
| v) Other public facilities? | ☐ | ☐ | ☒ | ☐ |

**Setting**

Fire protection services would be provided by the Linda Fire Department and police protection services would be provided by the Yuba County Sheriff's Department.

**Answers to Checklist Questions**

*Question A) i-ii:*

The proposed project site is located approximately 2.2 miles from the Linda Fire Department Station located at 1286 Scales Avenue, within an appropriate response radius for an engine company. The proposed school would not result in a substantial population increase; therefore, it would not present impacts associated to maintaining the Department's current service ratios, response times, or performance objectives. The project site would be located within the Linda Fire Department's service area. In addition, the construction and operation of the school campus would be required to comply with applicable fire code requirements and would provide adequate emergency access for fire-fighting vehicles. The project would not significantly contribute to increased demand for fire services; therefore, impacts are less than significant.

The proposed project site is located approximately 2.9 miles from the Yuba County Sheriff's Department substation located at 5829 Feather River Boulevard. The proposed school would not result in a substantial population increase; therefore, it would not present impacts associated with maintaining the Department's current service ratios, response times, or performance objectives. In addition, the General Plan includes policies to improve law enforcement services to meet the demands associated with new development in the County. Implementation of the proposed new middle school, alternative education school, adult education school, and educational services and support facilities is not expected to result in a significant impact to police services; therefore, impacts are less than significant.

*Question A) iii-iv:*

The future development of the school would have a beneficial impact on the existing public school system by helping to absorb future overcrowding of existing schools from projected growth within the area. There would be no adverse impacts to the public school system. Other public facilities, such as recreational facilities, public waste facilities, and energy provision facilities, are addressed in the Recreation section as well as the Utilities and Service Systems sections. Impacts to other public resources would be less than significant.

**Mitigation**

No mitigation is required.

**Significance After Mitigation**

Impacts would be less than significant without mitigation.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **XV. RECREATION –** | | | | |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☒ | ☐ |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☒ | ☐ |

**Setting**

According to the Yuba County Parks Master Plan (February 2008), the County maintains several neighborhood, community, and regional parks with a total acreage of 88.1 acres. The Cities of Marysville and Wheatland manage additional parks, totaling approximately 314 acres. The project site is currently in private residential use, and does not currently provide recreational opportunities for the public.

**Answers to Checklist Questions**

***Questions A and B:***

The project would include playfields that would provide recreational amenities for students. Although not intended as a joint-use facility, the school's playfields would provide a recreational amenity within the community, and would therefore create a beneficial impact to recreation. The project includes the construction of recreational facilities that might have an adverse physical effect on the environment; however, these physical impacts are discussed throughout this document. The proposed school would not increase the use, construction, or expansion of existing neighborhoods and regional parks. Impacts related to recreation would be less than significant.

**Mitigation**

No mitigation is required.

## Significance After Mitigation

Impacts would be less than significant without mitigation.

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

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVI. TRANSPORTATION / TRAFFIC** – Would the project: | | | | |
| adjacent to or near a major arterial roadway or freeway that may pose a safety hazard? | | | | |
| h) Are traffic and pedestrian hazards mitigated per Caltrans', "School Area Pedestrian Safety" manual? | ☐ | ☒ | ☐ | ☐ |
| i) Is minimum peripheral visibility maintained for driveways per Caltrans' Highway Design Manual? | ☐ | ☐ | ☒ | ☐ |
| j) Is the proposed school site within 1,500 feet of a railroad track easement? | ☐ | ☐ | ☐ | ☒ |

## Setting

The following analysis is based on the Traffic Impact Study prepared for the proposed project (Appendix D). Existing transportation and circulation conditions were observed and a.m. and p.m. peak hour traffic counts were performed. The study included analysis of eight intersections most likely to be affected by the proposed project, as well as access intersections proposed to be constructed.

## Answers to Checklist Questions

***Questions A and B:***

The proposed project would result in additional traffic volumes due to increased trips to and from the school, particularly during the morning and afternoon peak hours. The proposed project would generate 740 trips in the morning and 605 trips in the afternoon, which totals 1,345 trips per day, Monday through Friday. Under existing plus project conditions, local intersection operations are projected to operate within acceptable range, with the exception of the Hammonton-Smartsville Road/Trevor Drive intersection, which is forecast to operate at LOS F, with the addition of proposed project. Furthermore, forecast traffic volumes would trigger peak hour traffic signal warrants as described in the Manual on Uniform Traffic Control Devices (MUTCD). Installation of a signal at this intersection would mitigate the LOS from LOS F to an acceptable LOS B. All other study intersections would operate within acceptable range.

Under longer-term conditions (year 2030 cumulative plus project), which were derived from the Countywide Travel Demand Model that was used to develop the recently adopted Yuba County General Plan, the project would cause Hammonton-Smartsville Road/Trevor Drive to

operate at LOS F. MJUSD may be responsible for a portion of the improvements at Hammonton-Smartsville Road/Trevor Drive because the project impacts this intersection as a result of project implementation. Hammonton-Smartsville Road/Dunning Avenue and N. Beale Road/Sutter Street would operate at unacceptable LOS with or without the project. As a result, implementation of these improvements would ultimately be the responsibility of Yuba County. Impacts to Hammonton-Smartsville Road/Trevor Drive would be potentially significant but mitigable.

The project would generate construction related traffic, including employee commute trips, truck haul trips, and construction equipment drop off/pickup. These activities could increase traffic congestion within the vicinity. However, these potential impacts would be limited in duration and would not result in long term traffic impacts because construction activities are temporary. Therefore, construction related traffic impacts would be less than significant.

***Questions C and E:***

No changes to air traffic patterns would result from the proposed middle school and associated facilities. The nearest airport to the project site is the Yuba County Airport, located approximately 2.5 miles southwest of the project site. Currently, there are no existing structures or obstacles that would result in inadequate emergency access; the school would be designed according to California Fire Code and California Building Code standards. No impacts would result.

***Questions D, G, and H:***

The plan features designated bus access and drop-off areas, as well as several parking lots providing a total of 711 vehicle parking stalls (excluding stalls designated for truck and bus use) to ensure that safe and adequate site access is provided. In addition, the site plans indicate that satisfactory sight distance is provided at the main access way to the project site, but lighting in the driveway is not provided. Construction of street frontage improvements associated with development of the school site will improve the pedestrian circulation system in the study area by providing sidewalk improvements along the school frontage. However, the project does not designate specific safety provisions for student crossings at nearby intersections, including the Hammonton-Smartsville Road/Trevor Drive intersection and the Hammonton-Smartsville Road/Dantoni Road intersections. These are potentially significant but mitigable impacts.

***Question F:***

There are no applicable policies, plans, or programs supporting alternative transportation that would be affected by the project. Yuba-Sutter Transit provides local bus service in Yuba and Sutter counties. It also offers commuter routes to Sacramento and a number of routes to serve rural communities. The nearest bus stops to the project site are located at the Hammonton-Smartsville Road intersections of Dunning Avenue and Alberta Avenue. The project would allow buses onto the site for loading and unloading of students at a dedicated bus drop off- area on the project site. The site would also serve as a storage facility for 90 school buses. No impact would result.

*Question I:*

There would be no sharp turns or other physical barriers or obstacles that would limit or obstruct visibility at any of the school driveways. Agreed upon street improvements would adhere to County standards to ensure that adequate peripheral visibility is provided at the driveways. Impacts would be less than significant.

*Question J:*

The proposed project would not be located within 1,500 feet of a railroad track easement. No impact would result.

**Mitigation**

The following mitigation measures are adapted from the traffic study (Appendix D)
.

**TRA-1** **Signalize Hammonton-Smartsville Road/Trevor Drive Intersection**. The District should provide fair share funding for the installation of a traffic signal at the intersection. In order to improve intersection operation to an acceptable level, the traffic signal should provide separate left and a shared through-right turn lane on the eastbound and westbound approaches, and a protected left-turn phase on the eastbound - westbound approach and split phase on the northbound-southbound approach.

**TRA-3** **Develop Safe Route to School Plan**. The District should create a *Safe Route to School Plan* for the site, which designates recommended pedestrian and bicycle routes to the site.

**Significance After Mitigation**

With implementation of the above measures, traffic related impacts would be reduced to a less than significant level.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVII. UTILITIES AND SERVICE SYSTEMS** -- Would the project: | | | | |
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ☐ | ☒ |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVII. UTILITIES AND SERVICE SYSTEMS** -- Would the project: | | | | |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ☐ | ☒ | ☐ |
| e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☒ | ☐ |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ☒ | ☐ |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ |

## Setting

The Linda County Water District would provide water and wastewater service to the proposed new middle school, alternative education school, adult education school, and educational services and support facilities. The district serves an unincorporated area south of the Yuba River and east of the Feather River covering approximately 8 square miles south to roughly Erle Road and east to Griffith Avenue. The entire water supply is derived from groundwater sources that is delivered to individual homes and businesses. The Linda County Water District has an existing normal year surplus of 12,080 AFY (Linda County Water District Urban Water Management Plan, 2010). The District's wastewater treatment plant and has a maximum

capacity of 1.8 million gallons per day and currently receives 1.1 million gallons per day (2030 Yuba County General Plan).

**Answers to Checklist Questions**

***Question A:***

The proposed project involves the development of a new middle school, alternative education school, adult education school, and educational services and support facilities that would not be expected to result in wastewater treatment requirements exceeding RWQCB standards. No impacts would result.

***Questions B and E:***

The proposed middle school, alternative education school, adult education school, and educational services and support facilities would enroll up to a 1,168-student middle school, a 460-student alternative high school, 100-student adult education center and school and up to 60 staff. Using an average flow rate of 40 gallons per day (GPD) per student/staff, a total wastewater flow of 71,520 GPD would be expected. The Linda County Water District wastewater treatment plant, located west of the Yuba County Airport, has the capacity to accommodate an additional 700,000 GPD; therefore, adequate capacity exists to serve the proposed project. However, additional wastewater conveyance facilities would be required to connect the proposed project to existing sewer mains. Impact would be less than significant.

***Question C:***

Implementation of the proposed project would increase the area of impervious surfaces on the site when compared to existing conditions, resulting in an incremental increase in runoff. However, as discussed above in *Hydrology*, the preliminary drainage calculations (Appendix H) demonstrated that flows entering the drainage channel will not increase beyond current levels because flows will be detained on site through the construction of detention basins. Therefore, the capacity of storm drainages would not be exceeded. Impacts would be less than significant.

***Question D:***

Using a school facilities-based water duty demand factor of 3 acre-feet per year per acre (AFY), the 50-acre project site would require approximately 150 AFY of water. The Linda County Water District has an existing normal year surplus of 12,080 AFY (Linda County Water District Urban Water Management Plan, 2010). Therefore, adequate water supply is available to serve the proposed project. Impacts would be less than significant.

***Question F and G:***

The proposed middle school, alternative education school, adult education school, and educational services and support facilities would generate an estimated 146.5 tons of solid waste per year (based on a 180 school days per year and a conservative waste generation factor of 1 lb/student/day from the Solid Waste Association of North America Technical Bulletin, 85-6; Recovery Sciences, 1987). This would incrementally contribute to cumulative solid waste

generated in Yuba County. Solid waste disposal for East Linda is provided by Recology, which also serves other urban areas of Yuba and Sutter Counties. Their landfill site is the Ostrom Road Landfill, located in Wheatland. The landfill has the capacity to serve these areas through the year 2066 (CIWMB, 2009). The project's contribution to the waste stream would therefore be less than significant. Attainment of AB 939 source reduction and recycling goals would extend the landfill's life expectancy, and minimize the school's impact on the landfill's capacity. Impacts would be less than significant.

***Question H:***

The proposed project would increase demand for electrical and gas services. Development of the proposed middle school, alternative education school, adult education school center, and education services center would be in conformance with California Energy Commission code requirements, which would reduce energy demand. Impacts to electrical and gas services would be less than significant.

**Mitigation**

No mitigation is required.

**Significance After Mitigation**

Impacts would be less than significant without mitigation.

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVIII. MANDATORY FINDINGS OF SIGNIFICANCE —** | | | | |
| a) Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☒ | ☐ | ☐ |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental | ☐ | ☐ | ☒ | ☐ |

| | Potentially Significant Impact | Potentially Significant Unless Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVIII. MANDATORY FINDINGS OF SIGNIFICANCE —** | | | | |
| effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | | | | |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☒ | ☐ | ☐ |

**Mandatory Findings of Significance Discussion**

*Question A:*

Based upon the analysis and mitigation prescribed in this Initial Study, including BIO-1 through BIO-4 and CUL-1 and CUL-2, the proposed project would not have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history.

*Question B:*

The proposed project is consistent with the goals of the Yuba County General Plan and East Linda Specific Plan, and is needed to accommodate planned growth in student enrollment within the MJUSD. In addition, the potential cumulative impacts identified above would be less than significant with mitigation. As such, these impacts would not be cumulatively considerable.

*Question C:*

Due to the nature of the proposed project, it is not likely that adverse effects to the environment or to human populations would result. Mitigation measures are proposed to reduce impacts related to Aesthetics; Air Quality; Biological Resources; Cultural Resources; Geology and Soils; Hazards and Hazardous Materials; Hydrology and Water Quality; Noise/Vibration; and Transportation/Circulation. Impacts would be less than significant with implementation of mitigation.

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# Appendix A

*Air Quality and Greenhouse Gas Emissions Calculations*

# Hammonton-Smartville School IS-MND

**Yuba County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric |
|---|---|---|
| Junior High School | 1168 | Student |
| High School | 560 | Student |
| User Defined Educational | 278 | User Defined Unit |
| Parking Lot | 885 | Space |
| | 0 | |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Rural | **Wind Speed (m/s)** | 3.4 | **Utility Company** | Pacific Gas & Electric Company |
| **Climate Zone** | 3 | **Precipitation Freq (Days)** | 72 | | |

### 1.3 User Entered Comments

Project Characteristics -

Land Use - "User Defined Educational" represents proposed educational services and support facilities. "User Defined Unit" represents employees, including bus drivers. Lot acreage and square footage for this use estimated based on site plans.
Acreage for "Parking Lot" use inflated to address grading and activities required to construct on-site roadways and recreational facilities.

Construction Phase -

Vehicle Trips - Trip rates derived from traffic impact analysis prepared by Dowling Associates.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

## 2.0 Emissions Summary

### 2.1 Overall Construction

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2011 | 1.66 | 11.27 | 9.37 | 0.01 | 1.10 | 0.58 | 1.68 | 0.41 | 0.58 | 0.99 | 0.00 | 1,191.90 | 1,191.90 | 0.13 | 0.00 | 1,194.60 |
| 2012 | 1.50 | 7.36 | 10.91 | 0.01 | 0.57 | 0.41 | 0.98 | 0.03 | 0.41 | 0.44 | 0.00 | 1,143.88 | 1,143.88 | 0.11 | 0.00 | 1,146.16 |
| 2013 | 1.36 | 6.79 | 10.08 | 0.01 | 0.57 | 0.37 | 0.94 | 0.03 | 0.37 | 0.40 | 0.00 | 1,135.71 | 1,135.71 | 0.10 | 0.00 | 1,137.79 |
| 2014 | 1.23 | 6.24 | 9.34 | 0.01 | 0.57 | 0.33 | 0.90 | 0.03 | 0.33 | 0.36 | 0.00 | 1,127.35 | 1,127.35 | 0.09 | 0.00 | 1,129.24 |
| 2015 | 1.08 | 5.39 | 7.50 | 0.01 | 0.48 | 0.30 | 0.78 | 0.03 | 0.30 | 0.33 | 0.00 | 992.54 | 992.54 | 0.08 | 0.00 | 994.15 |
| 2016 | 6.68 | 0.55 | 0.58 | 0.00 | 0.03 | 0.04 | 0.08 | 0.00 | 0.04 | 0.05 | 0.00 | 74.63 | 74.63 | 0.01 | 0.00 | 74.81 |
| **Total** | **13.51** | **37.60** | **47.78** | **0.05** | **3.32** | **2.03** | **5.36** | **0.53** | **2.03** | **2.57** | **0.00** | **5,666.01** | **5,666.01** | **0.52** | **0.00** | **5,676.75** |

## 2.1 Overall Construction

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2011 | 1.12 | 5.82 | 9.15 | 0.01 | 0.85 | 0.37 | 1.23 | 0.41 | 0.37 | 0.78 | 0.00 | 1,191.90 | 1,191.90 | 0.13 | 0.00 | 1,194.60 |
| 2012 | 1.22 | 5.16 | 11.07 | 0.01 | 0.03 | 0.31 | 0.34 | 0.03 | 0.31 | 0.34 | 0.00 | 1,143.88 | 1,143.88 | 0.11 | 0.00 | 1,146.16 |
| 2013 | 1.15 | 4.94 | 10.27 | 0.01 | 0.03 | 0.31 | 0.34 | 0.03 | 0.31 | 0.34 | 0.00 | 1,135.71 | 1,135.71 | 0.10 | 0.00 | 1,137.79 |
| 2014 | 1.08 | 4.73 | 9.57 | 0.01 | 0.03 | 0.30 | 0.33 | 0.03 | 0.30 | 0.33 | 0.00 | 1,127.35 | 1,127.35 | 0.09 | 0.00 | 1,129.24 |
| 2015 | 0.94 | 4.13 | 7.68 | 0.01 | 0.03 | 0.28 | 0.31 | 0.03 | 0.28 | 0.31 | 0.00 | 992.54 | 992.54 | 0.08 | 0.00 | 994.15 |
| 2016 | 6.65 | 0.31 | 0.55 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.03 | 0.03 | 0.00 | 74.63 | 74.63 | 0.01 | 0.00 | 74.81 |
| **Total** | **12.16** | **25.09** | **48.29** | **0.05** | **0.97** | **1.60** | **2.58** | **0.53** | **1.60** | **2.13** | **0.00** | **5,666.01** | **5,666.01** | **0.52** | **0.00** | **5,676.75** |

## 2.2 Overall Operational

### Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 2.86 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy | 0.03 | 0.27 | 0.23 | 0.00 | | 0.00 | 0.02 | | 0.00 | 0.02 | 0.00 | 786.08 | 786.08 | 0.03 | 0.01 | 790.95 |
| Mobile | 3.31 | 5.70 | 33.05 | 0.04 | 3.63 | 0.18 | 3.81 | 0.16 | 0.18 | 0.34 | 0.00 | 3,399.70 | 3,399.70 | 0.20 | 0.00 | 3,403.92 |
| Waste | | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 64.02 | 0.00 | 64.02 | 3.78 | 0.00 | 143.46 |
| Water | | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 22.27 | 22.27 | 0.16 | 0.00 | 27.05 |
| **Total** | **6.20** | **5.97** | **33.28** | **0.04** | **3.63** | **0.18** | **3.83** | **0.16** | **0.18** | **0.36** | **64.02** | **4,208.05** | **4,272.07** | **4.17** | **0.01** | **4,365.38** |

## 2.2 Overall Operational

### Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 2.70 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Energy | 0.03 | 0.27 | 0.23 | 0.00 | | 0.00 | 0.02 | | 0.00 | 0.02 | 0.00 | 786.08 | 786.08 | 0.03 | 0.01 | 790.95 |
| Mobile | 3.31 | 5.70 | 33.05 | 0.04 | 3.63 | 0.18 | 3.81 | 0.16 | 0.18 | 0.34 | 0.00 | 3,399.70 | 3,399.70 | 0.20 | 0.00 | 3,403.92 |
| Waste | | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 64.02 | 0.00 | 64.02 | 3.78 | 0.00 | 143.46 |
| Water | | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 22.27 | 22.27 | 0.16 | 0.00 | 27.05 |
| **Total** | **6.04** | **5.97** | **33.28** | **0.04** | **3.63** | **0.18** | **3.83** | **0.16** | **0.18** | **0.36** | **64.02** | **4,208.05** | **4,272.07** | **4.17** | **0.01** | **4,365.38** |

# 3.0 Construction Detail

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

## 3.2 Site Preparation - 2011

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.36 | 0.00 | 0.36 | 0.20 | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Off-Road | 0.22 | 1.79 | 1.01 | 0.00 | | 0.09 | 0.09 | | 0.09 | 0.09 | 0.00 | 145.07 | 145.07 | 0.02 | 0.00 | 145.44 |
| **Total** | **0.22** | **1.79** | **1.01** | **0.00** | **0.36** | **0.09** | **0.45** | **0.20** | **0.09** | **0.29** | **0.00** | **145.07** | **145.07** | **0.02** | **0.00** | **145.44** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 0.01 | 0.01 | 0.06 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 4.85 | 4.85 | 0.00 | 0.00 | 4.86 |
| **Total** | **0.01** | **0.01** | **0.06** | **0.00** | **0.01** | **0.00** | **0.01** | **0.00** | **0.00** | **0.00** | **0.00** | **4.85** | **4.85** | **0.00** | **0.00** | **4.86** |

## 3.2 Site Preparation - 2011

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.36 | 0.00 | 0.36 | 0.20 | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Off-Road | 0.12 | 0.75 | 0.80 | 0.00 | | 0.05 | 0.05 | | 0.05 | 0.05 | 0.00 | 145.07 | 145.07 | 0.02 | 0.00 | 145.44 |
| **Total** | **0.12** | **0.75** | **0.80** | **0.00** | **0.36** | **0.05** | **0.41** | **0.20** | **0.05** | **0.25** | **0.00** | **145.07** | **145.07** | **0.02** | **0.00** | **145.44** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 0.01 | 0.01 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.85 | 4.85 | 0.00 | 0.00 | 4.86 |
| **Total** | **0.01** | **0.01** | **0.06** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **4.85** | **4.85** | **0.00** | **0.00** | **4.86** |

## 3.3 Grading - 2011

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.48 | 0.00 | 0.48 | 0.20 | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Off-Road | 0.72 | 6.09 | 3.17 | 0.01 | | 0.30 | 0.30 | | 0.30 | 0.30 | 0.00 | 541.55 | 541.55 | 0.06 | 0.00 | 542.78 |
| **Total** | **0.72** | **6.09** | **3.17** | **0.01** | **0.48** | **0.30** | **0.78** | **0.20** | **0.30** | **0.50** | **0.00** | **541.55** | **541.55** | **0.06** | **0.00** | **542.78** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 0.02 | 0.02 | 0.18 | 0.00 | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 14.81 | 14.81 | 0.00 | 0.00 | 14.84 |
| **Total** | **0.02** | **0.02** | **0.18** | **0.00** | **0.02** | **0.00** | **0.02** | **0.00** | **0.00** | **0.00** | **0.00** | **14.81** | **14.81** | **0.00** | **0.00** | **14.84** |

## 3.3 Grading - 2011

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.48 | 0.00 | 0.48 | 0.20 | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Off-Road | 0.43 | 2.76 | 3.12 | 0.01 | | 0.19 | 0.19 | | 0.19 | 0.19 | 0.00 | 541.55 | 541.55 | 0.06 | 0.00 | 542.78 |
| **Total** | **0.43** | **2.76** | **3.12** | **0.01** | **0.48** | **0.19** | **0.67** | **0.20** | **0.19** | **0.39** | **0.00** | **541.55** | **541.55** | **0.06** | **0.00** | **542.78** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 0.02 | 0.02 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14.81 | 14.81 | 0.00 | 0.00 | 14.84 |
| **Total** | **0.02** | **0.02** | **0.18** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **14.81** | **14.81** | **0.00** | **0.00** | **14.84** |

## 3.4 Building Construction - 2011

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.34 | 2.21 | 1.32 | 0.00 | | 0.15 | 0.15 | | 0.15 | 0.15 | 0.00 | 201.55 | 201.55 | 0.03 | 0.00 | 202.13 |
| **Total** | **0.34** | **2.21** | **1.32** | **0.00** | | **0.15** | **0.15** | | **0.15** | **0.15** | **0.00** | **201.55** | **201.55** | **0.03** | **0.00** | **202.13** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.15 | 0.91 | 1.44 | 0.00 | 0.03 | 0.03 | 0.06 | 0.00 | 0.03 | 0.03 | 0.00 | 107.79 | 107.79 | 0.01 | 0.00 | 107.92 |
| Worker | 0.20 | 0.24 | 2.18 | 0.00 | 0.21 | 0.01 | 0.21 | 0.01 | 0.01 | 0.02 | 0.00 | 176.28 | 176.28 | 0.02 | 0.00 | 176.63 |
| **Total** | **0.35** | **1.15** | **3.62** | **0.00** | **0.24** | **0.04** | **0.27** | **0.01** | **0.04** | **0.05** | **0.00** | **284.07** | **284.07** | **0.03** | **0.00** | **284.55** |

## 3.4 Building Construction - 2011

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.19 | 1.13 | 1.37 | 0.00 | | 0.10 | 0.10 | | 0.10 | 0.10 | 0.00 | 201.55 | 201.55 | 0.03 | 0.00 | 202.13 |
| **Total** | **0.19** | **1.13** | **1.37** | **0.00** | | **0.10** | **0.10** | | **0.10** | **0.10** | **0.00** | **201.55** | **201.55** | **0.03** | **0.00** | **202.13** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.15 | 0.91 | 1.44 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.03 | 0.03 | 0.00 | 107.79 | 107.79 | 0.01 | 0.00 | 107.92 |
| Worker | 0.20 | 0.24 | 2.18 | 0.00 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.02 | 0.00 | 176.28 | 176.28 | 0.02 | 0.00 | 176.63 |
| **Total** | **0.35** | **1.15** | **3.62** | **0.00** | **0.01** | **0.04** | **0.05** | **0.01** | **0.04** | **0.05** | **0.00** | **284.07** | **284.07** | **0.03** | **0.00** | **284.55** |

## 3.4 Building Construction - 2012

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.73 | 4.87 | 3.10 | 0.01 | | 0.33 | 0.33 | | 0.33 | 0.33 | 0.00 | 478.23 | 478.23 | 0.06 | 0.00 | 479.48 |
| **Total** | **0.73** | **4.87** | **3.10** | **0.01** | | **0.33** | **0.33** | | **0.33** | **0.33** | **0.00** | **478.23** | **478.23** | **0.06** | **0.00** | **479.48** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.33 | 1.98 | 3.17 | 0.00 | 0.08 | 0.06 | 0.14 | 0.01 | 0.06 | 0.07 | 0.00 | 257.25 | 257.25 | 0.01 | 0.00 | 257.53 |
| Worker | 0.43 | 0.50 | 4.64 | 0.00 | 0.49 | 0.02 | 0.51 | 0.02 | 0.02 | 0.04 | 0.00 | 408.40 | 408.40 | 0.04 | 0.00 | 409.15 |
| **Total** | **0.76** | **2.48** | **7.81** | **0.00** | **0.57** | **0.08** | **0.65** | **0.03** | **0.08** | **0.11** | **0.00** | **665.65** | **665.65** | **0.05** | **0.00** | **666.68** |

## 3.4 Building Construction - 2012

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.46 | 2.68 | 3.25 | 0.01 | | 0.23 | 0.23 | | 0.23 | 0.23 | 0.00 | 478.23 | 478.23 | 0.06 | 0.00 | 479.48 |
| **Total** | **0.46** | **2.68** | **3.25** | **0.01** | | **0.23** | **0.23** | | **0.23** | **0.23** | **0.00** | **478.23** | **478.23** | **0.06** | **0.00** | **479.48** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.33 | 1.98 | 3.17 | 0.00 | 0.01 | 0.06 | 0.07 | 0.01 | 0.06 | 0.07 | 0.00 | 257.25 | 257.25 | 0.01 | 0.00 | 257.53 |
| Worker | 0.43 | 0.50 | 4.64 | 0.00 | 0.02 | 0.02 | 0.04 | 0.02 | 0.02 | 0.04 | 0.00 | 408.40 | 408.40 | 0.04 | 0.00 | 409.15 |
| **Total** | **0.76** | **2.48** | **7.81** | **0.00** | **0.03** | **0.08** | **0.11** | **0.03** | **0.08** | **0.11** | **0.00** | **665.65** | **665.65** | **0.05** | **0.00** | **666.68** |

## 3.4 Building Construction - 2013

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.67 | 4.52 | 3.06 | 0.01 | | 0.30 | 0.30 | | 0.30 | 0.30 | 0.00 | 478.23 | 478.23 | 0.05 | 0.00 | 479.38 |
| **Total** | **0.67** | **4.52** | **3.06** | **0.01** | | **0.30** | **0.30** | | **0.30** | **0.30** | **0.00** | **478.23** | **478.23** | **0.05** | **0.00** | **479.38** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.30 | 1.82 | 2.87 | 0.00 | 0.08 | 0.05 | 0.13 | 0.01 | 0.05 | 0.06 | 0.00 | 258.86 | 258.86 | 0.01 | 0.00 | 259.11 |
| Worker | 0.39 | 0.45 | 4.15 | 0.00 | 0.49 | 0.02 | 0.51 | 0.02 | 0.02 | 0.04 | 0.00 | 398.62 | 398.62 | 0.03 | 0.00 | 399.29 |
| **Total** | **0.69** | **2.27** | **7.02** | **0.00** | **0.57** | **0.07** | **0.64** | **0.03** | **0.07** | **0.10** | **0.00** | **657.48** | **657.48** | **0.04** | **0.00** | **658.40** |

## 3.4 Building Construction - 2013

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.46 | 2.68 | 3.25 | 0.01 | | 0.23 | 0.23 | | 0.23 | 0.23 | 0.00 | 478.23 | 478.23 | 0.05 | 0.00 | 479.38 |
| **Total** | **0.46** | **2.68** | **3.25** | **0.01** | | **0.23** | **0.23** | | **0.23** | **0.23** | **0.00** | **478.23** | **478.23** | **0.05** | **0.00** | **479.38** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.30 | 1.82 | 2.87 | 0.00 | 0.01 | 0.05 | 0.06 | 0.01 | 0.05 | 0.06 | 0.00 | 258.86 | 258.86 | 0.01 | 0.00 | 259.11 |
| Worker | 0.39 | 0.45 | 4.15 | 0.00 | 0.02 | 0.02 | 0.04 | 0.02 | 0.02 | 0.04 | 0.00 | 398.62 | 398.62 | 0.03 | 0.00 | 399.29 |
| **Total** | **0.69** | **2.27** | **7.02** | **0.00** | **0.03** | **0.07** | **0.10** | **0.03** | **0.07** | **0.10** | **0.00** | **657.48** | **657.48** | **0.04** | **0.00** | **658.40** |

## 3.4 Building Construction - 2014

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.62 | 4.18 | 3.03 | 0.01 | | 0.26 | 0.26 | | 0.26 | 0.26 | 0.00 | 478.23 | 478.23 | 0.05 | 0.00 | 479.28 |
| **Total** | **0.62** | **4.18** | **3.03** | **0.01** | | **0.26** | **0.26** | | **0.26** | **0.26** | **0.00** | **478.23** | **478.23** | **0.05** | **0.00** | **479.28** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.27 | 1.66 | 2.62 | 0.00 | 0.08 | 0.05 | 0.13 | 0.01 | 0.05 | 0.06 | 0.00 | 260.23 | 260.23 | 0.01 | 0.00 | 260.46 |
| Worker | 0.35 | 0.40 | 3.69 | 0.00 | 0.49 | 0.02 | 0.51 | 0.02 | 0.02 | 0.04 | 0.00 | 388.89 | 388.89 | 0.03 | 0.00 | 389.49 |
| **Total** | **0.62** | **2.06** | **6.31** | **0.00** | **0.57** | **0.07** | **0.64** | **0.03** | **0.07** | **0.10** | **0.00** | **649.12** | **649.12** | **0.04** | **0.00** | **649.95** |

## 3.4 Building Construction - 2014

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.46 | 2.68 | 3.25 | 0.01 | | 0.23 | 0.23 | | 0.23 | 0.23 | 0.00 | 478.23 | 478.23 | 0.05 | 0.00 | 479.28 |
| **Total** | **0.46** | **2.68** | **3.25** | **0.01** | | **0.23** | **0.23** | | **0.23** | **0.23** | **0.00** | **478.23** | **478.23** | **0.05** | **0.00** | **479.28** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.27 | 1.66 | 2.62 | 0.00 | 0.01 | 0.05 | 0.06 | 0.01 | 0.05 | 0.06 | 0.00 | 260.23 | 260.23 | 0.01 | 0.00 | 260.46 |
| Worker | 0.35 | 0.40 | 3.69 | 0.00 | 0.02 | 0.02 | 0.04 | 0.02 | 0.02 | 0.04 | 0.00 | 388.89 | 388.89 | 0.03 | 0.00 | 389.49 |
| **Total** | **0.62** | **2.06** | **6.31** | **0.00** | **0.03** | **0.07** | **0.10** | **0.03** | **0.07** | **0.10** | **0.00** | **649.12** | **649.12** | **0.04** | **0.00** | **649.95** |

## 3.4 Building Construction - 2015

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.47 | 3.16 | 2.49 | 0.00 | | 0.19 | 0.19 | | 0.19 | 0.19 | 0.00 | 397.61 | 397.61 | 0.04 | 0.00 | 398.41 |
| **Total** | **0.47** | **3.16** | **2.49** | **0.00** | | **0.19** | **0.19** | | **0.19** | **0.19** | **0.00** | **397.61** | **397.61** | **0.04** | **0.00** | **398.41** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.19 | 1.26 | 1.80 | 0.00 | 0.07 | 0.04 | 0.10 | 0.01 | 0.04 | 0.04 | 0.00 | 218.10 | 218.10 | 0.01 | 0.00 | 218.26 |
| Worker | 0.26 | 0.29 | 2.72 | 0.00 | 0.40 | 0.02 | 0.42 | 0.02 | 0.02 | 0.03 | 0.00 | 314.59 | 314.59 | 0.02 | 0.00 | 315.04 |
| **Total** | **0.45** | **1.55** | **4.52** | **0.00** | **0.47** | **0.06** | **0.52** | **0.03** | **0.06** | **0.07** | **0.00** | **532.69** | **532.69** | **0.03** | **0.00** | **533.30** |

## 3.4 Building Construction - 2015

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.38 | 2.23 | 2.70 | 0.00 | | 0.19 | 0.19 | | 0.19 | 0.19 | 0.00 | 397.61 | 397.61 | 0.04 | 0.00 | 398.41 |
| **Total** | **0.38** | **2.23** | **2.70** | **0.00** | | **0.19** | **0.19** | | **0.19** | **0.19** | **0.00** | **397.61** | **397.61** | **0.04** | **0.00** | **398.41** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.19 | 1.26 | 1.80 | 0.00 | 0.01 | 0.04 | 0.04 | 0.01 | 0.04 | 0.04 | 0.00 | 218.10 | 218.10 | 0.01 | 0.00 | 218.26 |
| Worker | 0.26 | 0.29 | 2.72 | 0.00 | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 | 0.03 | 0.00 | 314.59 | 314.59 | 0.02 | 0.00 | 315.04 |
| **Total** | **0.45** | **1.55** | **4.52** | **0.00** | **0.03** | **0.06** | **0.07** | **0.03** | **0.06** | **0.07** | **0.00** | **532.69** | **532.69** | **0.03** | **0.00** | **533.30** |

## 3.5 Paving - 2015

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.11 | 0.66 | 0.45 | 0.00 | | 0.06 | 0.06 | | 0.06 | 0.06 | 0.00 | 58.21 | 58.21 | 0.01 | 0.00 | 58.40 |
| Paving | 0.05 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | **0.16** | **0.66** | **0.45** | **0.00** | | **0.06** | **0.06** | | **0.06** | **0.06** | **0.00** | **58.21** | **58.21** | **0.01** | **0.00** | **58.40** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 0.00 | 0.00 | 0.03 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 4.02 | 4.02 | 0.00 | 0.00 | 4.03 |
| **Total** | **0.00** | **0.00** | **0.03** | **0.00** | **0.01** | **0.00** | **0.01** | **0.00** | **0.00** | **0.00** | **0.00** | **4.02** | **4.02** | **0.00** | **0.00** | **4.03** |

## 3.5 Paving - 2015

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.06 | 0.34 | 0.42 | 0.00 | | 0.03 | 0.03 | | 0.03 | 0.03 | 0.00 | 58.21 | 58.21 | 0.01 | 0.00 | 58.40 |
| Paving | 0.05 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | **0.11** | **0.34** | **0.42** | **0.00** | | **0.03** | **0.03** | | **0.03** | **0.03** | **0.00** | **58.21** | **58.21** | **0.01** | **0.00** | **58.40** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.02 | 4.02 | 0.00 | 0.00 | 4.03 |
| **Total** | **0.00** | **0.00** | **0.03** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **4.02** | **4.02** | **0.00** | **0.00** | **4.03** |

## 3.5 Paving - 2016

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.07 | 0.44 | 0.32 | 0.00 | | 0.04 | 0.04 | | 0.04 | 0.04 | 0.00 | 41.01 | 41.01 | 0.01 | 0.00 | 41.14 |
| Paving | 0.03 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | **0.10** | **0.44** | **0.32** | **0.00** | | **0.04** | **0.04** | | **0.04** | **0.04** | **0.00** | **41.01** | **41.01** | **0.01** | **0.00** | **41.14** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.75 | 2.75 | 0.00 | 0.00 | 2.76 |
| **Total** | **0.00** | **0.00** | **0.02** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **2.75** | **2.75** | **0.00** | **0.00** | **2.76** |

## 3.5 Paving - 2016

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.04 | 0.24 | 0.29 | 0.00 | | 0.02 | 0.02 | | 0.02 | 0.02 | 0.00 | 41.01 | 41.01 | 0.01 | 0.00 | 41.14 |
| Paving | 0.03 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | **0.07** | **0.24** | **0.29** | **0.00** | | **0.02** | **0.02** | | **0.02** | **0.02** | **0.00** | **41.01** | **41.01** | **0.01** | **0.00** | **41.14** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.75 | 2.75 | 0.00 | 0.00 | 2.76 |
| **Total** | **0.00** | **0.00** | **0.02** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **2.75** | **2.75** | **0.00** | **0.00** | **2.76** |

## 3.6 Architectural Coating - 2016

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 6.55 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Off-Road | 0.01 | 0.09 | 0.07 | 0.00 | | 0.01 | 0.01 | | 0.01 | 0.01 | 0.00 | 9.56 | 9.56 | 0.00 | 0.00 | 9.59 |
| **Total** | **6.56** | **0.09** | **0.07** | **0.00** | | **0.01** | **0.01** | | **0.01** | **0.01** | **0.00** | **9.56** | **9.56** | **0.00** | **0.00** | **9.59** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 0.02 | 0.02 | 0.17 | 0.00 | 0.03 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 21.30 | 21.30 | 0.00 | 0.00 | 21.33 |
| **Total** | **0.02** | **0.02** | **0.17** | **0.00** | **0.03** | **0.00** | **0.03** | **0.00** | **0.00** | **0.00** | **0.00** | **21.30** | **21.30** | **0.00** | **0.00** | **21.33** |

## 3.6 Architectural Coating - 2016

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 6.55 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Off-Road | 0.01 | 0.06 | 0.07 | 0.00 | | 0.01 | 0.01 | | 0.01 | 0.01 | 0.00 | 9.56 | 9.56 | 0.00 | 0.00 | 9.59 |
| **Total** | **6.56** | **0.06** | **0.07** | **0.00** | | **0.01** | **0.01** | | **0.01** | **0.01** | **0.00** | **9.56** | **9.56** | **0.00** | **0.00** | **9.59** |

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker | 0.02 | 0.02 | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.30 | 21.30 | 0.00 | 0.00 | 21.33 |
| **Total** | **0.02** | **0.02** | **0.17** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **21.30** | **21.30** | **0.00** | **0.00** | **21.33** |

# 4.0 Mobile Detail

## 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 3.31 | 5.70 | 33.05 | 0.04 | 3.63 | 0.18 | 3.81 | 0.16 | 0.18 | 0.34 | 0.00 | 3,399.70 | 3,399.70 | 0.20 | 0.00 | 3,403.92 |
| Unmitigated | 3.31 | 5.70 | 33.05 | 0.04 | 3.63 | 0.18 | 3.81 | 0.16 | 0.18 | 0.34 | 0.00 | 3,399.70 | 3,399.70 | 0.20 | 0.00 | 3,403.92 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| | 0.00 | 0.00 | 0.00 | | |
| High School | 184.80 | 0.00 | 0.00 | 494,663 | 494,663 |
| Junior High School | 969.44 | 0.00 | 0.00 | 2,184,312 | 2,184,312 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| User Defined Educational | 1,345.52 | 0.00 | 0.00 | 5,142,577 | 5,142,577 |
| Total | 2,499.76 | 0.00 | 0.00 | 7,821,553 | 7,821,553 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | |
|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW |
| | 14.70 | 6.60 | 6.60 | | | |
| High School | 14.70 | 6.60 | 6.60 | 77.80 | 17.20 | 5.00 |
| Junior High School | 14.70 | 6.60 | 6.60 | 72.80 | 22.20 | 5.00 |
| Parking Lot | 14.70 | 6.60 | 6.60 | 0.00 | 0.00 | 0.00 |
| User Defined Educational | 14.70 | 6.60 | 6.60 | 100.00 | 0.00 | 0.00 |

## 5.0 Energy Detail

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 488.77 | 488.77 | 0.02 | 0.01 | 491.83 |
| Electricity Unmitigated | | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 488.77 | 488.77 | 0.02 | 0.01 | 491.83 |
| NaturalGas Mitigated | 0.03 | 0.27 | 0.23 | 0.00 | | 0.00 | 0.02 | | 0.00 | 0.02 | 0.00 | 297.32 | 297.32 | 0.01 | 0.01 | 299.13 |
| NaturalGas Unmitigated | 0.03 | 0.27 | 0.23 | 0.00 | | 0.00 | 0.02 | | 0.00 | 0.02 | 0.00 | 297.32 | 297.32 | 0.01 | 0.01 | 299.13 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU | tons/yr | | | | | | | | | | MT/yr | | | | | |
| High School | 1.95606e+006 | 0.01 | 0.10 | 0.08 | 0.00 | | 0.00 | 0.01 | | 0.00 | 0.01 | 0.00 | 104.38 | 104.38 | 0.00 | 0.00 | 105.02 |
| Junior High School | 3.61543e+006 | 0.02 | 0.18 | 0.15 | 0.00 | | 0.00 | 0.01 | | 0.00 | 0.01 | 0.00 | 192.93 | 192.93 | 0.00 | 0.00 | 194.11 |
| Parking Lot | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| User Defined Educational | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | | **0.03** | **0.28** | **0.23** | **0.00** | | **0.00** | **0.02** | | **0.00** | **0.02** | **0.00** | **297.31** | **297.31** | **0.00** | **0.00** | **299.13** |

### Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU | tons/yr | | | | | | | | | | MT/yr | | | | | |
| High School | 1.95606e+006 | 0.01 | 0.10 | 0.08 | 0.00 | | 0.00 | 0.01 | | 0.00 | 0.01 | 0.00 | 104.38 | 104.38 | 0.00 | 0.00 | 105.02 |
| Junior High School | 3.61543e+006 | 0.02 | 0.18 | 0.15 | 0.00 | | 0.00 | 0.01 | | 0.00 | 0.01 | 0.00 | 192.93 | 192.93 | 0.00 | 0.00 | 194.11 |
| Parking Lot | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| User Defined Educational | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | | **0.03** | **0.28** | **0.23** | **0.00** | | **0.00** | **0.02** | | **0.00** | **0.02** | **0.00** | **297.31** | **297.31** | **0.00** | **0.00** | **299.13** |

## 5.3 Energy by Land Use - Electricity

### Unmitigated

| | Electricity Use | ROG | NOx | CO | SO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | kWh | tons/yr | | | | MT/yr | | | |
| High School | 589864 | | | | | 171.60 | 0.01 | 0.00 | 172.67 |
| Junior High School | 1.09026e+006 | | | | | 317.17 | 0.01 | 0.01 | 319.16 |
| Parking Lot | 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| User Defined Educational | 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | | | | | | **488.77** | **0.02** | **0.01** | **491.83** |

### Mitigated

| | Electricity Use | ROG | NOx | CO | SO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | kWh | tons/yr | | | | MT/yr | | | |
| High School | 589864 | | | | | 171.60 | 0.01 | 0.00 | 172.67 |
| Junior High School | 1.09026e+006 | | | | | 317.17 | 0.01 | 0.01 | 319.16 |
| Parking Lot | 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| User Defined Educational | 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | | | | | | **488.77** | **0.02** | **0.01** | **491.83** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 2.70 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Unmitigated | 2.86 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

## 6.2 Area by SubCategory

### Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.65 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Consumer Products | 2.21 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | **2.86** | **0.00** | **0.00** | **0.00** | | **0.00** | **0.00** | | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

### Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.65 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Consumer Products | 2.04 | | | | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Landscaping | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | **2.69** | **0.00** | **0.00** | **0.00** | | **0.00** | **0.00** | | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

| | ROG | NOx | CO | SO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | MT/yr | | | |
| Mitigated | | | | | 22.27 | 0.16 | 0.00 | 27.05 |
| Unmitigated | | | | | 22.27 | 0.16 | 0.00 | 27.05 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

## 7.2 Water by Land Use

### Unmitigated

| | Indoor/Outdoor Use | ROG | NOx | CO | SO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | Mgal | tons/yr | | | | MT/yr | | | |
| High School | 2.46678 / 6.34314 | | | | | 10.37 | 0.08 | 0.00 | 12.59 |
| Junior High School | 2.83151 / 7.28103 | | | | | 11.90 | 0.09 | 0.00 | 14.46 |
| Parking Lot | 0 / 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| User Defined Educational | 0 / 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | | | | | | **22.27** | **0.17** | **0.00** | **27.05** |

### 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | ROG | NOx | CO | SO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | Mgal | tons/yr | | | | MT/yr | | | |
| High School | 2.46678 / 6.34314 | | | | | 10.37 | 0.08 | 0.00 | 12.59 |
| Junior High School | 2.83151 / 7.28103 | | | | | 11.90 | 0.09 | 0.00 | 14.46 |
| Parking Lot | 0 / 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| User Defined Educational | 0 / 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | | | | | | **22.27** | **0.17** | **0.00** | **27.05** |

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

### Category/Year

| | ROG | NOx | CO | SO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|
| | tons/yr | | | | MT/yr | | | |
| Mitigated | | | | | 64.02 | 3.78 | 0.00 | 143.46 |
| Unmitigated | | | | | 64.02 | 3.78 | 0.00 | 143.46 |
| **Total** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** | **NA** |

## 8.2 Waste by Land Use

### Unmitigated

| | Waste Disposed | ROG | NOx | CO | SO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | tons | tons/yr | | | | MT/yr | | | |
| High School | 102.2 | | | | | 20.75 | 1.23 | 0.00 | 46.49 |
| Junior High School | 213.16 | | | | | 43.27 | 2.56 | 0.00 | 96.97 |
| Parking Lot | 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| User Defined Educational | 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | | | | | | **64.02** | **3.79** | **0.00** | **143.46** |

## 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | ROG | NOx | CO | SO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | tons | tons/yr | | | | MT/yr | | | |
| High School | 102.2 | | | | | 20.75 | 1.23 | 0.00 | 46.49 |
| Junior High School | 213.16 | | | | | 43.27 | 2.56 | 0.00 | 96.97 |
| Parking Lot | 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| User Defined Educational | 0 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | | | | | | **64.02** | **3.79** | **0.00** | **143.46** |

# 9.0 Vegetation

# Appendix B

*Jurisdictional Delineation*



# Jurisdictional Delineation

# Hammonton-Smartville School IS/MND
# Yuba County, California

*Prepared for:*

**Marysville Joint Unified School District**
1919 B Street
Marysville, CA 95901

*Prepared by:*

**Rincon Consultants, Inc.**
1530 Monterey Street, Suite D
San Luis Obispo, California 93401

*September 2011*

rincon

Environmental Scientists Planners Engineers

# TABLE OF CONTENTS

**1.0 INTRODUCTION ..... 1**
**1.1 Project Location ..... 1**
**1.2 Project Description ..... 1**
**2.0 METHODS ..... 3**
**2.1 Literature Review ..... 3**
**2.2 Field Survey ..... 3**
**3.0 RESULTS ..... 5**
**3.1 Environmental Setting ..... 5**
**3.2 Vegetation ..... 5**
**3.3 Hydrology ..... 7**
**3.4 Soils ..... 8**
**4.0 JURISDICTIONAL WATERS ..... 10**
**4.1 USACE Jurisdiction ..... 10**
**4.2 RWQCB Jurisdiction ..... 12**
**4.3 CDFG Jurisdiction ..... 12**
**5.0 CONCLUSIONS AND RECOMMENDATIONS ..... 12**
**6.0 REFERENCES ..... 13**

FIGURES

Figure 1 – Regional Location
Figure 2 – Jurisdictional Areas
Figure 3 – USDA Soils Map

APPENDICES

Appendix A – Regulatory Overview and Definitions
Appendix B – Wetland Determination Data Forms
Appendix C – Plant List
Appendix D – Site Photos

# 1.0 INTRODUCTION

Rincon Consultants, Inc. (Rincon) conducted a delineation of waters of the United States (U.S.) and State of California (State), as well as features potentially under the jurisdiction of the California Department of Fish and Game (CDFG), for the Hammonton-Smartville Initial Study/Mitigated Negative Declaration being prepared for the Marysville Joint Unified School District project in the City of Marysville, Yuba County, California.

The purpose of this delineation was to document the type and aerial extent of features within the study area that may be within the jurisdiction of the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and/or CDFG. Any proposed development activities that would result in the discharge of dredged or fill material into features identified as jurisdictional waters may be subject to the permit requirements of the USACE under Section 404 of the Clean Water Act (CWA), the RWQCB under Section 401 of the CWA and provisions of the Porter-Cologne Water Quality Act, and the CDFG pursuant to Section 1600 et. seq. of the California Fish and Game Code. Actual jurisdictional areas are determined by the state and federal authorities at the time that permits are requested.

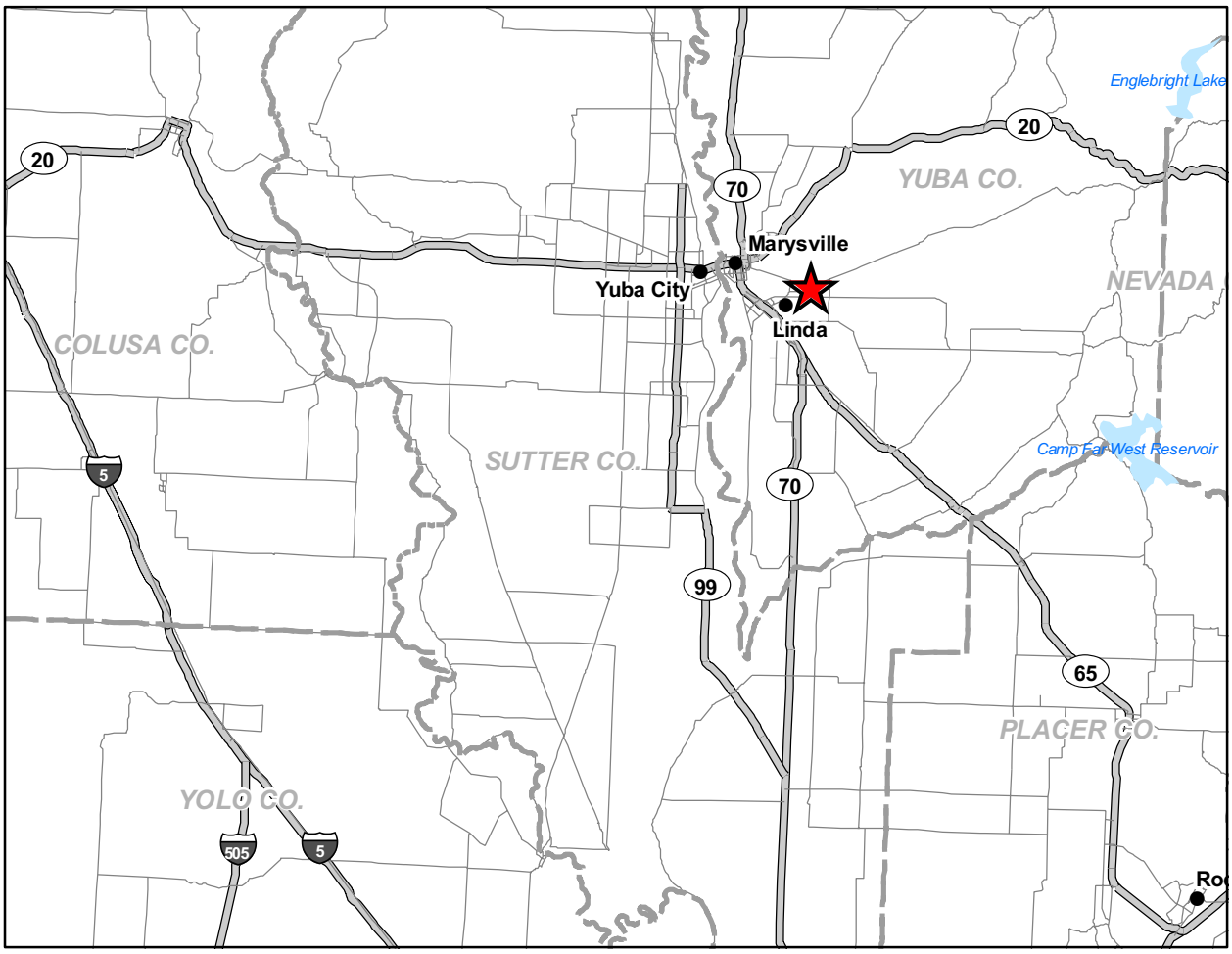
## 1.1 Project Location

The approximately 70-acre study area is located at 2176 Hammonton-Smartville Road (Assessor's Parcel Numbers 021150032000 and 021150060000), approximately 2.5 miles southeast of the City of Marysville in Yuba County, California (Figure 1). The study area is located on the floor of the Central Valley at approximately 70 feet elevation above mean sea level and the topography on-site is flat. The study area is located in Township 15 North, Range 4 East, and Section 21; it is centered at approximately 39.133605° latitude and -121.537052° longitude and is depicted on the *Yuba City, California*, United State Geological Survey (USGS) 7.5-minute topographic quadrangle. Immediately to the north of the property is Hammonton-Smartville Road, to the east is rural residential development, to the south are a residential development and an undeveloped parcel, and to the west is an undeveloped parcel. The nearest water body is the Yuba River approximately two miles to the northeast. The site is within the Lower Feather River Subbasin, which drains into the Feather River, a Traditional Navigable Water (TNW).

The region is characterized by a Mediterranean climate, with mild winters and hot summers. Average annual precipitation is approximately 20 inches, most of which falls in the form of rainfall from October through May (Western Regional Climate Center 2009). The natural landscape of the region, which historically consisted of grasslands and scattered shrublands, has been converted for irrigated agricultural use and rural and suburban development. No natural drainage features occur within or adjacent to the study area.

## 1.2 Project Description

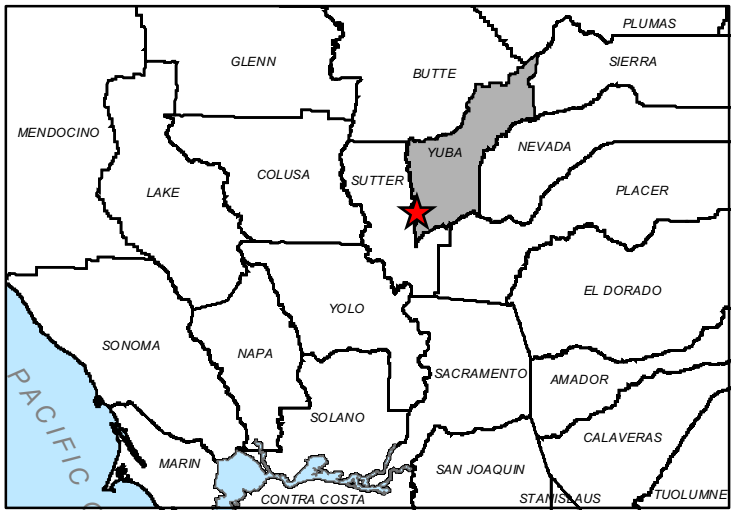
The Marysville Joint Unified School District is proposing to construct a new intermediate school, an alternative education school, an adult education center, and an educational and operational services center within the project site. The proposed intermediate school would be designed to accommodate students in grades 6 through 8. The proposed alternative education







Project Location




*Base map source: U.S. Bureau of the Census TIGER Data, 2000, ESRI 2006.*

Regional Location Figure 1

school would accommodate students in grades 7 through 8. Several classrooms in separate buildings, as well as one multi-purpose building, a library, a gym, driveways and bus access areas, parking areas, concrete flatwork, and hard-court and turf playfields would be constructed. The classroom and faculty buildings and parking and driveway areas would generally encompass the northwestern portion of the site, with the playfields in the southwestern portion of the site. The eastern half of the site is reserved for the planned educational and operational services center, details for which are not yet available. Access to the site would be from Hammonton-Smartville Road.

# 2.0 METHODS

Waters of the U.S., including wetlands potentially subject to USACE jurisdiction and thus, Section 404 of CWA, were delineated in accordance with the USACE *Wetlands Delineation Manual* (Environmental Laboratory 1987), *Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest* (U.S. Army Corps of Engineers 2001), *Regulatory Guidance Letter No. 05-05: Ordinary High Water Mark Identification* (U.S. Army Corps of Engineers 2005), *Jurisdictional Determination Form Instructional Guidebook* (U.S. Environmental Protection Agency and U.S. Army Corps of Engineers 2007), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (U.S. Army Corps of Engineers 2008a), and Code of Federal Regulations sections that pertain to factors constituting the ordinary high water mark (OHWM) for non-wetland waters ("other waters") (33 CFR 328.3 and 33 CFR 328.4). RWQCB jurisdiction was determined in accordance with the previously listed methodologies to identify waters subject to federal jurisdiction and thus, mirrors the lateral limits of federal jurisdiction pursuant to Section 401 of the CWA. The determination of RWQCB jurisdiction will follow such methods until the State Water Resources Control Board's Wetland and Riparian Area Protection Policy is fully developed and officially implemented. Wetland status of the plant species observed was determined using Reed (1988). CDFG jurisdiction was delineated in accordance with Section 1602(a) of the California Fish and Game Code. Appendix A contains a discussion of jurisdictional regulations and definitions pertaining to this delineation.

## 2.1 Literature Review

Prior to the field survey, Rincon biologists reviewed aerial photographs of the site, the U.S. Geological Survey, Yuba City, California 7.5-minute topographic quadrangle, and the *Soil Survey of Yuba County, California* (U. S. Department of Agriculture, Soil Conservation Service, 2009) to characterize the nature and extent of potential jurisdictional areas on the property. The National Wetlands Inventory (NWI) (U.S. Fish and Wildlife Service 2009) was also reviewed to determine if any wetlands had been previously documented and mapped on or adjacent to the site.

## 2.2 Field Survey

Rincon biologist Carie Wingert conducted a jurisdictional delineation field survey within the project site on 26 and 27 August 2009. All potential jurisdictional features within the site were examined to determine existing conditions and to evaluate jurisdictional limits. The assessment included an evaluation of "normal circumstances", "atypical situations", and "problem areas" as detailed in Environmental Laboratory (1987) and U.S. Army Corps of Engineers (2008a).

Data points were taken in both potential wetland and upland areas to determine the wetland/upland boundary. *Wetland Determination Data Forms – Arid West Region* (U.S. Army Corps of Engineers 2008a) were completed for each data point, and included an assessment of hydrophytic vegetation, hydric soils, and wetland hydrology. Hydrophytic vegetation was determined by creating a plant species list for each sampling point, estimating percent cover by each species, and determining whether wetland plants (as listed in Reed 1988) dominated the area using the Dominance and Prevalence Tests (U.S. Army Corps of Engineers 2008a). To establish whether hydric soils were present, a soil pit approximately 16 inches deep was dug to determine the presence or absence of positive field indicators for hydric soils. Soil color was determined using a Munsell® (2000) soil color chart. In some areas that contained a predominance of Obligate Wetland or Facultative Wetland plant species, and had positive indicators of hydrology, the hydric soils criterion was presumed to be met. This presumption is described in greater detail in Section 3.4. Wetland hydrology was determined by the presence of indicators, such as surface water or soil saturation. A data point was considered to be within a jurisdictional wetland if the area met the criteria for the presence of all three parameters (hydrophytic vegetation, hydric soils, and wetland hydrology). Data for wetland waters and adjacent uplands were entered on standardized wetland determination data forms, which are presented in Appendix B.

In addition, USACE-defined wetlands also needed to meet the requirement of having a significant nexus to a TNW if not adjacent to a TNW or abutting a Relatively Permanent Water (RPW) that maintains a direct hydrologic surface connection to a TNW. Situations where the significant nexus criteria were not met, or adjacency to a TNW or abutment to a RPW did not occur, but in which wetlands were present, such features were determined not subject to federal jurisdiction but were considered jurisdictional under the RWQCB.

The lateral limits of USACE jurisdiction (i.e., width) for non-wetland waters or "other waters" were determined by the presence of physical characteristics indicative of the OHWM. The OHWM was identified in accordance with the applicable Code of Federal Regulations sections (33 CFR 328.3 and 33 CFR 328.4) and Regulatory Guidance Letter (United States Army Corps of Engineers 2005), as well as in reference to various relevant technical publications including but not limited to *Review of Ordinary High Water Mark Indicators for Delineating Arid Streams in the Southwestern United States* (United States Army Corps of Engineers 2004), *Distribution of Ordinary High Water Mark (OHWM) Indicators and Their Reliability in Identifying the Limits of "Waters of the United States" in Arid Southwestern Channels* (United States Army Corps of Engineers 2006), and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (United States Army Corps of Engineers 2008b). The CDFG jurisdictional limits were measured laterally from bank to bank at the top of the channel, or to the outer drip-line of associated riparian vegetation, if present. Data for non-wetland waters were also entered on standardized wetland determination data forms (Appendix B).

A Trimble GeoXT GPS unit was used to map the extent of on-site wetlands and other waters as well as the locations of data points. Aerial photographs (field maps) were also used to map drainages, and data on channel width was recorded on the field maps. ArcGIS was then used to calculate the approximate acreages and/or linear feet of jurisdictional features.

# 3.0 RESULTS

## 3.1 Environmental Setting

A total of 11 data points were used to delineate potential waters of the U.S. and State, as well as CDFG jurisdictional areas on the property (Figure 2). Wetland delineation data sheets are contained in Appendix B, and a list of the plant species identified during the jurisdictional delineation and the wetland indicator status for each of these species is provided in Appendix C. Note that this plant list does not represent all of the species present on the property, but is a summary of the species observed at the data points. Site photos are provided in Appendix D.

This delineation examined three linear features throughout the property, including the Linda Drain which trends northeast to southwest across the property and contained water at the time of the site visit. Also examined were areas that appeared to show inundation on aerial images of the site

## 3.2 Vegetation

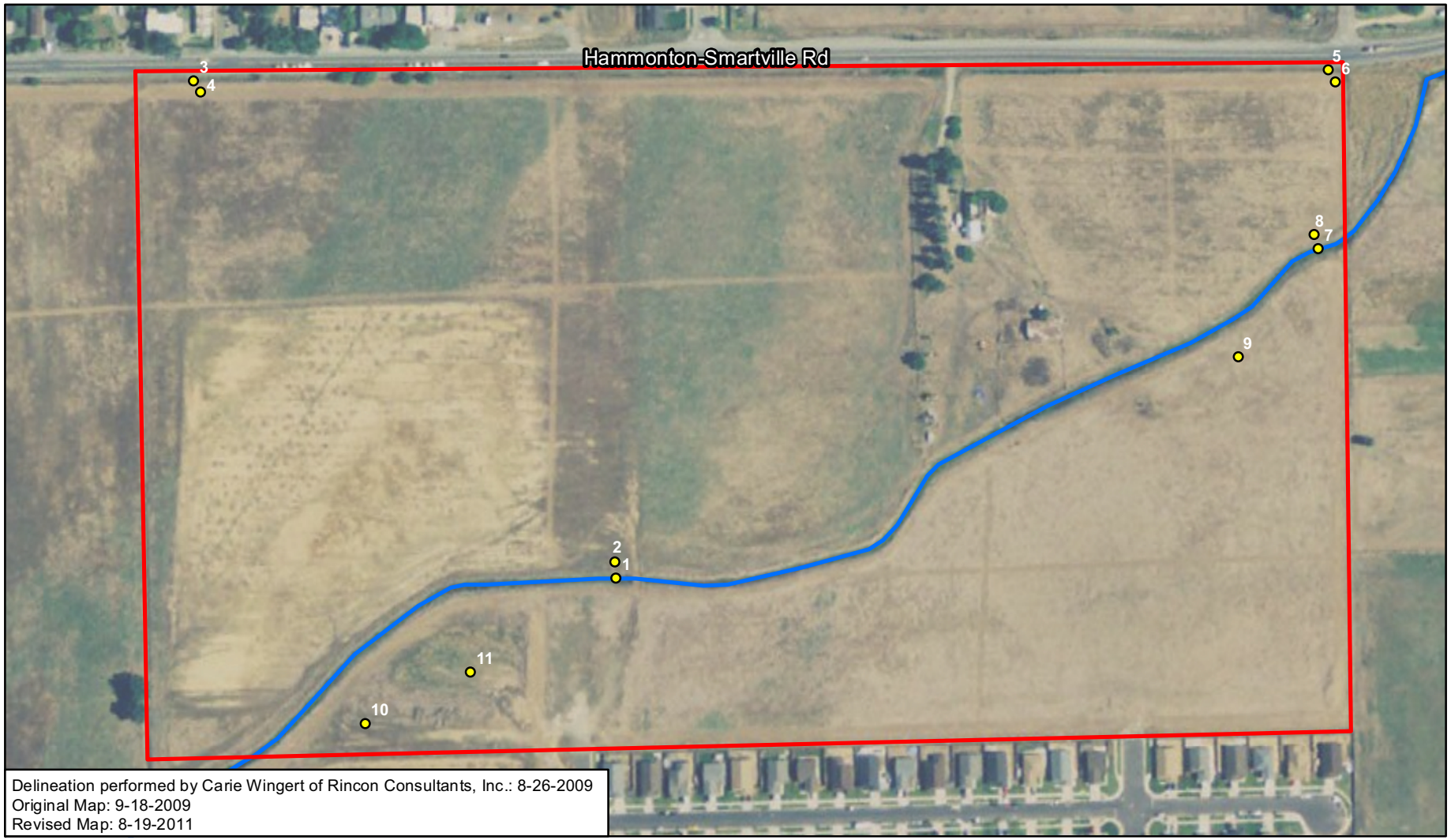
Two vegetation communities were observed on-site: California Annual Grassland series and Ruderal/Developed. Classification of the on-site vegetation communities or series was generally based on Sawyer and Keeler-Wolf (1995), and was compared to Holland (1986) for consistency. Descriptions of these vegetation series, as well as the vegetation associated with the Linda Drain and ephemeral ditches on–site are presented below.

California Annual Grassland

The California Annual Grassland series corresponds to the non-native grassland plant community described by Holland (1986). This vegetation series covered nearly the entire project site and was characterized by predominantly introduced herbaceous plant species. Common introduced grass species observed on the site included wild oats (*Avena fatua*), ripgut grass (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), Italian ryegrass (*Lolium perenne* ssp. *multiflorum*) and wheat (*Triticum aestivum*), along with non-native herbs such as radish (*Raphanus sativus*), yellow star thistle (*Centaurea solstitialis*), bindweed (*Convolvulus arvensis*), curly dock (*Rumex crispus*), and prickly lettuce (*Lactuca serriola*). Two native herbs were observed: dove weed (*Croton setigerus*) and horseweed (*Conyza canadensis*).

Ruderal/Developed

The Ruderal/Developed habitat on-site is not described by either Sawyer and Keeler-Wolf (1995) or Holland (1986) because it is a human-induced habitat. This habitat was associated with the unoccupied residence in the northeast portion of the property and included a house and several accessory buildings. Vegetation was similar to that of the California annual grassland described above, but included other ornamental species such as rose bushes (*Rosa* sp.) and gum trees (*Eucalyptus* sp.).




Jurisdictional Areas

Figure 2

Linda Drain

The freshwater emergent wetland on-site was confined to the wetted portion of the Linda Drain, which traverses the property in a northeast to southwest trend. Due to the lack of diversity and artificial nature of the wetland, this community doesn't fit well into any of the communities defined by Sawyer and Keeler-Wolf (1995) or Holland (1986). This habitat type corresponds most closely with the Soft Rush March series described by Sawyer and Keeler-Wolf and with the Coastal and Valley Freshwater Marsh vegetation community described by Holland. This wetland was dominated by common rush (*Juncus effuses*), broad-leaved cattail (*Typha latifolia*), and chufa flatsedge (*Cyperus esculentus*), all of which were growing directly out of the water. Other species observed included creeping bentgrass (*Agrostis stolonifera*), tall flatsedge (*C. eragrostis*), dallis grass (*Paspalum dilatatum*), and western vervain (*Verbena lasiostachys*). This habitat lacks diversity and is artificial in nature due to periodic removal by the Yuba County Public Works Department to maintain flows within the Linda Drain.

Ephemeral Ditches

In addition to the Linda Drain, there are two ephemeral ditches on-site. An east-west trending ditch occurs along the northern boundary of the property adjacent to Hammonton-Smartville Road (Data Points 3 and 5). This ditch was dry at the time of the site visit and was vegetated with facultative wetland plant species including narrow-leaf milkweed (*Asclepias fascicularis*), curly dock and Bermuda grass (*Cynodon dactylon*). Other species present within the east-west ditch included Italian ryegrass, tall flatsedge (*Cyperus eragrostis*), and barnyard grass (*Echinochloa crus-galli*).

The second ephemeral ditch is a north-south trending ditch along the western boundary of the property and serves as a connection between the east-west ditch and the Linda Drain. The north-south ditch was vegetated with California annual grassland series plants similar to those found throughout the property including Italian ryegrass, wild oat, and foxtail barley (*Hordeum murinum* ssp. *leporinum*), with small amounts of prickly lettuce and curly dock. This drainage displayed the least amount of evidence of frequent flow.

## 3.3 Hydrology

A review of NWI maps, topographic maps, and aerial photographs indicated the presence of one blue-line perennial stream on the property known as the Linda Drain. Two ephemeral ditches not mapped on topographic or NWI maps were also observed within the subject property.

Linda Drain

The Linda Drain is an artificially constructed, V-shaped earthen ditch designed to carry storm water flows and other surface runoff and collects water from the entire project site (drainage area) and from a network of ditches throughout an approximately five square-mile watershed to the northeast. This ditch is perennial in nature, meanders, and contained murky and stagnant water of approximately one foot depth at the time of the site visit. The gradient for this feature is approximately one percent. Subsurface flow characteristics are unknown.

Evidence of flow was present along the entire length of the Linda Drain and included a definable bed and bank, a line impressed on the bank, destruction of terrestrial vegetation along the bottom one-third of the bank, and a clearly defined OHWM of approximately six feet in width. The width at the top of bank is approximately 15 feet and the ditch is approximately eight feet deep with 2:1 slopes. The banks are stable and vegetated along the upper two-thirds with primarily upland non-native vegetation. No runs, riffle, or pools were observed within this feature on the subject property.

Ephemeral Ditches

One ephemeral ditch traverses the property in an east-west trend along the northern boundary of the property adjacent to Hammonton-Smartville Road. The second ephemeral ditch traverses the property in a north-south direction along the western boundary of the property and connects the east-west ephemeral ditch to the Linda Drain. Both ditches lacked water at the time of the site visit and likely convey flows only during and shortly after storm events. Several smaller ephemeral ditches are present throughout the area and connect with these ditches.

Both ditches had a definable bed and bank. The east-west ditch had presence of litter and debris and an OHWM of approximately three feet in width, was approximately eight feet wide from top of bank to top of bank, was approximately six feet deep and had 2:1 slopes. The north-south ditch was approximately three feet wide at the bottom, eight feet wide from top of bank to top of bank, and had 3:1 slopes.

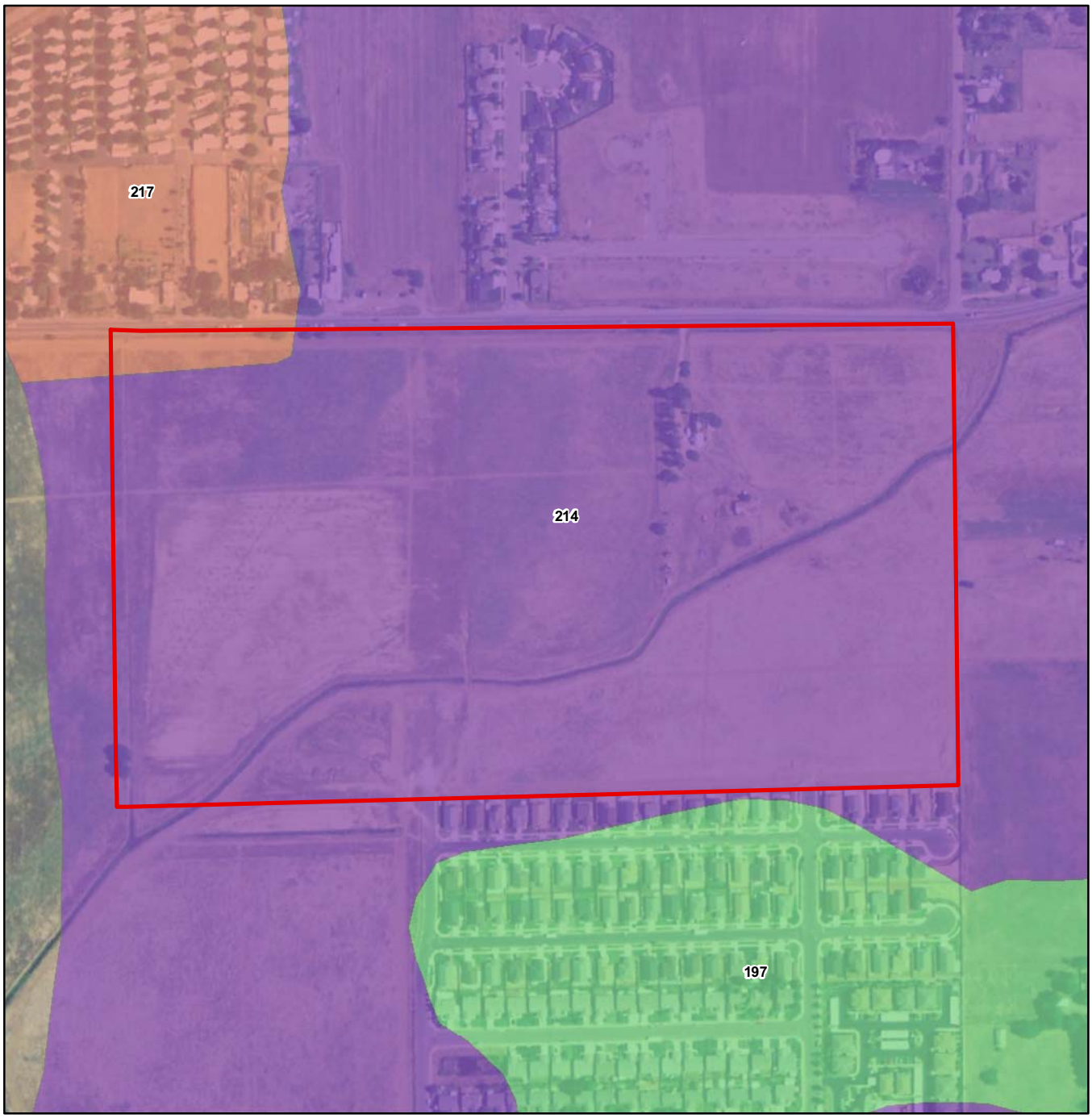
## 3.4 Soils

Two soil units are mapped within the site boundaries and are shown in Figure 3.

**San Joaquin loam, 0 to 1 percent slopes.** This soil is a moderately deep to a duripan, well- to moderately well-drained soil formed from alluvium derived from mixed but dominantly granitic sources. It is a loam soil underlain by clay. It is typically found on terraces, often in depression, with medium to very high runoff and very slow permeability. It is typically used for cropland and livestock grazing. This soil map unit is considered hydric when found in depressions (United States Department of Agriculture Natural Resources Conservation Service 2009).

**San Joaquin-Urban land complex 0 to 1 percent slopes**. This soil complex is made up of approximately 45 percent San Joaquin, 45 percent Urban land, and 10 percent minor components. San Joaquin soil is described above. There is no soil description for Urban Land. This soil map unit is also considered hydric when found in depressions (United States Department of Agriculture Natural Resources Conservation Service 2009).

Redox concentrations were observed in several soil pits dug throughout the project site (Data Points 5, 9, 10, 11, and 12). However, none of these locations contained soils with the appropriate chroma.




*Aerial source: Map images copyright © 2009 ESRI and its licensors. All rights reserved. Used by permission. Soil layer source: U.S. Department of Agriculture, Natural Resources Conservation Service, 2009.*

Study Area Boundary

197, Oakdale sandy loam, 0 to 5 percent slopes

214, San Joaquin loam, 0 to 1 percent slopes

217, San Joaquin-Urban land complex, 0 to 1 percent slopes

N

0 250 500 Feet

USDA Soils Map

Figure 3

# 4.0 JURISDICTIONAL WATERS

Based upon the findings of the field delineation, the features depicted on Figure 2 represent jurisdictional waters and constitute our preliminary jurisdictional determination. The Linda Drain was determined to fall under the jurisdictions of the USACE, RWQCB, and CDFG. In addition, the ephemeral ditches were determined to fall under the jurisdiction of CDFG. While all three wetland parameters were present at data points one and seven, these points represented isolated patches of hydrophytic vegetation. The majority of Linda Drain does not support hydrophytic vegetation and was determined to be jurisdictional waters, not wetlands. It should be noted that each regulatory agency makes an independent final jurisdictional determination. Table 1, below, summarizes the total acreage of jurisdictional waters on-site. Figure 2 depicts the location and extent of jurisdictional and non-jurisdictional waters within the project site.

**Table 1. Jurisdictional Areas.**

| Jurisdictional Type | USACE[1] | RWQCB[1] | CDFG[1] |
|---|---|---|---|
| | Non-wetland Waters Acres (Linear Feet) | Non-wetland Waters Acres (Linear Feet) | Streambed/ Riparian Habitat Acres (Linear Feet) |
| Linda Drain | 0.32 (2,353) | 0.32 (2,353) | 0.81 (2,353) |
| East-West Ephemeral Ditch | 0.00 | 0.00 | 0.36 (2,244) |
| North-South Ephemeral Ditch | 0.00 | 0.00 | 0.23 (1,265) |
| **Total** | **0.32 (2,353)** | **0.32 (2,353)** | **1.40 (5,862)** |

*1 Width measurements for USACE/RWQCB jurisdiction were determined based on the lateral extent of the OHWM. CDFG jurisdictional limits are measured laterally from bank to bank at the top of the channel, or to the outer drip-line of associated riparian vegetation, if present.*

## 4.1 USACE Jurisdiction

Pursuant to the Rapanos/Carabell decision, the Linda Drain is subject to USACE jurisdiction because it is hydrologically connected to, and has a significant nexus with a TNW. The significant nexus evaluation must include consideration of both hydrological and ecological factors associated with the feature in question. The Linda Drain is a RPW with an indirect connection to the Feather River, a TNW. This drainage on-site has a consistent OWHM of approximately six feet in width across the site and totals approximately 0.32 acre (2,353 linear feet). Based upon the significant nexus evaluation (see discussion below), the Linda Drain is subject to USACE jurisdiction.

The ephemeral ditches on-site do not fall under the jurisdiction of the USACE. This determination was made based on the USACE/EPA guidance memorandum (Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States) which states that "ditches excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water" are not generally jurisdictional. The ephemeral ditches on-site meet these criteria: they were excavated in and drain only uplands and they likely only flow during and immediately after storm events.

## Significant Nexus Evaluation

*Hydrological Factors*

The Linda Drain is an artificial perennial ditch that flows from northeast to southwest across the project site. This ditch conveys hydrologic flows by collecting water from the network of smaller ditches in the area. It is likely designed to convey heavier flows during and a few days following storm events, but apparently also conveys surface water runoff from surrounding land uses such as landscape and agricultural irrigation, as evidenced by the presence of water within the ditch and the fact that the ditch originates to the northeast in the vicinity of several acres of orchards.

The Linda Drain conveys flows in a southerly direction, eventually into the Clark Slough approximately 7.5 river miles to the south. Flows continue approximately 7.2 river miles south into the Bear River (a RPW), then approximately three river miles to the Feather River (a TNW), and approximately 12.5 river miles into the Sacramento River (another TNW). Flows then travel through the Sacramento River for approximately 77 river miles west to the Suisun Bay, then into the San Pablo Bay, and finally into the Pacific Ocean. Therefore, the Linda Drain is three orders removed and approximately 21.9 river miles from the Feather River. It is approximately 3.2 aerial miles to the west of the Feather River, the nearest TNW.

*Ecological Factors*

The region surrounding the project site has been subject to agricultural practices, such as grazing, row crop, and orchards, for decades, and is currently undergoing conversion to urban land uses. As a result, there is potential for the Linda Drain to transport pollutants related to both agricultural and urban land uses downstream into the Clark Slough, into the Bear River, and finally into the Feather River. These pollutants are collected from on-site sources, as well as from dozens of ephemeral and perennial ditches off-site that are apparently connected to the on-site drainage system. Such pollutants may affect water quality for humans and special status species such as delta smelt (*Hypomesus transpacificus*), and California red-legged frog (*Rana draytonii*), as well as a wide variety of species that rely on riparian habitat associated with downstream drainages through which these waters flow. In addition, there is potential for the Linda Drain to support special status animal species such as the giant garter snake (*Thamnophis gigas*), which could therefore be affected by such pollutants.

*Significant Nexus Determination*

The Linda Drain is an RPW that conveys both storm water flows and surface runoff likely due to irrigation, both of which likely contain pollutants and sediment from surrounding agricultural and urban land uses. Although this feature comprises only a small portion of the Sacramento watershed, it is located in an area that conveys precipitation directly into the Clark Slough, then into the Bear River, and then into the Feather River. Therefore, given these factors, it is reasonable to conclude that the Linda Drain has a significant nexus with a TNW and, thus, is jurisdictional.

## 4.2 RWQCB Jurisdiction

The Linda Drain also falls under the RWQCB for the same reasons outlined in Section 4.1 above. Acreages for RWQCB jurisdiction in the Linda Drain are the same as those for USACE jurisdiction (see Table 1). Based upon the artificial condition of the ephemeral ditches and the fact that they are excavated wholly in and draining only uplands and do not carry a relatively permanent flow of water, it is expected that the RWQCB will not take jurisdiction over the ephemeral ditches.

## 4.3 CDFG Jurisdiction

The CDFG asserts jurisdiction for fish and wildlife resources associated with rivers, streams and lakes pursuant to Sections 1600-1616 of the California Fish and Game Code. This jurisdictional area is defined as either the distance from bank to bank at the top of the channel, or to the outer limits of riparian vegetation beyond the top of bank, when present. Each of the ephemeral ditches and the Linda Drain has a definable bed, bank and channel, and is therefore subject to CDFG jurisdiction. Freshwater emergent riparian vegetation is within the bank to bank distance. No other riparian vegetation is present on-site. Therefore, the CDFG jurisdiction area is limited to the distance between the tops of the banks, which ranges from approximately 7 feet to 8 feet for the ephemeral ditches and approximately 15 feet for the Linda Drain. Thus, the approximate total CDFG jurisdictional area on-site is approximately 1.40 acres (5,862 linear feet).

# 5.0 CONCLUSIONS AND RECOMMENDATIONS

The Linda Drain was determined to fall under the jurisdictions of the USACE, RWQCB, and CDFG. The ephemeral ditches were determined to fall under the jurisdiction of CDFG. Thus, permits may be necessary and further agency consultation regarding these ditches is recommended.

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# Appendix A

*Regulatory Overview and Definitions*



# USACE Jurisdiction

The USACE, under provisions of Section 404 of the Clean Water Act and USACE implementing regulations, has jurisdiction over the "waters of the United States." "Waters" include all waters subject to the ebb and flow of the tide, all interstate waters, all other waters (intrastate lakes, rivers, streams, mudflats, sandflats, playa lakes, natural ponds, seasonal drainage channels, etc.), all impoundments of waters otherwise defined as waters of the U.S., tributaries of waters otherwise defined as waters of the U.S., territorial seas, and wetlands adjacent to waters of the U.S. USACE jurisdictional limits are typically identified by the presence of an Ordinary High Water Mark (OHWM). The OHWM is the line on the shore or banks of a water course established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area. The USACE defines wetlands as containing three parameters: hydrophytic vegetation, hydric soils, and wetland hydrology.

Areas not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially-irrigated areas, artificial lakes or ponds excavated on dry land used for irrigation or stock watering, small artificial water bodies such as swimming pools, and water filled depressions (51 Fed. Reg. 41, 217 1986). In addition, a Supreme Court ruling (SWANCC vs. USACE, January 9, 2001) determined that the USACE exceeded its statutory authority by asserting Clean Water Act jurisdiction over "an abandoned sand and gravel pit in northern Illinois, which provides habitat for migratory birds." Based solely on the use of such waters by migratory birds, the Supreme Court's holding was strictly limited to waters that are "non-navigable, isolated, and intrastate."

The Supreme Court further addressed the extent of the USACE jurisdiction in Rapanos v. U.S. (June 19, 2006). There, a sharply divided Court issued multiple opinions, none of which garnered the support of a majority of Justices. This created substantial uncertainty as to which jurisdictional test should be used. The Ninth Circuit Court of Appeal, which encompasses California, answered this in Northern California River Watch v. City of Healdsburg (August 11, 2006). There, the Court held that Justice Kennedy's opinion in Rapanos provides the controlling rule of law. Under that rule, wetlands or other waters which are not navigable in fact are subject to USACE jurisdiction if they have a "significant nexus" to a navigable-in-fact waterway. As Justice Kennedy explained, whether a significant nexus exists in any given situation will have to be decided on a case-by-case basis, depending on site-specific circumstances.

USACE Headquarters in Washington, D.C. issued substantive guidance on June 5, 2007, to its District Offices as to how to apply these rulings. Based on this guidance, additional quantitative, qualitative, and other physical data is required for the USACE to make a determination of jurisdictional authority. This determination is reviewed by the United States Environmental Protection Agency (EPA).

In accordance with the Rapanos guidance, the USACE will assert jurisdiction over traditional navigable waters (TNWs), non-navigable tributaries of TNWs that are relatively permanent waters (RPWs), and wetlands that are adjacent to TNWs and directly abut RPWs. TNWs include all of the "navigable waters of the U.S.," defined in 33 CFR Part 329 and by pertinent

federal court decisions. RPWs convey water flow seasonally, typically for at least 3 months. In addition, non-navigable tributaries that are not relatively permanent (non-RPWs), wetlands adjacent to non-RPWs, and wetlands adjacent to but that do not directly abut a RPW will be found jurisdictional based on a fact-specific analysis that they have a significant nexus with a TNW. The significant nexus evaluation considers the volume, duration, and frequency of water flow in the tributary and the proximity of the tributary to a TNW, as well as the hydrologic, ecologic, and other functions performed by the tributary and all of its adjacent wetlands.

## RWQCB Jurisdiction

The State Water Resources Control Board (SWRCB) and local RWQCB have jurisdiction over "waters of the State" pursuant to the Porter-Cologne Water Quality Control Act which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general Waste Discharge Requirements (WDRs) regarding discharges to "isolated" waters of the State (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction). The local RWQCB enforces actions under this general order for isolated waters not subject to federal jurisdiction, and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the Clean Water Act for waters subject to federal jurisdiction.

## CDFG Jurisdiction

The CDFG has regulatory authority over any work within rivers, streams, and lakes in the State of California pursuant to Section 1600 et. seq. of the California Fish and Game Code (State of California 1989) on public, private, and agricultural lands. Water features that are regulated by CDFG include all rivers, streams, or lakes, including man-made watercourses with or without wetlands, if they contain a definable bed and bank and support a fish or wildlife resource. CDFG jurisdiction also extends to the outer drip-line of riparian vegetation associated with rivers, streams, and lakes.

## Wetlands

The USACE defines wetlands as containing three parameters: hydrophytic vegetation, hydric soils, and wetland hydrology (Environmental Laboratory 1987, U.S. Army Corps of Engineers 2008). The following is a discussion of each of these parameters.

**Hydrophytic vegetation** dominates areas where frequency and duration of inundation or soil saturation exerts a controlling influence on the plant species present. Plant species are assigned wetland indicator status according to the probability of their occurring in wetlands. More than fifty percent of the dominant plant species must have a wetland indicator status to meet the hydrophytic vegetation criterion. The USFWS published the *National List of Plant Species That Occur In Wetlands* (1988), which separates vascular plants into the following four basic categories based on plant species frequency of occurrence in wetlands:

- Obligate Wetland (OBL). Occur almost always (estimated probability >99%) under natural conditions in wetlands.

- Facultative Wetland (FACW). Usually occur in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands.
- Facultative (FAC). Equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).
- Facultative Upland (FACU). Usually occur in non-wetlands (estimated probability 67%-99%), but occasionally found in wetlands (estimated probability 1%-33%).
- Obligate Upland (UPL). May occur in wetlands in another region, but occur almost always (estimated probability >99%) under natural conditions in non-wetlands in the region specified.

The USACE considers OBL, FACW and FAC species to be indicators of wetlands. An area is considered to have hydrophytic vegetation when greater than 50 percent of the dominant species in each vegetative stratum (tree, shrub, and herb) fall within these categories. Any species not appearing on the USFWS list is assumed to be an upland species, almost never occurring in wetlands. In addition, an area needs to contain at least 5% vegetative cover to be considered as a vegetated wetland.

**Hydric soils** are saturated and/or inundated for a sufficient duration during the growing season to develop anaerobic or reducing conditions. Sufficient duration cannot be defined due to the vast differences in chemistry and mineral composition in soils from site to site and region to region, but can be as short as two weeks during the growing season. Field indicators of hydric soils include, but are not limited to observation of redoximorphic features (e.g., concentrations of oxidized minerals such as iron) and detection of hydrogen sulphide gas. Documentation of a soil as hydric must be verified in the field.

**Wetland hydrology** is inundation and/or soil saturation with a frequency and duration long enough to cause the development of hydric soils and plant communities dominated by hydrophytic vegetation. If direct observation of wetland hydrology is not possible (as in seasonal wetlands), or records of wetland hydrology are not available (such as stream gauges), assessment of wetland hydrology is frequently supported by primary and secondary field indicators, such as surface soil cracks and drainage patterns, respectively.

## Other Waters

The USACE defines the lateral limits for other waters or non-wetlands waters to occur where the physical characteristics representing an OWHM are observed (33 Code of Federal Regulations [CFR] 328.3, 33 CFR 329.11, U.S. Army Corps of Engineers 2005). The following includes a list of the physical characteristics or indicators that are used to identify the OHWM for other waters:

- Natural line impressed on the bank
- Shelving
- Changes in the character of soil
- Destruction of terrestrial vegetation
- Presence of litter and debris
- Wracking
- Vegetation matted down, bent, or absent
- Sediment sorting
- Leaf litter disturbed or washed away
- Scour
- Deposition
- Multiple observed flow events
- Bed and banks
- Water staining
- Change in plant community

# Appendix B

*Wetland Determination Data Forms*



Habitat Type ____ Annual Grassland_____

## Wetland Determination Data Form

Wetland Type _Freshwater Emergent/Linda Drain

Project/Site: ____Hammonton Smartville IS/MND_____ City/County: ___Marysville/Yuba____ Sampling Date: ___8/26/09__

Applicant/Owner: ___Marysville JUSD_____ State: _CA___ Sampling Point: __1_____

Investigator(s): _Carie Wingert___

Landform (hillslope, terrace, etc.) __drainage ditch_____ Local relief (concave, convex, none) ____Concave_____ Slope % __<1___

Subregion (LRR) __Mediterranean CA_____ Soil Map Unit Name: _____San Joaquin loam_____

Are climatic/hydrologic conditions on the site typical for this time of year? __Yes__ *(If no, explain in remarks.)*

Are vegetation _N__, soil _N___, or hydrology __N__ significantly disturbed? Are normal circumstances present? __Yes___

Are vegetation _N___, soil __N__, or hydrology _N___ naturally problematic? *(If needed, explain any answers in Remarks.)*

### Summary of Findings (Attach site map showing sampling point locations, transects, important features, etc.)

Hydrophytic vegetation? __Y__ Hydric soil? __Y__ Wetland hydrology? __Y__ Is sampled area a wetland? __Y__ Other waters? _Y__

### USACE Jurisdiction

Abutting Waters ____ Adjacent to Waters _____ Tributary to Waters _X__ Isolated (with interstate commerce) _____ Isolated (non-jurisdictional) _____
Explain: Linda Drain in an RPW with a significant nexus to the Feather River, a TNW

### Evaluation of Features Designated "Other Waters of the United States"

Ordinary High Water Mark (OHWM) Characteristics: Line Impressed on Bank __X__ Shelving ____ Changes in Character of Soil _____ Bed and Bank __X__ Destruction of Terrestrial Vegetation _X___ Presence of Litter and Debris ____ Scour ____ Deposition ____ Other (please specify) _____
Feature Designation: Perennial _X____ Intermittent _____ Ephemeral ____ Blue-line on USGS Quad __X___
Natural Drainage ____ Artificial Drainage _X____ Navigable Water _____

**Remarks** Linda Drain running from northeast to southwest across the property. ~1 ft deep standing water – murky. Does not appear to be flowing. OHWM ~6 ft on lower ¼ of bank. Top of bank ~15 feet wide.

### Vegetation

| Tree Stratum (use scientific names) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: __0_____ | | | |
| **Sapling/Shrub Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |
| **Herb Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _Juncus effusus_____ | __25___ | ___Y___ | _OBL_ |
| 2. _Typha latifolia_____ | __10___ | ___Y___ | _OBL_ |
| 3. _Echinochloa crus-galli_____ | __10___ | ___Y___ | _FACW |
| 4. _Cyperus esculentus_____ | ___5___ | ___N___ | _FACW |
| 5. | | | ___ |
| 6. | | | ___ |
| 7. | | | ___ |
| 8. | | | ___ |
| 50%=__25____ 20%=__10_____ Total Cover: __50___ | | | |
| **Woody/Vine Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |

**% Bare Ground in Herb Stratum ___0__ % Cover of Biotic Crust __0___**

**Dominance Test Worksheet**

Number of dominant species that are OBL, FACW, or FAC: __3____ (A)

Total number of dominant species across all strata: __3____ (B)

Percent of dominant species that are OBL, FACW, or FAC: _100%__ (AB)

**Prevalence Index Worksheet**

| Total % Cover of: | | Multiply by | |
|---|---|---|---|
| OBL Species | _____ | x 1 = | _____ |
| FACW Species | _____ | x 2 = | _____ |
| FAC Species | _____ | x 3 = | _____ |
| FACU Species | _____ | x 4 = | _____ |
| UPL Species | _____ | x 5 = | _____ |
| Column Totals | _____ (A) | | _____ (B) |

Prevalence Index = B/A = _____

**Hydrophytic Vegetation Indicators**

_____ Dominance Text is >50%
_____ Prevalence Index is $\leq$ 3.0[1]
_____ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
_____ Problematic Hydrophytic Vegetation[1] (Explain)

*[1]Indicators of hydric soil and wetland hydrology must be present.*

**Hydrophytic Vegetation? __YES_____**

Open water about 50% of area.

## Soils

**Profile Description**: (Describe to the depth needed to document the indicator or confirm the absence of indicators.

| Depth | Matrix | | Redox Features | | | | | |
|---|---|---|---|---|---|---|---|---|
| (inches) | Color (moist) | % | Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Types: C = Concentration D = Depletion RM = Reduced Matrix [2]Location: PL = Pore Lining RC = Root Channel M = Matrix

**Hydric Soil Indicators**: (Applicable to all LRRs, unless otherwise noted)

_____ Histosol (A1)
_____ Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (AG) (LRR C)
_____ 1 cm Muck (A9) (LRR D)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Loamy Mucky Mineral (F1)
_____ Loamy Gleyed Matrix (F2)
_____ Depleted Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)
_____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]

_____ 1 cm Muck (A9) (LRR C)
_____ 2 cm Muck (A10) (LRR B)
_____ Reduced Vetric (F18)
_____ Red Parent Materials (TF2)
_____ Vegetated Sand/Gravel Bars
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: __N/A_____ Depth (Inches) __N/A____ Hydric Soil? _Yes____

**Remarks**

No soil pit dug. Hydrophytic emergent vegetation present and surface water present. Assumed soil is hydric.

## Hydrology

**Wetland Indicators**

Primary Indicators (Any one indicator is sufficient)

__X__ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1) (Nonriverine)
_____ Sediment Deposits (B2) (Nonriverine)
_____ Drift Deposits (B3) (Nonriverine)
_____ Surface Soil Cracks (B6)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Water-Stained Leaves (B9)
_____ Salt Crust (B11)
_____ Biotic Crust (B12)
_____ Aquatic Invertebrates (B13)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Plowed Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

_____ Water Marks (B1) (Riverine)
_____ Sediment Deposits (B2) (Riverine)
_____ Drift Deposits (B3) (Riverine)
_____ Drainage Patterns (B10)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Shallow Aquitard (D3)
_____ FAC-Neutral Test (D5)

**Field Observations**

Surface Water Present? Yes __X___ No _____ Depth (inches) __N/A_____ Wetland Hydrology? Yes __x___ No _____

Water Table Present? Yes _____ No __X___ Depth (inches) __N/A_____

Saturation Present? Yes _____ No __X___ Depth (inches) __N/A_____ *(includes capillary fringe)*

**Describe Recorded Data** (stream gauge, monitoring well, aerial photos, and previous inspections), if available:

**Remarks** Surface water present in August 2009. Ditch likely conveys water year round.

Habitat Type ____Annual Grassland_____

## Wetland Determination Data Form

Wetland Type ___Upland_____

Project/Site: ____Hammonton Smartville IS/MND_____ City/County: ___Marysville/Yuba____ Sampling Date: ___8/26/09__

Applicant/Owner: ___Marysville JUSD_____ State: _CA___ Sampling Point: __2_____

Investigator(s): _Carie Wingert___

Landform (hillslope, terrace, etc.) __flat field_____ Local relief (concave, convex, none) ____flat_____ Slope % __<5___

Subregion (LRR) __Mediterranean CA_____ Soil Map Unit Name: _____San Joaquin loam_____

Are climatic/hydrologic conditions on the site typical for this time of year? __Yes__ *(If no, explain in remarks.)*

Are vegetation _N___, soil _N___, or hydrology __N__ significantly disturbed? Are normal circumstances present? __Yes___

Are vegetation _N___, soil __N__, or hydrology _N___ naturally problematic? *(If needed, explain any answers in Remarks.)*

### Summary of Findings (Attach site map showing sampling point locations, transects, important features, etc.)

Hydrophytic vegetation? __N__ Hydric soil? __N__ Wetland hydrology? __N__ Is sampled area a wetland? __N__ Other waters? _N__

### USACE Jurisdiction

Abutting Waters ____ Adjacent to Waters _____ Tributary to Waters ____ Isolated (with interstate commerce) _____ Isolated (non-jurisdictional) _____
Explain:

### Evaluation of Features Designated "Other Waters of the United States"

Ordinary High Water Mark (OHWM) Characteristics: Line Impressed on Bank _____ Shelving ____ Changes in Character of Soil _____ Bed and Bank _____
Destruction of Terrestrial Vegetation _____ Presence of Litter and Debris ____ Scour ____ Deposition ____ Other (please specify) _____
Feature Designation: Perennial _____ Intermittent _____ Ephemeral ____ Blue-line on USGS Quad _____
Natural Drainage ____ Artificial Drainage _____ Navigable Water _____

### Remarks Upland point paired with Point 1.

### Vegetation

| Tree Stratum (use scientific names) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: __0_____ | | | |
| **Sapling/Shrub Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |
| **Herb Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _Avena fatua_____ | __60___ | ___Y___ | _UPL_ |
| 2. _Centaurea solstitialis_____ | __20___ | ___Y___ | _UPL_ |
| 3. _Lactuca serriola_____ | ___3___ | ___N___ | _FAC_ |
| 4. _Convolvulus arvensis_____ | ___3___ | ___N___ | _UPL_ |
| 5. _Conyza canadensis_____ | ___1___ | ___N___ | _FAC_ |
| 6. __Raphanus sativus_____ | ___3___ | ___N___ | _UPL_ |
| 7. | | | |
| 8. | | | |
| 50%=__45____ 20%=__18_____ Total Cover: __90___ | | | |
| **Woody/Vine Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |

**% Bare Ground in Herb Stratum ___10__ % Cover of Biotic Crust __0___**

**Dominance Test Worksheet**

Number of dominant species that are OBL, FACW, or FAC: ___0___ (A)

Total number of dominant species across all strata: ___2___ (B)

Percent of dominant species that are OBL, FACW, or FAC: ___0____ (AB)

**Prevalence Index Worksheet**

| Total % Cover of: | | Multiply by | |
|---|---|---|---|
| OBL Species | ___0___ | x 1 = | __0____ |
| FACW Species | ___0___ | x 2 = | __0____ |
| FAC Species | ___4___ | x 3 = | __12___ |
| FACU Species | ___0___ | x 4 = | __0____ |
| UPL Species | ___86__ | x 5 = | __430__ |
| Column Totals | ___90__ (A) | | __442__ (B) |

Prevalence Index = B/A = __4.91____

**Hydrophytic Vegetation Indicators**

_____ Dominance Text is >50%
_____ Prevalence Index is $\leq$ 3.0[1]
_____ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]*Indicators of hydric soil and wetland hydrology must be present.*

**Hydrophytic Vegetation? __NO_____**

.

## Soils

**Profile Description**: (Describe to the depth needed to document the indicator or confirm the absence of indicators.

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox Features % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| _0-6_ | _10YR 4/4____ | _100_ | _____ | _____ | _____ | _____ | clay loam | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

[1]Types: C = Concentration D = Depletion RM = Reduced Matrix [2]Location: PL = Pore Lining RC = Root Channel M = Matrix

**Hydric Soil Indicators**: (Applicable to all LRRs, unless otherwise noted)

_____ Histosol (A1)
_____ Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (AG) (LRR C)
_____ 1 cm Muck (A9) (LRR D)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Loamy Mucky Mineral (F1)
_____ Loamy Gleyed Matrix (F2)
_____ Depleted Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)
_____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]

_____ 1 cm Muck (A9) (LRR C)
_____ 2 cm Muck (A10) (LRR B)
_____ Reduced Vetric (F18)
_____ Red Parent Materials (TF2)
_____ Vegetated Sand/Gravel Bars
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: __N/A_____ Depth (Inches) __N/A____ Hydric Soil? _NO____

**Remarks**

Ground very dry and hard. No redox features present.

## Hydrology

### Wetland Indicators

Primary Indicators (Any one indicator is sufficient)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1) (Nonriverine)
_____ Sediment Deposits (B2) (Nonriverine)
_____ Drift Deposits (B3) (Nonriverine)
_____ Surface Soil Cracks (B6)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Water-Stained Leaves (B9)
_____ Salt Crust (B11)
_____ Biotic Crust (B12)
_____ Aquatic Invertebrates (B13)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Plowed Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

_____ Water Marks (B1) (Riverine)
_____ Sediment Deposits (B2) (Riverine)
_____ Drift Deposits (B3) (Riverine)
_____ Drainage Patterns (B10)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Shallow Aquitard (D3)
_____ FAC-Neutral Test (D5)

### Field Observations

Surface Water Present? Yes _____ No __X___ Depth (inches) __N/A_____ Wetland Hydrology? Yes _____ No __X___

Water Table Present? Yes _____ No __X___ Depth (inches) __N/A_____

Saturation Present? Yes _____ No __X___ Depth (inches) __N/A_____ *(includes capillary fringe)*

**Describe Recorded Data** (stream gauge, monitoring well, aerial photos, and previous inspections), if available:

**Remarks** No hydrology indicators present.

Habitat Type _Annual Grassland_____

## Wetland Determination Data Form

Wetland Type _Non-wetland Water (Ephemeral Ditch)

Project/Site: ___Hammonton Smartville IS/MND_____ City/County: ___Marysville/Yuba____ Sampling Date: ___8/27/09__

Applicant/Owner: ___Marysville JUSD_____ State: _CA___ Sampling Point: __3_____

Investigator(s): _Carie Wingert___

Landform (hillslope, terrace, etc.) __drainage ditch_____ Local relief (concave, convex, none) ____concave_____ Slope % __<5___

Subregion (LRR) __Mediterranean CA_____ Soil Map Unit Name: _____San Joaquin-Urban Land complex_____

Are climatic/hydrologic conditions on the site typical for this time of year? __Yes__ *(If no, explain in remarks.)*

Are vegetation _N__, soil _N___, or hydrology __N__ significantly disturbed? Are normal circumstances present? __Yes___

Are vegetation _N___, soil __N__, or hydrology _N___ naturally problematic? *(If needed, explain any answers in Remarks.)*

### Summary of Findings (Attach site map showing sampling point locations, transects, important features, etc.)

Hydrophytic vegetation? __Y__ Hydric soil? __N__ Wetland hydrology? __Y__ Is sampled area a wetland? __N__ Other waters? _Y__

### USACE Jurisdiction

Abutting Waters ____ Adjacent to Waters _____ Tributary to Waters __X__ Isolated (with interstate commerce) _____ Isolated (non-jurisdictional) _____
Explain: Drains into Linda Drain, which is a RPW

### Evaluation of Features Designated "Other Waters of the United States"

Ordinary High Water Mark (OHWM) Characteristics: Line Impressed on Bank _____ Shelving ____ Changes in Character of Soil _____ Bed and Bank __X___ Destruction of Terrestrial Vegetation _____ Presence of Litter and Debris __X__ Scour ____ Deposition ____ Other (please specify) _____
Feature Designation: Perennial _____ Intermittent _____ Ephemeral _X___ Blue-line on USGS Quad _____
Natural Drainage ____ Artificial Drainage __X____ Navigable Water _____

**Remarks** Bottom of drainage ditch along Hammonton Smartville Road near northwest corner of property. Approximately 5 feet deep. Dry at time of site visit. OHWM ~6 feet near bottom of bank, not very visible. Top of bank ~8 feet across.

### Vegetation

| Tree Stratum (use scientific names) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: | __0____ | | |
| **Sapling/Shrub Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: | ___0___ | | |
| **Herb Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _Asclepias fascicularis | __20___ | ___Y___ | _FAC_ |
| 2. _Rumex crispus | __50___ | ___Y___ | _FACW |
| 3. _Lolium perenne ssp. multiflorum | ___5___ | ___N___ | _FAC_ |
| 4. _Cyperus eragrostis | ___5___ | ___N___ | _FACW |
| 5. _Cynodon dactylon | ___2___ | ___N___ | _FAC_ |
| 6. _Pesicaria [=Polygonum] lapathifolium | ___5___ | ___N___ | _UPL_ |
| 7. | | | |
| 8. | | | |
| 50%=__43.5____ 20%=__17.4_____ Total Cover: | __87___ | | |
| **Woody/Vine Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 50%=_____ 20%=_____ Total Cover: | ___0____ | | |

**% Bare Ground in Herb Stratum ___13__ % Cover of Biotic Crust __0___**

**Dominance Test Worksheet**

Number of dominant species that are OBL, FACW, or FAC: __2___ (A)

Total number of dominant species across all strata: __2___ (B)

Percent of dominant species that are OBL, FACW, or FAC: _100%_ (AB)

**Prevalence Index Worksheet**

| Total % Cover of: | | Multiply by | |
|---|---|---|---|
| OBL Species | _____ | x 1 = | _____ |
| FACW Species | _____ | x 2 = | _____ |
| FAC Species | _____ | x 3 = | _____ |
| FACU Species | _____ | x 4 = | _____ |
| UPL Species | _____ | x 5 = | ____ |
| Column Totals | _____ (A) | | ____ (B) |

Prevalance Index = B/A = _____

**Hydrophytic Vegetation Indicators**

_____ Dominance Text is >50%
_____ Prevalence Index is ≤ 3.0[1]
_____ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]*Indicators of hydric soil and wetland hydrology must be present.*

**Hydrophytic Vegetation? ___YES_____**

.

## Soils

**Profile Description**: (Describe to the depth needed to document the indicator or confirm the absence of indicators.

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox Features % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| _0-8_ | _10YR 5/6____ | _100_ | _____ | _____ | _____ | _____ | silty loam | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

[1]Types: C = Concentration D = Depletion RM = Reduced Matrix [2]Location: PL = Pore Lining RC = Root Channel M = Matrix

**Hydric Soil Indicators**: (Applicable to all LRRs, unless otherwise noted)

_____ Histosol (A1)
_____ Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (AG) (LRR C)
_____ 1 cm Muck (A9) (LRR D)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Loamy Mucky Mineral (F1)
_____ Loamy Gleyed Matrix (F2)
_____ Depleted Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)
_____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]

_____ 1 cm Muck (A9) (LRR C)
_____ 2 cm Muck (A10) (LRR B)
_____ Reduced Vetric (F18)
_____ Red Parent Materials (TF2)
_____ Vegetated Sand/Gravel Bars
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: __N/A_____ Depth (Inches) __N/A____ Hydric Soil? _NO____

**Remarks**

Ground very dry and hard. No hydric soil indicators present. Soil unusual for site – silty, sandy, rocky – maybe base material from adjacent road construction?

## Hydrology

**Wetland Indicators**

Primary Indicators (Any one indicator is sufficient)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1) (Nonriverine)
_____ Sediment Deposits (B2) (Nonriverine)
_____ Drift Deposits (B3) (Nonriverine)
_____ Surface Soil Cracks (B6)
_____ Inundation Visible on Aerial Imagery (B7)
__X___ Water-Stained Leaves (B9)
_____ Salt Crust (B11)
_____ Biotic Crust (B12)
_____ Aquatic Invertebrates (B13)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Plowed Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

_____ Water Marks (B1) (Riverine)
_____ Sediment Deposits (B2) (Riverine)
__X__ Drift Deposits (B3) (Riverine)
_____ Drainage Patterns (B10)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Shallow Aquitard (D3)
_____ FAC-Neutral Test (D5)

**Field Observations**

Surface Water Present? Yes _____ No __X___ Depth (inches) __N/A_____ Wetland Hydrology? Yes __X___ No _____

Water Table Present? Yes _____ No __X___ Depth (inches) __N/A_____

Saturation Present? Yes _____ No __X___ Depth (inches) __N/A_____ *(includes capillary fringe)*

**Describe Recorded Data** (stream gauge, monitoring well, aerial photos, and previous inspections), if available:

**Remarks** Water stained leaves and other vegetation present at the very bottom of the ditch. Small amount of drift deposit visible along some portions of the ditch.

Habitat Type ___Annual Grassland_____

## Wetland Determination Data Form

Wetland Type ___Upland_____

Project/Site: ___Hammonton Smartville IS/MND_____ City/County: ___Marysville/Yuba____ Sampling Date: ___8/27/09__

Applicant/Owner: ___Marysville JUSD_____ State: _CA___ Sampling Point: __4_____

Investigator(s): _Carie Wingert___

Landform (hillslope, terrace, etc.) __level field_____ Local relief (concave, convex, none) ____flat_____ Slope % __<5___

Subregion (LRR) __Mediterranean CA_____ Soil Map Unit Name: _____San Joaquin-Urban Land complex_____

Are climatic/hydrologic conditions on the site typical for this time of year? __Yes__ *(If no, explain in remarks.)*

Are vegetation _N___, soil _N___, or hydrology __N__ significantly disturbed? Are normal circumstances present? __Yes___

Are vegetation _N___, soil __N__, or hydrology _N___ naturally problematic? *(If needed, explain any answers in Remarks.)*

### Summary of Findings (Attach site map showing sampling point locations, transects, important features, etc.)

Hydrophytic vegetation? __N__ Hydric soil? __N__ Wetland hydrology? __N__ Is sampled area a wetland? __N__ Other waters? _N__

### USACE Jurisdiction

Abutting Waters ____ Adjacent to Waters _____ Tributary to Waters ____ Isolated (with interstate commerce) _____ Isolated (non-jurisdictional) _____
Explain:

### Evaluation of Features Designated "Other Waters of the United States"

Ordinary High Water Mark (OHWM) Characteristics: Line Impressed on Bank _____ Shelving ____ Changes in Character of Soil _____ Bed and Bank _____
Destruction of Terrestrial Vegetation _____ Presence of Litter and Debris ____ Scour ____ Deposition ____ Other (please specify) _____
Feature Designation: Perennial _____ Intermittent _____ Ephemeral ____ Blue-line on USGS Quad _____
Natural Drainage ____ Artificial Drainage _____ Navigable Water _____

### Remarks Upland point paired to point 3.

### Vegetation

| Tree Stratum (use scientific names) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: __0_____ | | | |
| **Sapling/Shrub Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |
| **Herb Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _Avena fatua_____ | __95___ | ___Y___ | _UPL_ |
| 2. _Bromus diandrus_____ | __5____ | ___N___ | _UPL_ |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| 50%=__50____ 20%=__20_____ Total Cover: __100___ | | | |
| **Woody/Vine Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |

**% Bare Ground in Herb Stratum ___0__ % Cover of Biotic Crust __0___**

**Dominance Test Worksheet**

Number of dominant species that are OBL, FACW, or FAC: __0____ (A)

Total number of dominant species across all strata: __1____ (B)

Percent of dominant species that are OBL, FACW, or FAC: __0____ (AB)

**Prevalence Index Worksheet**

| Total % Cover of: | | Multiply by | |
|---|---|---|---|
| OBL Species | _____ | x 1 = | _____ |
| FACW Species | _____ | x 2 = | _____ |
| FAC Species | _____ | x 3 = | _____ |
| FACU Species | _____ | x 4 = | _____ |
| UPL Species | __100_ | x 5 = | _500__ |
| Column Totals | __100__ (A) | | _500__ (B) |

Prevalance Index = B/A = __5.0___

**Hydrophytic Vegetation Indicators**

_____ Dominance Text is >50%
_____ Prevalence Index is ≤ 3.0[1]
_____ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]*Indicators of hydric soil and wetland hydrology must be present.*

**Hydrophytic Vegetation? ___NO_____**

.

## Soils

**Profile Description**: (Describe to the depth needed to document the indicator or confirm the absence of indicators.

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox Features % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| _0-12_ | _10YR 8/2___ | _100_ | _____ | _____ | _____ | _____ | clay loam | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

[1]Types: C = Concentration D = Depletion RM = Reduced Matrix [2]Location: PL = Pore Lining RC = Root Channel M = Matrix

**Hydric Soil Indicators**: (Applicable to all LRRs, unless otherwise noted)

_____ Histosol (A1)
_____ Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (AG) (LRR C)
_____ 1 cm Muck (A9) (LRR D)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Loamy Mucky Mineral (F1)
_____ Loamy Gleyed Matrix (F2)
_____ Depleted Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)
_____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]

_____ 1 cm Muck (A9) (LRR C)
_____ 2 cm Muck (A10) (LRR B)
_____ Reduced Vetric (F18)
_____ Red Parent Materials (TF2)
_____ Vegetated Sand/Gravel Bars
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: __N/A_____ Depth (Inches) __N/A____ Hydric Soil? _NO____

**Remarks**

Ground very dry and hard.

## Hydrology

### Wetland Indicators

Primary Indicators (Any one indicator is sufficient)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1) (Nonriverine)
_____ Sediment Deposits (B2) (Nonriverine)
_____ Drift Deposits (B3) (Nonriverine)
_____ Surface Soil Cracks (B6)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Water-Stained Leaves (B9)
_____ Salt Crust (B11)
_____ Biotic Crust (B12)
_____ Aquatic Invertebrates (B13)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Plowed Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

_____ Water Marks (B1) (Riverine)
_____ Sediment Deposits (B2) (Riverine)
_____ Drift Deposits (B3) (Riverine)
_____ Drainage Patterns (B10)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Shallow Aquitard (D3)
_____ FAC-Neutral Test (D5)

### Field Observations

Surface Water Present? Yes _____ No __X___ Depth (inches) __N/A_____ Wetland Hydrology? Yes _____ No __X___

Water Table Present? Yes _____ No __X___ Depth (inches) __N/A_____

Saturation Present? Yes _____ No __X___ Depth (inches) __N/A_____ *(includes capillary fringe)*

**Describe Recorded Data** (stream gauge, monitoring well, aerial photos, and previous inspections), if available:

**Remarks** No hydrology indicators present.

Habitat Type ___Annual Grassland_____

## Wetland Determination Data Form

Wetland Type _Non-wetland Water (Ephemeral Ditch)

Project/Site: ____Hammonton Smartville IS/MND_____ City/County: ___Marysville/Yuba____ Sampling Date: ___8/27/09__

Applicant/Owner: ___Marysville JUSD_____ State: _CA___ Sampling Point: __5_____

Investigator(s): _Carie Wingert___

Landform (hillslope, terrace, etc.) __drainage ditch_____ Local relief (concave, convex, none) ____concave_____ Slope % __<5___

Subregion (LRR) __Mediterranean CA_____ Soil Map Unit Name: _____San Joaquin loam_____

Are climatic/hydrologic conditions on the site typical for this time of year? __Yes__ *(If no, explain in remarks.)*

Are vegetation _N__, soil _N___, or hydrology __N__ significantly disturbed? Are normal circumstances present? __Yes___

Are vegetation _N___, soil __N__, or hydrology _N___ naturally problematic? *(If needed, explain any answers in Remarks.)*

### Summary of Findings (Attach site map showing sampling point locations, transects, important features, etc.)

Hydrophytic vegetation? __Y__ Hydric soil? __N__ Wetland hydrology? __Y__ Is sampled area a wetland? __N__ Other waters? _Y__

### USACE Jurisdiction

Abutting Waters ____ Adjacent to Waters _____ Tributary to Waters _X___ Isolated (with interstate commerce) _____ Isolated (non-jurisdictional) _____
Explain: Drains into Linda Drain, which is a RPW

### Evaluation of Features Designated "Other Waters of the United States"

Ordinary High Water Mark (OHWM) Characteristics: Line Impressed on Bank _____ Shelving ____ Changes in Character of Soil _____ Bed and Bank ___x__ Destruction of Terrestrial Vegetation _____ Presence of Litter and Debris ____ Scour ____ Deposition ____ Other (please specify) _____
Feature Designation: Perennial _____ Intermittent _____ Ephemeral ____ Blue-line on USGS Quad _____
Natural Drainage ____ Artificial Drainage ___x___ Navigable Water _____

**Remarks** Drainage ditch along Hammonton Smartville Road, near eastern property boundary.

### Vegetation

| Tree Stratum (use scientific names) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: __0_____ | | | |
| **Sapling/Shrub Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |
| **Herb Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _Cynodon dactylon_____ | __92___ | ___Y___ | _FAC_ |
| 2. _Pesicaria [=Polygonum] lapathifolium_____ | __5____ | ___N___ | _UPL_ |
| 3. _Avena fatua_____ | __1____ | ___N___ | _UPL_ |
| 4. _Rumex crispus_____ | __2____ | ___N___ | _FACW |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| 50%=__50____ 20%=__20_____ Total Cover: __100___ | | | |
| **Woody/Vine Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |

**% Bare Ground in Herb Stratum ___0__ % Cover of Biotic Crust __0___**

**Dominance Test Worksheet**

Number of dominant species that are OBL, FACW, or FAC: _1_____ (A)

Total number of dominant species across all strata: __1____ (B)

Percent of dominant species that are OBL, FACW, or FAC: _100%__ (AB)

**Prevalence Index Worksheet**

| Total % Cover of: | | Multiply by | |
|---|---|---|---|
| OBL Species | _____ | x 1 = | _____ |
| FACW Species | _____ | x 2 = | _____ |
| FAC Species | _____ | x 3 = | _____ |
| FACU Species | _____ | x 4 = | _____ |
| UPL Species | _____ | x 5 = | _____ |
| Column Totals | _____ (A) | | _____ (B) |

Prevalance Index = B/A = _____

**Hydrophytic Vegetation Indicators**

__X__ Dominance Text is >50%
_____ Prevalence Index is $\leq$ 3.0[1]
_____ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]*Indicators of hydric soil and wetland hydrology must be present.*

**Hydrophytic Vegetation? __YES_____**

.

## Soils

**Profile Description**: (Describe to the depth needed to document the indicator or confirm the absence of indicators.

| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| _0-6_ | _10YR 4/4____ | _90__ | _5Y 5/8 _____ | _10__ | __C__ | __M__ | loam clay | |
| _0-12 | _10YR 4/3____ | _85__ | _5Y 5/8 _____ | _15__ | __C__ | __M__ | loam clay | |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

[1]Types: C = Concentration D = Depletion RM = Reduced Matrix [2]Location: PL = Pore Lining RC = Root Channel M = Matrix

**Hydric Soil Indicators**: (Applicable to all LRRs, unless otherwise noted)

_____ Histosol (A1)
_____ Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (AG) (LRR C)
_____ 1 cm Muck (A9) (LRR D)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Loamy Mucky Mineral (F1)
_____ Loamy Gleyed Matrix (F2)
_____ Depleted Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)
_____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]

_____ 1 cm Muck (A9) (LRR C)
_____ 2 cm Muck (A10) (LRR B)
_____ Reduced Vetric (F18)
_____ Red Parent Materials (TF2)
_____ Vegetated Sand/Gravel Bars
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: __N/A_____ Depth (Inches) __N/A____ Hydric Soil? _NO____

**Remarks**

Redox features are present; however, soil chroma does not meet the criteria for hydric soils.

## Hydrology

### Wetland Indicators

Primary Indicators (Any one indicator is sufficient)

_____ Surface Water (A1)
_____ High Water Table (A2)
___X_ Saturation (A3)
_____ Water Marks (B1) (Nonriverine)
_____ Sediment Deposits (B2) (Nonriverine)
_____ Drift Deposits (B3) (Nonriverine)
_____ Surface Soil Cracks (B6)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Water-Stained Leaves (B9)
_____ Salt Crust (B11)
_____ Biotic Crust (B12)
_____ Aquatic Invertebrates (B13)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Plowed Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

_____ Water Marks (B1) (Riverine)
_____ Sediment Deposits (B2) (Riverine)
_____ Drift Deposits (B3) (Riverine)
_____ Drainage Patterns (B10)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Shallow Aquitard (D3)
_____ FAC-Neutral Test (D5)

### Field Observations

Surface Water Present? Yes _____ No __X___ Depth (inches) __N/A_____ Wetland Hydrology? Yes ___X__ No _____

Water Table Present? Yes _____ No __X___ Depth (inches) __N/A_____

Saturation Present? Yes _X___ No _____ Depth (inches) __6_____ *(includes capillary fringe)*

**Describe Recorded Data** (stream gauge, monitoring well, aerial photos, and previous inspections), if available:

**Remarks**

Saturation was visible, and an earthworm was present.

Habitat Type ___Annual Grassland_____

## Wetland Determination Data Form

Wetland Type _____Upland_____

Project/Site: ____Hammonton Smartville IS/MND_____ City/County: ___Marysville/Yuba____ Sampling Date: ___8/27/09__

Applicant/Owner: ___Marysville JUSD_____ State: _CA___ Sampling Point: __6_____

Investigator(s): _Carie Wingert___

Landform (hillslope, terrace, etc.) __field_____ Local relief (concave, convex, none) ____flat_____ Slope % __<5___

Subregion (LRR) __Mediterranean CA_____ Soil Map Unit Name: _____San Joaquin loam_____

Are climatic/hydrologic conditions on the site typical for this time of year? __Yes__ *(If no, explain in remarks.)*

Are vegetation _N___, soil _N___, or hydrology __N__ significantly disturbed? Are normal circumstances present? __Yes___

Are vegetation _N___, soil __N__, or hydrology _N___ naturally problematic? *(If needed, explain any answers in Remarks.)*

### Summary of Findings (Attach site map showing sampling point locations, transects, important features, etc.)

Hydrophytic vegetation? __N__ Hydric soil? __N__ Wetland hydrology? __N__ Is sampled area a wetland? __N__ Other waters? _N__

### USACE Jurisdiction

Abutting Waters ____ Adjacent to Waters _____ Tributary to Waters ____ Isolated (with interstate commerce) _____ Isolated (non-jurisdictional) _____
Explain:

### Evaluation of Features Designated "Other Waters of the United States"

Ordinary High Water Mark (OHWM) Characteristics: Line Impressed on Bank _____ Shelving ____ Changes in Character of Soil _____ Bed and Bank _____
Destruction of Terrestrial Vegetation _____ Presence of Litter and Debris ____ Scour ____ Deposition ____ Other (please specify) _____
Feature Designation: Perennial _____ Intermittent _____ Ephemeral ____ Blue-line on USGS Quad _____
Natural Drainage ____ Artificial Drainage _____ Navigable Water _____

### Remarks Upland point paired to Point 5

### Vegetation

| Tree Stratum (use scientific names) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ |
| 3. _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ |
| 50%=_____ 20%=_____ Total Cover: __0_____ | | | |
| **Sapling/Shrub Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ |
| 3. _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |
| **Herb Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _Avena fatua_____ | __65___ | ___Y___ | _UPL_ |
| 2. _Bromus diandrus_____ | __20___ | ___Y___ | _UPL_ |
| 3. _Lactuca serriola_____ | __3____ | ___N___ | _FAC_ |
| 4. _Cynodon dactylon_____ | __10___ | ___N___ | _FAC_ |
| 5. _Bromus hordeaceus_____ | __1____ | ___N___ | _UPL_ |
| 6. _Croton setigerus_____ | __1____ | ___N___ | _UPL_ |
| 7. _____ | _____ | _____ | _____ |
| 8. _____ | _____ | _____ | _____ |
| 50%=__50____ 20%=__20_____ Total Cover: __100___ | | | |
| **Woody/Vine Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |

**% Bare Ground in Herb Stratum ___0__ % Cover of Biotic Crust __0___**

**Dominance Test Worksheet**

Number of dominant species that are OBL, FACW, or FAC: __0____ (A)

Total number of dominant species across all strata: __2____ (B)

Percent of dominant species that are OBL, FACW, or FAC: __0____ (AB)

**Prevalence Index Worksheet**

| Total % Cover of: | | Multiply by | |
|---|---|---|---|
| OBL Species | _____ | x 1 = | _____ |
| FACW Species | _____ | x 2 = | _____ |
| FAC Species | _13___ | x 3 = | _39___ |
| FACU Species | _____ | x 4 = | _____ |
| UPL Species | _87___ | x 5 = | _435__ |
| Column Totals | _100___ (A) | | _474__ (B) |

Prevalance Index = B/A = _4.74____

**Hydrophytic Vegetation Indicators**

_____ Dominance Text is >50%
_____ Prevalence Index is $\leq$ 3.0[1]
_____ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]*Indicators of hydric soil and wetland hydrology must be present.*

**Hydrophytic Vegetation? ___NO_____**

.

## Soils

**Profile Description**: (Describe to the depth needed to document the indicator or confirm the absence of indicators.

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox Features % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| _0-6_ | _10YR 4/4____ | _100_ | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Types: C = Concentration D = Depletion RM = Reduced Matrix [2]Location: PL = Pore Lining RC = Root Channel M = Matrix

**Hydric Soil Indicators**: (Applicable to all LRRs, unless otherwise noted)

_____ Histosol (A1)
_____ Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (AG) (LRR C)
_____ 1 cm Muck (A9) (LRR D)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Loamy Mucky Mineral (F1)
_____ Loamy Gleyed Matrix (F2)
_____ Depleted Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)
_____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]

_____ 1 cm Muck (A9) (LRR C)
_____ 2 cm Muck (A10) (LRR B)
_____ Reduced Vetric (F18)
_____ Red Parent Materials (TF2)
_____ Vegetated Sand/Gravel Bars
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: __N/A_____ Depth (Inches) __N/A____ Hydric Soil? _NO____

**Remarks**

No hydric soil indicators present.

## Hydrology

### Wetland Indicators

Primary Indicators (Any one indicator is sufficient)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1) (Nonriverine)
_____ Sediment Deposits (B2) (Nonriverine)
_____ Drift Deposits (B3) (Nonriverine)
_____ Surface Soil Cracks (B6)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Water-Stained Leaves (B9)
_____ Salt Crust (B11)
_____ Biotic Crust (B12)
_____ Aquatic Invertebrates (B13)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Plowed Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

_____ Water Marks (B1) (Riverine)
_____ Sediment Deposits (B2) (Riverine)
_____ Drift Deposits (B3) (Riverine)
_____ Drainage Patterns (B10)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Shallow Aquitard (D3)
_____ FAC-Neutral Test (D5)

### Field Observations

Surface Water Present? Yes _____ No __X___ Depth (inches) __N/A_____ Wetland Hydrology? Yes _____ No __X___

Water Table Present? Yes _____ No __X___ Depth (inches) __N/A_____

Saturation Present? Yes _____ No __X____ Depth (inches) __N/A_____ *(includes capillary fringe)*

**Describe Recorded Data** (stream gauge, monitoring well, aerial photos, and previous inspections), if available:

**Remarks**

No hydrology indicators present.

Habitat Type ___Annual Grassland_____

## Wetland Determination Data Form

Wetland Type _Emergent Wetland/Linda Drain

Project/Site: ____Hammonton Smartville IS/MND_____ City/County: ___Marysville/Yuba____ Sampling Date: ___8/27/09__

Applicant/Owner: ___Marysville JUSD_____ State: _CA___ Sampling Point: __7_____

Investigator(s): _Carie Wingert___

Landform (hillslope, terrace, etc.) __drainage ditch_____ Local relief (concave, convex, none) ____concave_____ Slope % __<5___

Subregion (LRR) __Mediterranean CA_____ Soil Map Unit Name: _____San Joaquin loam_____

Are climatic/hydrologic conditions on the site typical for this time of year? __Yes__ *(If no, explain in remarks.)*

Are vegetation _N__, soil _N___, or hydrology __N__ significantly disturbed? Are normal circumstances present? __Yes___

Are vegetation _N___, soil __N__, or hydrology _N____ naturally problematic? *(If needed, explain any answers in Remarks.)*

### Summary of Findings (Attach site map showing sampling point locations, transects, important features, etc.)

Hydrophytic vegetation? __Y__ Hydric soil? __Y__ Wetland hydrology? __Y__ Is sampled area a wetland? __Y__ Other waters? _Y__

### USACE Jurisdiction

Abutting Waters ____ Adjacent to Waters _____ Tributary to Waters _X___ Isolated (with interstate commerce) _____ Isolated (non-jurisdictional) _____
Explain: Linda Drain is a RPW with a connection to the Feather River, a TNW

### Evaluation of Features Designated "Other Waters of the United States"

Ordinary High Water Mark (OHWM) Characteristics: Line Impressed on Bank __X___ Shelving ____ Changes in Character of Soil _____ Bed and Bank __X___ Destruction of Terrestrial Vegetation __X___ Presence of Litter and Debris ____ Scour ____ Deposition ____ Other (please specify) _____
Feature Designation: Perennial ___X___ Intermittent _____ Ephemeral ____ Blue-line on USGS Quad __X___
Natural Drainage ____ Artificial Drainage __X____ Navigable Water _____

**Remarks** Point taken in creek near eastern property boundary. OHWM ~6 feet. Top of bank ~15 feet.

### Vegetation

| Tree Stratum (use scientific names) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: __0_____ | | | |
| **Sapling/Shrub Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |
| **Herb Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _Juncus effusus_____ | __40___ | ___Y___ | _OBL_ |
| 2. _Typha latifolia_____ | __20___ | ___Y___ | _OBL_ |
| 3. __Echinochloa crus-galli_____ | __20___ | ___Y___ | _FACW |
| 4. | | | |
| 5. | | | |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| 50%=__40____ 20%=__16_____ Total Cover: __80___ | | | |
| **Woody/Vine Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |

**% Bare Ground in Herb Stratum ___0__ % Cover of Biotic Crust __0___**

**Dominance Test Worksheet**

Number of dominant species that are OBL, FACW, or FAC: __3___ (A)

Total number of dominant species across all strata: __3___ (B)

Percent of dominant species that are OBL, FACW, or FAC: _100%_ (AB)

**Prevalence Index Worksheet**

| Total % Cover of: | | Multiply by |
|---|---|---|
| OBL Species | _____ | x 1 = _____ |
| FACW Species | _____ | x 2 = _____ |
| FAC Species | ____ | x 3 = ____ |
| FACU Species | _____ | x 4 = _____ |
| UPL Species | ____ | x 5 = ___ |
| Column Totals | ____ (A) | ___ (B) |

Prevalance Index = B/A = _____

**Hydrophytic Vegetation Indicators**

__X__ Dominance Text is >50%
_____ Prevalence Index is $\leq$ 3.0[1]
_____ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]*Indicators of hydric soil and wetland hydrology must be present.*

**Hydrophytic Vegetation? ___YES_____**

Open water ~20%.

## Soils

**Profile Description**: (Describe to the depth needed to document the indicator or confirm the absence of indicators.

| Depth | Matrix | | Redox Features | | | | | |
|---|---|---|---|---|---|---|---|---|
| (inches) | Color (moist) | % | Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Types: C = Concentration D = Depletion RM = Reduced Matrix [2]Location: PL = Pore Lining RC = Root Channel M = Matrix

**Hydric Soil Indicators**: (Applicable to all LRRs, unless otherwise noted)

_____ Histosol (A1)
_____ Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (AG) (LRR C)
_____ 1 cm Muck (A9) (LRR D)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Loamy Mucky Mineral (F1)
_____ Loamy Gleyed Matrix (F2)
_____ Depleted Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)
_____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]

_____ 1 cm Muck (A9) (LRR C)
_____ 2 cm Muck (A10) (LRR B)
_____ Reduced Vetric (F18)
_____ Red Parent Materials (TF2)
_____ Vegetated Sand/Gravel Bars
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: __N/A_____ Depth (Inches) __N/A____ Hydric Soil? _YES____

**Remarks**

No pit dug. Emergent vegetation and surface water present. Hydric soils assumed to be present.

## Hydrology

**Wetland Indicators**

Primary Indicators (Any one indicator is sufficient)

__X__ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1) (Nonriverine)
_____ Sediment Deposits (B2) (Nonriverine)
_____ Drift Deposits (B3) (Nonriverine)
_____ Surface Soil Cracks (B6)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Water-Stained Leaves (B9)
_____ Salt Crust (B11)
_____ Biotic Crust (B12)
_____ Aquatic Invertebrates (B13)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Plowed Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

_____ Water Marks (B1) (Riverine)
_____ Sediment Deposits (B2) (Riverine)
_____ Drift Deposits (B3) (Riverine)
_____ Drainage Patterns (B10)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Shallow Aquitard (D3)
_____ FAC-Neutral Test (D5)

**Field Observations**

Surface Water Present? Yes __X__ No _____ Depth (inches) __N/A_____ Wetland Hydrology? Yes __X___ No _____

Water Table Present? Yes _____ No __X___ Depth (inches) __N/A_____

Saturation Present? Yes _____ No __X____ Depth (inches) __N/A_____ *(includes capillary fringe)*

**Describe Recorded Data** (stream gauge, monitoring well, aerial photos, and previous inspections), if available:

**Remarks**

Sufficient wetland hydrology indicator.

Habitat Type ___Annual Grassland_____

## Wetland Determination Data Form

Wetland Type __Upland_____

Project/Site: ____Hammonton Smartville IS/MND_____ City/County: ___Marysville/Yuba____ Sampling Date: ___8/27/09__

Applicant/Owner: ___Marysville JUSD_____ State: _CA___ Sampling Point: __8_____

Investigator(s): _Carie Wingert___

Landform (hillslope, terrace, etc.) __field_____ Local relief (concave, convex, none) ____flat_____ Slope % __<5___

Subregion (LRR) __Mediterranean CA_____ Soil Map Unit Name: _____San Joaquin loam_____

Are climatic/hydrologic conditions on the site typical for this time of year? __Yes__ *(If no, explain in remarks.)*

Are vegetation _N__, soil _N___, or hydrology __N__ significantly disturbed? Are normal circumstances present? __Yes___

Are vegetation _N___, soil __N__, or hydrology _N___ naturally problematic? *(If needed, explain any answers in Remarks.)*

### Summary of Findings (Attach site map showing sampling point locations, transects, important features, etc.)

Hydrophytic vegetation? __N__ Hydric soil? __N__ Wetland hydrology? __N__ Is sampled area a wetland? __N__ Other waters? _N__

### USACE Jurisdiction

Abutting Waters ____ Adjacent to Waters _____ Tributary to Waters _____ Isolated (with interstate commerce) _____ Isolated (non-jurisdictional) _____
Explain:

### Evaluation of Features Designated "Other Waters of the United States"

Ordinary High Water Mark (OHWM) Characteristics: Line Impressed on Bank _____ Shelving ____ Changes in Character of Soil _____ Bed and Bank _____ Destruction of Terrestrial Vegetation _____ Presence of Litter and Debris ____ Scour ____ Deposition ____ Other (please specify) _____
Feature Designation: Perennial _____ Intermittent _____ Ephemeral ____ Blue-line on USGS Quad _____
Natural Drainage ____ Artificial Drainage _____ Navigable Water _____

### Remarks Upland point paired to point 7.

### Vegetation

| Tree Stratum (use scientific names) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ |
| 3. _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ |
| 50%=_____ 20%=_____ Total Cover: __0_____ | | | |
| **Sapling/Shrub Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ |
| 3. _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |
| **Herb Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _Bromus diandrus_____ | __50___ | ___Y___ | _UPL_ |
| 2. _Bromus hordeaceus_____ | __45___ | ___Y___ | _UPL_ |
| 3. _Lactuca serriola_____ | __2___ | ___N___ | _FAC_ |
| 4. _Convolvulus arvensis_____ | __2____ | ___N____ | _FAC_ |
| 5. _prickly plant (tarweed?)_____ | __1____ | _____ | _____ |
| 6. _____ | _____ | _____ | _____ |
| 7. _____ | _____ | _____ | _____ |
| 8. _____ | _____ | _____ | _____ |
| 50%=__50____ 20%=__20_____ Total Cover: __100__ | | | |
| **Woody/Vine Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |

**% Bare Ground in Herb Stratum ___0__ % Cover of Biotic Crust __0___**

**Dominance Test Worksheet**

Number of dominant species that are OBL, FACW, or FAC: _____ (A)

Total number of dominant species across all strata: _____ (B)

Percent of dominant species that are OBL, FACW, or FAC: _____ (AB)

**Prevalence Index Worksheet**

| Total % Cover of: | | Multiply by |
|---|---|---|
| OBL Species | _____ | x 1 = _____ |
| FACW Species | _____ | x 2 = _____ |
| FAC Species | ____ | x 3 = ____ |
| FACU Species | _____ | x 4 = _____ |
| UPL Species | ____ | x 5 = ___ |
| Column Totals | ____ (A) | ___ (B) |

Prevalance Index = B/A = _____

**Hydrophytic Vegetation Indicators**

_____ Dominance Text is >50%
_____ Prevalence Index is $\leq$ 3.0[1]
_____ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]*Indicators of hydric soil and wetland hydrology must be present.*

**Hydrophytic Vegetation? ___NO_____**

## Soils

**Profile Description**: (Describe to the depth needed to document the indicator or confirm the absence of indicators.

| Depth (inches) | Matrix Color (moist) | Matrix % | Redox Features Color (moist) | Redox Features % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| _0-6_ | _10YR 4/4____ | _100_ | _____ | _____ | _____ | _____ | clay loam | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |

[1]Types: C = Concentration D = Depletion RM = Reduced Matrix [2]Location: PL = Pore Lining RC = Root Channel M = Matrix

**Hydric Soil Indicators**: (Applicable to all LRRs, unless otherwise noted)

_____ Histosol (A1)
_____ Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (AG) (LRR C)
_____ 1 cm Muck (A9) (LRR D)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Loamy Mucky Mineral (F1)
_____ Loamy Gleyed Matrix (F2)
_____ Depleted Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)
_____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]

_____ 1 cm Muck (A9) (LRR C)
_____ 2 cm Muck (A10) (LRR B)
_____ Reduced Vetric (F18)
_____ Red Parent Materials (TF2)
_____ Vegetated Sand/Gravel Bars
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: __N/A_____ Depth (Inches) __N/A____ Hydric Soil? _NO____

**Remarks**

Ground very hard and dry.

## Hydrology

### Wetland Indicators

Primary Indicators (Any one indicator is sufficient)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1) (Nonriverine)
_____ Sediment Deposits (B2) (Nonriverine)
_____ Drift Deposits (B3) (Nonriverine)
_____ Surface Soil Cracks (B6)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Water-Stained Leaves (B9)
_____ Salt Crust (B11)
_____ Biotic Crust (B12)
_____ Aquatic Invertebrates (B13)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Plowed Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

_____ Water Marks (B1) (Riverine)
_____ Sediment Deposits (B2) (Riverine)
_____ Drift Deposits (B3) (Riverine)
_____ Drainage Patterns (B10)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Shallow Aquitard (D3)
_____ FAC-Neutral Test (D5)

### Field Observations

Surface Water Present? Yes _____ No __X___ Depth (inches) __N/A_____ Wetland Hydrology? Yes _____ No __X___

Water Table Present? Yes _____ No __X___ Depth (inches) __N/A_____

Saturation Present? Yes _____ No __X____ Depth (inches) __N/A_____ *(includes capillary fringe)*

**Describe Recorded Data** (stream gauge, monitoring well, aerial photos, and previous inspections), if available:

**Remarks**

No hydrology indicators present.

Habitat Type ___Annual Grassland_____

## Wetland Determination Data Form

Wetland Type _Upland_____

Project/Site: ____Hammonton Smartville IS/MND_____ City/County: ___Marysville/Yuba____ Sampling Date: ___8/27/09__

Applicant/Owner: ___Marysville JUSD_____ State: _CA___ Sampling Point: __9_____

Investigator(s): _Carie Wingert___

Landform (hillslope, terrace, etc.) __field_____ Local relief (concave, convex, none) ____flat_____ Slope % __<5___

Subregion (LRR) __Mediterranean CA_____ Soil Map Unit Name: _____San Joaquin loam_____

Are climatic/hydrologic conditions on the site typical for this time of year? __Yes__ *(If no, explain in remarks.)*

Are vegetation _N__, soil _N___, or hydrology __N__ significantly disturbed? Are normal circumstances present? __Yes___

Are vegetation _N___, soil __N__, or hydrology _N___ naturally problematic? *(If needed, explain any answers in Remarks.)*

### Summary of Findings (Attach site map showing sampling point locations, transects, important features, etc.)

Hydrophytic vegetation? __Y__ Hydric soil? __N__ Wetland hydrology? __N__ Is sampled area a wetland? __N__ Other waters? _N__

### USACE Jurisdiction

Abutting Waters ____ Adjacent to Waters _____ Tributary to Waters _____ Isolated (with interstate commerce) _____ Isolated (non-jurisdictional) _____
Explain:

### Evaluation of Features Designated "Other Waters of the United States"

Ordinary High Water Mark (OHWM) Characteristics: Line Impressed on Bank _____ Shelving ____ Changes in Character of Soil _____ Bed and Bank _____ Destruction of Terrestrial Vegetation _____ Presence of Litter and Debris ____ Scour ____ Deposition ____ Other (please specify) _____
Feature Designation: Perennial _____ Intermittent _____ Ephemeral ____ Blue-line on USGS Quad _____
Natural Drainage ____ Artificial Drainage _____ Navigable Water _____

**Remarks** Patch of curly dock south of Linda Drain near eastern property boundary. Appears to be in a slight depression.

### Vegetation

| Tree Stratum (use scientific names) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: __0_____ | | | |
| **Sapling/Shrub Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |
| **Herb Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _Rumex crispus_____ | __25___ | ___Y___ | _FAC_ |
| 2. _Lolium perenne ssp. multiflorum_____ | __30___ | ___Y___ | _FAC_ |
| 3. _Triticum aestivum_____ | __14__ | ___N___ | _UPL_ |
| 4. _Lactuca serriola_____ | __1____ | ___N___ | _FAC_ |
| 5. _Hordeum murinum ssp. leporinum_____ | __30___ | ___Y___ | _UPL_ |
| 6. | | | |
| 7. | | | |
| 8. | | | |
| 50%=__50____ 20%=__20_____ Total Cover: __100__ | | | |
| **Woody/Vine Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |

**% Bare Ground in Herb Stratum ___5__ % Cover of Biotic Crust __0___**

**Dominance Test Worksheet**
Number of dominant species that are OBL, FACW, or FAC: __2___ (A)

Total number of dominant species across all strata: __3___ (B)

Percent of dominant species that are OBL, FACW, or FAC: _66%__ (AB)

**Prevalence Index Worksheet**

| Total % Cover of: | | Multiply by |
|---|---|---|
| OBL Species | _____ | x 1 = _____ |
| FACW Species | _____ | x 2 = _____ |
| FAC Species | ____ | x 3 = ____ |
| FACU Species | _____ | x 4 = _____ |
| UPL Species | ____ | x 5 = ___ |
| Column Totals | ____ (A) | ___ (B) |

Prevalence Index = B/A = _____

**Hydrophytic Vegetation Indicators**
__X__ Dominance Text is >50%
_____ Prevalence Index is ≤ 3.0[1]
_____ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
_____ Problematic Hydrophytic Vegetation[1] (Explain)
*[1]Indicators of hydric soil and wetland hydrology must be present.*

**Hydrophytic Vegetation? __Yes____**

## Soils

**Profile Description**: (Describe to the depth needed to document the indicator or confirm the absence of indicators.

| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| 0-6 | 10YR 4/4 | 95 | 7.5YR 5/8 | 5 | C | M | clay loam | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Types: C = Concentration D = Depletion RM = Reduced Matrix [2]Location: PL = Pore Lining RC = Root Channel M = Matrix

**Hydric Soil Indicators**: (Applicable to all LRRs, unless otherwise noted)

_____ Histosol (A1)
_____ Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (AG) (LRR C)
_____ 1 cm Muck (A9) (LRR D)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
_____ Sandy Redox (S5)
_____ Stripped Matrix (S6)
_____ Loamy Mucky Mineral (F1)
_____ Loamy Gleyed Matrix (F2)
_____ Depleted Matrix (F3)
_____ Redox Dark Surface (F6)
_____ Depleted Dark Surface (F7)
_____ Redox Depressions (F8)
_____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]

_____ 1 cm Muck (A9) (LRR C)
_____ 2 cm Muck (A10) (LRR B)
_____ Reduced Vetric (F18)
_____ Red Parent Materials (TF2)
_____ Vegetated Sand/Gravel Bars
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: __N/A_____ Depth (Inches) __N/A____ Hydric Soil? _NO____

**Remarks**

Redox features present, but soil chroma does not meet criteria for hydric soil.

## Hydrology

**Wetland Indicators**

Primary Indicators (Any one indicator is sufficient)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1) (Nonriverine)
_____ Sediment Deposits (B2) (Nonriverine)
_____ Drift Deposits (B3) (Nonriverine)
_____ Surface Soil Cracks (B6)
_____ Inundation Visible on Aerial Imagery (B7)
_____ Water-Stained Leaves (B9)
_____ Salt Crust (B11)
_____ Biotic Crust (B12)
_____ Aquatic Invertebrates (B13)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Plowed Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

_____ Water Marks (B1) (Riverine)
_____ Sediment Deposits (B2) (Riverine)
_____ Drift Deposits (B3) (Riverine)
_____ Drainage Patterns (B10)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Shallow Aquitard (D3)
_____ FAC-Neutral Test (D5)

**Field Observations**

Surface Water Present? Yes _____ No __X___ Depth (inches) __N/A_____ Wetland Hydrology? Yes _____ No __X___

Water Table Present? Yes _____ No __X___ Depth (inches) __N/A_____

Saturation Present? Yes _____ No __X____ Depth (inches) __N/A_____ *(includes capillary fringe)*

**Describe Recorded Data** (stream gauge, monitoring well, aerial photos, and previous inspections), if available:

**Remarks** Point taken where an unusual patch of Rumex crispus occurred in non-native grassland. Appears to be a slight depression, but no hydrology indicators present.

Habitat Type ___Annual Grassland_____

## Wetland Determination Data Form

Wetland Type __Upland_____

Project/Site: ____Hammonton Smartville IS/MND_____ City/County: ___Marysville/Yuba____ Sampling Date: ___8/27/09__

Applicant/Owner: ___Marysville JUSD_____ State: _CA___ Sampling Point: __10_____

Investigator(s): _Carie Wingert___

Landform (hillslope, terrace, etc.) __field_____ Local relief (concave, convex, none) ____flat_____ Slope % __<5___

Subregion (LRR) __Mediterranean CA_____ Soil Map Unit Name: _____San Joaquin loam_____

Are climatic/hydrologic conditions on the site typical for this time of year? __Yes__ *(If no, explain in remarks.)*

Are vegetation _N__, soil _N___, or hydrology __N__ significantly disturbed? Are normal circumstances present? __Yes___

Are vegetation _N___, soil __N__, or hydrology _N___ naturally problematic? *(If needed, explain any answers in Remarks.)*

### Summary of Findings (Attach site map showing sampling point locations, transects, important features, etc.)

Hydrophytic vegetation? __N__ Hydric soil? __N__ Wetland hydrology? __N__ Is sampled area a wetland? __N__ Other waters? _N__

### USACE Jurisdiction

Abutting Waters ____ Adjacent to Waters _____ Tributary to Waters _____ Isolated (with interstate commerce) _____ Isolated (non-jurisdictional) _____
Explain:

### Evaluation of Features Designated "Other Waters of the United States"

Ordinary High Water Mark (OHWM) Characteristics: Line Impressed on Bank _____ Shelving ____ Changes in Character of Soil _____ Bed and Bank _____ Destruction of Terrestrial Vegetation _____ Presence of Litter and Debris ____ Scour ____ Deposition ____ Other (please specify) _____
Feature Designation: Perennial _____ Intermittent _____ Ephemeral ____ Blue-line on USGS Quad _____
Natural Drainage ____ Artificial Drainage _____ Navigable Water _____

**Remarks** Point taken at edge of cottonwood area.

### Vegetation

| Tree Stratum (use scientific names) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: | ___0___ | | |
| **Sapling/Shrub Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 50%=_____ 20%=_____ Total Cover: | ___0___ | | |
| **Herb Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _Raphanus sativus_____ | __20___ | ___Y___ | _UPL_ |
| 2. _Centaurea solstitialis_____ | __30___ | ___Y___ | _UPL_ |
| 3. _Bromus hordeaceus_____ | __5___ | ___N___ | _UPL_ |
| 4. _Lolium perenne ssp. multiflorum_____ | __40___ | ___Y___ | _FAC_ |
| 5. _Lactuca serriola_____ | __2____ | ___N___ | _FAC_ |
| 6. _Avena fatua_____ | __3____ | ___N___ | _UPL_ |
| 7. | | | |
| 8. | | | |
| 50%=__50____ 20%=__20_____ Total Cover: | __100__ | | |
| **Woody/Vine Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. | | | |
| 2. | | | |
| 50%=_____ 20%=_____ Total Cover: | ___0___ | | |

**% Bare Ground in Herb Stratum ___0__ % Cover of Biotic Crust __0___**

**Dominance Test Worksheet**

Number of dominant species that are OBL, FACW, or FAC: ___1___ (A)

Total number of dominant species across all strata: ___3___ (B)

Percent of dominant species that are OBL, FACW, or FAC: __33%__ (AB)

**Prevalence Index Worksheet**

| Total % Cover of: | | Multiply by | |
|---|---|---|---|
| OBL Species | __0____ | x 1 = | __0___ |
| FACW Species | __0____ | x 2 = | __0___ |
| FAC Species | __42___ | x 3 = | __126_ |
| FACU Species | __0____ | x 4 = | __0___ |
| UPL Species | __58___ | x 5 = | __290_ |
| Column Totals | _100___ (A) | | __416_ (B) |

Prevalence Index = B/A = _4.16____

**Hydrophytic Vegetation Indicators**

_____ Dominance Text is >50%
_____ Prevalence Index is $\leq$ 3.0[1]
_____ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]*Indicators of hydric soil and wetland hydrology must be present.*

**Hydrophytic Vegetation? ___NO_____**

# Appendix C

*Plant List*



## Plant Species Observed during the Jurisdictional Delineation of the Hammonton-Smartville project site on August 26 and 27, 2009.

| Scientific Name | Common Name | Wetland Indicator Status |
|---|---|---|
| *Agrostis exarata* | spike bentgrass | FACW |
| *Asclepias fascicularis* | narrow-leaf milkweed | FAC |
| *Asparagus officinalis* | garden asparagus | FACU |
| *Avena fatua* | wild oat | None |
| *Bromus diandrus* | ripgut grass | None |
| *Bromus hordeaceus* | soft brome | None |
| *Centaurea solstitialis* | yellow star-thistle | None |
| *Centromadia* [=*Hemizonia*] *fitchii* | Fitch's tarweed | None |
| *Convolvulus arvensis* | bindweed | UPL |
| *Conyza canadensis* | horseweed | FAC |
| *Croton setigerus* | dove weed | None |
| *Cynodon dactylon* | Bermuda grass | FAC |
| *Cyperus eragrostis* | tall flatsedge | FACW |
| *Cyperus esculentus* | chufa flatsedge | FACW |
| *Echinochloa crus-galli* | barnyardgrass | FACW |
| *Hordeum murinum* ssp. *leporinum* | foxtail barley | None |
| *Juncus effusus* | common rush | OBL |
| *Lactuca serriola* | prickly lettuce | FAC |
| *Lolium perenne* ssp. *multiflorum* | Italian ryegrass | FAC |
| *Paspalum dilatatum* | dallis grass | FAC |
| *Pesicaria* [=*Polygonum*] *lapathifolium* | willow weed | None |
| *Phalaris aquatica* | harding grass | FAC |
| *Populus fremontii* | Fremont cottonwood | FACW |
| *Raphanus sativus* | radish | None |
| *Rumex crispus* | curly dock | FACW |
| *Triticum aestivum* | wheat | None |
| *Typha latifolia* | broad-leaved cattail | OBL |

*1. Source: Reed (1988). OBL = Obligate Wetland – occurs almost always in wetlands; FACW = Facultative Wetland – usually occurs in wetlands (67%-99%), but occasionally in nonwetlands; FAC = Facultative – equally likely to occur in wetlands or nonwetlands (34%-66%); FACU = Facultative Upland – Usually occur in nonwetlands (67%-99%), but occasionally found in wetlands; UPL = Obligate Upland – occurs almost always (>99%) under natural conditions in nonwetlands; None – no indicator status, generally considered to be obligate upland.*

# Appendix D

*Site Photos*

# HAMMONTON-SMARTVILLE IS/MND
# JURISDICTIONAL DELINEATION PHOTO PLATE



**Photo 1**. View of Linda Drain from south-central portion of the property, looking east. Emergent vegetation was present at varying density along the length of the channel within the property boundaries. The Linda Drain is mapped on USGS topographic maps as a blue-line stream.



**Photo 2.** View of Linda Drain from eastern boundary of the property, looking southwest. Emergent vegetation was very dense in this location.



**Photo 3**. View of project site looking northeast from the Linda Drain towards the unoccupied residence. Non-native grassland was the dominant habitat type on-site.



**Photo 4.** View of the north-south man-made, ephemeral ditch located along the western boundary of the property, looking north from the Linda Drain. This ditch connects an east-west trending ditch along Hammonton-Smartville Road to the Linda Drain.



**Photo 5**. View of the ephemeral ditch meeting the Linda Drain south of the southwest corner of the property, looking south.



**Photo 6.** View of the connection between the north-south ephemeral ditch along the western boundary of the property and the east-west ditch along Hammonton Smartville Road, looking south towards the Linda Drain (not visible).

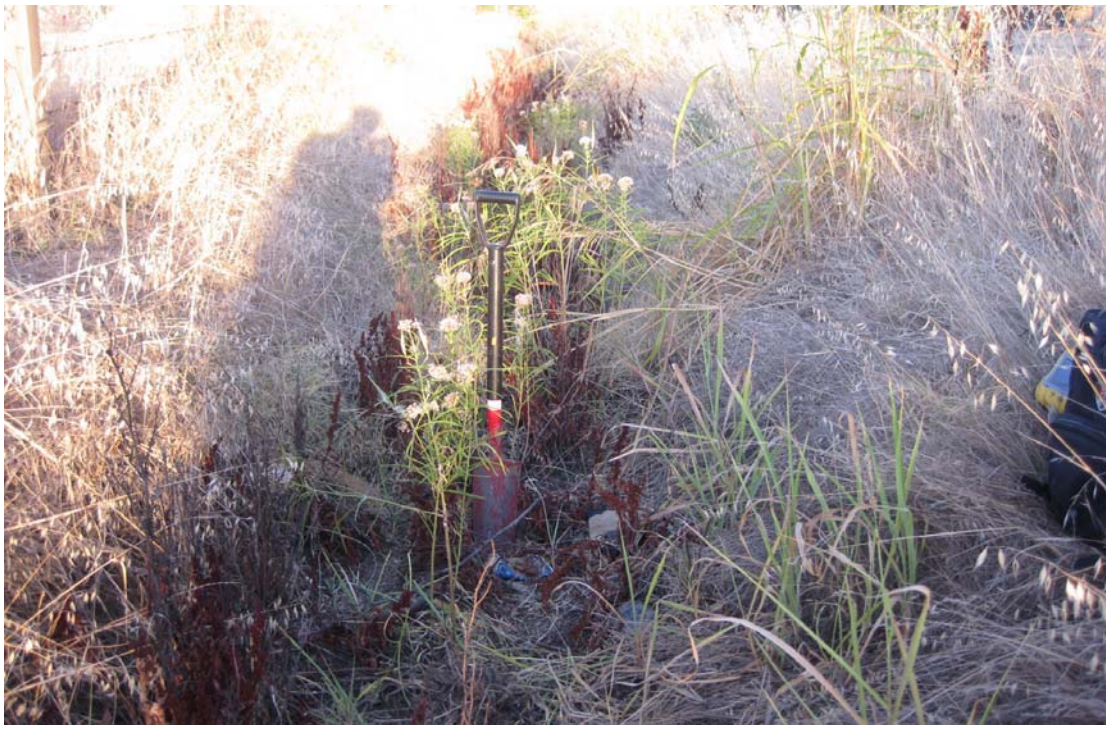


**Photo 7**. View of Data Point 3 in the east-west drainage ditch along Hammonton-Smartville Road near the northwest corner of the property.



**Photo 8.** View of Data Point 5 in the east-west drainage ditch along Hammonton-Smartville Road near the northeast corner of the property. The soil was saturated and contained earth worms.



**Photo 9**. View of Data Point 8 next to the Linda Drain near the eastern boundary of the property.



**Photo 10.** View of an isolated patch of *Rumex crispus* south of the Linda Drain near the eastern property boundary, looking east. All three wetland parameters were not met for this location (see data point #9).



**Photo 11**. View of lone Fremont cottonwood south of Linda Drain and in the southwestern portion of the property. Aerial photos and vegetation indicate that this area stays wetter longer than other portions of the property; however, this area did not meet the definition of a wetland (see data point #11).



**Photo 12.** View of seasonally wet area in the southwestern portion of the property, looking west from the lone cottonwood.

## Soils

**Profile Description**: (Describe to the depth needed to document the indicator or confirm the absence of indicators.

| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| _0-6_ | _10YR 4/3____ | _95_ | _7.5YR 5/8____ | __5__ | __C__ | __M_ | clay loam | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Types: C = Concentration D = Depletion RM = Reduced Matrix [2]Location: PL = Pore Lining RC = Root Channel M = Matrix

**Hydric Soil Indicators**: (Applicable to all LRRs, unless otherwise noted)

- _____ Histosol (A1)
- _____ Histic Epipedon (A2)
- _____ Black Histic (A3)
- _____ Hydrogen Sulfide (A4)
- _____ Stratified Layers (AG) (LRR C)
- _____ 1 cm Muck (A9) (LRR D)
- _____ Depleted Below Dark Surface (A11)
- _____ Thick Dark Surface (A12)
- _____ Sandy Mucky Mineral (S1)
- _____ Sandy Gleyed Matrix (S4)
- _____ Sandy Redox (S5)
- _____ Stripped Matrix (S6)
- _____ Loamy Mucky Mineral (F1)
- _____ Loamy Gleyed Matrix (F2)
- _____ Depleted Matrix (F3)
- _____ Redox Dark Surface (F6)
- _____ Depleted Dark Surface (F7)
- _____ Redox Depressions (F8)
- _____ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]

- _____ 1 cm Muck (A9) (LRR C)
- _____ 2 cm Muck (A10) (LRR B)
- _____ Reduced Vetric (F18)
- _____ Red Parent Materials (TF2)
- _____ Vegetated Sand/Gravel Bars
- _____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: __N/A_____ Depth (Inches) __N/A____ Hydric Soil? _NO____

**Remarks**

Redox features present, but soil chroma does not meet criteria for hydric soil.

## Hydrology

### Wetland Indicators

Primary Indicators (Any one indicator is sufficient)

- _____ Surface Water (A1)
- _____ High Water Table (A2)
- _____ Saturation (A3)
- _____ Water Marks (B1) (Nonriverine)
- _____ Sediment Deposits (B2) (Nonriverine)
- _____ Drift Deposits (B3) (Nonriverine)
- _____ Surface Soil Cracks (B6)
- _____ Inundation Visible on Aerial Imagery (B7)
- _____ Water-Stained Leaves (B9)
- _____ Salt Crust (B11)
- _____ Biotic Crust (B12)
- _____ Aquatic Invertebrates (B13)
- _____ Hydrogen Sulfide Odor (C1)
- _____ Oxidized Rhizospheres (C3)
- _____ Presence of Reduced Iron (C4)
- _____ Recent Iron Reduction in Plowed Soils (C6)
- _____ Thin Muck Surface (C7)
- _____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- _____ Water Marks (B1) (Riverine)
- _____ Sediment Deposits (B2) (Riverine)
- _____ Drift Deposits (B3) (Riverine)
- _____ Drainage Patterns (B10)
- _____ Dry-Season Water Table (C2)
- _____ Crayfish Burrows (C8)
- _____ Saturation Visible on Aerial Imagery (C9)
- _____ Shallow Aquitard (D3)
- _____ FAC-Neutral Test (D5)

### Field Observations

Surface Water Present? Yes _____ No __X___ Depth (inches) __N/A_____ Wetland Hydrology? Yes _____ No __X___

Water Table Present? Yes _____ No __X___ Depth (inches) __N/A_____

Saturation Present? Yes _____ No __X____ Depth (inches) __N/A_____ *(includes capillary fringe)*

**Describe Recorded Data** (stream gauge, monitoring well, aerial photos, and previous inspections), if available:

**Remarks** No hydrology indicators.

Habitat Type ___Annual Grassland_____

## Wetland Determination Data Form

Wetland Type __Upland_____

Project/Site: ____Hammonton Smartville IS/MND_____ City/County: ___Marysville/Yuba____ Sampling Date: ___8/27/09__

Applicant/Owner: ___Marysville JUSD_____ State: _CA___ Sampling Point: __11_____

Investigator(s): _Carie Wingert___

Landform (hillslope, terrace, etc.) __field_____ Local relief (concave, convex, none) ____flat_____ Slope % __<5___

Subregion (LRR) __Mediterranean CA_____ Soil Map Unit Name: _____San Joaquin loam_____

Are climatic/hydrologic conditions on the site typical for this time of year? __Yes__ *(If no, explain in remarks.)*

Are vegetation _N__, soil _N___, or hydrology __N__ significantly disturbed? Are normal circumstances present? __Yes___

Are vegetation _N___, soil __N__, or hydrology _N___ naturally problematic? *(If needed, explain any answers in Remarks.)*

### Summary of Findings (Attach site map showing sampling point locations, transects, important features, etc.)

Hydrophytic vegetation? __Y__ Hydric soil? __N__ Wetland hydrology? __N__ Is sampled area a wetland? __N__ Other waters? _N__

### USACE Jurisdiction

Abutting Waters ____ Adjacent to Waters _____ Tributary to Waters _____ Isolated (with interstate commerce) _____ Isolated (non-jurisdictional) _____
Explain:

### Evaluation of Features Designated "Other Waters of the United States"

Ordinary High Water Mark (OHWM) Characteristics: Line Impressed on Bank _____ Shelving ____ Changes in Character of Soil _____ Bed and Bank _____ Destruction of Terrestrial Vegetation _____ Presence of Litter and Debris ____ Scour ____ Deposition ____ Other (please specify) _____
Feature Designation: Perennial _____ Intermittent _____ Ephemeral ____ Blue-line on USGS Quad _____
Natural Drainage ____ Artificial Drainage _____ Navigable Water _____

**Remarks** Point taken near a cottonwood in a location that appears very wet in aerial photographs.

### Vegetation

| Tree Stratum (use scientific names) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. __Populus fremontii_____ | __5____ | ___Y___ | _FACW_ |
| 2. _____ | _____ | _____ | _____ |
| 3. _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ |
| 50%=__2.5____ 20%=___1___ Total Cover: __5_____ | | | |
| **Sapling/Shrub Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ |
| 3. _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |
| **Herb Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _Lolium perenne ssp. multiflorum_____ | __30___ | ___Y___ | _FAC_ |
| 2. _Hordeum murinum ssp. leporinum_____ | __24___ | ___Y___ | _UPL_ |
| 3. _Croton setigerus_____ | __10__ | ___N___ | _UPL_ |
| 4. _Rumex crispus_____ | __1____ | ___N___ | _FAC_ |
| 5. _Lactuca serriola_____ | __5____ | ___Y___ | _FAC_ |
| 6. _Agrostis exarata_____ | __20___ | ___Y___ | _FACW |
| 7. _Convolvulus arvensis_____ | __10___ | ___N___ | _UPL_ |
| 8. _____ | _____ | _____ | _____ |
| 50%=__50____ 20%=__20_____ Total Cover: __100__ | | | |
| **Woody/Vine Stratum (use scientific names)** | **% Cover** | **Species?** | **Status** |
| 1. _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ |
| 50%=_____ 20%=_____ Total Cover: ___0____ | | | |

**% Bare Ground in Herb Stratum ___0__ % Cover of Biotic Crust __0___**

**Dominance Test Worksheet**

Number of dominant species that are OBL, FACW, or FAC: __4___ (A)

Total number of dominant species across all strata: __5___ (B)

Percent of dominant species that are OBL, FACW, or FAC: _80%__ (AB)

**Prevalence Index Worksheet**

| Total % Cover of: | | Multiply by |
|---|---|---|
| OBL Species | _____ | x 1 = _____ |
| FACW Species | _____ | x 2 = _____ |
| FAC Species | ____ | x 3 = ____ |
| FACU Species | _____ | x 4 = _____ |
| UPL Species | ____ | x 5 = ___ |
| Column Totals | ____ (A) | ___ (B) |

Prevalence Index = B/A = _____

**Hydrophytic Vegetation Indicators**

__X__ Dominance Text is >50%
_____ Prevalence Index is ≤ 3.0[1]
_____ Morphological Adaptations[1] (provide supporting data in Remarks or on a separate sheet)
_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]*Indicators of hydric soil and wetland hydrology must be present.*

**Hydrophytic Vegetation? __YES_____**

## Soils

**Profile Description**: (Describe to the depth needed to document the indicator or confirm the absence of indicators.

| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) | % | Type[1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| _0-6_ | _10YR 4/3____ | _85_ | _7.5YR 5/8____ | _15__ | __C__ | __M_ | clay loam | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1]Types: C = Concentration D = Depletion RM = Reduced Matrix [2]Location: PL = Pore Lining RC = Root Channel M = Matrix

**Hydric Soil Indicators**: (Applicable to all LRRs, unless otherwise noted)

_____ Histosol (A1)
_____ Histic Epipedon (A2)
_____ Black Histic (A3)
_____ Hydrogen Sulfide (A4)
_____ Stratified Layers (AG) (LRR C)
_____ 1 cm Muck (A9) (LRR D)
_____ Depleted Below Dark Surface (A11)
_____ Thick Dark Surface (A12)
_____ Sandy Mucky Mineral (S1)
_____ Sandy Gleyed Matrix (S4)
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Indicators for Problematic Hydric Soils[3]

_____ 1 cm Muck (A9) (LRR C)
_____ 2 cm Muck (A10) (LRR B)
_____ Reduced Vetric (F18)
_____ Red Parent Materials (TF2)
_____ Vegetated Sand/Gravel Bars
_____ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present): Type: __N/A_____ Depth (Inches) __N/A____ Hydric Soil? _NO____

**Remarks**

Redox features present, but soil chroma does not meet criteria for hydric soil.

## Hydrology

### Wetland Indicators

Primary Indicators (Any one indicator is sufficient)

_____ Surface Water (A1)
_____ High Water Table (A2)
_____ Saturation (A3)
_____ Water Marks (B1) (Nonriverine)
_____ Sediment Deposits (B2) (Nonriverine)
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_____ Surface Soil Cracks (B6)
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_____ Aquatic Invertebrates (B13)
_____ Hydrogen Sulfide Odor (C1)
_____ Oxidized Rhizospheres (C3)
_____ Presence of Reduced Iron (C4)
_____ Recent Iron Reduction in Plowed Soils (C6)
_____ Thin Muck Surface (C7)
_____ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

_____ Water Marks (B1) (Riverine)
_____ Sediment Deposits (B2) (Riverine)
_____ Drift Deposits (B3) (Riverine)
_____ Drainage Patterns (B10)
_____ Dry-Season Water Table (C2)
_____ Crayfish Burrows (C8)
_____ Saturation Visible on Aerial Imagery (C9)
_____ Shallow Aquitard (D3)
_____ FAC-Neutral Test (D5)

### Field Observations

Surface Water Present? Yes _____ No __X___ Depth (inches) __N/A_____ Wetland Hydrology? Yes _____ No __X___

Water Table Present? Yes _____ No __X___ Depth (inches) __N/A_____

Saturation Present? Yes _____ No __X____ Depth (inches) __N/A_____ *(includes capillary fringe)*

**Describe Recorded Data** (stream gauge, monitoring well, aerial photos, and previous inspections), if available:

**Remarks** Two berms are present that may contribute to ponding during storm events. However, no evidence of hydrology present.

# Appendix C

*Preliminary Environmental Assessment*



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1410 Rocky Ridge Drive
Suite 330
Roseville
California 95661
Tel 916.786.0320
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**www.arcadis-us.com**

Mr. Mark Allgire
Marysville Joint Unified School District
1919 B Street
Marysville, California 95901

ENVIRONMENT

Subject:
Revised Preliminary Environmental Assessment Work Plan, Hammonton Smartsville Property, APN 021-150-032 and a Portion of APN 021-150-060, Yuba County, California

Date:
February 9, 2012

Contact:
Scott Hackman

Phone:
916.786.7369

Email:
scott.hackman@arcadis-us.com

Our ref:
RV009363.0011

Dear Mr. Allgire:

ARCADIS U.S., Inc., (ARCADIS) is pleased to present the attached Revised Preliminary Environmental Assessment (PEA) work plan ("the PEA work plan") for the proposed investigation activities at the Hammonton Smartsville property located on the southwestern corner of the intersection of Dantoni and Hammonton Smartsville Roads in Yuba County, California (the Site). ARCADIS understands that the Marysville Joint Unified School District (MJUSD) plans to develop the majority of the approximately 50-acre Site for use as MJUSD educational support facilities, an intermediate school, alternative school and adult education center.

The following assessment submittals have been prepared for the Site and submitted it to the California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC):

- *Draft Preliminary Environmental Assessment Work Plan*, dated November 25, 2009 and prepared by LFR an ARCADIS Company (the draft PEA work plan)
- *Preliminary Environmental Assessment Work Plan*, dated September 15, 2011 and prepared by ARCADIS (the September 2011 PEA work plan)
- *Response to Comments – "Preliminary Environmental Assessment Work Plan"*, dated January 16, 2012 and prepared by ARCADIS

The September 2011 PEA work plan has been modified based on conversations with the DTSC during a scoping meeting on January 21, 2010, observations during a site visit with representatives of ARCADIS, the DTSC and the MJUSD on August 16, 2011, comments from the DTSC in their letter to MJUSD dated October 17, 2011, and

ARCADIS

comments from the DTSC in their email to MJUSD dated January 26, 2012. This PEA work plan was prepared to update the draft PEA work plan and the September 2011 PEA work plan, present a brief background information summary for the Site, and present a proposed scope of work for the PEA.

Completion of a PEA is recommended based on the results of ARCADIS' background research and site reconnaissance, to evaluate whether past site uses have resulted in environmental impacts at the Site and to delineate suspect affected soil, surface water, and groundwater.

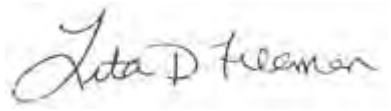
If you have any questions or comments concerning this document, please call either of the undersigned at (916) 786-0320.

Sincerely,

ARCADIS U.S., Inc.



Scott Hackman, PEA I (No. 30141)
Project Scientist



Lita D. Freeman, PG (No. 7368), REA II (No. 20106), C.A.C.
Principal Geologist

Copies:
Ms. Mary Gaspari, California Department of Toxic Substances Control (2 copies)

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**Marysville Joint Unified School District**

# Revised Preliminary Environmental Assessment Work Plan

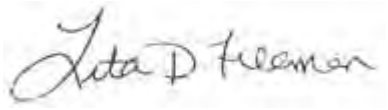
Hammonton Smartsville Property, APN 021-150-032 and a Portion of APN 021-150-060, Yuba County, California

February 9, 2012

ARCADIS



Scott Hackman, REA I (No. 30141)
Project Scientist



Lita D. Freeman, P.G. (7368), REA II (20106), C.A.C.
Principal Geologist

**Revised Preliminary Environmental Assessment Work Plan**

Hammonton Smartsville Property
APN 021-150-032 and a Portion of APN 021-150-060, Yuba County, California

Prepared for:
Marysville Joint Unified School District
1919 B Street
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Prepared by:
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Our Ref.:
RV009363.0011

Date:
February 9, 2012

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**1. Introduction** **1**

1.1 Purpose and Qualifications 2

1.2 Scope of Work 3

1.3 Significant Assumptions 4

1.4 Limitations and Exceptions 4

1.5 User Reliance 5

1.6 Data Gaps 5

**2. SITE SETTING** **5**

2.1 Location 5

2.2 Geology and Hydrogeology 6

2.2.1 Regional and Local Geology 6

2.2.2 Regional and Local Surface and Groundwater Hydrology 7

2.3 Site Vicinity 8

2.4 Designated MJUSD Contact Person and Mailing Address 8

**3. User-Provided Information** **8**

3.1 Title Record 8

3.2 Environmental Liens or Activity and Use Limitations 8

3.3 Specialized Knowledge 9

3.4 Commonly Known or Reasonably Ascertainable Information 10

3.5 Owner, Property Manager, and Occupant Information 10

**4. Site and Site Vicinity Reconnaissance** **10**

4.1 August 2009 Site Reconnaissance 10

4.2 August 2011 Site Reconnaissance 11

4.3 Off-Site Reconnaissance 14

**5. Public Record Review** **15**

5.1 Environmental 15

ARCADIS

5.1.1 Site 16
5.1.2 Off-Site Properties 16
5.2 Historical 18
5.3 August 2011 Updated Information 21
5.4 Previous Site Investigations 21

**6. Additional Research Data 22**
6.1 Radon Gas Data 22
6.2 Regional Asbestos Information 22
6.3 California General Education Code Provisions 23
6.4 Environmental Hazards Survey 26

**7. Interviews 27**
7.1 Interviews with Site Contacts 27
7.2 Interviews with Off-Site Contacts 27
7.3 Interviews with Local Government Officials 28

**8. Background Information Findings and Recommendations 28**
8.1 Findings 28
8.1.1 On-Site Findings 28
8.1.2 Site Assessment Data Gaps 30
8.1.3 Off-Site Findings 31
8.2 Conclusions and Recommendations 32

**9. PEA Objectives 34**

**10. Field Sampling Plan 35**
10.1 Compounds of Potential Concern 35
10.2 Pre-Field Activities 35
10.3 Field Activities 35
10.3.1 Sampling Methods and Procedures 36

10.3.1.1 Soil Sampling 36

10.3.1.2 Decontamination Procedures 37

10.4 Field Sampling Plan 37

10.4.1 Site Structures 38

10.4.1.1 Current Structures 38

10.4.1.2 Former Structures – With Foundations Present 39

10.4.1.3 Former Structures – With Foundations No Longer Present 39

10.4.2 Fill Material 40

10.4.3 Pole-Mounted Transformer 40

10.4.4 Storm-Water Drainage Ditch 41

10.4.5 Low-Lying Area Adjacent to Water Trough 41

10.4.6 Low-Lying Area Adjacent to Water-Supply Well 41

10.4.7 Painted Power Pole 42

10.4.8 Wood/Trash and Municipal Waste Piles 42

10.4.9 Potential Former Burn Pit 42

10.4.10 Unlabeled Drum 43

10.4.11 Reduced Agricultural 43

10.4.12 Livestock Handling Areas 44

10.5 Waste Disposal 44

10.6 Analytical Methods 44

**11. QA/QC Procedures 45**

11.1 Field Quality Assurance/Quality Control Procedures 45

11.1.1 Duplicate Samples 46

11.1.2 Equipment Rinsate Blanks 46

11.1.3 Field Blanks 46

11.2 Laboratory Quality Assurance/Quality Control Procedures 47

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**12. Human Health Screening Evaluation** **47**

12.1 Data Evaluation and Selection of Compounds of Potential Concern 48

12.2 Exposure Assessment 48

12.3 Toxicity Assessment 49

12.4 Risk Characterization 49

**13. Ecological Screening Evaluation** **50**

**14. Community Involvement** **50**

**15. PEA Report Preparation and Schedule** **50**

**16. References** **51**

**Tables**

1 Sampling and Analysis Summary

2 Sample Quantitation Limits

3 Analytical Methods, Container Types, and Preservatives

**Figures**

1 Site Vicinity Map

2 Site Plan

3 Site Detail

4 Proposed Sampling Plan

4a Proposed Sampling Plan Site Detail

**Appendices**

A Correspondence Records and Site Photographs

B EDR Environmental Lien Search Report

C EDR Radius Map with GeoCheck® Report

D Historical Topographic Maps

E Aerial Photographs

F Sanborn® Map Report

G EDR City Directory Abstract Report

H Environmental Hazards Survey Information

## 1. Introduction

This Revised Preliminary Environmental Assessment (PEA) work plan ("the PEA work plan") has been prepared by ARCADIS, U.S., Inc., (ARCADIS) on behalf of the Marysville Joint Unified School District (MJUSD) for the Hammonton Smartsville property located on the southwestern corner of the intersection of Dantoni and Hammonton Smartsville Roads in Yuba County, California (the Site). The PEA work plan presents a background due diligence assessment of the Site and scope of work to evaluate potential areas of concern found during the background due diligence. The approximately 50-acre property is located on Yuba County Assessor's Office (YCAO) Assessor Parcel Number (APN) 021-150-032 and a portion of APN 021-150-060.

The following assessment submittals have been prepared for the Site and submitted it to the California Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control (DTSC):

- *Draft Preliminary Environmental Assessment Work Plan*, dated November 25, 2009 and prepared by LFR an ARCADIS Company (the draft PEA work plan; LFR 2009)

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The September 2011 PEA work plan has been modified based on conversations with the DTSC during a scoping meeting on January 21, 2010, observations during a site visit with representatives of ARCADIS, the DTSC and the MJUSD on August 16, 2011, comments from the DTSC in their letter to MJUSD dated October 17, 2011, and comments from the DTSC in their email to MJUSD dated January 26, 2012. This PEA work plan was prepared to update the draft PEA work plan and the September 2011 PEA work plan, present a brief background information summary for the Site, and present a proposed scope of work for the PEA

The following significant changes have occurred at the Site since the preparation of the draft PEA work plan:

- The MJUSD purchased the property; therefore, previous ownership information (other than historical site activities) have been removed from this PEA work plan

- The site area decreased from 70-acres to approximately 50-acres

- Access to the interior of Buildings B1 through B3 and the northern portion of Building B4 was obtained

The approximate 50-acre site is developed by five permanent structures and undeveloped land that reportedly is occasionally used for cattle grazing and other farming activities. ARCADIS understands that the MJUSD plans to develop the majority of the Site for use as MJUSD educational support facilities, adult education center, a new intermediate school and alternative education school. During the proposed development activities, the MJUSD plans to add approximately nine classroom buildings, 11 administration buildings and district offices, six portable classrooms, and possibly 24 relocated portable classrooms to the Site. The proposed site development is master planned for a 1,628 student body between a middle school and an alternative high school. Following development, the Site will be served by public utilities for drinking water, irrigation water and sewage disposal. The existing on-site structures will be demolished prior to implementation of the sampling proposed in this PEA work plan. The demolition of the on-site structures will not include the removal of the structure foundations. The site location is shown on Figure 1; site boundaries are shown on Figure 2, and site structures are shown on Figure 3.

### 1.1 Purpose and Qualifications

The MJUSD requested that ARCADIS conduct a background due diligence assessment of the Site and prepare a scope of work to evaluate potential areas of concern found during the background due diligence. The purpose of the background due diligence is to identify recognized environmental conditions (RECs) in connection with the Site. The term RECs, as defined by American Society for Testing and Materials International (ASTM) Standard Practice E 1527-05 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or the material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

The term RECs also includes hazardous substances or petroleum products even under conditions in compliance with environmental laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. *De minimis* conditions are not RECs. This assessment has been performed in a manner that complies with requirements of the most recently revised version of ASTM Standard Practice E 1527-05 and the 2009 California Education Code.

A scope of work to evaluate potential areas of concern on the Site found during the background due diligence is also presented in this PEA work plan. This PEA work plan was prepared and will be implemented in general accordance with the guidelines of the DTSC, as detailed in the PEA Guidance Manual ("the DTSC PEA Guidance Manual"; DTSC 1999). Prior to implementation of this PEA work plan, ARCADIS will prepare a site-specific Health and Safety Plan (HSP) which will be kept on-site during the proposed field activities at the Site.

Site findings will be presented in a PEA report following implementation of this PEA work plan. Completion of the PEA will satisfy DTSC's requirements for the environmental assessment of the Site, so that the Site may be approved for school construction.

This PEA work plan has been prepared for the MJUSD pursuant to ARCADIS's *Proposal for a Draft Preliminary Environmental Assessment and Geological Hazards Assessment to include an Environmental Hazards Report, 2176 Hammonton Smartville Road, Marysville, California*, dated April 1, 2009 and the Professional Service Agreement entered into by the MJUSD and ARCADIS dated July 18, 2011. ARCADIS's performance of the services is specifically intended to develop required information for MJUSD to develop the Site.

### 1.2 Scope of Work

The scope of work for this assessment included the following:

- conducting a reconnaissance-level survey of the Site and a review of site history to obtain evidence of past releases of hazardous materials, if any, and to assess the potential for on-site releases of hazardous materials
- evaluating land use in the vicinity of the Site including the presence of underground storage tanks (USTs), above ground storage tanks (ASTs), hazardous air emitters, and electrical transmission lines within the radii specified by California and ASTM regulations
- evaluating historical information regarding the past use, storage, disposal, or release of hazardous wastes/substances at the Site
- preparing a scope of work for further assessment of on-site areas of potential concern during the PEA
- completing a checklist of hazards as described in California Code of Regulations, Title 5 (Section 14001) used by the California Department of Education (CDE) School Facilities Planning Division staff for site-review purposes
- preparing this work plan to present our findings and proposed scope of work

### 1.3 Significant Assumptions

ARCADIS assumes that the information provided by the MJUSD, previous site owner, regulatory database provider, and regulatory agencies is true and reliable.

### 1.4 Limitations and Exceptions

Site-specific activities performed by ARCADIS and the information collected during these activities are summarized in the following sections.

The opinions and recommendations presented in this report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by ARCADIS and the original party for whom this report was prepared. This report is an instrument of professional service and was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry. To the extent that ARCADIS relied upon any information prepared by other parties not under contract to ARCADIS, ARCADIS makes no representation as to the accuracy or completeness of such information.

Only the party for whom this report was originally prepared, and other specifically named parties, may make use of and rely upon the information in this report, in its entirety, for a period not to exceed 180 days in accordance with the ASTM's *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process,* ASTM Designation E 1527-00 dated May 10, 2000, ASTM's *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process,* ASTM Designation E 1527-05 dated November 1, 2005, and/or the Code of Federal Regulations (CFR) 40 CFR Part 312 *Standards and Practices for All Appropriate Inquiries: Final Rule,* dated November 1, 2005. After 180 days and prior to using the information contained herein, the report should be updated in accordance with ASTM Standards and Federal regulations.

The findings presented in this report apply solely to site conditions existing at the time when ARCADIS's assessment was performed. It must be recognized, however, that an ESA is intended for the purpose of evaluating the potential for contamination through limited research and investigative activities and in no way represents a conclusive or complete site characterization. Conditions in other parts of the project site may vary from those at the locations where data were collected. ARCADIS's ability to interpret investigation results is related to the availability of the data and the extent of the investigation activities. As such, 100 percent confidence in ESA conclusions cannot reasonably be achieved.

ARCADIS, therefore, does not provide any guarantees, certifications, or warranties (express or implied) that a property is free from environmental contamination. Furthermore, nothing contained in this document shall relieve any other party of its responsibility to abide by contract documents and all applicable laws, codes, regulations, or standards.

### 1.5 User Reliance

This report is for the exclusive use of the MJUSD, its agents, and assignees. Use of this report by any other party shall be at such party's sole risk.

### 1.6 Data Gaps

The following represent data gaps:

- A 50-year chain of title for the Site was not reviewed by ARCADIS prior to the completion of this document. This data gap does not appear to be significant because sufficient historical sources, including aerial coverage dating back to 1947, was reviewed to establish past site uses and past ownership is known.
- A preliminary title report for the Site was not reviewed by ARCADIS prior to the completion of this document. This data gap does not appear to be significant because the current site owner and on-site easements are known and the names of previous site owners dating back to 1977 were provided in the Guarantee prepared by First American Title Insurance Company.
- Lack of soil and water quality data from the Site. This data gap appears to be significant because of historical site uses and current site conditions.

These data gaps do not appear to impede ARCADIS' ability to identify RECs.

## 2. SITE SETTING

### 2.1 Location

The approximate 50-acre site is located on the southwestern corner of the intersection of Dantoni and Hammonton Smartsville Roads in Yuba County, California (Figure 1). The YCAO designates the parcels comprising the Site as APNs 021-150-032 and a portion of 021-150-060. The MJUSD currently owns the Site. The Site and surrounding vicinity are shown on the Site Vicinity Map (Figure 1). A Site Plan depicting the configuration of the buildings and exterior features of the Site is included as Figure 2.

The approximate geographic coordinates of the Site are 39° 8' 1.3" north latitude and minus 121° 32' 16.1" west longitude, according to information obtained from Environmental Data Resources, Inc. (EDR) of Milford, Connecticut.

Topography at the Site ranges from between 65 to 73 feet (ft) mean sea level (msl) according to information obtained from the United States Geological Survey (USGS) 7.5-Minute Series Topographic Map of the Yuba City, California Quadrangle dated 1973 (photorevised from 1952). The surface of the Site slopes toward the southwest. The regional topography slopes to the west-southwest toward the Feather River.

## 2.2 Geology and Hydrogeology

### 2.2.1 Regional and Local Geology

The Site is located near the eastern boundary of the Sacramento River Valley which represents part of the Great Valley Geomorphic Province (California Geological Survey 2002). The Great Valley trends generally north-south and is bordered by the Coast Ranges to the west and by the Sierra Nevada to the east. The Great Valley is an asymmetrical synclinal trough about 50 miles wide and 400 miles long with its axis off-center to the west in which sediments have been deposited almost continuously since the Jurassic Period (about 160 million years ago).

Lithology beneath the Great Valley is composed of alluvial sediments known as the Great Valley Sequence, comprising interbedded sedimentary units. The thickness of the Great Valley Sequence exceeds 25,000 ft in some areas. These sediments are primarily eroded rock from the Sierra Nevada and were deposited in the trough from the Cretaceous to the Quaternary Periods. Because the syncline was previously under water, some of the sediments are of marine origin.

Pleistocene age sediments, deposited by the ancestral Yuba River are presumed to underlie the Site. These sediments are part of the Victor formation which consists primarily of unconsolidated gravel, sand, silt, and clay.

The surficial sediments at the Site have been mapped as unconsolidated Quaternary alluvial deposits (Saucedo and Wagner 1992). The soils at the Site have been mapped predominantly as "San Joaquin Loam" by the National Resource Conservation Service (NRCS; 2009). San Joaquin soils are typically associated with alluvial deposits; they consist of a mixture of sand, silt, and clay.

It should be noted that ARCADIS has not yet conducted subsurface investigations at the Site, and that the local and regional geologic conditions described herein are based solely upon available literature regarding the area and borings advanced by other consultants.

#### 2.2.2 Regional and Local Surface and Groundwater Hydrology

The Site lies in the South Yuba Sub-basin of the Sacramento Valley Groundwater Basin of California (California Department of Water Resources 2006). Groundwater-bearing formations in the vicinity of the Site consist of Quaternary to late Miocene age alluvium. Well records indicate that groundwater occurs at relatively shallow depths in the Site area, estimated at approximately 15 to 25 ft below ground surface (bgs; ARCADIS 2009).

The Site lies approximately 1.7 miles south of the Yuba River, and approximately 3.2 miles west of the Feather River. It is separated from both rivers by levees; the nearest levee, which lies between the Site and the Yuba River, is located approximately 1,000 ft northwest from the northwest corner of the Site. Local surface drainage is predominantly to the southwest, towards the Feather River.

A small channel, mapped by the Federal Emergency Management Agency (FEMA; 2007) as the “Upper Linda Drain,” crosses the Site, in a general northeast-to-southwest direction. The Linda Drain is shown on the Revised South Yuba Drainage Master Plan prepared by MHM Inc. (MHM). Under existing land use conditions, estimated runoff that would occur during a 100-year frequency storm event would be 875 cubic ft per second at the Southern Pacific Rail Road (SPRR) culvert (MHM 1992).

According to information provided by the Yuba County Public Works Department (YCPW), the Linda Drain begins approximately 19,000 ft northeast of the intersection of Alberta Avenue and Hammonton Smartsville Road. The Linda Drain relies on gravity flow and does not contain pumps. The YCPW does not collect water samples from the Linda Drain, therefore, information is not available on water quality. In addition, information is not available of the lining (if any) along the bottom and sides of the Linda Drain, or on the width and depth of the Linda Drain.

According to EDR, a total of 31 wells are reportedly present within a 1-mile radius of the Site. The nearest well is located approximately 40 ft north of the Site and is associated with the Linda County Water District (LCWD) Well Station Number 15.

Based upon ARCADIS’s review of data from monitoring wells installed in the site vicinity, the depth to groundwater was identified between 42 and 65 ft bgs. Groundwater flow direction in the site vicinity was assumed to be towards the southwest based on topography.

### 2.3 Site Vicinity

At the time of the site reconnaissance, the Site was bordered to the north by Hammonton Smartsville Road with residential structures farther to the north, to the east by undeveloped land with residential structures farther to the east, to the south by residential structures, and to the west by undeveloped land and 115 kilovolt (kV) power lines further to the west. In general, the site vicinity consisted of residential properties.

### 2.4 Designated MJUSD Contact Person and Mailing Address

Mr. Mark Allgire
Assistant Superintendent, Business Services
Marysville Joint Unified School District
1919 B Street
Marysville, California 95901
Telephone Number: (530) 749-6115
E-mail address: mallgire@mjusd.k12.ca.us

## 3. User-Provided Information

The following items regarding the Site were provided by the MJUSD or obtained by ARCADIS on behalf of the MJUSD. ARCADIS provided Ms. Michal Healy, the Director of Planning and Design for the MJUSD, with a questionnaire on the environmental status of the property. Ms. Healy completed the questionnaire on August 27, 2009. A copy of the questionnaire is included in Appendix A and summarized below.

### 3.1 Title Record

A preliminary title report was not reviewed prior to the completion of this report and is considered a data gap for ARCADIS's assessment. However, a listing of on-site easements and the names of previous site owners dating back to 1977 were presented in the *Guarantee* prepared by First American Title Insurance Company and dated September 22, 2010; this document was provided to ARCADIS by the MJUSD and a copy is included in Appendix A.

### 3.2 Environmental Liens or Activity and Use Limitations

ARCADIS did not provide a questionnaire to past site owners; however, we submitted a questionnaire to the MJUSD requesting information pertaining to specialized knowledge they may have of the Site. The following questions and responses were obtained from the questionnaire completed by the MJUSD:

- ***Question:*** Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state, or local law?
  ***Response: Unknown.***

- ***Question:*** Are you aware of any activity or land use limitations, such as engineering controls, land use restrictions, or institutional controls, that are in place at the Site and/or have been filed or recorded in a registry under federal, tribal, state, or local law?
  ***Response: Unknown.***

ARCADIS obtained an Environmental Lien Search Report from EDR (EDR Project Number 2556892.7, dated August 11, 2009) for the Site. No environmental liens associated with the site APNs were found during their review of public information according to information provided by EDR. A copy of EDR's Environmental Liens Search Report is provided in Appendix B.

### 3.3 Specialized Knowledge

The following responses to ARCADIS's questions were obtained from the MJUSD as part of the assessment:

- ***Question****:* Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business? ***Response: No****.*

- ***Question****:* Are you aware of commonly known or reasonably ascertainable information about the Site that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user, please respond to the following questions.

    a) ***Question:*** Do you know the past uses of the property? ***Response: Unknown. Third parties information has indicated dairy and farming past uses. The MJUSD has no first-hand knowledge.***

    b) ***Question:*** Do you know of specific chemicals that are present or once were present at the property? ***Response: Unknown.***

    c) ***Question:*** Do you know of spills or other chemical releases that have taken place at the property? ***Response: Unknown.***

    d) ***Question:*** Do you know of any environmental cleanups that have taken place at the property? ***Response: Unknown.***

e) ***Question:*** Do you know if any fill material has been imported to the Site? ***Response: Unknown.***

f) ***Question:*** Do you know of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the Site? ***Response: Unknown.***

- ***Question:*** Do you know of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the Site? ***Response: Unknown.***
- ***Question:*** Do you know of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products? ***Response: Unknown.***

### 3.4 Commonly Known or Reasonably Ascertainable Information

The following responses to ARCADIS's questions were obtained from the MJUSD as part of the assessment:

- ***Question:*** Based on your knowledge and experience related to the Site are there any obvious indicators that point to the presence or likely presence of contamination at the Site? ***Response: No.***

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

According to the YCAO, the previous owner of APN 021-150-032 was listed as Mr. Eric Butler, Ms. Angela Butler, Mr. Brett Butler, The Greenberg Family Trust, The Butler Family Trust, and Mr. Stephen M. Hull. The previous owner of APN 021-150-060 was listed as the Blair Family Trust (with Ms. Roberta Butler listed as the successor trustee).

The MJUSD currently owns the Site.

## 4. Site and Site Vicinity Reconnaissance

### 4.1 August 2009 Site Reconnaissance

On August 26, 2009, Mr. Scott Hackman of ARCADIS conducted a reconnaissance of the Site to photograph general site conditions and indications of possible chemical releases. Mr. Hackman was met on the Site by one of the previous site owners, Mr. Hull. Mr. Hull noted that the current on-site structures were first occupied in approximately 1912. Mr. Hull was unaware of any USTs, ASTs, or septic tanks formerly or currently located on the Site.

### 4.2 August 2011 Site Reconnaissance

On August 16, 2011, Mr. Hackman of ARCADIS conducted a reconnaissance of the Site to photograph general site conditions and indications of possible chemical releases since the August 2009 site reconnaissance. Mr. Hackman was met on the Site by Ms. Mary Gaspari of the DTSC and Ms. Healy of the MJUSD. At the time of ARCADIS's visit, the eastern, southern and northern site boundaries were marked by a chain-link-fence and the western site boundary was demarcated with wooden stakes every 100-ft. Site reconnaissance photographs are provided in Appendix A.

For purposes of this assessment, APN 021-150-032 and a portion of APN 021-150-060 were considered the approximately 50-acre Site.

The following is a summary of the findings observed during the site reconnaissance:

- The Site was developed with five permanent structures identified as Buildings 1 through 5 on Figure 3. Building 1 was approximately 10-ft by 10-ft and consisted of wood framed construction painted white. Building 1 was assumed to formerly be used as a shed for storage of household goods. Building 2 was approximately 21-ft by 36-ft and consisted of wood framed construction painted white. Building 2 was assumed to formerly be used as a residence. Building 3 was approximately 20-ft by 35-ft and consisted of an approximately 4-ft tall concrete foundation painted white with wood framed construction painted white. Building 3 was assumed to formerly be used for refrigeration of raw milk. A wood framed, steel sided three-sided shed was attached to the southern side of Building 3; this shed has a bare soil floor and was full of garbage and household debris. Building 4 was approximately 30-ft by 40-ft and consisted of an approximately 4-ft tall concrete foundation painted white with wood framed construction painted white. Building 4 was assumed to formerly be used as a barn for farm equipment storage and/or cow milking. Building 5 was approximately 45-ft by 60-ft and consisted of wood framed construction with metal sheeting. Building 5 was assumed to formerly be used as a barn for farm equipment storage. A metal framed shed used to store bags of fertilizer was located on the northern side of Building 5. Buildings 4 and 5 contained concrete flooring in good condition with no visible staining.
- The buildings featured rock and tar or steel roofs. The exterior paint (if any) of the on-site buildings appeared to be in generally poor condition.
- A potential former burn pit was observed within Building 5. A concrete floor appeared to be present beneath the former burn pit.

- Two approximately 15-ft by 15-ft concrete foundations of former structures were observed on the Site. The former structures with visible foundations are identified as F1 and F2 on Figure 3.
- Two former structures were observed on aerial photographs with no concrete foundations observed in the field. The former structures without visible foundations are identified as F3 and F4 on Figure 3.
- A concrete water trough was observed to the west of former structure F4 as shown on Figure 3.
- Two large piles of trash and municipal waste were observed centrally located on the Site near Building 5 (identified as Wood/Trash Piles #1 and #2 on Figure 3). According to Mr. Hull, the trash had been deposited on-site from off-site unknown source(s).

  The trash piles appeared to consist of mainly household waste, furniture, and wood debris painted white. The trash will be properly removed from the Site for disposal by the MJUSD prior to implementation of the sampling proposed in the PEA work plan.
- One abandoned truck, one abandoned crop harvester, and two plows were observed on the Site during the August 2009 site visit. This equipment was removed (not by the MJUSD) from the site prior to the August 2011 site visit. No soil staining from potential leakage of petroleum hydrocarbons was observed in the area where the equipment was formerly located.
- One livestock feeding trough was observed on the southern portion of the residential area during the August 2009 site visit. This trough was removed from the Site prior to the August 2011 site visit. No livestock feed was observed within the trough.
- One unlabeled 55-gallon steel drum was observed adjacent to the former abandoned truck as shown on Figure 3. The drum contained an unknown quantity of an unknown liquid. The drum was in good condition with no holes and a secure lid. No soil staining or distressed vegetation was observed in the vicinity of the drum.
- Two large piles of fill material and concrete were observed east of Building 5 (as shown on Figure 3). A significant amount of vegetation was observed on the fill material piles.
- Approximately 10 power poles for communication lines were located on-site south of Hammonton Smartsville Road. In addition, six power poles for both power and communication lines were observed within the residential portion of the Site during the August 2009 site visit. One power pole containing two pole-mounted transformers was observed centrally located within the residential portion of the Site southeast of Building 1 during the August 2009 site visit. No evidence of staining was observed on the soil around the base of the power pole.

According to available information, the transformers are owned and maintained by Pacific Gas and Electric (PG&E). No "Non-PCB" sticker was observed on the transformers and information on the age of the transformers was not available to ARCADIS during the August 2009 site visit. The cooling oil may contain PCBs; however, no evidence of damage was noted on the transformers and the transformers appeared to be in good condition.

The power pole with the pole-mounted transformers had been removed (not by MJUSD) prior to the August 2011 site visit. The location of the former power pole was confirmed during the August 2011 site visit and shown on Figure 3.

- Two drinking water-supply wells were observed to the west of the power pole containing the pole-mounted transformers (Figure 3). Well construction details were not reviewed by ARCADIS from the California Department of Water Resources (DWR) or discussed with the current site owner prior to the completion of this PEA work plan. Water quality and/or sampling frequency information for the on-site wells was not available to ARCADIS prior to the completion of this PEA work plan. These wells will be properly destroyed by the MJUSD prior to implementation of the sampling proposed in this PEA work plan.
- One concrete framed water trough was observed to the south of the Linda Drain. No water was observed within the trough and the trough was not painted.
- One approximately 75-gallon pressure tank was observed at the well-head of one of the drinking water supply wells. In addition, an approximately 1,000-gallon AST assumed to store water was observed west of the pressure tank.
- A storm-water drainage ditch maintained by the YCPW and referred to as the Linda Drain is located on the Site. The Linda Drain extends from off-site on northeastern corner of the site to the southern portion of the residential portion of the Site and off-site on the southwestern corner of the Site. Surface water flowing from northeast to southwest was observed in the drainage ditch during ARCADIS's site visit. The location of the drainage ditch is shown on Figure 2 and Figure 3.
- Two approximately 15-ft by 15-ft piles of fill material were observed on the southwestern portion of the Site adjacent to the drainage ditch. No distressed vegetation, significant odors, or soil staining was observed on the piles of fill material (Figure 2).
- Information provided by LCWD identified one 12-inch (60 psi average pressure) below ground water line located on the western portion of the Site. The water line extended from North Beale Road (off-site to the south) along Sutter Street (off-site) to Hammonton Smartsville Road (off-site to the north). No pipeline demarcation posts were observed in the field.
- The remaining portions of the Site were undeveloped land covered with tall grass.

### 4.3 Off-Site Reconnaissance

At the time of ARCADIS's site reconnaissance, the following findings were documented for the site vicinity:

- The Site was bordered to the north by Hammonton Smartsville Road with power lines and residential structures farther north, to the east and south by residential structures, and to the west by undeveloped land with residential structures farther west.
- Electrical lines were observed west of the Site and to the north of the Site across Hammonton Smartsville Road. The electrical lines to the west of the Site are 115 kV (designated as Palermo-Bogue Lines by PG&E) and are located approximately 600 ft from the western site boundary which is greater than the 100-ft set-back from 50-133 kV lines needed for a school site as detailed in the California Code of Regulations, Title 5, Division One, Chapter 13, Subchapter One, School Facilities Construction, Article Two, School Sites, Paragraph C. The electrical lines to the north of the Site were not reported as high voltage power lines by PG&E and are anticipated to be general service lines with a voltage of less than 50 kV.
- LCWD Well Station Number 15 is located at 6294 Dantoni Road approximately 40 ft north of the northern site boundary. An approximately 240,000 gallon water tank and a diesel generator were observed on the 6294 Dantoni property approximately 500 ft north of the northeastern site boundary. A water-supply well associated with LCWD Well Station Number 15 was observed on the northwestern corner of the intersection of Hammonton Smartsville and Dantoni Roads approximately 40 ft north of the Site.
- An approximately 4-ft high, 20-ft by 20-ft pile of fill material was observed off-site adjacent to the northeastern corner of the site and an approximately 15-ft by 15-ft pile of fill material was observed off-site adjacent to the southwestern corner of the site. No soil staining or distressed vegetation was observed on or in the vicinity of the fill material.
- Information provided by the FRAQMD identified one permitted hazardous air emitter within a 0.25-mile radius of the Site. The LCWD well station 15 located at 6294 Dantoni Road in Marysville, California contains a diesel generator which operates under a FRAQMD permit for the air emission of diesel. In addition, Hammonton Smartsville, Simpson-Dantoni, and North Beale Roads were roadways identified as hazardous air emitters in the site vicinity.

## 5. Public Record Review

### 5.1 Environmental

An environmental database report prepared by EDR was reviewed for local, state, and federal listings for properties within the site area. Included in EDR's report are regulatory database lists, which were reviewed by EDR for cases pertaining to leaking USTs and ASTs, hazardous waste sites, and abandoned sites within ASTM-specified radii (Table A). EDR also reviewed selected database lists generated by the United States Environmental Protection Agency (U.S. EPA). Explanations of the regulatory agency database lists reviewed and acronyms used by EDR are presented in EDR's report in Appendix C.

**Table A: Regulatory Agency Databases/Lists Reviewed**

| Search Radius | Agency | Database | Type of Records in Database |
|---|---|---|---|
| 1 mile | U.S. EPA | NPL | Sites designated for Superfund cleanup by the U.S. EPA |
| | U.S. EPA | CORRACTS | Resource Conservation and Recovery Act facilities undergoing "corrective actions" |
| | DTSC | AWP (SPL) | Sites prioritized by the state for cleanup |
| | IWMB | SWIS | Sites included in the Solid Waste Information System database |
| 0.5 mile | U.S. EPA | CERCLIS | Sites under review by the U.S. EPA |
| | U.S. EPA | TSD | Facilities that treat, store, and/or dispose of hazardous waste |
| | DTSC and RWQCB | SLIC/Toxics | Sites with solvents/toxics contamination |
| | RWQCB | LUST | Sites with leaking USTs (LUSTs) |
| | IWMB | SWLF/SWAT | Sites permitted as solid waste landfills, incinerators, or transfer stations |
| | OEP, OHM | CORTESE | Sites on state index of properties with spills |
| Site/Adjoining Properties Only | U.S. EPA | RCRA Generator | Sites that generate large or small quantities of hazardous waste |
| | DTSC | Cal-Sites (SCL) | Sites under review by the state |
| | OES, Fire Department | ERNS | Sites with reported accidental releases of oil and hazardous substances |
| | SWRCB | UST/AST | Sites with registered USTs or ASTs |
| | U.S. EPA | CERCLIS – NFRAP | CERCLIS sites with no further remedial actions planned at time of report |
| | U.S. EPA | FINDS | Sites included on the facility inventory database |

**Notes**:

DTSC=Department of Toxic Substances Control
NPL=National Priority List
RCRA=Resource Conservation and Recovery Act
OES = Office of Emergency Services
FINDS=Facility Inventory Database System
SWRCB=State Water Resources Control Board
RWQCB=Regional Water Quality Control Board
SWIS=Solid Waste Information System

IWMB=Integrated Waste Management Board SWLF=Solid Waste Landfills
LUST=Leaking Underground Storage Tank
OEP, OHM = Office of Emergency Planning, Oil and Hazardous Material
CERCLIS = Comprehensive Environmental Response, Compensation and Liability Information System

#### 5.1.1 Site

The Site was not identified on the databases searched by EDR.

#### 5.1.2 Off-Site Properties

Several off-site regulated properties/facilities were identified in the area; those with a potential to impact the Site due to proximity or location with respect to shallow groundwater flow direction are discussed below.

**2184 Cecelia Way in Marysville, California.** There was one unregulated release of an unknown airborne chemical, possibly insecticide from 2184 Cecelia Way in April 2007. This release was reported to the Yuba County Office of Emergency Services (YCOES) by a neighbor and is believed to be a small airborne release, and is not considered by ARCADIS to be a potential source of impact to the site. Details of this release are included in the EDR report in Appendix C.

**Linda Elementary School.** The Linda Elementary School, located at 6180 Dunning Avenue, was identified on the SCH (proposed and existing school properties that are being evaluated by the DTSC), Envirostor (facilities that have known contamination or for which there may be reasons to investigate further) and Haznet databases. The Linda Elementary School is not considered by ARCADIS to be a potential source of impact for the Site because of its distance (976 ft) and its cross-gradient location (with respect to the anticipated groundwater flow direction).

**Yuba College.** The Yuba College – Marysville Campus located at 2088 North Beale Road (located approximately 1,500 ft upgradient from the Site), is identified on the Historical UST, RCRA-SQG, Finds, Haznet, LUST, UST, CA FID UST, Sweeps UST, HIST Cortese, and Manifest databases.

According to Dave Kendel, a project manager of the Yuba College, no groundwater monitoring wells are located on the Yuba College. No additional environmental information was available from Mr. Kendel prior to the completion of this document.

According to information provided by the Yuba County Environmental Health Department (YCEHD), there have been two USTs historically removed from the Yuba College facility.

On November 2, 2006 an 8,000 gallon UST (4,000 gallon gasoline and 4,000 gallon diesel dual-compartment UST) was removed in excellent condition. All confirmation samples collected during removal were either non-detect or relatively low concentrations therefore, the YCEHD granted “no further action” with regards to the 8,000 gallon UST in a letter to the Yuba College dated December 20, 2006.

On April 14, 2009 a 10,000 gallon diesel UST was removed in excellent condition. All confirmation samples collected during removal were either non-detect or relatively low concentrations therefore the YCEHD granted “no further action” (with regards to the 10,000 gallon diesel UST, piping sump, and the removed piping) in a letter to the Yuba College dated May 8, 2009. According to the YCEHD, no other former or active USTs were reported for the Yuba College. Based on the “no further action” letters from the YCEHD, the Yuba College is not considered by ARCADIS to be a potential source of impact for the Site. A copy of the YCEHD “no further action” letters are including in Appendix A.

Based on available information, the remaining facilities identified by EDR do not appear to be a potential source of impact for the Site because of their distance from the Site, impact to soil only, and/or are cross gradient to downgradient with respect to anticipated groundwater flow direction.

EDR identified several regulated facilities that could not be located because of insufficient address information. These facilities are referred to by EDR as “orphan” facilities. Based on our knowledge of the site vicinity and our observations during the site reconnaissance, these properties do not appear to be located in close proximity to the Site, and are therefore unlikely to represent an environmental concern to the Site.

**Peach Tree Golf and Country Club.** The Peach Tree Golf and Country Club located at 2043 Simpson Dantoni Road (approximately 1,500 ft from and cross-gradient of the Site with respect to assumed shallow groundwater flow direction), is identified on the Historical UST, CA FID UST and Sweeps UST databases. Information obtained from the YCEHD indicate the removal of one 1,000-gallon gasoline storage UST and one 500-gallon diesel storage UST from the Site in April 1988. Hydrocarbons in air measurements were collected beneath the fill ends of both tanks using a Gastech Hydrocarbon meter and were reported to be 50 parts per million (ppm) and 100 ppm. According to the Yuba County, contamination was considered minor and the site was considered closed on August 24, 1990. Soil was to be excavated and aerated; however, no excavation information was found at the YCEHD. Available documentation pertaining to the former USTs is included in Appendix A.

### 5.2 Historical

ARCADIS obtained historical information on the Site and site vicinity during this assessment, as summarized in Table B. Because of the aerial photographs' and maps' scale, actual site boundaries may not be easily inferred; therefore, for review of the topographic maps and aerial photographs, the school campus was referred to as the Site. For recommendation purposes, only the areas proposed by the MJUSD for construction are referred to as the Site.

**Table B: Historical Information Reviewed/Agency Records Summary**

| Source | Date | Information Obtained |
|---|---|---|
| Topographic Maps (copies provided in Appendix D) | Site: 1895, 1952, and 1973 | **Site.** Site details are not discernable on the 1895 topographic map because of the maps' scale. Three unlabeled structures are depicted within the site boundaries on the 1952 map. In addition, the site area appears to be located between 65 and 70 ft above msl. No additional information can be gathered from the 1973 map.<br><br>**Off Site.** Present day Hammonton Smartsville Road is depicted on the 1895 map forming the northern border of the Site. On the 1952 map, five unlabeled structures are depicted across Hammonton Smartsville Road to the north of the Site. In addition, on the 1952 map, undeveloped land is depicted to the east, west, and south bordering the Site. Land bordering the Site is unchanged in the 1973 map. Yuba College appears to the south of the Site on the 1973 map. The topographic maps reviewed for this assessment were provided by EDR. |

| Source | Date | Information Obtained |
|---|---|---|
| Aerial Photographs (copies provided in Appendix E) | 1947, 1969, 1974, 1984, 1987, 1998, and 2005 | **Site**. In the 1947 photograph, the northeastern portion of the Site appears to be developed with three structures; these structures were likely part of a farm. Building 5 is visible and another structure is directly east of Building 5 in the vicinity of the piles of fill material observed during the site visit. Another structure is visible directly east of Building 5 on the eastern side of the Linda Drain. The remaining portions of the Site appear to be undeveloped grass land. The Site appears relatively unchanged in the 1969 photograph. The structure on the eastern side of the Linda Drain appears to have been demolished in the 1974 aerial photograph and Building 2 has been added to the Site in the orientation observed during ARCADIS's site visit. Due to the poor quality of the 1984 and 1987 photographs, changes to the on-site structures are difficult to discern, but the Site use appears to remain relatively unchanged. Buildings 1, 3, and 4 are visible on the 1998 aerial photograph and the former structure east of Building 5 appears to have been demolished. The Site appears relatively unchanged in the 2005 photograph.<br><br>**Off Site**. Residential development east of the Site and farming fields are visible to the north, south, and west of the Site in the 1947 aerial photograph. Expanded residential development east of the Site and the addition of Yuba College to the south of the Site appear in the 1969 photograph. The area surrounding the Site appears basically unchanged in the 1974 photograph. There is some additional residential development to the south-west of the site in the 1984 photograph, while the 1987 photograph is basically unchanged. In the 1998 photograph, a small residential development appears to the south of the Site. In addition, the LCWD well station 15 and approximately 240,000 gallon water AST are visible approximately 500 ft north of the northeastern site boundary. The residential development south of the Site appears to have been further developed to its present day configuration in the 2005 photograph. |
| Sanborn® Fire Insurance Maps ("No Coverage" letter in Appendix F) | EDR Completion Date Order 8/4/2009 | According to EDR, Sanborn® Fire Insurance Maps that cover the Site are not available. |
| City Directory Abstract (copies provided in Appendix G) | EDR Completion Date Order 8/27/2009 | The EDR City Directory Abstract Report (EDR Inquiry Number 2574390.1), provided information from Polk's City Directory for various years between 1965 and 2001. The Site was classified residential on the 1981 through 2001 directories. Adjoining properties are listed as residential, except Linda Saw & Mower Shop at 2089 Hammonton Smartsville Road in the 1986 through 2001 directories. |

| Source | Date | Information Obtained |
|---|---|---|
| Yuba County Assessor's Office (YCAO) | August 2009 | **Property Improvements and Valuation Records.** According to the YCAO, APN 021-150-032 consists of 40-acres and is owned by Mr. Eric Butler, Ms. Angela Butler, Mr. Brett Butler, The Greenberg Family Trust, The Butler Family Trust, and Mr. Steve Hull. In addition, APN 021-150-060, which comprises a portion of the site consists of 76.83-acres and is owned by the Butler Family Trust (with Ms. Roberta Butler listed as the successor trustee). The approximately 50-acre site encompasses the entire APN 021-150-032 and a portion of APN 021-150-060. A copy of parcel map is included in Appendix A. |
| Linda Fire Department (LFD) | September 2009 | **Fire/Emergency Response or Chemical Release**. ARCADIS contacted the LFD for information regarding chemical releases or fire/emergency responses at the Site. According to Mr. Bob Criss (Assistant Fire Chief), no incidents have occurred at the Site in his 35 year history with the LFD, with the exception of small grass fires where no structures were damaged.<br><br>A copy of ARCADIS's Telephone Memorandum with the OFD is located in Appendix A. |
| Yuba County Building Department (YCBD) | August 2009 | **Permits.** ARCADIS contacted the YCBD for information pertaining to building permits associated with the Site. The YCBD had two permits for mobile home installations on record in 1966 and 1974. No mobile homes were observed on-site during ARCADIS's site visit. According to the YCBD, there is a leach field and septic system on-site which was not mentioned by the site owner during ARCADIS's site visit.<br><br>Copies of ARCADIS's Telephone Memorandum with the YCBD is presented in Appendix A. |
| Yuba County Environmental Health Department (YCEHD) | August 2009 | **Files Pertaining to Chemical Usage, Hazardous Materials Storage, and Hazardous Materials Release on Site and Adjacent Properties**.<br><br>ARCADIS contacted the YCEHD regarding information about chemical usage, hazardous materials storage, septic systems, and hazardous materials releases on-site and at the adjoining property located at 2184 Cecelia Way. No files were available for either property.<br><br>As detailed in Section 5.1.2, two former USTs were removed from the Yuba College facility located approximately 1,500 ft south of the Site. The YCEHD granted "no further action" regarding both the former USTs. No other former or active USTs were reported for the Yuba College. Based on the "no further action" letters from the YCEHD, the Yuba College is not considered by ARCADIS to be a potential source of impact for the Site.<br><br>A copy of ARCADIS's Telephone Memorandum with the YCEHD and copies of the "no further action" letters pertaining to the Yuba College is presented in Appendix A. |

| Source | Date | Information Obtained |
|---|---|---|
| Feather River Air Quality Management District (FRAQMD) | August 2009 | **Hazardous Air Emitters.** ARCADIS contacted the FRAQMD for information pertaining to air emitters or hazardous materials handlers located within a 0.25-mile radius of the Site. The FRAQMD identified one permitted facility located at 6294 Dantoni Rd. ARCADIS noted this facility during the August 26, 2009 site visit. The facility is a diesel powered water supply well. No concern is associated with the diesel generator. A copy of ARCADIS's Telephone Memorandum with the FRAQMD is located in Appendix A. |
| Yuba County Agricultural Commissioner (YC Ag Commissioner) | October 2009 | **Pesticide Use Permits. According to the** YC Ag Commissioner, one permitted pesticide identified as Gly Star Original (42750-60-AA-0) was used during the past four years. According to the YC Ag Commissioner, Gly Star Original is a generic form of Roundup herbicide by Monsanto and is a non-restricted, short lived pesticide. Approximately 2.5-gallons of Gly Star Original was permitted for use on the Site. A copy of ARCADIS's Telephone Memorandum with the YC Ag Commissioner is located in Appendix A. |
| Regional Water Quality Control Board (RWQCB) | August 2009 | **Past Investigations.** ARCADIS contacted the RWQCB for information pertaining to past investigations and remedial activities conducted on the Site. According to the RWQCB file review specialist, no files were available for the Site. |
| Yuba County Office of Emergency Services (YCOES) | September 2009 | **Hazardous Materials Release.** ARCADIS contacted YCOES concerning a reported minor airborne chemical release, shown in EDR's report that occurred at 2184 Cecelia Way in April 2007. The YCOES advised ARCADIS that if any additional information was available, it would be on file with the YCEHD. |

### 5.3 August 2011 Updated Information

Following the August 2011 site visit the YCEHD and LFD were contacted for available information added to their files following the August 2009 site visit. According to the YCEHD and LFD, no additional information was available. Updated telephone logs and legal description for the site are included in Appendix A.

### 5.4 Previous Site Investigations

According to information obtained by ARCADIS during this assessment, no previous environmental investigations have been conducted for the Site.

## 6. Additional Research Data

### 6.1 Radon Gas Data

The U.S. EPA considers radon to be unhealthful at levels of 4.0 picoCuries per liter (pCi/L) of air or greater. According to the CA Radon State Database there were 14 sites in zip code 95901 and none of them contained radon above 4.0 pCi/L. According to Federal Area Radon Information for zip code 95901 average first floor living area and basement radon levels collected from 9 sites were 0.689 pCi/L and 1.600 pCi/L, respectively. The potential for elevated radon levels at the Site appears to be low for aboveground and below ground structures.

### 6.2 Regional Asbestos Information

Asbestos deposits, which are located in many parts of California, are commonly associated with serpentine and can be either asbestiform (fibrous) or non-asbestiform (platy). Chrysotile, crocidolite, amosite, tremolite, actinolite, and anthophyllite are the principal forms of asbestos. Chrysotile breaks into curly fibers, while the remaining types tend to have a thin needle-like appearance.

Serpentinite is rock composed almost entirely of serpentine and is the most common host rock for chrysotile. Generally, chrysotile and amphibole asbestos varieties occur in areas where the original rock has metamorphosed under elevated temperatures and pressures. Serpentinite and its parent material, ultramafic rock, are present in California's Sierra Nevada Foothills. Typically, the asbestos content of these rocks ranges from less than 1 percent to about 25 percent, with higher concentrations sometimes found.

Disturbance of asbestos-containing rock and soil can result in a release of asbestos fibers to the air. This disturbance can be caused by driving over roads or driveways surfaced with these materials, construction activities (ripping of outcrops and bedrock), and/or weathering and erosion processes. Once released into the air, asbestos fibers are relatively stable and can remain airborne for long periods of time.

Asbestos fibers that have become airborne can be inhaled deep into the lungs where they can remain for extended periods of time or be translocated to other parts of the body. Once inhaled, asbestos fibers can result in health problems. The potential for developing health problems from asbestos exposure depends on the length and intensity of the exposure. Asbestos is classified as a known human carcinogen by state and federal agencies. Diseases related to asbestos exposure include asbestosis, lung cancer, and mesothelioma.

The best-known guidance on the occurrence of ultramafic rocks in California is "A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain naturally Occurring Asbestos," published by the California Department of Conservation (CDMG 2000). There are exposures of ultramafic rocks in the Sierra foothills to the east of the Site, in the general upgradient direction (Saucedo and Wagner 1992; CDMG 2000). However, these exposures occur at distances of more than 10 miles from the Site. The general lack of detail on this map makes pinpointing the Site challenging, and as a result this measured distance is roughly approximated.

Based on these measured distances, outcrops of serpentinized ultramafic rock are well beyond the 10-mile criterion. The exposures therefore do not represent a significant concern based on the distance criterion defined in the DTSC Guidance (DTSC 2004).

### 6.3 California General Education Code Provisions

As part of an evaluation of the Site as a potential school site, ARCADIS was requested to assess the following environmental issues, which are applicable to Kindergarten through 12 schools, as noted in certain portions of the Phase I Environmental Site Assessment Advisory: School Property Evaluations and the State of California General Education Code Provisions, Division 1, Part 10.5, Chapter 1, Article 1.

*The Site is not built upon a property which contains abandoned/inactive mines, mine waste, and/or unusual environmental conditions resulting from past mining, milling, and/or smelting operations.*

- ARCADIS has found no evidence during the course of this assessment to suggest that the Site was formerly or is currently located in the vicinity of abandoned/inactive mines, mine wastes, and/or unusual environmental conditions resulting from past mining, milling, and/or smelting operations.

*The Site is not built upon a property currently or formerly owned or used by the following U.S. Government agencies: Departments of the Army, Air Force, Navy, Defense or Energy, or Formerly Used Defense Sites. In addition, the Site is not built upon a property which has the potential for the presence of unexploded ordnance.*

- ARCADIS has found no evidence during the course of this assessment to suggest that the Site was formerly or is currently owned or used by the aforementioned government agencies.

*The Site has not been identified as a location of previous law enforcement or DTSC cleanup activities for illegal drug laboratories.*

- ARCADIS has found no evidence during the course of this assessment to suggest that the Site was a location of previous law enforcement or DTSC cleanup activities for illegal drug laboratories.

*The Site is not part of a current or former hazardous waste disposal site or solid waste disposal site.*

- ARCADIS has found no evidence during the course of this assessment to suggest that the Site was formerly or is currently part of a regulated hazardous waste site.

*The Site is not built upon a hazardous substance release site as identified by the State Department of Health Services in a current list adopted pursuant to Section 25336 for removal or remedial action pursuant to Chapter 6.8 (commencing with Section 25300) of Division 20 of the Health and Safety Code.*

- ARCADIS has found no evidence during the course of this assessment to suggest that the Site was formerly or is currently built upon a hazardous substance release site.

*The Site is not built upon a property which contains one or more pipelines, situated underground or aboveground, which carries hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line which is used only to supply natural gas to that school or neighborhood.*

- ARCADIS has found no evidence during the course of this assessment to suggest that a hazardous substance aboveground or below ground pipeline is located on the Site.

*The proposed school site is not located within a 0.25-mile radius of a facility, which might reasonably be anticipated to emit hazardous air emissions, or to handle hazardous or acutely hazardous materials, substances, or waste.*

- The FRAQMD identified one permitted hazardous air emitter within a 0.25-mile radius of the Site. The LCWD well station 15 located at 6294 Dantoni Road operates under a FRAQMD permit (permit #P23106) for the air emission of diesel. In addition, Hammonton Smartville, Simpson-Dantoni, and North Beale Roads were identified as hazardous air emitters in the site vicinity.

*The proposed school-site is not located within a 2-mile radius of an active runway.*

- ARCADIS has found no evidence during the course of this assessment to suggest that the Site is located within a 2-mile radius of an active runway.

*A provision in the California Code of Regulations, Title 5, Division One, Chapter 13, Subchapter One, School Facilities Construction, Article Two, School Sites, Paragraph d., mandates that "If the proposed site is within 1,500 feet of a railroad track easement, a safety study shall be done by a competent professional trained in assessing cargo manifests, frequency, speed, and schedule of railroad traffic, grade, curves, type and condition of track, need for sound or safety barriers, need for pedestrian and vehicle safeguards at railroad crossings, presence of high-pressure gas lines near the tracks that could rupture in the event of a derailment, preparation of an evacuation plan. In addition to the analysis, possible and reasonable mitigation measures must be identified."*

- ARCADIS has found no evidence during the course of this assessment to suggest that the Site is located within a 1,500 ft of an active railroad.

*A provision in the California Code of Regulations, Title 5, Division One, Chapter 13, Subchapter One, School Facilities Construction, Article Two, School Sites, Paragraph c., mandates that "The property line of the site shall be at least the following distance from the edge of respective power line easements: 1. 100 feet for 50-133 kV line; 2. 150 feet for 220-230 kV line; and 3. 350 feet for 500-550 kV line."*

- According to information obtained from Pacific Gas and Electric (PG&E), 115 kilovolt (kV) lines are located approximately 600 ft west of the Site. Due to the distances between the 115 kV power lines and the western site boundary, ARCADIS assumes no additional research or studies are necessary pertaining to the power lines.

*California Code of Regulations Title 5, Section 14010(h) stipulates that proposed school sites shall not be located within 1,500 feet of the easement of an aboveground water or fuel storage tank, aboveground pipeline, or underground pipeline that can pose a safety hazard as established by a risk analysis study.*

- One approximately 240,000 gallon water storage tank was observed approximately 500 ft north of the northeastern site boundary. The water AST was reportedly used as a back wash tank associated with the LCWD well station 15. The Hammonton Smartsville Road is a slightly elevated roadway located between the site and the AST. Further evaluation of the off-site water AST does not appear warranted due to the presence of the slightly elevated roadway between the Site and the AST.
- According to the LCWD, a 12-inch (60 psi average pressure) water line is located on the western portion of the Site and extends south to north from North Beale Road (off-site to the south) along Sutter Street (off-site to the south) to Hammonton

Smartsville Road (northern site boundary). ARADIS assumes that the CDE will require a Stage 2 pipeline risk assessment to evaluate potential impacts associated with a hypothetical worst-case accidental release from the LCWD high-volume water pipeline.

A high-volume water pipeline is defined by the CDE as a pipeline that is equal to or greater than 12-inches in diameter. The Stage 2 Pipeline Risk Assessment should be prepared in general accordance with the methodology presented in the CDE "Guidance Protocol for School Site Pipeline Risk Analysis, Section 4.7.6" dated February 2007 ("the February 2007 Protocol"; CDE 2007).

*Senate Bill 352 requires that school districts evaluate air quality at the proposed school site if a busy freeway or traffic corridor is located within 500 feet of the site. A busy freeway or traffic corridor is defined by Senate Bill 352 as averaging more than 50,000 vehicles per day in rural areas and 100,000 vehicles per day in urban areas.*

- ARCADIS has found no evidence during the course of this assessment to suggest that the Site is located within 500 ft of a busy freeway or traffic corridor.

### 6.4 Environmental Hazards Survey

As part of an evaluation of the Site as a potential school site, ARCADIS was requested to complete an environmental hazards survey (EHS) for the Site pursuant to the Phase I Environmental Site Assessment Advisory: School Property Evaluations and the State of California General Education Code Provisions, Division 1, Part 10.5, Chapter 1, Article 1. The findings of the EHS were based on the results of a site visit, review of available and pertinent background information and following the completion of a checklist of hazards as described in California Code of Regulations (CCR), Title 5 (Section 14001) used by the CDE School Facilities Planning Division staff for site-review purposes.

ARCADIS's EHS findings are detailed in Table 1 of Appendix H, FEMA Flood Hazards, Dam Inundation Hazards, Railroad Tracks within 1,500 ft, and Alquis Priolo Earthquake Fault Zones are detailed in Table 2 through 5 of Appendix H. Suggestions for additional investigation (if any) associated with the findings detailed in the above referenced tables are included in the recommendations section of this report.

**Summary.** The following summarizes the significant findings of the EHS and presents our recommendations.

- Much of the western portion of the Site lies within a 100-year flood zone. Rerouting of the Linda Drain and/or to raise the Site topography above the 100-year base flood

elevation through grading could remove the affected parts of the Site from the 100-year flood zone.

- One approximately 240,000 gallon water storage tank was observed approximately 500 ft north of the northeastern site boundary. Further evaluation of the off-site water AST does not appear warranted due to the presence of the slightly elevated roadway between the Site and the AST.
- A 12-inch diameter water line is located on the western portion of the Site and extends south to north from North Beale Road along Sutter Street to Hammonton Smartsville Road. ARADIS assumes that the CDE will require a pipeline risk assessment to evaluate potential impacts associated with a hypothetical worst-case accidental release from the LCWD high-volume water pipeline.
- The LCWD well station 15 is classified as a hazardous air emitter within a 0.25-mile radius of the Site. The diesel generator at LCWD well station 15 is approximately 500 ft north of the northeastern site boundary. ARADIS assumes that the CDE will require further research at the FRAQMD into the standby status of the diesel engine, review of the permit, and review of a hazardous risk assessment potentially completed for the permit.

## 7. Interviews

ARCADIS's representatives interviewed the former site owner Mr. Steve Hull during ARCADIS's site reconnaissance on August 26, 2009. Information obtained during this interview is summarized below.

### 7.1 Interviews with Site Contacts

According to Mr. Hull, the two large piles of trash and municipal waste observed on the Site had been deposited on-site from off-site unknown source(s). In addition, the on-site structures were first inhabited in 1912. No additional information was provided by Mr. Hull.

### 7.2 Interviews with Off-Site Contacts

According to information provided by the MJUSD, the Site reportedly was formerly used for occasional cattle grazing purposes and other farming activities. No other information pertaining to former on-site cattle grazing activities was available from the MJUSD or past site owner prior to the production of this document.

### 7.3 Interviews with Local Government Officials

ARCADIS contacted several local government officials as part of our investigation. The information obtained from the government agencies is presented in Section 5.0. A copy of ARCADIS's telephone memoranda with the local officials are included in Appendix A.

## 8. Background Information Findings and Recommendations

ARCADIS was retained by the MJUSD to perform a background assessment of the Site. ARCADIS reviewed pertinent history, conducted two site reconnaissances, evaluated local land uses, interviewed representatives of the former site tenant, and searched public records. The scope of work for the site due diligence was developed in accordance with guidelines set forth in ASTM Designation E1527-05. The following text summarizes our findings and presents our recommendations.

### 8.1 Findings

#### 8.1.1 On-Site Findings

At the time of ARCADIS's initial reconnaissance, the following findings were observed:

- The Site was developed with five permanent structures identified as Buildings 1 through 5. Building 1 was approximately 10-ft by 10-ft and consisted of wood framed construction painted white. Building 2 was approximately 21-ft by 36-ft and consisted of wood framed construction painted white. Building 3 was approximately 20-ft by 35-ft and consisted of an approximately 4-ft tall concrete foundation painted white with wood framed construction painted white. A wood framed, steel sided three-sided shed was attached to the southern side of Building 3. Building 4 was approximately 30-ft by 40-ft and consisted of an approximately 4-ft tall concrete foundation painted white with wood framed construction painted white. Building 5 was approximately 45-ft by 60-ft and consisted of wood framed construction with metal sheeting. A metal framed shed used to store bags of fertilizer was located on the northern side of Building 5. Buildings 4 and 5 contained concrete flooring in good condition with no visible staining.
- A potential former burn pit was observed within Building 5. It appeared a concrete floor was beneath the former burn pit.
- The Site was not identified on the databases searched by EDR.
- Two approximately 15-ft by 15-ft concrete foundations of former structures were observed on the Site as shown on Figure 3 (located northwest of Building 3 and southwest of Building 1 and identified as former structures F1 and F2, respectively).

- Two additional former structures were identified on aerial photographs reviewed by ARCADIS. One former structure was located southeast of Building 5 in the vicinity of the two large piles of fill material and concrete and is identified as former structure F3 on Figure 3. One additional former structure was noted in aerial photographs southeast of Building 5 on the eastern side of the Linda Drain (identified as former structure F4 on Figure 3).
- A concrete water trough was observed to the west of former structure F4 as shown on Figure 3.
- Two approximately 15-ft by 15-ft piles of fill material were observed on the southwestern portion of the Site adjacent to the drainage ditch (as shown on Figure 2). No distressed vegetation, significant odors, or soil staining was observed on the piles of fill material.
- Two large piles of trash and municipal waste were observed centrally located on the Site (identified as Wood/Trash Piles #1 and #2 on Figure 3).
- One abandoned truck, one abandoned crop harvester, and two plows were observed on the Site during the August 2009 site visit and removed (not by MJUSD) prior to the August 2011 site visit. No soil staining from potential leakage of petroleum hydrocarbons was observed beneath either the truck or the crop harvester; therefore, further assessment of soil quality beneath the abandoned farm equipment does not appear warranted.
- One livestock feeding trough was observed on the southern portion of the residential area during the August 2009 site visit and removed (not by MJUSD) prior to the August 2011 site visit. No livestock feed was observed within the trough.
- The site was reportedly formerly used for occasional cattle grazing and other farming purposes.
- One unlabeled 55-gallon steel drum was observed adjacent to the former abandoned truck. The drum contained an unknown quantity of an unknown liquid. The drum was in good condition with no holes and a secure lid. No soil staining or distressed vegetation was observed in the vicinity of the drum.
- Approximately 10 power poles for communication lines were located on-site south of Hammonton Smartsville Road. In addition, six power poles for both power and communication lines were observed within the residential portion of the Site during the August 2009 site visit. One power pole containing two pole-mounted transformers was observed centrally located within the residential portion of the Site south of Building 1 during the August 2009 site visit. No evidence of staining was observed on the soil around the base of the power pole.

  The cooling oil may contain PCBs; however, no evidence of damage was noted on the transformers and the transformers appeared to be in good condition.

The power pole with the pole-mounted transformers had been removed (not by MJUSD) prior to the August 2011 site visit. The location of the former power pole was confirmed during the August 2011 site visit and shown on Figure 3.

- Two drinking water supply wells were observed to the west of the power pole containing the pole-mounted transformers. Water quality and/or sampling frequency information for the on-site wells was not available to ARCADIS prior to the completion of this PEA work plan. These wells will be properly destroyed by the MJUSD prior to implementation of the sampling proposed in this PEA work plan.
- One approximately 75-gallon pressure tank was observed at the well-head of Well 1. In addition, an approximately 1,000-gallon AST assumed to store water was observed west of the pressure tank.
- A storm-water drainage ditch maintained by the YCPW and referred to as the Linda Drain is located on the Site. The Linda Drain extends from off-site on northeastern corner of the site to the southern portion of the residential portion of the Site and off-site on the southwestern corner of the Site. Surface water flowing from northeast to southwest was observed in the drainage ditch.
- One concrete framed water trough was observed to the south of the Linda Drain. No water was observed within the trough and the trough was not painted.
- Information provided by LCWD identified one 12-inch (60 psi average pressure) below ground water line located on the western portion of the Site. The water line extended from North Beale Road (off-site to the south) along Sutter Street (off-site) to Hammonton Smartsville Road (off-site to the north).
- Much of the Site lies within a 100-year flood zone. This zone is associated with the Linda Drain, which crosses the Site. ARCADIS understands that the proposed development of the Site may include rerouting of the Upper Linda Drain; such rerouting could remove the affected parts of the Site from the 100-year flood zone. It might also be feasible to raise the Site topography above the 100-year base flood elevation through grading.

#### 8.1.2 Site Assessment Data Gaps

The following lack of information represents data gaps:

- A 50-year chain of title for the Site was not reviewed by ARCADIS prior to the completion of this document. This data gap does not appear to be significant because sufficient historical sources, including aerial coverage dating back to 1947, was reviewed to establish past site uses and past ownership is known.
- A preliminary title report for the Site was not reviewed by ARCADIS prior to the completion of this document. This data gap does not appear to be significant because

the current site owner and on-site easements are known and the names of previous site owners dating back to 1977 were provided in the *Guarantee* prepared by First American Title Insurance Company (Appendix A).

- Lack of soil and water quality data from the Site. This data gap appears to be significant because of historical site uses and current site conditions.

These data gaps do not appear to impede ARCADIS' ability to identify RECs.

#### 8.1.3 Off-Site Findings

At the time of ARCADIS's site reconnaissance, the following findings were documented for the site vicinity:

- The Site was bordered to the north by Hammonton Smartsville Road with power lines and residential structures farther north, to the east and south by residential structures, and to the west by undeveloped land with residential structures farther west.
- Electrical lines were observed west of the Site and to the north of the Site across Hammonton Smartsville Road. The electrical lines to the west of the Site are 115 kV (designated as Palermo-Bogue Lines by PG&E) and are located approximately 600 ft from the western site boundary. The electrical lines to the north of the Site were not reported as high voltage power lines by PG&E and are anticipated to be general service lines with a voltage of less than 50 kV. Due to the distances between the 115 kV power lines and the western site boundary, ARCADIS assumes no additional research or studies are necessary pertaining to the power lines.
- LCWD Well Station Number 15 is located at 6294 Dantoni Road approximately 500 ft north of the northern site boundary. An approximately 240,000 gallon water tank was observed on the 6294 Dantoni property. Further evaluation of the off-site water AST does not appear warranted due to the presence of the slightly elevated roadway between the Site and the AST.
- An approximately 4-ft high, 20-ft by 20-ft pile of fill material was observed off-site adjacent to the northeastern corner of the site and an approximately 15-ft by 15-ft pile of fill material was observed off-site adjacent to the southwestern corner of the site. No soil staining or distressed vegetation was observed on or in the vicinity of the fill material. Because the fill material is located off-site and does not extend on-site, additional evaluation of the off-site fill material does not appear warranted during the PEA.
- Information provided by the FRAQMD identified one permitted hazardous air emitter within a 0.25-mile radius of the Site. The LCWD well station 15 located at 6294 Dantoni Road in Marysville, California operates under a FRAQMD permit for the air

emission of diesel. In addition, Hammonton Smartsville, Simpson-Dantoni, and North Beale Roads were identified as hazardous air emitters in the site vicinity.

- An unregulated release of an unknown airborne chemical (possibly insecticide) was reported to the YCOES in April of 2007 for the 2184 Cecelia Way facility. This airborne release is not considered by ARCADIS to be a potential source of impact to the site.
- The Linda Elementary School located at 6180 Dunning Avenue, was identified on the SCH, Envirostor, and Haznet databases. The Linda Elementary School is not considered by ARCADIS to be a potential source of impact for the Site because of its distance (976 ft) and its anticipated cross-gradient groundwater flow location with respect to the Site.
- The Yuba College – Marysville Campus located at 2088 North Beale Road (located approximately 1,500 ft upgradient from the Site), is identified on the Historical UST, RCRA-SQG, Finds, Haznet, LUST, UST, CA FID UST, Sweeps UST, HIST Cortese, and Manifest databases. Two former USTs have been removed from the Yuba College facility. The YCEHD granted “no further action” regarding both the former USTs in letters to the Yuba College dated December 20, 2006 and May 8, 2009. No other former or active USTs were reported for the Yuba College. Based on the “no further action” letters from the YCEHD, the Yuba College is not considered by ARCADIS to be a potential source of impact for the Site
- Several additional regulated facilities with reported releases were located in the site vicinity. However, because of the distances of more than 1,000 ft for the upgradient facilities (with respect to the expected groundwater flow direction), the locations of these facilities in a crossgradient or downgradient direction from the Site (with respect to the expected groundwater flow direction), and/or the facilities being granted case closure by the local regulatory agency, the releases at these facilities are not considered by ARCADIS to be potential sources of impact for the Site.
- EDR identified several regulated facilities that could not be located because of insufficient address information. These facilities are referred to by EDR as “orphan” facilities. Based on our knowledge of the site vicinity and our observations during the site reconnaissance, these properties do not appear to be located in close proximity to the Site, and are therefore unlikely to represent an environmental concern to the Site.

### 8.2 Conclusions and Recommendations

Based on the results of ARCADIS’s site history research and site reconnaissance, a sampling and analysis program is recommended to be performed during the PEA to evaluate:

- the possible presence of lead and organochlorine pesticides (OCPs) in shallow soil around existing buildings that are proposed for demolition and around the perimeter of former structures;
- the possible presence of PCBs in shallow soil around pre-1976 transformers and lead in shallow soil around the painted power pole located between Buildings 2 and 3;
- soil quality of two piles of fill material east of Building 5 and two piles of fill material on the southwestern portion of the Site;
- soil quality adjacent to the two on-site water supply wells and adjacent to the metal framed shed used to store bags of fertilizer located on the northern side of Building 5;
- soil quality within the potential former burn pit located in Building 5;
- soil quality beneath the Wood/Trash Piles #1 and #2; and,
- soil quality in the on-site portions of the Linda Drain.

Much of the western portion of the Site lies within a 100-year flood zone. This zone is associated with the Linda Drain, which crosses the Site. ARCADIS understands that the proposed development of the Site may include rerouting of the Linda Drain; such rerouting could remove the affected parts of the Site from the 100-year flood zone. It might also be feasible to raise the Site's topography above the 100-year base flood elevation through grading.

The contents of the on-site unlabeled 55-gallon steel drum should be properly profiled and removed from the Site prior to proposed construction activities.

A 12-inch diameter water pipeline has been identified within 1,500 ft of the Site. Under CCR Title 5, Section 14010(h), CDE would require completion of a risk analysis study for the Site. The risk analysis should be prepared under separate cover using the methodology presented in the February 2007 Protocol (CDE 2007). The risk analysis should evaluate the potential hazards posed by the 12-inch water pipeline to potential students, faculty, and staff within the boundaries of the Site.

The FRAQMD identified the LCWD well station 15 and the Hammonton Smartville, Simpson-Dantoni, and North Beale Roads as hazardous air emitters within a 0.25-mile radius of the Site. The diesel generator at LCWD well station 15 is approximately 500 ft north of the northeastern site boundary. ARADIS assumes that the CDE will require research at the FRAQMD into the standby status of the diesel engine, review of the permit, and review of a hazardous risk assessment potentially completed for the permit; this evaluation can be prepared under separate cover.

## 9. PEA Objectives

The CDE has adopted an environmental policy requiring that, if applicable, ambient air, subsurface soils, and shallow groundwater at school sites will be evaluated. A "No Further Action" and/or "partial site approval" designation from the DTSC must be obtained before the CDE can approve a school district for the acquisition and/or construction of a new school site.

The acreage of the school campus for which the MJUSD is seeking approval is approximately 50 acres.

The PEA is intended to identify whether a release or threatened release of hazardous substances exists at the Site and to evaluate the potential risk to human health or the environment before the DTSC issues a "No Further Action" designation.

The overall objectives of the PEA include the following:

- evaluate historical information regarding the past use, storage, disposal, or release of hazardous wastes/substances at the Site
- conduct a field sampling and analysis program to characterize the nature, concentration, and extent of hazardous wastes/substances present in soil
- estimate the potential threat to public health and/or the environment posed by known hazardous constituents at the Site using a residential land use scenario

Using information developed during the PEA and the conservative human and ecological risk evaluation to be conducted using the DTSC PEA Guidance Manual, the DTSC will make an informed decision regarding potential risks, if any, posed by the Site.

Possible outcomes of the PEA decision include the following:

- the requirement for further assessment through the remedial investigation/feasibility study process if the Site is found to be significantly affected by hazardous substances
- the need to perform a removal action for areas where localized impacts by hazardous substances release(s) are found
- issuance of a "No Further Action" finding if the Site is found not to be affected or if risks to human health and the environment are found to be within acceptable levels based on the conservative screening-level risk assessment

## 10. Field Sampling Plan

A table presenting the proposed sampling plan (Table 1) and a figure showing the associated sample locations (Figures 4 and 4a) are included with this PEA work plan. Proposed sample quantitation limits are summarized in Table 2 and analytical methods, container types, and preservatives are summarized in Table 3.

### 10.1 Compounds of Potential Concern

Suspect compounds of potential concern (COPCs) for the Site identified during the background due diligence include PCBs, OCPs, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons, and California Assessment Manual (CAM)-17 (CCR Title 22) metals.

### 10.2 Pre-Field Activities

Prior to implementation of this PEA work plan, ARCADIS will prepare a site-specific HSP which will be kept on-site during the proposed field activities at the Site. The HSP documents the potential hazards to worker health and safety at the Site during the proposed field activities and specifies the appropriate means to mitigate or control these hazards. The HSP will address the potential for exposure to hazardous constituents and describes general safety procedures. Fieldwork will be monitored to ensure that appropriate health and safety procedures are followed.

Before fieldwork begins, ARCADIS will coordinate clearance of proposed sampling locations for underground utilities with Underground Service Alert (USA). A private utility-locating subcontractor may also be used. USA will be notified at least 48 hours in advance of sampling activities.

A notice describing the proposed work and schedule will be distributed by the MJUSD to occupants of properties within line-of-sight of the Site at least 72 hours prior to commencement of fieldwork.

### 10.3 Field Activities

ARCADIS's sampling strategy was prepared in accordance with the following:

- DTSC – *Preliminary Environmental Assessment Guidance Manual*, dated January 1994. Second printing June 1999 ("the DTSC PEA Guidance Manual").

- DTSC – *Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers*, dated June 9, 2006. Revised September 12, 2006.
- DTSC – *Information Advisory Clean Imported Fill Material*, dated October 2001

As required by the DTSC, a dedicated field notebook or field sampling information forms will be maintained by ARCADIS's representative for the Site.

#### 10.3.1 Sampling Methods and Procedures

ARCADIS's procedures for soil sampling as well as decontamination procedures are discussed in the following subsections.

##### *10.3.1.1 Soil Sampling*

ARCADIS will collect soil samples using a direct-push sampling rig or hand-sampling equipment. If a direct-push sampling rig is used, 1.5-inch-diameter acetate sample tubes will be advanced beneath the subsurface inside a stainless steel sample probe. Upon recovery from the sample probe, retrieved soil samples will be cut to a desired length (6 to 8 inches). Samples will be collected in 1.5- to 2.5-inch-diameter, 6-inch-long brass or stainless steel tubes if hand-sampling equipment is used at the Site.

After recovery of the acetate, brass, or stainless steel tubes, the tubes will be capped on both ends with Teflon® and plastic caps, and labeled properly. After labeling, the soil samples will be sealed in plastic bags and placed in an ice-chilled cooler for transportation to the laboratory under proper chain-of-custody protocols. Analytical methods, types of containers, preservation methods, and holding times are summarized in Table 3.

Logging will be performed using continuous core samples for proposed borings (not including the surface soil sample locations). The boring log will contain the following information:

- borehole number and location
- sample depth(s)
- sediment color
- sediment grain size
- descriptive comments
- estimated moisture content

- depth at which groundwater was encountered, if applicable
- permit number, if applicable
- drilling method
- sampling method
- photoionization detector (PID) measurements, if applicable
- depth where groundwater stabilized, if applicable
- blow counts, if applicable
- field geologist/engineer's name

An ARCADIS Professional Geologist will review and sign the final lithologic logs. Copies of the field logs will be included in the PEA report. ARCADIS will approximately locate each boring location using a handheld global positioning system unit, survey flags, and/or marking paint.

*10.3.1.2 Decontamination Procedures*

Equipment will be decontaminated in a pre-designated area over plastic sheeting. Cleaned bulky equipment will be stored on plastic sheeting in uncontaminated areas. Cleaned small equipment will be stored in plastic bags. Materials to be stored more than a few hours will also be covered.

Re-usable equipment that comes into contact with potentially contaminated soil or groundwater will be decontaminated and rinsed with distilled water before use at each sampling location to ensure the integrity of samples collected. Disposable equipment intended for one-time use will be packaged for appropriate disposal and will not be reused. Drilling and sampling devices used will be decontaminated using high-pressure hot water (steam cleaned) or by the following procedures:

- laboratory-grade detergent and tap water or deionized water wash, in a 5-gallon plastic bucket, using a brush
- initial tap water, distilled water, or deionized water rinse, in a 5-gallon plastic bucket
- final distilled water or deionized water rinse, in a 5-gallon plastic bucket

### 10.4 Field Sampling Plan

The following subsections outline the proposed sampling plan to address each REC.

### 10.4.1 Site Structures

#### *10.4.1.1 Current Structures*

Five current structures are located on the Site and were constructed prior to the ban of lead-based paint in January 1979. Similarly, these buildings have been on site since termiticides were banned in the late 1980s. Buildings 1 through 5 are a mixture of wood and concrete construction. Sampling for lead-based paint is proposed for five buildings, sampling for termiticides is only proposed for Buildings 1, 2 and 5 because Buildings 3 and 4 have an approximately 4-ft tall concrete foundation.

In accordance with DTSC guidance, a minimum of four discrete surface (0 – 0.5 foot bgs) soil samples will be collected with at least one sample per building side for analysis of lead unless the building is a smaller out building (e.g. shed or similar small structure) in which case only two samples per structure are planned. Additionally, discrete surface and discrete subsurface (2 – 2.5 ft bgs) soil samples collected from four locations around each structure (or six for larger buildings, i.e., Building 5; and two for each smaller out building) for OCP analysis are planned. Up to four adjacent discrete samples from the same depth can be composited for analysis of OCPs.

**Building 1:** ARCADIS recommends a total of two sampling locations around the building structure (Figure 4a) with collection of samples at depth intervals 0 – 0.5 ft bgs and 2 – 2.5 ft bgs. Discrete surface soil samples will be analyzed for lead by U.S. EPA Method 6010B. Discrete surface and subsurface samples collected for analysis of OCPs by U.S. EPA Method 8081A will be composited into 2-point composite samples by the analytical laboratory (e.g. one composite sample per building).

**Buildings 2 and 5**: ARCADIS recommends a total of four sampling locations around Building 2 and six around Building 5 (Figure 4a) with collection of samples at depth intervals 0 – 0.5 ft bgs and 2 – 2.5 ft bgs. Discrete surface soil samples will be analyzed for lead by U.S. EPA Method 6010B. Discrete surface and subsurface samples collected for analysis of OCPs by U.S. EPA Method 8081A will be composited into 4-point composite samples for Building 2 and 3-point composite samples for Building 5 by the analytical laboratory (e.g., one composite sample per sample depth for Building 2 and two composite samples per sample depth for Building 5).

**Buildings 3 and 4:** ARCADIS recommends a total of four sampling locations around each building (Figure 4a) with collection of samples at depth intervals 0 – 0.5 ft bgs and 2 – 2.5 ft bgs. Because the area between Buildings 3 and 4 is paved with concrete, no samples will be collected from between these buildings; however, sampling points will be located in the nearest unpaved areas where associated runoff may collect. Discrete surface soil samples

will be analyzed for lead by U.S. EPA Method 6010B. Subsurface soil samples will be placed on hold pending results of the surface samples.

**Wooden Shed North of Building 5:** ARCADIS recommends collecting two surface soil samples (0 to 0.5 ft bgs) from around the metal-framed shed located on the northern side of Building 5. These samples will be analyzed for OCPs by U.S. EPA Method 8081A and lead and arsenic by U.S. EPA Method 6010B because the shed was used to store bags of fertilizer.

The on-site structures will be demolished prior to implementation of the sampling proposed in this PEA work plan. The demolition of the on-site structures will not include the removal of the structure foundations. The presence of the foundations will facilitate identifying the locations of the soil samples proposed in this PEA work plan.

*10.4.1.2 Former Structures – With Foundations Present*

Foundations of former structures F1 and F2 are visible and are the size of out-buildings (smaller shed-like buildings – approximately 15 ft by 15 ft). ARCADIS recommends a total of eight sampling locations around each foundation (Figure 4a; two sets of four perimeter sampling locations: one set within 2 feet of the foundation and one set at the outer extent of the disturbed soil from the debris removal) with collection of samples at depth intervals 0 – 0.5 ft bgs and 2 – 2.5 ft bgs. In addition, if soil is exposed within the footprint of the former structures, soil samples will be collected from two interior sampling locations. Surface and subsurface soil samples will be analyzed for lead by U.S. EPA Method 6010B and OCPs by U.S. EPA Method 8081A. The OCP samples will be composited into 4-point composite samples by the analytical laboratory.

*10.4.1.3 Former Structures – With Foundations No Longer Present*

Foundations of former structures F3 and F4 are no longer present. Their presence and location was identified through a review of aerial photographs. In accordance with DTSC guidance, a six sample sampling grid will be established in the area of the former structures. Samples will be collected from each of the six sample locations from at depth intervals 0 – 0.5 ft bgs and 2 – 2.5 ft bgs. In order to ensure that samples collected from the area of former structure F3 are representative of the native soil and not of overlying fill material, the following measures will be taken:

- When possible, the soil samples will be collected at least 3 feet from the edges of the fill material piles; and

- If soil sample locations must coincide with areas containing fill, the sampler will visually compare and differentiate between the native soil and fill material, and will clear fill material from the area before collecting samples of the native soil.

Surface and subsurface soil samples will be analyzed for lead by U.S. EPA Method 6010B and OCPs by U.S. EPA Method 8081A. The OCP samples will be composited into 3-point composites by the analytical laboratory prior to analysis.

The soil samples will be collected by hand-augering to the sample depth. Samples to be analyzed for lead and/or OCPs will be collected in laboratory-supplied, 4-ounce glass jars or stainless steel sampling tubes. The samples will be placed in a Ziploc™ bags and temporarily stored in a chilled ice chest pending delivery to the analytical laboratory.

#### 10.4.2 Fill Material

Two large piles of fill material (approximately 135 cubic yards each [30-ft by 30-ft by 4-ft]) and concrete were observed east of Building 5 in the vicinity of former structure F3. In addition, two approximately 15-ft by 15-ft by 4-ft piles of fill material (approximately 35 cubic yards each) were observed on the southwestern portion of the Site adjacent to the drainage ditch (as shown on Figure 2). No distressed vegetation, significant odors, or soil staining were observed on the piles of fill material located on the Site.

To address COPCs associated with the unknown source of fill material, ARCADIS proposes to collect one sample from the center of each fill pile (approximately 1 foot below pile surface) to be analyzed for: total petroleum hydrocarbons-full scan (TPH) by U.S. EPA Method 8015B/C, CCR Title 22 metals by U.S. EPA Method 6010B, and OCPs by U.S. EPA Method 8081A.

The samples proposed for TPH-gasoline range organics (GRO) analysis will be collected using U.S. EPA Method 5035 TerraCore samplers and analyzed for TPH-GRO by U.S. EPA Method 8015B/C. Based on the TPH analysis, samples may be subsequently analyzed for additional organic compounds based on the particular carbon ranges identified, if any.

#### 10.4.3 Pole-Mounted Transformer

One power pole containing two pole-mounted transformers was formerly located within the residential portion of the Site in the area south of Building 1. No evidence of staining was observed on the soil around the base of the former power pole. Although no staining was noted, DTSC guidance indicates that the possibility exists of a past release of PCB containing compounds associated with the transformer. To address potential contaminants associated with the transformer, ARCADIS proposes to collect one soil sample near the

base of the power pole from at depth intervals 0 – 0.5 ft bgs and submit the sample for analysis of PCBs by U.S. EPA Method 8082. A second soil sample will be collected from the subsurface (2 – 2.5 ft bgs) at the same location and placed on hold pending analysis of the surface sample.

#### 10.4.4 Storm-Water Drainage Ditch

An unlined storm-water drainage ditch maintained by the YCPW and referred to as the Linda Drain transects the Site. The Linda Drain extends from off-site on the northeastern corner of the Site to the southern portion of the residential portion of the Site and off-site on the southwestern corner of the Site.

Soil sampling in the Linda Drain is proposed to evaluate if pesticide use on off-site properties have impacted site soil via runoff or other surficial flow due to agricultural operations in the upgradient site vicinity.

ARCADIS proposes to collect surface soil samples from three locations along the drainage ditch (upgradient, middle, and downgradient). At each location, soil samples will be collected at a sample depth of 0 to 0.5 ft bgs from the top of the levee and approximately 1 foot above the stagnant water line. The samples will be analyzed for CCR Title 22 metals by U.S. EPA Method 6010B and OCPs by U.S. EPA Method 8081A.

Additional sediment/soil samples may be collected from the bottom of the drainage ditch if: (1) the analytical results of samples collected from the top and/or sidewalls (middle) of the levee indicate elevated contaminant concentrations; or (2) the drainage ditch is re-routed.

#### 10.4.5 Low-Lying Area Adjacent to Water Trough

A concrete framed water trough is located to the south of the Linda Drain. No water was observed within the trough, and the trough was not painted. ARCADIS proposes to collect one surface soil sample (0 to 0.5 ft bgs) from the low-lying area adjacent to the water trough. The sample will be analyzed for OCPs by U.S. EPA Method 8081A to evaluate if the area was used for pesticide mixing due to the accessibility of water.

#### 10.4.6 Low-Lying Area Adjacent to Water-Supply Well

ARCADIS proposes to collect one surface soil sample (0 to 0.5 ft bgs) from each of the low-lying areas adjacent to the two water-supply wells (situated adjacent to former structure F2). The two samples will be analyzed for OCPs by U.S. EPA Method 8081A to evaluate if the area has been impacted from possible pesticide mixing due to the accessibility of water.

#### 10.4.7 Painted Power Pole

ARCADIS proposes to collect one surface soil sample (0 to 0.5 ft bgs) adjacent to the painted power pole located between Buildings 2 and 3. The sample will be analyzed for lead by U.S. EPA Method 6010B because lead-based paint may have been used to paint the power pole.

#### 10.4.8 Wood/Trash and Municipal Waste Piles

Following MJUSD's proper removal and off-site disposal of the two Wood/Trash Piles located near Building 5 and the Municipal Waste Pile located near the Former Livestock feeding trough, ARCADIS will observe the areas beneath each pile.

If evidence of possible environmental concerns (e.g., soil staining) is noted beneath the Wood/Trash Piles, ARCADIS proposes to collect two surface samples (0 to 0.5 ft bgs) from the area of Wood/Trash Pile #1 and four surface soil samples (0 to 0.5 ft bgs) from the area of Wood/Trash Pile #2. If there is an indication of possible environmental concerns (e.g., soil staining) beneath the Municipal Waste Pile, two surface samples (0 to 0.5 ft bgs) will be collected from the area.

Wood/Trash Pile #1 and Wood/Trash Pile #2 included large amounts of wood debris covered with white paint. Because this paint may be lead-based, the samples will be analyzed for lead by U.S. EPA Method 6010B. The Municipal Waste Pile samples will be analyzed for total petroleum hydrocarbons-full scan (TPH) by U.S. EPA Method 8015B/C and CCR Title 22 metals by U.S. EPA Method 6010B if evidence of soil staining or indication of possible environmental concerns are noted by ARCADIS staff.

The samples proposed for TPH-gasoline range organics (GRO) analysis will be collected using U.S. EPA Method 5035 TerraCore samplers and analyzed for TPH-GRO by U.S. EPA Method 8015B/C. Based on the TPH analysis, samples may be subsequently analyzed for additional organic compounds based on the particular carbon ranges identified, if any.

#### 10.4.9 Potential Former Burn Pit

Prior to collecting a sample from the potential former burn pit ARCADIS will ascertain the likelihood that ash came into contact with the underlying soil. If the burn pit was located on the foundation of Building 5 and did not contact the underlying soil, no sample will be collected. However, if the ash from the burn pit was in contact with the soil ARCADIS proposes to collect one surface soil sample (0 to 0.5 ft bgs) from the potential former burn pit. The sample will be analyzed for PAHs by U.S. EPA Method 8270 and CAM 17 metals by U.S. EPA Method 6010B to assess potential soil impacts resulting from use of the pit.

#### 10.4.10 Unlabeled Drum

ARCADIS proposes to retain a HAZCAT subcontractor to field test the contents of the unlabeled 55-gallon steel drum observed adjacent to the former abandoned truck (Figure 4a). The HAZCAT subcontractor will don appropriate Level B (self-contained breathing apparatus) personal protection equipment to open the drum and field characterize the following parameters:

- pH
- corrosivity
- flammability
- oxidizer
- chlorination

The drum will be over-packed into an 85-gallon drum following the field test and transported off-site for proper disposal.

Following removal of the unlabeled drum, ARCADIS staff will observe the soil in the area below the drum. If staining or odors are evident, ARCADIS proposes to collect one surface sample (0.0-0.5 ft bgs) from directly beneath the drum and submit the sample for CAM 17 metals, OCPs, TPH, and PCBs analyses. The number of samples to be collected from beneath the drum and their appropriate analysis may change based on field observations. The field change will be discussed with the DTSC prior to implementation.

#### 10.4.11 Reduced Agricultural

ARCADIS will perform reduced agricultural sampling to assess for any potential impacts resulting from possible agricultural activities (i.e., crop farming) conducted at the Site. In accordance with DTSC recommendations, a four section sampling grid will be established in the area of open fields (i.e., not within the residential areas). For each grid section, four discrete samples will be collected from 0 – 0.5 ft bgs and 2 – 2.5 ft bgs (Figure 4). The discrete surface and subsurface (if analysis is necessary) soil samples will be composited into 4-point composite samples for each grid section (four surface and four subsurface composite samples total) to be analyzed for OCPs by U.S. EPA Method 8081A. In addition, one discrete sample from each 4-point composite of surface soil will be analyzed for arsenic by U.S. EPA Method 6010B. Subsurface samples will be placed on hold pending the results of the surface samples.

#### 10.4.12 Livestock Handling Areas

Buildings 4 and 5 were anticipated to be the most likely locations for livestock to be handled. Four discrete surface (0 to 0.5 ft bgs) soil samples (SS-54a, SS-54b, SS-54c, and SS-54d) within the fenced-in area south of Building 5, and three discrete surface soil samples (SS-12b, SS-15, and SS-15a) in the vicinity of the eastern side of Building 3 and the western and southern sides of Building 4 will be composited into one 4-point composite sample and one 3-point composite sample to be analyzed for OCPs by U.S. EPA Method 8081A.

### 10.5 Waste Disposal

Soil and/or wastewater generated from sampling activities will be stored in U.S. Department of Transportation (DOT) approved 55-gallon steel drums. The containers will be labeled and identified with the generator's name and the date the waste was generated. The containers will be secured on site pending characterization and disposal.

**Waste Soil.** ARCADIS assumes that the analytical data generated from the soil investigations will be sufficient to meet waste acceptance criteria set by the disposal facility for the soil containers, and that additional profiling of the waste soils will not be necessary.

**Wastewater.** If wastewater is generated during implementation of this work plan, one drum characterization water sample will be collected from the aqueous storage containers. If multiple wastewater containers are used, a drum composite sample of the multiple drums will be collected. The sample will be submitted to a California-certified laboratory for appropriate analysis (Table 1).

If the waste is classified as hazardous, the current site owner (as the hazardous waste generator) will secure a U.S. EPA identification number from the DTSC for proper management of the hazardous waste. The transportation contractor and disposal facility will comply with the DTSC and DOT requirements of hazardous waste transportation and disposal. The hazardous waste will be transported by a registered hazardous waste hauler under a uniform hazardous waste manifest.

The MJUSD shall make the final determination for such disposal and shall direct ARCADIS to make such disposal accordingly.

### 10.6 Analytical Methods

Table 1 presents a summary of sampling locations, sample depths, and analytical methods for the samples to be collected during the PEA field investigation. Samples will be submitted

to a California-certified analytical laboratory on a standard laboratory turnaround-time basis. Proposed laboratory reporting limits are presented in Table 2.

Quality assurance/quality control (QA/QC) samples will be analyzed as noted in Table 1 and summarized in Section 11.0.

Chain-of-custody records are used to document sample collection and shipment to a laboratory for analysis. A chain-of-custody record will accompany the sample shipments for analyses. Forms will be completed and sent with the samples for each laboratory and each shipment. If multiple coolers are sent to a single laboratory on a single day, individual chain-of-custody forms will be completed and sent with the samples in each cooler.

Generally, a sample is considered to be in someone's custody if it is either in someone's physical possession, in someone's view, locked up, or kept in a secured area that is restricted to authorized personnel. Until receipt by the laboratory, the custody of the samples will be the responsibility of the sample collector.

## 11. QA/QC Procedures

QA/QC procedures will be employed in both the field and the laboratory. QA/QC samples include equipment rinsate samples, field blank samples, and field duplicate samples.

### 11.1 Field Quality Assurance/Quality Control Procedures

The following field QA/QC procedures will be performed at the Site:

- Chain-of-custody forms will be used when submitting samples to the laboratory.
- Daily information regarding soil sample collection will be recorded in a field logbook or on field sampling information forms. Sample types, soil descriptions, sample identification numbers, and sample times will be collected and recorded on field sampling information forms and/or in field logbooks. Pages will be numbered, dated, and signed by the person recording the field data.

Field QA/QC samples will be collected and submitted for analysis along with the discrete soil samples, using the following sampling frequency:

- field duplicate samples: one for every 10 discrete samples per sample media
- equipment rinsate blanks: one per field day that includes collection of samples by nondisposable (reusable) sampling equipment

- field blanks: one per field day that includes collection of samples by reusable sampling equipment (when an equipment rinsate blank sample is collected)

#### 11.1.1 Duplicate Samples

Duplicate samples will be collected to evaluate the analytical procedures and methods employed by the laboratory. The duplicate soil sample will be collected immediately below the depth interval where the original soil sample is collected from the boring. One field duplicate sample will be collected for every 10 soil samples collected. Proposed duplicate samples are summarized on Table 1.

#### 11.1.2 Equipment Rinsate Blanks

An equipment rinsate blank will be collected from the final water rinsed over equipment after cleaning activities have been performed. The equipment rinsate blank will be collected from nondisposable (reusable) sampling equipment such as soil sampling tools and sampling equipment. To collect an equipment rinsate blank sample, distilled water will be poured over or through the recently cleaned equipment, and carefully collected directly into an appropriate sample container held over a bucket. Equipment rinsate blank samples will be stored and processed in the same manner as the other samples.

ARCADIS anticipates fieldwork will be performed over two work days; therefore, up to two equipment rinsate blanks will be sufficient for this project; however, reusable field sampling equipment may not be used each day. The equipment rinsate blank(s) will be analyzed for the sample analyte using the same analytical methods as for the samples collected using the reusable equipment and analytical methods used for samples collected during the field day.

#### 11.1.3 Field Blanks

Field blank samples consist of a sample of the distilled water or deionized water used to wash sampling equipment during equipment cleaning activities. The purpose of the field blank sample is to evaluate the distilled water or deionized water for the presence of chemicals for which environmental samples are being analyzed. A field blank sample will be collected by pouring distilled water or deionized water into the appropriate sample container.

ARCADIS anticipates fieldwork will be performed over two work days; therefore, up to two field blanks will be sufficient for this project; however, reusable field sampling equipment may not be used each day. The field blank(s) will be analyzed for the sample analyte using

the same analytical methods as for the sample collected using the reusable equipment and analytical methods used for samples collected during the field day.

### 11.2 Laboratory Quality Assurance/Quality Control Procedures

Laboratory QA/QC procedures include the following:

- Laboratory analyses will be performed within the required holding time for samples submitted for initial analysis and samples being held for analysis based on the results of the initial analyses.
- Appropriate minimum reporting limits will be used for each analysis. The reporting limits will be lower than the corresponding preliminary remediation goals established by the U.S. EPA Region 9 and/or the CHHSLs for residential land use (OEHHA 2005/2009).
- The laboratory will report the following information for each sample delivery group as follows:
  - a discussion of how the QA/QC criteria were met by the laboratory
  - a discussion of hold times
  - matrix spike/matrix spike duplicate results
  - relative percent difference
  - method blank data
  - surrogate recovery, instrument tuning, and calibration data
  - exceptions
  - signed laboratory reports, including the sample designation, date of sample collection, date of sample analysis, laboratory analytical method employed, sample volume, and the minimum reporting limit (any discrepancies will be detailed in a letter provided by the laboratory)

ARCADIS will use a California-certified environmental testing laboratory for the sample analyses. Proposed laboratory reporting limits are summarized in Table 2 and analytical methods, container types, and preservatives are summarized in Table 3.

## 12. Human Health Screening Evaluation

A human health screening evaluation will be performed in accordance with the protocols detailed in the DTSC PEA Guidance Manual. The human health screening evaluation will include a Human Health Risk Assessment (HHRA). The purpose of the HHRA is to

estimate adverse human health effects by qualitatively and quantitatively addressing possible routes of exposure associated with the Site. The scope of work will include the specific tasks listed below.

### 12.1 Data Evaluation and Selection of Compounds of Potential Concern

The data sets to be evaluated include soil and groundwater sample results from the proposed sampling for the PEA. Past known land use and current site operations indicate that detectable concentrations of COPCs are suspected to exist adjacent and in close proximity to the Site. The suspect COPCs include:

- PCBs
- OCPs
- PAHs
- Petroleum Hydrocarbons
- CCR Title 22 Metals

For the purposes of the HHRA, detected chemicals from samples collected during the PEA will be selected as COPCs for evaluation in the HHRA.

### 12.2 Exposure Assessment

The exposure assessment (including fate and transport modeling) will follow U.S. EPA and DTSC risk assessment guidelines and use the reasonable maximum exposure methods recommended by the U.S. EPA. The objective of the exposure assessment is to identify potential exposure pathways to individuals who may come in contact with the COPCs originating at the Site, to characterize potentially exposed populations, and to estimate the extent of exposure.

The proposed future land use for the Site is an intermediate school campus, alternative education and adult education campus, and educational support facilities. The anticipated populations to be evaluated would include hypothetical students, full-time school workers, and maintenance/utility workers. However, for purposes of this HHRA, the land use of the Site will be assumed to be residential in accordance with the DTSC PEA Guidance Manual.

The exposure pathways assumed applicable under the residential land use include:

- incidental ingestion of soil
- direct dermal contact with soil

- inhalation of particulates
- inhalation of vapors in indoor air

Potential direct soil contact (i.e., incidental soil ingestion, inhalation of particulates, dermal contact with soil) and indirect soil and groundwater contact (i.e., inhalation of airborne dust) will be evaluated using maximum detected concentrations of identified COPCs in soil and groundwater as exposure point concentrations for estimating potential chronic health hazards associated with COPCs at the Site.

### 12.3 Toxicity Assessment

The toxicity assessment section will provide a list of available toxicity values and the potential adverse health effects attributable to each of the COPCs included in the HHRA. The toxicity assessment considers the types of adverse health or environmental effects associated with individual and multiple chemical exposures; the relationship between magnitude of exposures and adverse effects; and related uncertainties such as the weight of evidence for a COPC's potential carcinogenicity and other deleterious health effects on humans.

The following hierarchy can be used in obtaining toxicity values: the most current list of toxicity values is provided by the Cal-EPA, OEHHA, U.S. EPA Integrated Risk Information System database, and health effects assessment summary tables.

### 12.4 Risk Characterization

Quantitative estimates of the noncarcinogenic and carcinogenic risk to identified human receptor populations will be presented for the COPCs at the Site. Estimates of risk are obtained by integrating information developed during the exposure and toxicity assessments to characterize potential or actual risks. Noncarcinogenic and carcinogenic risk estimates for individual chemicals will be assumed across all pathways and separately for each exposure scenario to obtain total estimated noncarcinogenic hazard index and carcinogenic risk.

The total estimated noncarcinogenic hazard index will be compared to the U.S. EPA and DTSC acceptable hazard index of 1. The total estimated carcinogenic risk will be compared to the Cal-EPA acceptable incremental lifetime cancer risk level of $1 \times 10^{-6}$.

## 13. Ecological Screening Evaluation

A detailed ecological screening evaluation will not be performed during this PEA since the Site is located within a developed area. For this project, the ecological screening evaluation will be limited to one or two paragraphs, describing the site area and the presence or absence of suitable habitat for ecological receptors of concern.

## 14. Community Involvement

The DTSC and the MJUSD will prepare and implement a plan to establish the procedures and protocols for informing the community surrounding the Site of the PEA evaluation according to the requirements of the California Education Code.

## 15. PEA Report Preparation and Schedule

**PEA Report.** A PEA report presenting the results of the overall investigation will be prepared and submitted to the DTSC. The PEA report will be prepared in accordance with the DTSC PEA Guidance Manual (DTSC 1999). The report will include site background and environmental setting information, field procedures, presentation of field observations including boring logs, and analytical results including laboratory report sheets and a table summarizing the analytes, detection limits, minimum concentrations, maximum concentrations, 95 percent upper concentration limits (if appropriate), and exposure point concentrations.

The PEA report will also include a summary of the public participation activities implemented and the human health and ecological screening evaluation. Electronic files with the field data, laboratory data, and at least one geo-referenced figure will be submitted to the DTSC at the time of submission of the PEA report.

Based on the human health and ecological screening evaluation, the summary and conclusions section of the PEA report will address four main questions:

- Have current or past practices resulted in a release or threat of a release at the Site?
- If a release has occurred or a threatened release exists, does it pose a significant threat to public health or the environment and, if not, why not?
- Does a release pose an immediate potential hazard to health or the environment so as to necessitate an emergency removal action and, if so, why?
- What further specific information and/or removal/remediation actions are necessary to better assess or mitigate health/environmental threats posed by the Site?

Recommendations will be made regarding the need for additional action to further assess conditions at the Site, or for limited removal action(s), if appropriate, based on site investigative findings and the screening risk evaluation. If further action is recommended, the PEA report will identify additional investigations and/or remediation needs and strategies. The PEA report will also include recommendations for expedited response actions necessary to mitigate immediate potential hazards to public health or the environment, if needed. No Further Action recommendations will be made if levels of detected contamination are assessed to be below risk-based screening levels.

ARCADIS recommends coordinating the DTSC's review of the draft PEA report with the 30-day public comment period for the PEA.

**Schedule.** Upon approval of this PEA work plan, ARCADIS estimates that two weeks will be required to schedule the proposed fieldwork, and two days will be required to complete the fieldwork. Laboratory analytical analysis will require approximately seven business days after sample submittal and final report preparation will require an estimated one month after analytical results are received from the laboratory. This anticipated schedule precludes conditions beyond the control of ARCADIS that would affect the schedule (e.g., barriers to site access, delays in obtaining permits [if any], and/or subcontractor availability).

## 16. References

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| ear | Scale | Source |
|---|---|---|
| 1947 | 1" = 473' | USGS |
| 1969 | 1" = 555' | Cartwright Aerial Surveys |
| 1974 | 1" = 541' | NASA |
| 1984 | 1" = 690' | USGS |
| 1987 | 1" = 666' | USGS |
| 1998 | 1" = 666' | USGS |
| 2005 | 1" = 604' | EDR |

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**Table 1**
**Sampling and Anal sis Summar**
**Mar sville oint Unified Sc ool District**
**ammonton Smartsville Propert**
**uba Count , California**

| On-Site Location | Sample ID | Sample Dept (feet bgs)[1] | Matri | PA s[2] | CAM 1 Metals[3] | OCPs[4] | TP - Full Scan[5] | Lead | PCBs | Arsenic | OLD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Center of Fill Material Piles | FM-1-1.5 | 1.0 - 1.5 | Soil | -- | X | X | X | -- | -- | -- | -- |
| | FM-2-1.5 | 1.0 - 1.5 | Soil | -- | X | X | X | -- | -- | -- | -- |
| | FM-3-1.5 | 1.0 - 1.5 | Soil | -- | X | X | X | -- | -- | -- | -- |
| | FM-4-1.5 | 1.0 - 1.5 | Soil | -- | X | X | X | -- | -- | -- | -- |
| Linda Drain - Upgradient (top of levee)* | SS-1a-0.5 | 0.0 - 0.5 | Soil | -- | X | X | -- | -- | -- | -- | -- |
| Linda Drain - Upgradient (middle of levee) | SS-1b-0.5 | 0.0 - 0.5 | Soil | -- | X | X | -- | -- | -- | -- | -- |
| Linda Drain - Center (top of levee)* | SS-2a-0.5 | 0.0 - 0.5 | Soil | -- | X | X | -- | -- | -- | -- | -- |
| Linda Drain - Center (middle of levee) | SS-2b-0.5 | 0.0 - 0.5 | Soil | -- | X | X | -- | -- | -- | -- | -- |
| Linda Drain - Downgradient (top of levee)* | SS-3a-0.5 | 0.0 - 0.5 | Soil | -- | X | X | -- | -- | -- | -- | -- |
| Linda Drain - Downgradient (middle of levee) | SS-3b-0.5 | 0.0 - 0.5 | Soil | -- | X | X | -- | -- | -- | -- | -- |
| Former Structure F1 | SS-4-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-5-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-6-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-7-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-4-2.5 | 2.0 - 2.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-5-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-6-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-7-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-4b-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-5b-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-6b-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-7b-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-4b-2.5 | 2.0 - 2.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-5b-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-6b-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-7b-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| Former Structure F2 | SS-8-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-9-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-10-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-11-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-8-2.5 | 2.0 - 2.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-9-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-10-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-11-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-8b-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-9b-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-10b-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-11b-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-8b-2.5 | 2.0 - 2.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-9b-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-10b-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-11b-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |

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| On-Site Location | Sample ID | Sample Dept (feet bgs)[1] | Matri | PA s[2] | CAM 1 Metals[3] | OCPs[4] | TP - Full Scan[5] | Lead | PCBs | Arsenic | OLD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Current Structure B1 | SS-20-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-21-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-20-2.5 | 2.0 - 2.5 | Soil | -- | -- | X | -- | -- | -- | -- | -- |
| | SS-21-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| Current Structure B2 | SS-16-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-17-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-18-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-19-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-16-2.5 | 2.0 - 2.5 | Soil | -- | -- | X | -- | -- | -- | -- | -- |
| | SS-17-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-18-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-19-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| Current Structure B3 | SS-12-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | X | -- | -- | -- |
| | SS-13-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | X | -- | -- | -- |
| | SS-13b-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | X | -- | -- | -- |
| | SS-12-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-12b-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-13-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-13b-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-12b-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| Current Structure B4 | SS-15-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-15a-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-14-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | X | -- | -- | -- |
| | SS-14a-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | X | -- | -- | -- |
| | SS-14-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-14a-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-15-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-15a-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| Current Structure B5 | SS-22-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-23-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-24-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-25-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-26-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-27-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-22-2.5 | 2.0 - 2.5 | Soil | -- | -- | X | -- | -- | -- | -- | -- |
| | SS-23-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-24-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-25-2.5 | 2.0 - 2.5 | Soil | -- | -- | X | -- | -- | -- | -- | -- |
| | SS-26-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-27-2.5 | 2.0 - 2.5 | Soil | | -- | | -- | -- | -- | -- | -- |
| Former Structure F3 | SS-28-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-29-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-30-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-31-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-32-0.5 | 0.0 - 0.5 | Soil | -- | -- | | | X | -- | -- | -- |
| | SS-33-0.5 | 0.0 - 0.5 | Soil | -- | -- | | | X | -- | -- | -- |
| | SS-28-2.5 | 2.0 - 2.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-29-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-30-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-31-2.5 | 2.0 - 2.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-32-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-33-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| Former Structure F4 | SS-34-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-35-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-36-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-37-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-38-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-39-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-34-2.5 | 2.0 - 2.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-35-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-36-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-37-2.5 | 2.0 - 2.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| | SS-38-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| | SS-39-2.5 | 2.0 - 2.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| Pole-Mounted Transformer | SS-40-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | -- | X | -- | -- |
| | SS-40-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| Low-lying Area Adjacent to Water Trough | SS-41-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | -- | -- | -- | -- |
| Low-lying Area Adjacent to Supply Well | SS-42-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | -- | -- | -- | -- |
| Low-lying Area Adjacent to Supply Well | SS-43-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | -- | -- | -- | -- |
| Wooden Shed North of Building 5 | SS-44-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | X | -- |
| | SS-45-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | X | -- |
| Painted Power Pole | SS-46-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | X | -- | -- | -- |
| Wood/Trash Piles #1 and #2 (if necessary) | SS-47-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | X | -- | -- | -- |
| | SS-48-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | X | -- | -- | -- |
| | SS-49-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | X | -- | -- | -- |
| | SS-50-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | X | -- | -- | -- |
| | SS-51-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | X | -- | -- | -- |
| | SS-52-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | X | -- | -- | -- |
| Reduced Agricultural Sampling | SS-53a-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | -- | -- | X | -- |
| | SS-53b-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-53c-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-53d-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-53a-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53b-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53c-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53d-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53e-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | -- | -- | X | -- |
| | SS-53f-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-53g-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-53h-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-53e-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53f-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53g-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53h-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53i-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | -- | -- | X | -- |
| | SS-53j-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-53k-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-53L-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-53i-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53j-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53k-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |

**Table 1**
**Sampling and Anal sis Summar**
**Mar sville oint Unified Sc ool District**
**ammonton Smartsville Propert**
**uba Count , California**

| On-Site Location | Sample ID | Sample Dept (feet bgs)[1] | Matri | PA s[2] | CAM 1 Metals[3] | OCPs[4] | TP - Full Scan[5] | Lead | PCBs | Arsenic | OLD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | SS-53L-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53m-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | X | -- |
| | SS-53n-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | -- | -- | -- | -- |
| | SS-53o-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-53p-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-53m-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53n-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53o-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| | SS-53p-2.5 | 2.0 - 2.5 | Soil | -- | -- | -- | -- | -- | -- | -- | X |
| Former Livestock Area Sampling | SS-54a-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-54b-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | -- | -- | -- | -- |
| | SS-54c-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| | SS-54d-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| Potential Former Burn Pit (if necessary) | Burn-1-0.5 | 0.0 - 0.5 | Soil | X | X | -- | -- | -- | -- | -- | -- |
| Municipal Trash Pile (if necessary) | SS-55-0.5 | 0.0 - 0.5 | Soil | -- | X | -- | X | -- | -- | -- | -- |
| | SS-56-0.5 | 0.0 - 0.05 | Soil | -- | X | -- | X | -- | -- | -- | -- |
| | SS-57-0.5 | 0.0 - 0.5 | Soil | -- | X | -- | X | -- | -- | -- | -- |
| | SS-58-0.5 | 0.0 - 0.5 | Soil | -- | X | -- | X | -- | -- | -- | -- |
| Unlabeled Drum Sample (if necessary) | SS-59-0.5 | 0.0 - 0.5 | Soil | -- | X | X | X | -- | X | -- | -- |
| Waste Water Drum Sample | IDW | -- | Water | X | X | X | X | -- | X | -- | -- |
| | | | | 2 | 17 | 47 | 10 | 85 | 3 | 6 | 25 |
| **Duplicate Samples** | | | | | | | | | | | |
| Co-Collected at Sample FM-1-1.5 | FM-1a-1.5 | 1.0 - 1.5 | Soil | -- | X | X | X | -- | -- | -- | -- |
| Co-Collected at Sample SS-4-0.5 | SS-4a-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| Co-Collected at Sample SS-5-0.5 | SS-5a-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| Co-Collected at Sample SS-6-0.5 | SS-6a-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| Co-Collected at Sample SS-7-0.5 | SS-7a-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| Co-Collected at Sample SS-4b-0.5 | SS-4c-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| Co-Collected at Sample SS-5b-0.5 | SS-5c-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | -- | -- |
| Co-Collected at Sample SS-6b-0.5 | SS-6c-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| Co-Collected at Sample SS-7b-0.5 | SS-7c-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | X | -- | -- | -- |
| Co-Collected at Sample SS-20-0.5 | SS-20a-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | -- | -- | -- | -- |
| Co-Collected at Sample SS-21-0.5 | SS-21a-0.5 | 0.0 - 0.5 | Soil | -- | -- | | -- | -- | -- | -- | -- |
| Co-Collected at Sample SS-40-0.5 | SS-40a-0.5 | 0.0 - 0.5 | Soil | -- | -- | -- | -- | -- | X | -- | -- |
| Co-Collected at Sample SS-45-0.5 | SS-45a-0.5 | 0.0 - 0.5 | Soil | -- | -- | X | -- | X | -- | X | -- |
| Co-Collected at Sample Burn-1-0.5 | Burn-1a-0.5 | 0.0 - 0.5 | Soil | X | X | -- | -- | -- | -- | -- | -- |
| **Sample Blanks** | | | | | | | | | | | |
| Field Blank** | FB1 | -- | Water | -- | X | X | X | X | X | X | -- |
| Equipment Blank** | EB1 | -- | Water | -- | X | X | X | X | X | X | -- |

**Notes:**

"X" indicates samples that will be analyzed for noted compound.

* = Samples collected from the top of levee will be alternated (north side of the levee at SS-1, south side of levee at SS-2 and north side of levee at SS-3).

1. bgs = below ground surface
2. Polycyclic aromatic hydrocarbons (PAHs) will be analyzed using U.S. EPA Method 8270 SIM
3. California Assessment Manual 17 (CAM 17) metals will be analyzed using U.S. EPA Method 6010B
4. Organochlorine pesticides (OCPs) will be analyzed using EPA Method 8081A.
5. TPH-Full Scan = Total petroleum hydrocarbons quantified as gasoline, diesel, and motor oil will be analyzed using U.S. EPA Method 8015B/C. TPH quantified as gasoline will be collected using U.S. EPA Method 5035-Terracore samplers.
6. Lead and Arsenic will be analyzed using U.S. EPA Method 6010B.
7. Polychlorinated biphenyls (PCBs) will be analyzed using EPA Method 8082.
8. Arsenic will be analyzed using EPA Method 6010B.

HOLD = Samples will be placed on "hold" pending analysis of the 0.0 - 0.5 foot samples

** = One collected per field day assuming re-useable equipment is used

**Table 2**
**Sample uantitation Limits**
**Mar sville oint Unified Sc ool District**
**ammonton Smartsville Propert**
**uba Count , California**

| CAM 17 Metals (U.S. EPA Method 6000/7000) | | | |
|---|---|---|---|
| CAS# | Element | Reporting Limit | |
| | | Water | Soil |
| | | (µg/l) | (mg/kg) |
| 7440-36-0 | Antimony | 10 | 3 |
| 7440-38-2 | Arsenic | 5 | 0.25 |
| 7440-39-3 | Barium | 5 | 0.5 |
| 7440-41-7 | Beryllium | 2 | 0.1 |
| 7440-43-9 | Cadmium | 5 | 0.25 |
| 7440-47-3 | Chromium | 5 | 0.5 |
| 7440-48-4 | Cobalt | 5 | 1 |
| 7440-50-8 | Copper | 5 | 0.5 |
| 7439-92-1 | Lead | 3 | 0.15 |
| 7439-97-6 | Mercury | 0.2 | 0.02 |
| 7439-98-7 | Molybdenum | 5 | 1 |
| 7440-02-0 | Nickel | 5 | 1 |
| 7782-49-2 | Selenium | 10 | 0.25 |
| 7440-22-4 | Silver | 5 | 0.25 |
| 7440-28-0 | Thallium | 10 | 0.25 |
| 7440-62-2 | Vanadium | 5 | 0.5 |
| 7440-66-6 | Zinc | 20 | 1 |

| Polychlorinated Biphenys (U.S. EPA Method 8082) | | | |
|---|---|---|---|
| CAS# | Element (Corresponding CHHSL [mg/kg]) | Reporting Limit | |
| | | Water | Soil |
| | | (µg/l) | (mg/kg) |
| 12674-11-2 | Aroclor-1016 (0.089) | 0.5 | 0.02 |
| 11104-28-2 | Aroclor-1221 (0.089) | 0.5 | 0.02 |
| 11141-16-5 | Aroclor-1232 (0.089) | 0.5 | 0.02 |
| 53469-21-9 | Aroclor-1242 (0.089) | 0.5 | 0.02 |
| 12672-29-6 | Aroclor-1248 (0.089) | 0.5 | 0.02 |
| 11097-69-1 | Aroclor-1254 (0.089) | 0.5 | 0.02 |
| 11096-82-5 | Aroclor-1260 (0.089) | 0.5 | 0.02 |

| Total Petroleum Hydrocarbons (U.S. EPA Method 5035/8015) | | | |
|---|---|---|---|
| CAS# | Element | Reporting Limit | |
| | | Water | Soil |
| | | | (mg/kg) |
| 8006-61-9 | Gasoline | -- | 1 |
| 68334-30-5 | Diesel | -- | 1 |
| 68334-30-5 | Motor Oil | -- | 1 |

| OCPs (U.S. EPA Method 8081A) | | | |
|---|---|---|---|
| CAS# | Element (Corresponding CHHSL [mg/kg]) | Reporting Limit | |
| | | Water | Soil |
| | | (µg/l) | (mg/kg) |
| 309-00-2 | aldrin (0.033) | 0.05 | 0.0017 |
| 319-84-6 | alpha-BHC | 0.05 | 0.0017 |
| 319-85-7 | beta-BHC | 0.05 | 0.0017 |
| 319-86-8 | delta-BHC | 0.05 | 0.0017 |
| 58-89-9 | gamma-BHC (Lindane; 0.5) | 0.05 | 0.0017 |
| 5103-71-9 | technical chlordane (0.43) | 0.5 | 0.02 |
| 72-54-8 | 4,4'-DDD (2.3) | 0.1 | 0.0033 |
| 72-55-9 | 4,4'-DDE (1.6) | 0.1 | 0.0033 |
| 50-29-3 | 4,4'-DDT (1.6) | 0.1 | 0.0033 |
| 60-57-1 | Dieldrin (0.035) | 0.1 | 0.003 |
| 959-98-8 | Endosulfan I | 0.05 | 0.0017 |
| 33213-65-9 | Endosulfan II | 0.1 | 0.0033 |
| 1031-07-8 | Endosulfan sulfate | 0.1 | 0.0033 |
| 72-20-8 | Endrin (21) | 0.1 | 0.0033 |
| 7421-93-4 | Endrin aldehyde | 0.1 | 0.0033 |
| 76-44-8 | Heptachlor (0.13) | 0.05 | 0.0017 |
| 1024-57-3 | Heptachlor epoxide | 0.05 | 0.0017 |
| 72-43-5 | Methoxychlor (340) | 0.5 | 0.017 |
| 8001-35-2 | Toxaphene (0.46) | 1 | 0.02 |

| PAHs (U.S. EPA Method 8270 SIM) | | |
|---|---|---|
| CAS# | Element | Reporting Limit |
| | | Soil |
| | | (mg/kg) |
| | Naphthalene | 0.005 |
| | 2-methylnaphthalene | 0.005 |
| | Acenaphthylene | 0.005 |
| | acenaphthene | 0.005 |
| | Fluorene | 0.005 |
| | Phenanthrene | 0.005 |
| | Anthracene | 0.005 |
| | Fluoranthene | 0.005 |
| | Pyrene | 0.005 |
| | Benzo(a)anthracene | 0.005 |
| | Chrysene | 0.005 |
| | Benzo(b)fluroanthene | 0.005 |
| | Benzo(k)fluroanthene | 0.005 |
| | Benzo(a)pyrene | 0.005 |
| | Indeno(1,2,3-cd)pyrene | 0.005 |
| | Benzo(g,h,i)perylene | 0.005 |

Notes:
CHHSL = California Human Health Screening Levels (OEHHA 2005)
U.S. EPA = United States Environmental Protection Agency
µg/l = micrograms per liter
mg/kg = milligrams per kilogram
% = asbestos weight percent

**Table 3**
**Anal tical Met ods, Container T pes, and Preservatives**
**Mar sville oint Unified Sc ool District**
**ammonton Smartsville Propert**
**uba Count , California**

| Analysis | Matrix | Analytical Method | Holding Time[1] | Minimum Volume | Container | Preservative[2] |
|---|---|---|---|---|---|---|
| Polycyclic Aromatic Hydrocarbons | Water | EPA 8270 SIM | 7 d/40 d[3] | 1 l | 1-l glass | None |
| | Soil | | 14 d/40 d[3] | 30 g | 6-inch stainless steel sleve | None |
| Polychlorinated Biphenyls | Water | EPA 8082 | 7 d/40 d[3] | 1 l | 1-l glass | None |
| | Soil | | 14 d/40 d[3] | 30 g | 6-inch stainless steel sleve | None |
| Organochlorine Pesticides | Water | U.S. EPA 8081A | 7 d/40 d[3] | 1 l | 1-l amber glass | None |
| | Soil | | 14 d/40 d[3] | 50 g | 6-inch stainless steel sleve | None |
| CAM 17 Metals | Water | U.S. EPA 6010 | 6 mo/28 d[3,4] | 100 ml | 1-l poly | $HNO_3$ |
| | Soil | | 14 d/40 d[3] | 5 g | 6-inch stainless steel sleve | None |
| TPH-DRO/ORO | Water | U.S. EPA 8015B/C | 14 d/40 d[3] | 40 ml | 40 ml - VOA | HCL |
| | Soil | | 14 d/40 d[3] | 25 g | 6-inch stainless steel sleve | None |
| TPH-GRO | Water | U.S. EPA 8015B/C* | 14 d/40 d[3] | 40 ml | 40 ml - VOA | HCL |
| | Soil | | 7 d/14 d[3] | 20 g | 40 ml - VOA | Methanol |

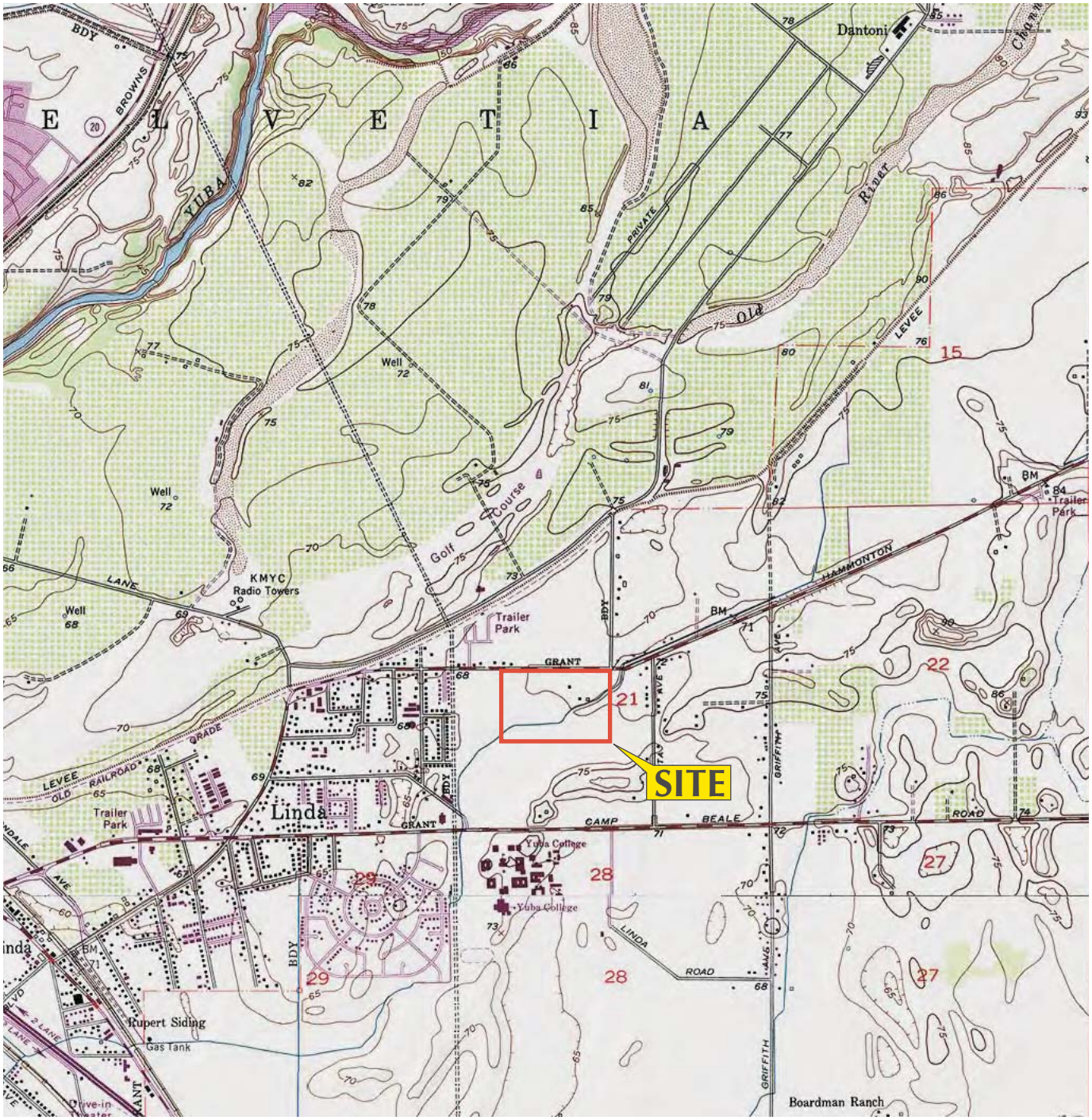
Notes:
* = Soil samples to be analyzed for TPH-GRO will be collected using U.S. EPA Method 5035/Terracore.
CAM 17 = California Assessment Manual 17
d = days
g = grams
h = hours
l = liter
ml = milliliters
mo = months
oz = ounce
TPH-DRO/ORO = TPH quantified as diesel and oil range organics
TPH-GRO = total petroleum hydrocarbons quantified as gasoline range organics
U.S. EPA = U.S. Environmental Protection Agency

1. Holding times specified in 40 CFR 136.3 Table 2 (Clean Water Act/NPDES) and SW-846 Table 2-36 Revision 3, December 1996.

2. Samples should be kept at 4 degrees Celsius from time of collection until analysis.

3. X/Y: X days from sample collection to extraction, then Y days from extraction to analysis.

4. 28-day holding time for mercury; 6-month holding time for all other elements.




SITE BOUNDARY

0 2,250 FEET

SOURCE: USGS California Topo CD

HAMMONTON SMARTVILLE PROPERTY
A PORTION OF APNS 021-150-032 AND 021-150-060
YUBA COUNTY, CALIFORNIA

## SITE VICINITY MAP

ARCADIS

FIGURE
1

G:\ENVCAD\Emeryville\ACT\RV009363\00060004\Hammonton\CDR\RV009363 Hammonton B01.cdr

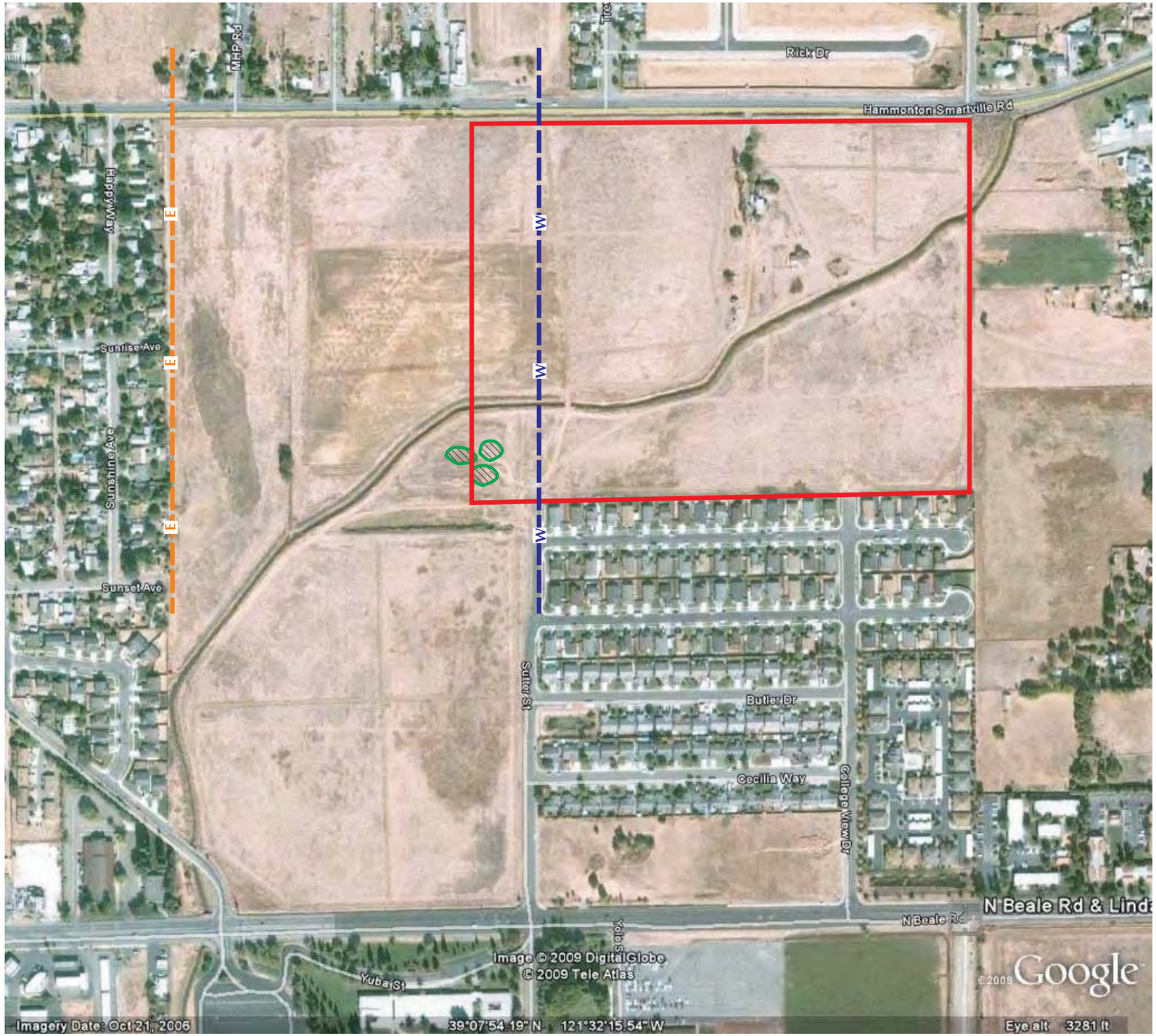



Image Source: Google Earth Pro©

**EXPLANATION**

- SITE BOUNDARY (APPROXIMATE)
- FILL MATERIAL
- E — PG&E 115kV POWER LINE
- W — 12-INCH DIAMETER WATER PIPELINE

N

0 360 feet

GRAPHIC SCALE

HAMMONTON SMARTVILLE PROPERTY
A PORTION OF APNS 021-150-032 AND 021-150-060
YUBA COUNTY, CALIFORNIA

# SITE PLAN

ARCADIS

FIGURE
2

G:\ENVCAD\Emeryville\ACTRV009363\000600004\Hammonton\CDR\RV009363 Hammonton B02.cdr




**EXPLANATION:**

- F1 — Concrete foundation/former structure identifier
- B1 — Current structure identifier
- T — Former pole mounted transformer (2)
- W — Water-supply well

N

0 100 Feet

Image Source: Google Earth Pro©

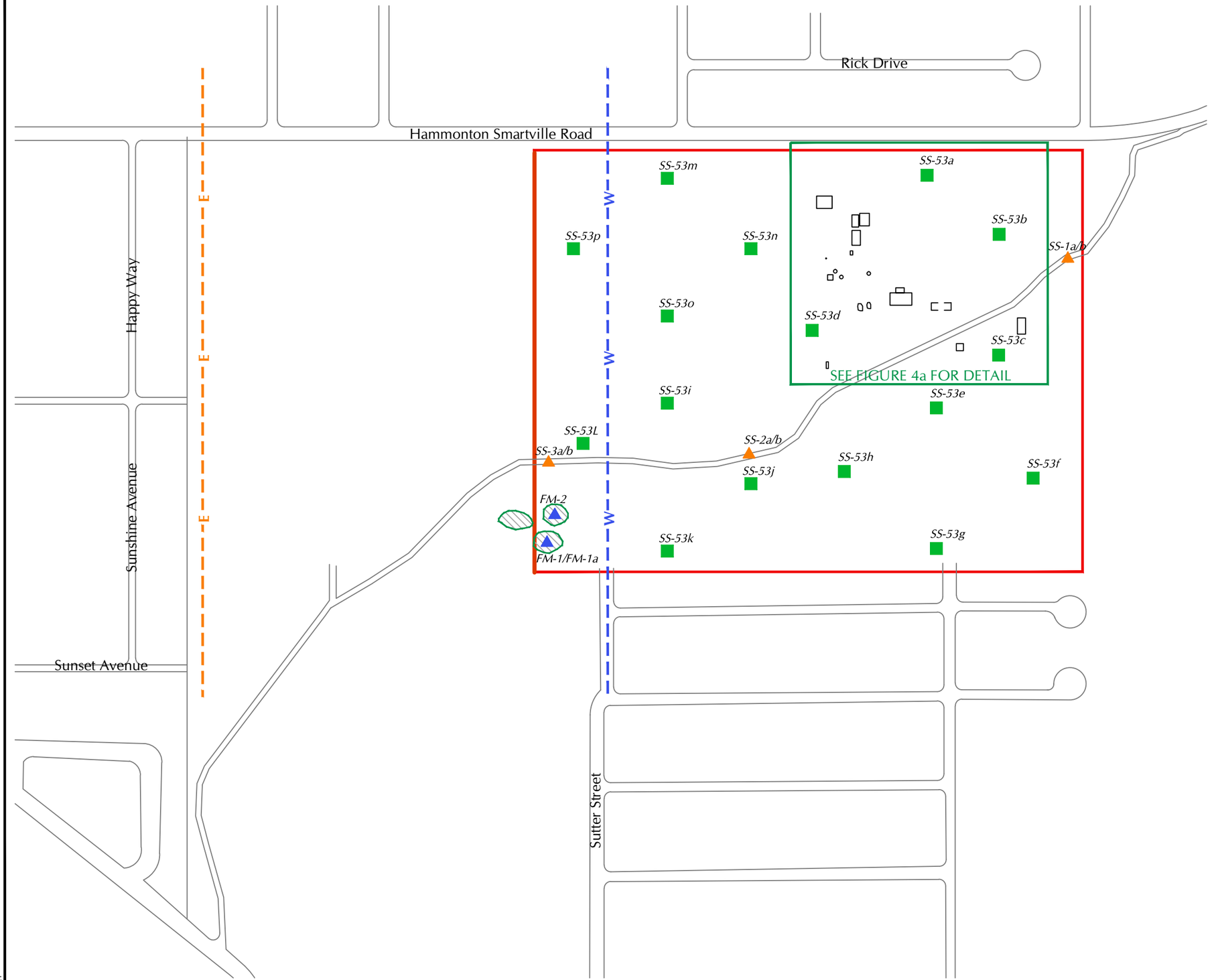
HAMMONTON SMARTVILLE PROPERTY
A PORTION OF APNS 021-150-032 AND 021-150-060
YUBA COUNTY, CALIFORNIA

# SITE DETAIL

ARCADIS

FIGURE
3

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\Emeryville\ACTIVE\V009363\00061\0004\Hammonton\DWG\V009363 Hammonton B03.dwg LAYOUT: 3 SAVED: 8/25/2011 3:46 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 8/25/2011 3:52 PM BY: REYES, ALEC




**EXPLANATION**

- SITE BOUNDARY (APPROXIMATE)
- FILL MATERIAL
- E — PG&E 115kV POWER LINE
- W — 12-INCH DIAMETER WATER PIPELINE
- *SS-2* — SAMPLE IDENTIFICATION NAME

**Fill Material**
Soil Samples
Sample from 1 ft. below surface from center of each pile.
Analyze discrete samples for:
- TPH (U.S. EPA [EPA] method 8015B/C)
- Metals (EPA method 6010B)
- OCPs (EPA method 8081A)

**Storm ater Drainage Ditc**
Soil Samples
Sample from 1 ft. above the stagnant water line from a depth of 0 - 0.5 ft bgs.
At top of levee from a depth of 0 - 0.5 ft bgs.
Analyze discrete samples for:
- Metals (EPA method 6010B)
- OCPs (EPA method 8081A)

**educed Agricultural Sample**
Soil Samples
Sample at intervals of 0 - 0.5 ft bgs and 2 - 2.5 ft bgs.
- Analyze 4-pt composite sample for OCPs (EPA method 8081A)
- Analyze one discrete sample from each composite for Arsenic (EPA method 6010B)

N

0 300 Feet

HAMMONTON SMARTVILLE PROPERTY
A PORTION OF APNS 021-150-032 AND 021-150-060
YUBA COUNTY, CALIFORNIA

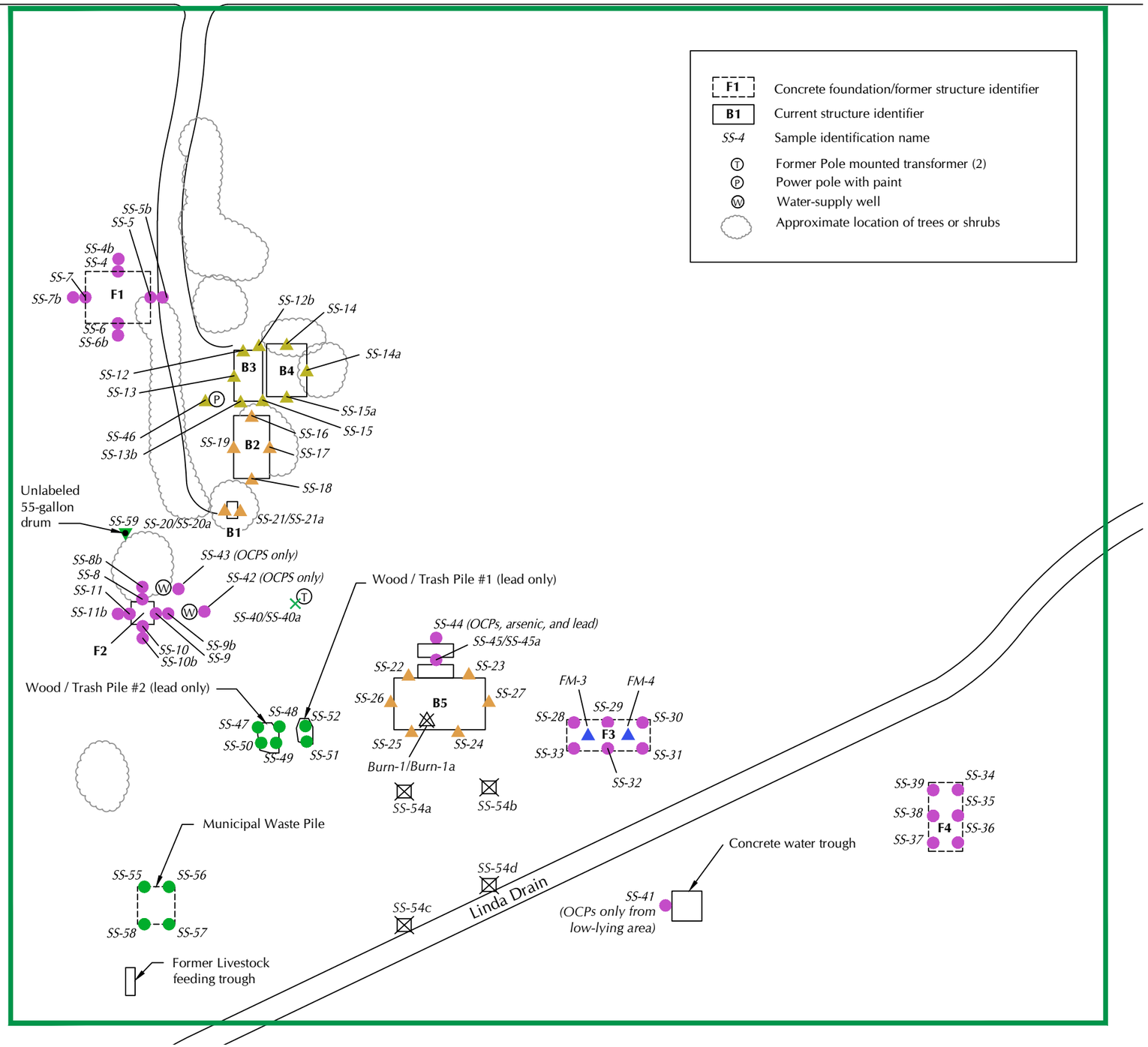
# PROPOSED SAMPLING PLAN

ARCADIS

FIGURE 4

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
\\Arcadis-us\officedata\Emeryville-CA\ENVCAD\Emeryville\ACTIV\009363\0006\000004\Hammonton\DWG\RV009383-Hammonton B04.dwg LAYOUT: 4 SAVED: 2/9/2012 9:46 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/9/2012 9:47 AM BY: LOVING, JEFFREY

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
\Arcadis-us\officedata\Emeryville-CA\ENVCAD\Emeryville\ACTIVITY\00936300060004\Hammonton\DWG\RV009363 Hammonton B04A.dwg LAYOUT: 4A SAVED: 2/9/2012 9:57 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/9/2012 9:58 AM BY:
LOVING, JEFFREY




**EXPLANATION:**

**Former Pole Mounted Transformers**
Soil Samples:
Sample at intervals of 0-0.5 ft. and 2-2.5 ft. below ground surface
- Analyze discrete 0.5 ft. sample for:
PCBs (U.S. EPA [EPA] Method 8082)
Place 2.5 ft. sample on hold pending analysis of 0.5 ft. sample.

**Potential Former Burn Pit**
Soil Samples:
Sample at intervals of 0-0.5 ft.
and analyze for metals (EPA Method 6010B)
PAHs (EPA Method 8270 SIM)

**Former Livestock Locations** (including SS-12b, SS-15, SS-15a)
Soil Samples:
Sample at 0-0.5 ft bgs.
- Analyze composite for:
OCPs (EPA Method 8081A)

**Former Structures (F1-F4)**
Soil Samples:
Sample at intervals of 0-0.5 ft. and 2-2.5 ft. below ground surface
- Analyze discrete 0.5 ft. and 2.5 ft. samples for:
lead (EPA Method 6010B)
- Analyze composite 0.5 ft. samples and composite 2.5 ft. samples for:
OCPs (EPA Method 8081A)

**Current Structures (B3-B4)**
Soil Samples:
Sample at intervals of 0-0.5 ft. and 2-2.5 ft. below ground surface
- Analyze discrete 0.5 ft. samples for:
lead (EPA Method 6010B)
Place 2.5 ft. samples on hold pending analysis of 0.5 ft. samples

**Current Structures (B1, B2, B5)**
Soil Samples:
Sample at intervals of 0-0.5 ft. and 2-2.5 ft. below ground surface
- Analyze discrete 0.5 ft. samples for:
lead (EPA Method 6010B)
- Analyze composite 0.5 ft. and 2.5 ft. samples for:
OCPs (EPA Method 8081A)

**Fill Material**
Soil Samples:
Sample 1 ft. below surface from center of each pile
- Analyze discrete samples for:
TPH (EPA Method 8015B/C)
Metals (EPA Method 6010B)
OCPs (EPA Method 8081A)

**Unlabeled 55-gallon Drum Location**
Soil Samples:
Sample at 0-0.5 ft below ground surface and analyze for:
TPH (EPA Method 8015B/C)
Metals (EPA Method 6010B)
OCPs (EPA Method 8081A)
PCBs (EPA Method 8082)

**Municipal Waste Pile Locations**
Soil Samples:
Sample at 0-0.5 ft below ground surface and analyze for:
TPH (EPA Method 8015B/C)
Metals (EPA Method 6010B)

N

0 80 Feet

HAMMONTON SMARTVILLE PROPERTY
A PORTION OF APNS 021-150-032 AND 021-150-060
YUBA COUNTY, CALIFORNIA

# PROPOSED SAMPLING PLAN SITE DETAIL

ARCADIS

FIGURE
**4a**

ARCADIS

## Appendix A

Correspondence Records and Site Photographs

# August 2009 Site Visit Photos



Photo 1: View facing west of the on-site undeveloped field. PG&E power lines are visible off-site further to the west.



Photo 2: View of the on-site portion of the Linda Drain.



Photo 3: View of the on-site livestock feeding trough centrally located on the Site.



Photo 4: View facing west of the abandoned truck. The unlabeled 55-gallon drum is visible in the background adjacent to the truck.



Photo 5: View facing east toward a pile of garbage located in the vicinity of Building 5.



Photo 6: View of the on-site power pole containing two pole-mounted transformers. The power pole is centrally location on the Site, southeast of Building 1.



Photo 7: View of one of the two on-site water-supply wells.



Photo 8: View of western exterior of on-site Building 3 (foreground), Building 2 (middle), and Building 1 (background).



Photo 9: View of exterior of on-site Building 2.



Photo 10: View of exterior of on-site Building 4.



Photo 11: View of interior of on-site Building 4.



Photo 12: View of interior of on-site Building 5.



Photo 13: View facing north toward the piles of fill material east of Building 5. This area is also considered the location of former structure 3 (F3).



Photo 14: View facing north toward the undeveloped portion of the Site north of the on-site Buildings. Hammonton Smartville road is visible in the background.



Photo 15: View facing west toward the undeveloped portion of the Site along Hammonton Smartville Road.



Photo 16: View facing southwest toward the piles of fill material on the southwestern corner of the Site.



Photo 17: View facing north toward the off-site property located adjacent to the north of the Site.




Photo 18: View of the off-site LCWD well station 15. The approximately 240,000 gallon water AST and diesel generator are visible in the background.



Photo 19: View facing west toward the off-site water-supply well located adjacent to the north of the Site.



Photo 20: View facing southeast toward the off-site pile of fill material and undeveloped area located adjacent to the east of the Site.



Photo 21: View facing southeast toward the residential property located adjacent off-site to the south of the Site.



Photo 22: View facing west toward the undeveloped area located adjacent to the west of the Site. The PG&E 115 kV power lines and residential property are visible further to the west of the Site.

# August 2011 Site Visit Photos



Photo 1: View facing north from the southwestern corner of the site toward the modified western site boundary. The wooden stakes in the foreground and background demarcate the western site boundary.



Photo 2: View facing east from the southwestern corner of the site toward the southern site boundary. The wooden stakes in the foreground and background demarcate the southern site boundary.



Photo 3: Interior view of the potential former burn area within on-site building 5.



Photo 4: Interior view of the household debris and furniture within on-site building 1.



Photo 5: View facing west of the location of the former abandoned truck.



Photo 6: Interior view of the household debris and kitchen within on-site building 2.



Photo 7: View facing northeast toward the wood and trash pile #1 (Figure 3).



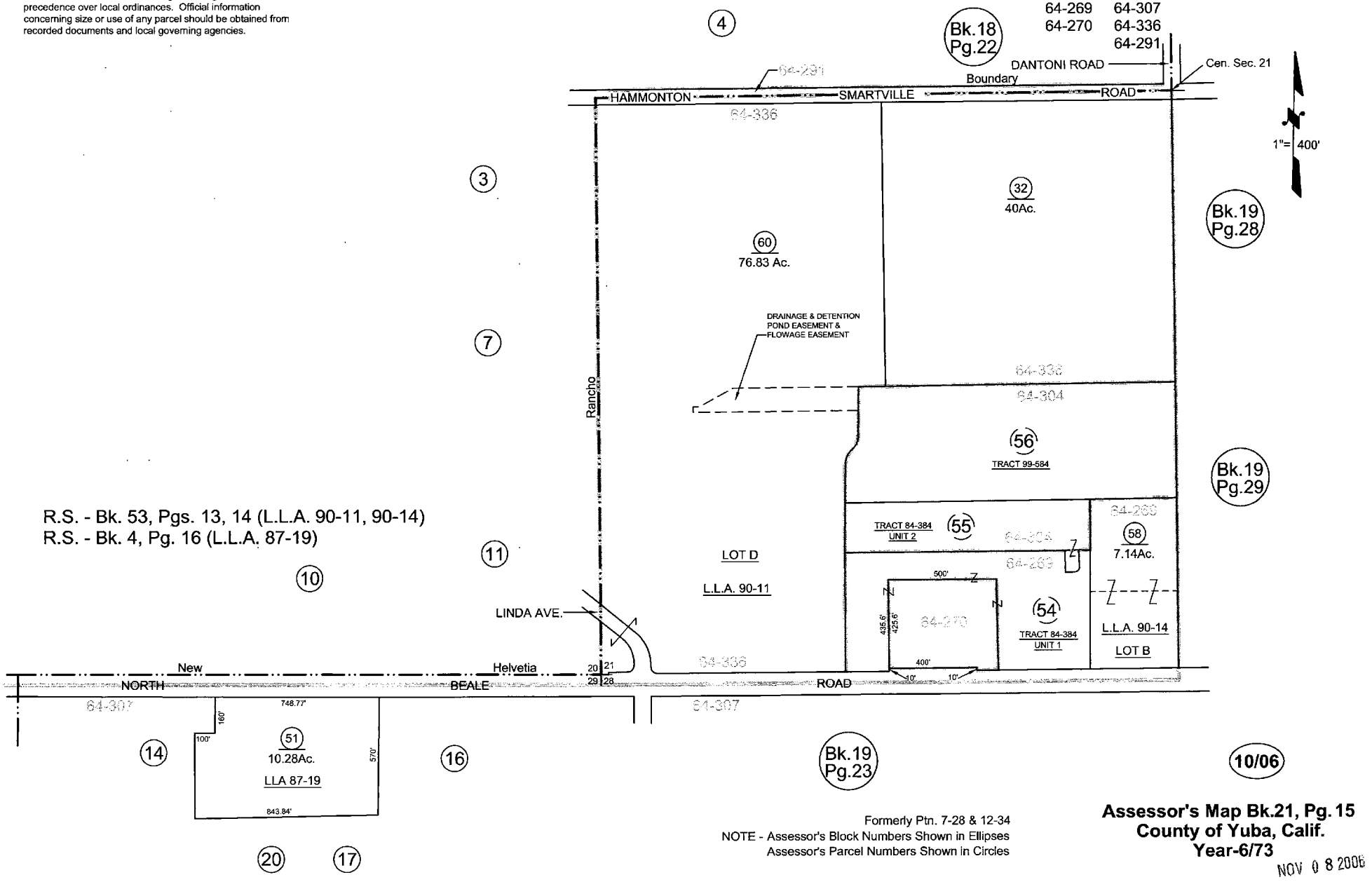
Photo 8: View facing north toward the wood and trash pile #2 (Figure 3).

NOTE: This map was prepared for assessment purposes only, and is not intended to illustrate legal building sites or establish precedence over local ordinances. Official information concerning size or use of any parcel should be obtained from recorded documents and local governing agencies.

# POR. SEC. 21 & 29, T.15N., R.4E., M. D. B. & M.

**21-15**

Tax Area Code
64-269 64-307
64-270 64-336
64-291




R.S. - Bk. 53, Pgs. 13, 14 (L.L.A. 90-11, 90-14)
R.S. - Bk. 4, Pg. 16 (L.L.A. 87-19)

Formerly Ptn. 7-28 & 12-34
NOTE - Assessor's Block Numbers Shown in Ellipses
Assessor's Parcel Numbers Shown in Circles

**10/06**

**Assessor's Map Bk.21, Pg. 15**
**County of Yuba, Calif.**
**Year-6/73**

NOV 0 8 2006

LFR ENVIRONMENTAL MANAGEMENT & CONSULTING ENGINEERING

# Phase I Environmental Site Assessment Questionnaire

Date: 27 AUGUST 2009
Site Name: HAMMONTON SMARTVILLE PROPERTY Your Name: MICHAL HEALY
Site Location: _____ Your Title: DIRECTOR OF PLANNING & DESIGN
Relationship to Site: ☐ Owner ☐ Occupant ☑ Purchaser ☐ Other
Length of Time Associated with Site: 3 MONTHS

Please review and complete this questionnaire which will assist LFR in completing our site assessment. If sufficient space in not provided, please compete your response on a separate sheet of paper and attach it to this questionnaire.

1. Do you have a title document prepared for the Site? ☐ Yes ☐ No
   If yes, please provide a copy to LFR.

2. Are you aware of any environmental cleanup liens against the Site that are filed or recorded under federal, tribal, state or local law?
   ☐ Yes ☐ No ☒ Unknown ☐ N/A
   If Yes, please explain: _____

3. Are you aware of any activity or land use limitations, such as engineering controls (for contaminant control), land use restrictions or institutional controls, that are in place at the Site and/or have been filed or recorded in a registry under federal, tribal, state or local law?
   ☐ Yes ☐ No ☒ Unknown ☐ N/A
   If Yes, please explain: _____

916.786.0320 m
916.786.0366 f
www.lfr.com
4190 Douglas Boulevard, Suite 200
Granite Bay, California 95746-5964
*Offices Nationwide*

LFR

4. Do you have any specialized knowledge or experience related to the Site or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the Site or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

☐ Yes ☒ No ☐ Unknown ☐ N/A

If Yes, please explain: _____

_____

5. Are you aware of commonly known or reasonably ascertainable information about the Site that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example,

a) Do you know the past uses of the Site?

☐ Yes ☐ No ☒ Unknown ☐ N/A

If Yes, please explain: 3RD PARTIES INFORMATION HAS INDICATED DAIRY AND FARMING PAST USES. DISTRICT HAS NO FIRST HAND KNOWLEDGE.

b) Do you know of specific chemicals that are present or once were present at the Site?

☐ Yes ☐ No ☒ Unknown ☐ N/A

If Yes, please explain: _____

_____

c) Do you know of chemical spills that have taken place at the Site?

☐ Yes ☐ No ☒ Unknown ☐ N/A

If Yes, please explain: _____

_____

d) Do you know of any environmental cleanups that have taken place at the Site?

☐ Yes ☐ No ☒ Unknown ☐ N/A

If Yes, please explain: _____

_____

LFR

e) Do you know if any fill material has been imported to the Site?

☐ Yes ☐ No ☒ Unknown ☐ N/A

If Yes, please explain: _____

_____

6. Do you know of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the Site?

☐ Yes ☐ No ☒ Unknown ☐ N/A

If Yes, please explain: _____

_____

7. Do you know of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the Site?

☐ Yes ☐ No ☒ Unknown ☐ N/A

If Yes, please explain: _____

_____

8. Do you know of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products at the Site?

☐ Yes ☐ No ☒ Unknown ☐ N/A

If Yes, please explain: _____

_____

9. Based on your knowledge and experience related to the Site are there any obvious indicators that point to the presence or likely presence of contamination at the Site?

☐ Yes ☒ No ☐ Unknown ☐ N/A

If Yes, please explain: _____

_____

LFR

10. Does the Site's purchase price reasonably reflect the fair market value of the property?

☒ Yes ☐ No ☐ Unknown ☐ N/A

If No, do you know the reason for lower purchase price? Is it possible that the lower purchase price is because of contamination known or believed to be present at the Site?

☐ Yes ☐ No ☐ Unknown ☐ N/A

If Yes, please explain: _____

_____

11. Have any of the following documents been prepared for the Site and, if so, can copies be provided to LFR:

- Environmental site assessment reports ☐ Yes ☒ No ☐ Copies available
- Environmental compliance audit reports ☐ Yes ☒ No ☐ Copies available
- Environmental permits (for example, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, National Pollutant Discharge Elimination System permits, underground injection permits) ☐ Yes ☒ No ☐ Copies available
- Registrations for underground storage tanks (USTs) and/or above ground storage tanks (ASTs) ☐ Yes ☒ No ☐ Copies available
- Registrations for underground injection systems ☐ Yes ☒ No ☐ Copies available
- Material safety data sheets ☐ Yes ☒ No ☐ Copies available
- Community right-to-know plan ☐ Yes ☒ No ☐ Copies available
- Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; etc. ☐ Yes ☒ No ☐ Copies available
- Reports regarding hydrogeologic conditions on the Site or in the surrounding area ☐ Yes ☒ No ☐ Copies available
- Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the Site or relating to environmental liens encumbering the Site ☐ Yes ☒ No ☐ Copies available
- Hazardous waste generator notices or reports ☐ Yes ☒ No ☐ Copies available
- Risk assessments ☐ Yes ☒ No ☐ Copies available
- Recorded Activity and Use Limitations (e.g. deed restriction, asphalt cap) ☐ Yes ☒ No ☐ Copies available

LFR appreciates your assistance on this project.

#15 I.C

# First American Title Insurance Company
# National Commercial Services

**1610 Arden Way, Suite 101**
**Sacramento, CA 95815**

September 22, 2010

James R. Traber
Kingsley Bogard Thompson LLP
50 Iron Point Circle, Suite 110
Folsom, CA 95630
Phone: (916)932-2500
Fax: (916)932-2510

| | |
|---|---|
| Customer Reference: | 2176 Hammonton Smartsville Road |
| Title Officer: | Timothy Dugan |
| Phone: | (916)677-8017 |
| Order Number: | NCS-455784-SAC4 |
| Escrow Number: | NCS-455784-SAC4 |
| Property: | 2176 Hammonton Smartsville, Linsa, CA |

Attached please find the following item(s):

Guarantee

Thank You for your confidence and support. We at First American Title Company maintain the fundamental principle:

*Customer First!*

**SCHEDULE A**

Liability: $2,500,000.00 Fee: $TBD

1. Named of Assured:

   Marysville Joint Unified School District

2. Date of Guarantee:

   September 14, 2010 at 7:30 A.M.

3. This Litigation Guarantee is furnished solely for the purpose of facilitating the filing of an action to:

   Eminent Domain

4. The estate or interest in the Land which is covered by this Guarantee is:

   Fee Simple

5. Title to the estate or interest in the Land is vested in:

   Erich Butler, as to an undivided 1/4th interest; Stephen Hull and Stephen M. Hull, as to an undivided 1/4th interest; Blair T. Butler and Roberta C. Butler, Trustees of the Butler Family Living Trust dated May 10, 1994 as to an undivided 1/4th interest; Angela K. Butler and Brett A. Butler, as to an undivided 1/8th interest; Stuart D. Greenberg and Debra Milani, as Co-Trustees of the Greenberg Family Trust dated May 07, 2004, as to an undivided 1/8th interest, as to Parcel One;

   Roberta C. Butler, Successor Trustee of the Butler Family Living Trust dated May 10, 1994, as to Parcel Two

6. The Land referred to in this Guarantee is described as follows:

   Real property in an unincorporated area, County of Yuba, State of California, described as follows:

   PARCEL ONE:

   THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION TWENTY ONE (21), TOWNSHIP FIFTEEN (15) NORTH, RANGE FOUR (4) EAST, M.D.B. & M.

   PARCEL TWO:

   A PORTION OF THE REMAINDER AS SHOWN ON TRACT MAP NO. 84-384, "COLLEGE VIEW SUBDIVISION UNIT 1", AS RECORDED IN BOOK 50 OF MAPS AT PAGE 48, YUBA COUNTY RECORDS, SITUATED IN

SECTION 21, TOWNSHIP 15 NORTH, RANGE 4 EAST, MOUNT DIABLO BASE AND MERIDIAN, YUBA COUNTY, CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

LOT "D" OF THE RECORD OF SURVEY RECORDED IN BOOK 53 OF MAPS AT PAGE 13, YUBA COUNTY RECORDS.

APN: 021-150-032-000, as Parcel One and 021-150-060-000, as Parcel Two

## SCHEDULE B

Defects, liens, encumbrances or other matters affecting title:

### PART ONE

1. General and special taxes and assessments for the fiscal year 2009-2010.

| | |
|---|---|
| First Installment: | $834.02, PAID |
| Penalty: | $0.00 |
| Second Installment: | $834.02, PAID |
| Penalty: | $0.00 |
| Tax Rate Area: | 064-336 |
| A. P. No.: | 021-150-032-000 |

(Affects Parcel One)

2. General and special taxes and assessments for the fiscal year 2009-2010.

| | |
|---|---|
| First Installment: | $1,039.20, PAID |
| Penalty: | $0.00 |
| Second Installment: | $1,039.20, PAID |
| Penalty: | $0.00 |
| Tax Rate Area: | 064-336 |
| A. P. No.: | 021-150-060-000 |

(Affects Parcel Two)

3. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.

4. Assessment liens, if applicable, collected with the general and special taxes.

5. Easements as to any portions lying within the boundaries of existing roads, pole lines, pipe lines, ditches and/or canals.

6. Rights of the public in and to that portion of the land lying within Hammonton Smartsville Road.

7. Rights of the public in and to that portion of the land lying within Linda Avenue.

8. Any facts, rights, interests or claims that may exist or arise by reason of matters, if any, disclosed by that certain Record of Survey filed in book 11, page 22 .

9. An easement for erecting, constructing, repairing, maintaining and using lines of poles and/or towers for the transmission and distribution of electricity and incidental purposes, recorded June 3, 1908 in Book 56 of Deeds, Page 578.
In Favor of: Great Western Power Company
Affects: The West 100 feet of Parcel Two

Document(s) declaring modifications thereof recorded October 28, 2005 as Instrument No. 2005R-026691 of Official Records.

10. An easement for right of way for a public highway and incidental purposes, recorded August 12, 1942 in Book 71, Page 151 of Official Records.
In Favor of: State of California
Affects: Parcel Two

11. A waiver of any claims for damages by reason of the location, construction, landscaping or maintenance of a contiguous freeway, highway, roadway or transit facility as contained in the document recorded August 12, 1942 in Book 71, Page 151 of Official Records.

(Affects Parcel Two)

12. The terms and provisions contained in the document entitled "Drainage Agreement" executed by and between Blair Butler and Roberta Butler and James K. Beadnell and Donald G. Clanton recorded January 25, 1983 as Instrument No. 6770 in Book 792, Page 17 of Official Records.

13. An easement for waterline and incidental purposes, recorded December 14, 1990 as Instrument No. 90-14345 of Official Records.
In Favor of: Stamas Corporation, a California corporation
Affects: The Northeast portion of Parcel Two

**PART TWO**

1. A Deed of Trust to secure an original indebtedness of $60,000.00 recorded December 19, 1977 as Book 655, Page 647 of Official Records.

| | |
|---|---|
| Dated: | December 19, 1977 |
| Trustor: | Blair Butler and Roberta C. Butler, his wife; Stephen Hull and Gayle Hull, his wife; Barry Butler and Debra Butler, his wife, and Erich Butler, a single man |
| Trustee: | First American Title Insurance Company, a California corporation |
| Beneficiary: | Arnold R. Bean, an unmarried man |

According to the public record the beneficial interest of Arnold R Bean was distributed to: Norman Barker Bean, Geraldine Bean Lawson, Elden Price Bean, Merle Everett Bean and Barbara Bean MacFarlane, by Decree of Distribution Recorded on July 17, 1985 in Book 856, Page 322 Yuba County Records.

Affects Parcel One

2. Notice of pendency of action recorded August 31, 2009 as Instrument No. 2009R-012459 of Official Records.

| | |
|---|---|
| Court: | Superior Court of the State of California in and for the County of Yuba |
| Case No.: | YCSCCVED080001012 |
| Plaintiff: | Marysville Joint Unified School District |
| Defendant: | Eric Charles Butler; Angela Butler; Brett Butler; Debbie Greenberg; Stuart D. Greenberg; Debra Milani; Greenberg Family Trust; Blair T. Butler; Roberta C. Butler; Butler Family Living Trust; Stephen M. Hull; Barry Butler; Debra Butler; and Doe One to Doe Ten |
| Purpose: | Acquire under the laws of eminent domain |

The map attached, if any, may or may not be a survey of the land depicted hereon. First American Title Insurance Company expressly disclaims any liability for loss or damage which may result from reliance on this map except to the extent coverage for such loss or damage is expressly provided by the terms and provisions of the title insurance policy, if any, to which this map is attached.

## SCHEDULE C

ADDRESSES

| Paragraph Number: | Recording Information: | Mailing Address: |
|---|---|---|
| Vesting Deed | December 19, 1977 as Instrument No. 6938 in Book 655, Page 646 | 6394 Larkin Road<br>Live Oak, CA |

ADDRESSES

| Paragraph Number: | Recording Information: | Mailing Address: |
|---|---|---|
| 1, Schedule B, Part II | December 19, 1977 as Instrument No. 6939 in Book 655, Page 647 | Arnold R. Bean<br>2176 Hammonton-Smartville Road<br>Linda, CA 95901 |

ADDRESSES

| Paragraph Number: | Recording Information: | Mailing Address: |
|---|---|---|
| Sub-item of No. 1, Schedule B, Part II | July 17, 1985 as Instrument No. 588 in Book 856, Page 322 | 1900 K Street, Suite 101<br>Sacramento, CA 95814 |

ADDRESSES

| Paragraph Number: | Recording Information: | Mailing Address: |
|---|---|---|
| Vesting Deed | May 11, 1994 as Instrument No. 94-05829 | Mr. & Mrs Blair T. Butler<br>6394 Larkin Road<br>Live Oak, CA 95953 |

ADDRESSES

| Paragraph Number: | Recording Information: | Mailing Address: |
|---|---|---|
| Vesting | March 31, 2004 as Instrument No. 2004R-005487 | John J. Trezza, Esquire Trezza, Ithurburn, Steidlmayer & Ithurburn<br>P.O. Drawer "S"<br>Yuba City, CA 95992 |

ADDRESSES

| Paragraph Number: | Recording Information: | Mailing Address: |
|---|---|---|
| Vesting | May 17, 2004 as Instrument No. 2004R-008822 | Drobny Law Offices, Inc.<br>A Professional Corporation<br>2151 River Plaza Drive, Suite 305<br>Sacramento, CA 95833 |

ADDRESSES

| Paragraph Number: | Recording Information: | Mailing Address: |
|---|---|---|
| Vesting | August 12, 2004 as Instrument No. 2004R-015844 | Stephen M. Hull<br>3500 Auberry Way<br>Cool, CA 95614 |

ADDRESSES

| Paragraph Number: | Recording Information: | Mailing Address: |
|---|---|---|
| Vesting | September 14, 2005 as Instrument No. 2005R-021943 | Roberta Blair<br>6394 Larkin Road<br>Live Oak, CA 95963 |

ADDRESSES

| Paragraph Number: | Recording Information: | Mailing Address: |
|---|---|---|
| 2 of Schedule B, Part II | August 31, 2009 as Instrument No. 2009R-012459 | Kingsley Bogard Thompson LLP<br>Paul G. Thompson, SBN: 190954<br>James R. Traber, SBN: 248439<br>50 Iron Point Circle, Suite 110<br>Folsom, CA 95630 |

## Hackman, Scott

**From:** Michal Healy [mhealy@mjusd.com]
**Sent:** Tuesday, September 08, 2009 3:51 PM
**To:** Hackman, Scott
**Subject:** RE: Hammonton Smartville Prop Question

Scott,
We do not have a title report on the property. We have a boundary survey, but not a title report.

The only information I have is word of mouth that the site was used for cattle.
Michal

---

**From:** Hackman, Scott [mailto:Scott.Hackman@lfr.com]
**Sent:** Tuesday, September 08, 2009 2:40 PM
**To:** Michal Healy
**Subject:** [SCANNED] Hammonton Smartville Prop Question

Hi Michal:

Do you have a recent title report for the site?

Do you have any additional information regarding former dairy cattle grazing/dairy producting on the site?

Let me know and thanks

**Scott S. Hackman**
Project Scientist
LFR Inc. an Arcadis company
1410 Rocky Ridge Drive, Suite 330
Roseville, CA 95661
916.786.7369 Direct Dial
916.786.0320 Main Number
916.747.8204 Mobile
916.786.0366 Fax
scott.hackman@lfr.com
Visit us at www.lfr.com

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## Hackman, Scott

**From:** Nicholson, Jeff [JANe@pge.com]
**Sent:** Thursday, September 03, 2009 11:32 AM
**To:** Hackman, Scott
**Subject:** RE: PG&E line information request for 2716 Hammonton Smartsville Road, Marysville, CA
**Attachments:** Marysville_buffer2.pdf

Scott, here is a revised map. The additional acreage does not pick up any new elec or gas transmission. --Jeff

---

**From:** Hackman, Scott [mailto:Scott.Hackman@lfr.com]
**Sent:** Wednesday, September 02, 2009 1:32 PM
**To:** Nicholson, Jeff
**Cc:** Hackman, Scott
**Subject:** RE: PG&E line information request for 2716 Hammonton Smartsville Road, Marysville, CA

Jeff:

**Item 1:** See attached buffer map you sent me and a revised site boundary map created by LFR. Can you confirm if the change in site boundary affects any other high tension power lines within 1500 ft?

**Item 2:** During my site visit I noted power lines extended east to west along the north side of Hammonton Smartville Road. They appeared to be general service lines for residential. What is the reason those lines did not appear on your buffer map? Are they less than 50 kV?

Let me know and thanks for your time.

**Scott S. Hackman**
Project Scientist
LFR Inc. an Arcadis company
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Roseville, CA 95661
916.786.7369 Direct Dial
916.786.0320 Main Number
916.747.8204 Mobile
916.786.0366 Fax
scott.hackman@lfr.com
Visit us at www.lfr.com

---

**From:** Nicholson, Jeff [mailto:JANe@pge.com]

## Hackman, Scott

**From:** Nicholson, Jeff [JANe@pge.com]
**Sent:** Wednesday, September 02, 2009 4:36 PM
**To:** Hackman, Scott
**Subject:** RE: PG&E line information request for 2716 Hammonton Smartsville Road, Marysville, CA

Scott, for item 2, yes you would be seeing distribution which can appear the same. Dist are always wood poles and some 60kv or 70kv are wood poles and look similar. Metal towers are always transmission. The kv split is pretty wide. With the exception of BART at 30kv, most distribution is 12kv and under. Then the jump to 60kv for transmission.

I'll send the revised map tomorrow with the expanded area.

---

**From:** Hackman, Scott [mailto:Scott.Hackman@lfr.com]
**Sent:** Wednesday, September 02, 2009 1:32 PM
**To:** Nicholson, Jeff
**Cc:** Hackman, Scott
**Subject:** RE: PG&E line information request for 2716 Hammonton Smartsville Road, Marysville, CA

Jeff:

**Item 1:** See attached buffer map you sent me and a revised site boundary map created by LFR. Can you confirm if the change in site boundary affects any other high tension power lines within 1500 ft?

**Item 2:** During my site visit I noted power lines extended east to west along the north side of Hammonton Smartville Road. They appeared to be general service lines for residential. What is the reason those lines did not appear on your buffer map? Are they less than 50 kV?

Let me know and thanks for your time.

**Scott S. Hackman**
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916.786.0320 Main Number
916.747.8204 Mobile
916.786.0366 Fax
scott.hackman@lfr.com
Visit us at www.lfr.com

---

**Sent:** Tuesday, August 11, 2009 4:50 PM
**To:** Hackman, Scott
**Subject:** RE: PG&E line information request for 2716 Hammonton Smartsville Road, Marysville, CA

Scott, attached is the map for this site. There are three elec trans lines and no gas trans line. I wasn't sure if this property also includes the larger section to the west bordering the trans lines. I can revise if so. The buffer from those additional acreages will still not intersect any additional lines. --Jeff

---

**From:** Hackman, Scott [mailto:Scott.Hackman@lfr.com]
**Sent:** Tuesday, August 11, 2009 10:50 AM
**To:** Nicholson, Jeff
**Cc:** Chan, Eva
**Subject:** RE: PG&E line information request for 2716 Hammonton Smartsville Road, Marysville, CA

Jeff:

Modification to site id - the site should be 2176 Hammonton Smartsville Rd, Marysville, CA

The request listed below is for a proposed school site location in Marysville, CA. My apologies for not mentioning that initially.

Thanks for your review of PG&E electric transmission and/or gas lines in vicinity of the proposed school site (2176 Hammonton Smartsville, RD.

Regards,

**Scott S. Hackman**
Project Scientist
LFR Inc. an Arcadis company
1410 Rocky Ridge Drive, Suite 330
Roseville, CA 95661
916.786.7369 Direct Dial
916.786.0320 Main Number
916.747.8204 Mobile
916.786.0366 Fax
scott.hackman@lfr.com
Visit us at www.lfr.com

---

**From:** Nicholson, Jeff [mailto:JANe@pge.com]
**Sent:** Tuesday, August 11, 2009 7:40 AM
**To:** Hackman, Scott
**Cc:** Chan, Eva
**Subject:** RE: PG&E line information request for 2716 Hammonton Smartsville Road, Marysville, CA

Hello Scott,

I'm not sure if I'm the right contact for this. I review school sites (proposed or those having improvements) for proximity of PG&E elec trans or gas trans. This looks like an environmental report?

Jeff

---

**From:** Coffer, Ronald
**Sent:** Tuesday, August 11, 2009 7:35 AM
**To:** Nicholson, Jeff
**Cc:** Hackman, Scott; Chan, Eva
**Subject:** RE: PG&E line information request for 2716 Hammonton Smartsville Road, Marysville, CA

Hi Jeff,

A location request for you.

Thanks

Ron

---

**From:** Chan, Eva [mailto:Eva.Chan@lfr.com]
**Sent:** Monday, August 10, 2009 6:55 PM
**To:** Coffer, Ronald
**Cc:** Hackman, Scott
**Subject:** PG&E line information request for 2716 Hammonton Smartsville Road, Marysville, CA

Dear Mr. Coffer,

This email is to serve as a written request for conducting a file review for environmental information pertaining to releases (if any) from the potential PG&E line located in the vicinity of the following property in Marysville, California:

Site Name: Hammonton Smartsville Property
Site Address: 2716 Hammonton Smartsville Road, Marysville, CA
APNs: 021-150-032 and 021-150-060

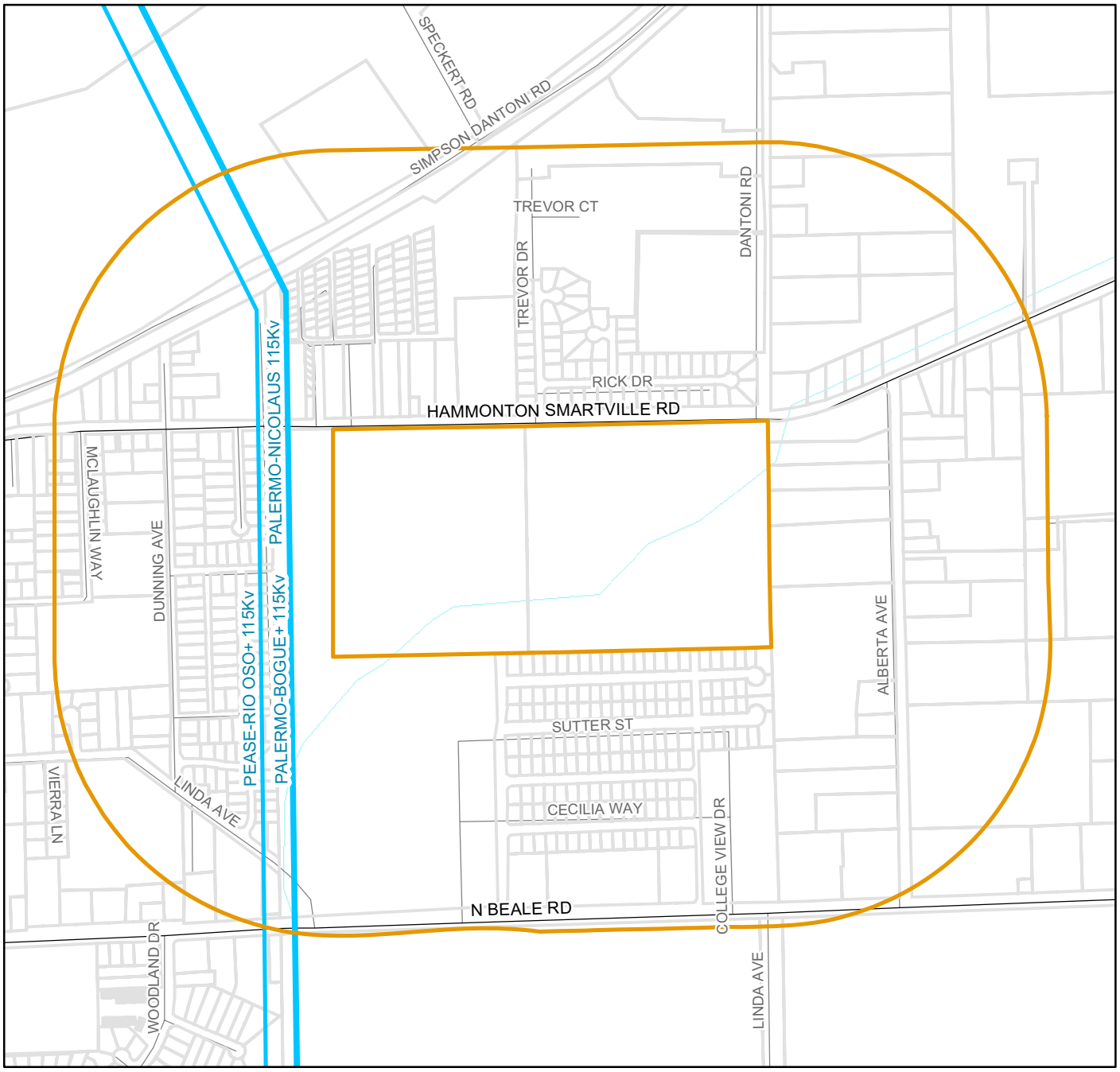
Please contact Scott Hackman at (916) 786-7369 / (916) 747-8204 or by e-mail: scott.hackman@lfr.com if you have any questions regarding this request.

Thank you for your assistance.

Sincerely,

Eva Chan
Senior Staff Scientist
LFR *an ARCADIS Company*
5150 El Camino Real, Suite D-21
Los Altos, CA 94022
(650) 469-7230 Main
(650) 469-7227 Direct
(650) 455-8615 Mobile
(650) 469-7235 Facsimile
eva.chan@lfr.com
Visit us at www.lfr.com

# 1500 ft Buffer around Project Site
# 2176 Hammonton Smartsville Rd, Marysville, CA




## Electric Transmission

- PALERMO-NICOLAUS 115 kv Line
- PEASE-RIO OSO 115 kv Line
- PALERMO-BOGUE 115 kv Line

PG&E CONFIDENTIAL
For Internal Use by
Authorized Persons Only
Copyright 2005 Pacific Gas & Electric Corp.

**California Gas Transmission**
**Gas System Maintenance and Technical Support**
**Geographic Information Services**

N
W E
S

09/03/2009
11:30 AM

1 inch equals 821.785001 feet

LFR

**TELEPHONE MEMORANDUM**

Date: August 25, 2009 **003-09363-06**

To: Yuba County Building Department 530-749-5440 tel.

From: Scott Hackman

Subject: Historical Site Information

---

**Yuba County Building Department**

**Martin W. Griffin, Chief Building Official**

**915 8th Street, Suite 123, Marysville, CA 95901**

**(530)749-5440 Fax: (530)749-5616**

8/20/2009 – Spoke with Janie Payne – Permit Technician.

Files ready to be reviewed at **Yuba County Community Development & Services Agency.**
915 8th street, suite 123
Marysville CA 95901
(530) 749-5440
Note: The County building department was founded in 1962 so that is the most historical they go.

8/25/2009 @ 1400 – Left a message with Janie requesting a file review for 8/26/09.

8/26/09 @ 1145 – LFR conducted a review of the files available for APN 021-150-032. No files were available for 021-150-060.

According to the YCBD – there is a leach field and septic system on-site.

The most recent permit was for the installation of a mobile home (which was not observed on-site) dated 12/10/1974. The oldest permit was for the installation of a mobile home dated 7/26/1966. The YCBD was founded in 1962 therefore no permits were available prior to 1962.

LFR Conducted a file review at the Yuba County Assessor's office – According to the assessor, no tax information is available for 021-150-032 until 1973. There is no structure or tax information for 021-150-060.

LFR

**TELEPHONE MEMORANDUM**

Date: September 9, 2009 **003-09363-06**

To: Yuba County Office of Emergency Services 530-749-7520 tel.

From: Nick Trimble 530-749-7524 fax.

Subject: Historical release

---

Yuba County Office of Emergency Services

915 8th St., Suite 117
Marysville, CA 95901

9/9/09 @ 1300 – Called YCOES to find out more information about 2184 Cecelia Way release listed in EDR Report. Advised by YCOES that any additional information on this release would be on file with YCEHD and not with YCOES.

## Hackman, Scott

**From:** Hackman, Scott
**Sent:** Tuesday, October 06, 2009 4:21 PM
**To:** Umino, Robert
**Cc:** Hackman, Scott
**Subject:** RE: Pesticide applications to 2176 Hammonton-Smartville Rd

Thank you for the information

**Scott Hackman** | Project Scientist | scott.hackman@lfr.com
LFR Inc., an ARCADIS Company | 1410 Rocky Ridge Drive, Suite 330 Roseville, CA
T. 916.786.7369 | F. 916.786.0366 | M. 916.786.0320 | C. 916.747.8204
www.lfr.com
Please consider the environment before printing this material.

---

**From:** Umino, Robert [mailto:rumino@co.yuba.ca.us]
**Sent:** Tuesday, October 06, 2009 4:16 PM
**To:** Hackman, Scott
**Subject:** RE: Pesticide applications to 2176 Hammonton-Smartville Rd

It is generic of Roundup herbicide by Monsanto, a non-restricted, short lived material.

---

**From:** Hackman, Scott [mailto:Scott.Hackman@lfr.com]
**Sent:** Tuesday, October 06, 2009 3:50 PM
**To:** Umino, Robert
**Subject:** RE: Pesticide applications to 2176 Hammonton-Smartville Rd

Thanks.

Do you know much about the Gly Star Original (42750-60-AA-0)

Is this a over the counter pesticide? What sort of crop/activitiy is it typically used for?

**Scott Hackman** | Project Scientist | scott.hackman@lfr.com
LFR Inc., an ARCADIS Company | 1410 Rocky Ridge Drive, Suite 330 Roseville, CA
T. 916.786.7369 | F. 916.786.0366 | M. 916.786.0320 | C. 916.747.8204
www.lfr.com
Please consider the environment before printing this material.

**From:** Umino, Robert [mailto:rumino@co.yuba.ca.us]
**Sent:** Tuesday, October 06, 2009 3:46 PM
**To:** Hackman, Scott
**Subject:** FW: Pesticide applications to 2176 Hammonton-Smartville Rd

SORRY SENT TO WRONG ADDRESS. WAST NOT REJECTED AND RETURNED

**From:** Umino, Robert
**Sent:** Tuesday, September 01, 2009 1:48 PM
**To:** 'Scott.hockman@LFR.com'
**Subject:** Pesticide applications to 2176 Hammonton-Smartville Rd

The only pesticide in the last 4 years was applied as follows:

| | | |
|---|---|---|
| June 10, 2009 | 42750-60-AA-0 GLY STAR ORIGINAL | 2.5000 GA |

Robert Umino
Yuba Co Dept of Ag/Wts & Meas
915 8th St, Ste 127
Marysville, CA 95991
Email: rumino@co.yuba.ca.us
(530)749-5400 Fax (530)749-5404

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LFR

**TELEPHONE MEMORANDUM**

Date: August 25, 2009 **003-09363-06**

To: Linda County Water District 530-743-2043 tel.

From: Scott Hacman

Subject: Information regarding the on-site water pipeline and the off-site well station 15

---

**Linda County Water District**

**1280 Scales Ave, Marysville, CA**

**(530) 743-2043; Fax: (530) 743-6858**

**8/12/2009**

8/12/2009 – Submitted the FOIA via fax – Attn: Wendi.

9/1/2009 – Spoke with Wendi of the LCWD. A 12" water main extends south to north from N Beale Rd to Hammonton Smartville Rd along Sutter Street. The line extends fairly close to the boundary between 021-150-032 and 021-150-060.

LFR also left a message for the LCWD manager, Doug Lofton, regarding the capacity of the well station 15's AST.

10/7/2009 @ 1300 – Spoke with Doug Lofton – the capacity of the water AST at well station 15 is approximately 240,000 back wash tank and would sit for ~ 8 hours

LFR an ARCADIS company

FAX TRANSMISSION: This cover page. 1 pg.

| | |
|---|---|
| Date | August 12, 2009 |
| Time | 9:18AM |
| From | Scott Hackman |
| RE: | High pressure water line locations |

| Deliver To | Name of Firm | FAX Number |
|---|---|---|
| Wendy | Linda County Water District | (530) 743-6858 |

This message (including any attachments) is intended only for the use of the named addressee(s) and may contain information that is legally privileged, confidential or exempt from disclosure under applicable law. If you are not a named addressee, you are hereby notified that any use, dissemination, distribution or copying of this message is strictly prohibited. If you have received this message in error, please notify the original sender immediately by telephone or by return e-mail and delete this message, along with any attachments, from your computer. Thank you.

Hi,

I am conducting an Environmental Hazards Survey on the following property in Marysville, California. Would you please conduct a high pressure water line location search (within 1500 foot radius) for the proposed school site?

**Site Name:** Hammonton Smartsville Property;
**Site Address:** 2176 Hammonton Smartsville Road, Marysville, CA

Please let me know if you would like to receive the site map for reference.

Please contact me with information pertaining to files (if any) associated with the above listed property.

Thank you for your assistance.

Sincerely,
Scott Hackman
Project Scientist
Direct: (916) 786-7369
Cell: (916) 747-8204
e-mail: scott.hackman@lfr.com

12" water main in the County right-of-way
Avg. Pressure 60 PSI
Wendi

LFR

Date: August 25, 2009

To: Regional Water Quality Control Board – FOIA Review

From: Scott Hackman

Subject: Historical Site Information – 2176 Hammonton Smartville Rd

8/11/2009 @ 0900 – No files are available for the Site.

U.S. Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region
Office of the Regional Administrator

P.O. Box 92007
Los Angeles, CA 90009-2007

AUG 19 2009

Mr. Scott Hackman
Project Scientist
LFR
4190 Douglas Boulevard, Suite 200
Granite Bay, CA 95745-5964

Dear Mr. Hackman:

Re: Freedom of Information Act Request 2009-006269WP

This letter is in response to your August 10, 2009, Freedom of Information Act (FOIA) request. You asked for a file review for any active or historical airport runways within a 2-nautical mile (12,150 feet) radius of 2176 Hammonton Smartsville Road, Marysville, California.

A records search was conducted in the Western-Pacific Region, San Francisco Airports District Office. No records were found responsive to your request. There were no airports found in that 2 mile radius. There are no fees associated with the processing of this request.

The undersigned and Robin K. Hunt, Manager, San Francisco Airports District Office, are responsible for this no records determination. You may request reconsideration of this determination by writing the Assistant Administrator for Regions and Center Operations (ARC-1), Federal Aviation Administration, 800 Independence Avenue, SW., Washington D.C., 20591. Your request for reconsideration must be made in writing within 30 days from the date of receipt of this letter and must include all information and arguments relied upon. Your letter must state that it is an appeal from the above-described denial of a request made under the FOIA. The envelope containing the appeal should be marked "FOIA." This is considered the final response to your FOIA request.

Sincerely,

William C. Withycombe

William C. Withycombe
Regional Administrator

FEATHER RIVER AIR QUALITY MANAGEMENT DISTRICT
*Serving Sutter and Yuba Counties*

| Post-it® Fax Note 7671 | Date 8/25/09 | # of pages 2 |
|---|---|---|
| To Scott | From Karla | |
| Co./Dept. LFR | Co. FRAQMD | |
| Phone # 916 786-7369 | Phone # 530 634-7659 | |
| Fax # 916 786 0366 | Fax # 530 634 7660 | |

ak Blvd., Suite B-3
ba City, CA 95991
(530) 634-7659
AX (530) 634-7660
www.fraqmd.org

**David A. Valler, Jr.**
**Air Pollution Control Officer**

August 18, 2009

Mr. Scott Hackman
LFR
4190 Douglas Boulevard, Suite 200
Granite Bay, CA 95746

**RE: HAZARDOUS AIR EMISSIONS - PERMITTED FACILITIES WITHIN 1/4 MILE OF SCHOOL SITES**

Dear Mr. Hackman,

The Feather River Air Quality Management District (District) received your faxed Public Records Act Request on August 10, 2009 and modified on August 11, 2009. You requested the District conduct a file review of 2176 Hammonton-Smartsville Road in Marysville for any available information and any available hazardous air emitters or hazardous material handlers within a 1/4 mile radius of the proposed school property. The District does not regulate hazardous materials handlers if there are no air emissions sources. The District has searched the database and found no files for the address listed. I have listed below the active files, available for review, within a quarter mile of the school property. In addition, comments regarding asbestos, railroads, and heavily travelled roads are included as applicable.

For asbestos applicable sites, the proposed school site is not near an area that might contain naturally occurring asbestos (NOA), serpentine, or ultramafic rock. If naturally occurring asbestos (NOA), serpentine, or ultramafic rock is discovered by the owner/operator, a registered geologist, or the District Air Pollution Control Officer (APCO) in the area to be disturbed after the start of any construction, grading, quarrying, or surfacing mining operation, then this project would be subject to California Code of Regulation Title 17, Section 93105. All provisions for asbestos surfacing applications are subject to Title 17, Section 93106.

For heavily traveled roads and railroads, the proposed school site is near increased vehicle activity associated with increased emissions of air contaminates including particulate matter (PM) PM10, PM2.5, total nitrogen oxides (NOX), nitrogen dioxide, nitric oxide (NO), and black carbon.

Table 1 contains the District's review of the proposed school site. If you have questions regarding this information or require additional information, please contact me at (530) 634-7659 ext. 205 or Sondra Andersson at (530) 634-7659 ext. 210.

Sincerely,

Karla Sanders
Air Quality Compliance Supervisor
KKS/sa
Enclosures – Table 1

**Table 1**

| Proposed School Site | District Permit | Facility | Address | Hazardous Air Emissions |
|---|---|---|---|---|
| 2176 Hammonton-Smartsville Road Marysville, CA 95901 | P23106 | Linda County Water District Well #15 | 6294 Dantoni Road, Marysville, CA | Diesel PM |
| | Road | | 0.00 mile to Hammonton-Smartville Road | |
| | Road | | 0.18 mile to Simpson-Dantoni Road | |
| | Road | | 0.25 mile to North Beale Road | |

KINDER MORGAN
ENERGY PARTNERS, L.P.
SFPP, L.P.

**SFPP, L.P.**
Operating Partnership

August 24, 2009

ENG 4-2-1 (930)
Reference #09-777

Scott Hackman
Project Scientist
LFR
Suite D-21
5150 El Camino Real
Los Altos CA 94022-1534

Re: Site Name: Hammonton Smartsville Property
Site Address: 2176 Hammonton Smartsville Road, Marysville, California

Dear Mr. Hackman:

This letter is in response to your letter dated August 12, 2009, concerning the above referenced project.

Based on the information you have provided, Kinder Morgan has no pipelines within 2,000 feet of the project area and has no conflict with the proposed project.

Please reference our File Reference No. 09-777 in any future communications concerning this project.

In the event the project scope changes, please resubmit your request.

Sincerely,

D. Sidorewicz

A. Dianne Sidorewicz CPS
Administrator
Engineering

T: Quinn\letters\421(930)\09-777(nas)

# Office of the State Fire Marshal

Pipeline Safety Division

*P.O. Box 944246*
*Sacramento, CA 94244-2460*

Request ID: 09222009SFM001

TO: LFR
ASHLEY GILREATH
1900 POWELL STREET, 12TH FL.
EMERYVILLE, CA 94608

Phone: 510 652 4500
Fax: 510 652 2246

FROM: Lisa Dowdy

Phone: (916) 445-8477
Fax: (916) 445-8526

**PIPELINE LOCATION REQUEST FOR:**

**2176 HAMMONTON SMARTSVILLE ROAD**
**MARYSVILLE, CA 95901**

THERE ARE NO PIPELINES JURISDICTIONAL TO THE STATE FIRE MARSHAL IN THE AREA FOR WHICH YOU HAVE INQUIRED.

- FOR NATURAL GAS PIPELINES PLEASE CONTACT YOUR LOCAL GAS COMPANY

- FOR OTHER TYPES OF PIPELINE PLEASE CONTACT THE DIVISION OF OIL AND GAS AT (714) 816-6847

- FOR PUBLIC UTILITIES PLEASE CONTACT THE PUBLIC UTILITIES COMMISSION AT (415) 703-2782

Yuba Community College Information
(2088 North Beale Road, Marysville, CA)

LFR

**TELEPHONE MEMORANDUM**

Date: September 9, 2009 **003-09363-06**

To: Yuba Community College 530-740-1785 tel.

From: Nick Trimble

Subject: Groundwater Chemical data for wells North of Beale St. or on the North end of the YCC property

---

## Yuba Community College

**(530) 740-1785 – Dave Kendel**

There is no data/reports uploaded to GeoTracker for this site.

9/9/2009 – 15:15 - Spoke with Dave Kendel – PM about any kind of well chemical data that he may have for wells located across Beale Street from the college or at the north end of the college property. I told him I was looking on Geotracker and could not find any information. He said he could provide me with some data. He will email me in the next day or two.

9/21/09 – 10:30 – Call Dave Kendel again. He said they have a well at the north end of campus and he will email me analytical data.

9/21/09 – 10:40 – receive email from Dave. He says the well at the northern end of the Yuba College property close to Beale St. hasn't been sampled in 10 to 15 years.

9/21/09 – 13:00 – Call Dave again, ask him if there is a gw plume at Yuba college as it comes up on the LUST database. Dave tells me they do not sample gw at all, they are not required to because they use city water, so he does not have any data. He said there are storage tanks that have been removed within the past 3 months and one tank still remains.

9/21/09 – 13:10 – Send Dave one last email requesting a map of the tank locations and/or any kind of recent environmental report.

# The County of Yuba

## Environmental Health Division

**Clark Pickell *Hazardous Materials Specialist III***
*915 8th Street, Suite 123, Marysville, California 95901*
*Phone: (530) 749-7523 FAX: (530) 749-5454*

December 20, 2006

Yuba Community College
Mr. Rod Perry
2088 North Beale Road
Marysville, CA 95901

**RE: No Further Action: Removal of one UST, 2088 North Beale Road, Marysville, CA 95901.**

Dear Mr. Perry,

On October 11th, 2006 this office received an application for removal of one 8,000 gallon underground storage tank (UST). The tank was a two compartment, split tank containing unleaded gasoline at 4,000 gallons and diesel at 4,000 gallons. The application for removal was approved on October 12th, 2006 for the removal of the above stated tank. On November 2nd, 2006 the Yuba County Certified Unified Program Agency inspected the excavation and removal of the UST completed by Hancock Petroleum Engineering. The tank was in excellent condition, there were no visible signs of leakage. No hydrocarbon odors were detected from the excavations native soils, however some odor was detected in the pea gravel as it was disturbed during the removal and sampling process. Four soil samples were taken on each side of the concrete hold down slab, as well as, a grab sample of the excavated soil and pea gravel. All samples were analyzed for TPH-G, TPH-D, BTEX, MTBE, and other compounds of concern by analytical methods 8260B, 8015(M) and 6010B. All samples were non-detect or had very low concentrations, just above the analytical reporting limit. Low concentrations of lead were detected in all samples and appear to represent the background concentration. The closure report dated November 28, 2006 received from Applied Engineering and Geology, Inc. summarizes the history and sampling results from the tank removal and recommends no further action.

Based on the available information, and with the provision that the information provided to this agency is accurate and representative of site conditions, no further action related to the underground storage tank removal is required for the above noted facility. Nothing in this determination shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current, or future operations at this location. This determination does not relieve the tank owner from liability or responsibility for existing, additional, or previously unidentified soil or groundwater contamination. Changes in the present land use may require further assessment and mitigation.

If you have any questions regarding this, please contact me.

Sincerely,

Clark Allen Pickell

County of Yuba
Environmental Health Division
Certified Unified Program Agency
Hazardous Materials Specialist III

Cc Hancock Petroleum Engineering
Applied Engineering and Geology, Inc.

# The County of Yuba

## Environmental Health Department

**Clark Pickell** ***Hazardous Materials Supervisor***
*915 8th Street, Suite 123, Marysville, California 95901*
*Phone: (530) 749-7523 FAX: (530) 749-5454*

May 8, 2009

Yuba Community College
Mr. Jonathan Neff
2088 North Beale Road
Marysville, CA 95901

**RE: No Further Action: Removal of one UST, 2088 North Beale Road, Marysville, CA 95901.**

Dear Mr. Neff,

On March 19th, 2009 this office received an application for removal of one 10,000 gallon underground storage tank (UST). The tank was a one compartment tank containing diesel. The application for removal was approved on March 23rd, 2009 for the removal of the above stated tank. On April 14th, 2009 the Yuba County Certified Unified Program Agency inspected the excavation and removal of the UST completed by Koch Excavating, Inc..The tank was in excellent condition, there were no visible signs of leakage. No hydrocarbon odors were detected from the excavations native soils, however some odor was detected in the sand as it was disturbed during the removal of the piping transition sump. Two soil samples were taken on each end of the UST and at the bottom of the piping sump. In addition six soil samples were taken along the piping trenches at approximately twenty foot intervals. Five additional soil samples were taken on each side of the piping sump excavation and the bottom, for confirmation, after further soil was removed , as well as, a grab sample of the excavated soil and sand. All samples were analyzed for TPH-D, BTEX by analytical methods 8015(M) and 8260B. All samples were non-detect or had very low concentrations, just above the analytical reporting limit. The soil pile was sampled for proper disposal. Eight Hundred feet of piping is to be closed in place. To date the line was tested for tightness twice and passed both times. This indicates that it is unlikely a release from the piping run occurred. It is the plan to sample every pipe length at approximately twenty foot intervals and test for TPH-d and BTEX, but as of the date of this letter this was yet to be completed. Therefore, the recommendation of No Further Action is in regards to the removal of the UST, piping sump and the removed piping run only.

Based on the available information, and with the provision that the information provided to this agency is accurate and representative of site conditions, no further action related to the underground storage tank removal is required for the above noted facility. Nothing in this determination shall constitute or be construed as a satisfaction or release from liability for any conditions or claims arising as a result of past, current, or future operations at this location. This determination does not relieve the tank owner from liability or responsibility for existing, additional, or previously unidentified soil or groundwater contamination. Changes in the present land use may require further assessment and mitigation.

If you have any questions regarding this, please contact me.

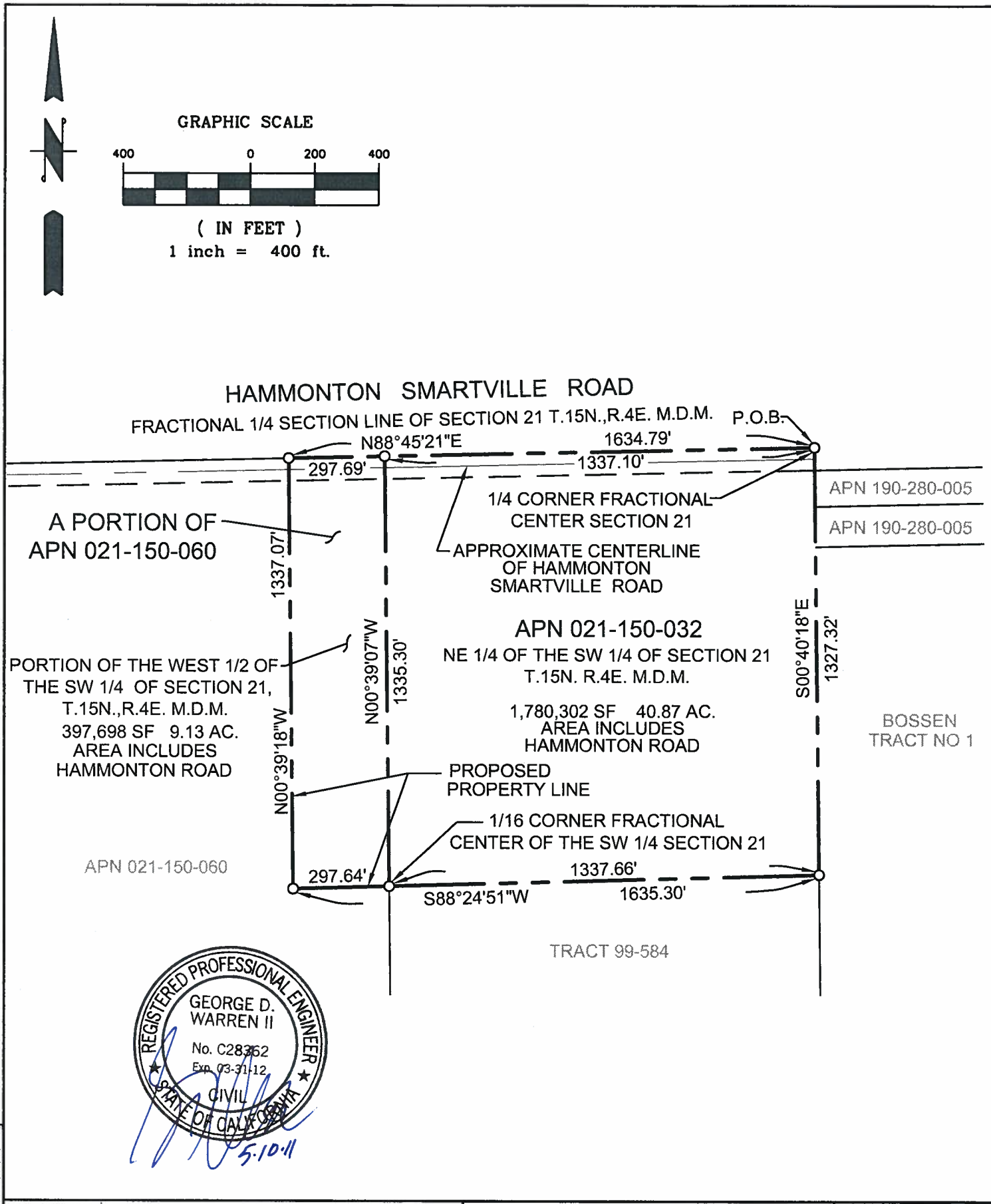
Sincerely,

Clark Allen Pickell

County of Yuba
Environmental Health Division
Certified Unified Program Agency
Hazardous Materials Specialist III

Cc Koch Excavating, Inc.

# Updated Information Following the August 2011 Site Visit




08-143 dwg/exhibit.dwg


**WARREN LAND SURVEYING, INC.**

160 Blue Ravine Road, Ste. C
Folsom, CA. 95630
916-985-1870


# EXHIBIT

HULL PROPERTY

MARYSVILLE, CALIFORNIA

| | |
|---|---|
| SCALE: | 1"=400' |
| DATE | 5-10-11 |
| SHEET: | 1 OF 1 |

Exhibit A
Legal Description

Being the Northeast one quarter of the Southwest one quarter (1/4) and a portion of the West one half (1/2) of the Southwest one quarter (1/4) of Section Twenty-one (21), Township Fifteen (15) North, Range Four (4) East M.D.B. & M., County of Yuba, State of California described as follows:

Beginning at the one quarter (1/4) fractional Center of Section Twenty-one (21), as shown on that certain Record of Survey for V.T.M. Bay Area Recorded in Book 11 of Record of Surveys at Page 22, Yuba County Recorders Office, State of California.

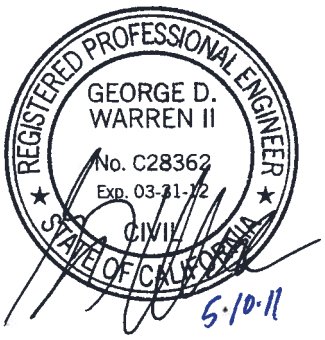
Thence from said point of beginning the following five (5) courses:

1. South 00°40'18" East along the North-South line running through the fractional Center of Section Twenty-one (21) 1327.32 feet
2. Leaving aforesaid North-South Center of Section Twenty-one (21), South 88°24'51" West along the East-West fractional Center of the Southwest one quarter (1/4) 1337.66 feet to the fractional Center of the Southwest one quarter (1/4) Section Twenty-one (21)
3. Continuing South 88°24'51" West 297.64 feet
4. North 00°39'18" West 1337.07 feet to the East-West Fractional Center one quarter (1/4) Section Line of Section Twenty-one (21),
5. North 88°45'21" East along the East-West one quarter (1/4) section line of Section Twenty-one (21),1634.79 feet to the point of beginning

Containing 2,178,000 square feet or 50. acres

End of Description

Prepared by: Warren Land Surveying, Inc.
160 Blue Ravine Road, Ste. C
Folsom, CA 95630



---

Parcel name: NEWPARCEL

North: 15874.9828 East : 19340.5025
Line Course: N 88-45-21 E Length: 1634.79
North: 15910.4791 East : 20974.9070
Line Course: S 00-40-18 E Length: 1327.32
North: 14583.2503 East : 20990.4666
Line Course: S 88-24-51 W Length: 1635.30
North: 14537.9943 East : 19355.7929
Line Course: N 00-39-18 W Length: 1337.07
North: 15874.9769 East : 19340.5080

Perimeter: 5934.48 Area: 2,178,000 sq.ft. 50.00 acres

Mapcheck Closure - (Uses listed courses, radii, and deltas)
Error Closure: 0.0081 Course: S 43-16-29 E
Error North: -0.00589 East : 0.00554
Precision 1: 732,651.85

ARCADIS
Infrastructure · Water · Environment · Buildings

**TELEPHONE MEMORANDUM**

Date: August 15, 2011 **RV009363.0011**

To: Linda Fire Protection District 530-743-1553 tel.

From: Scott Hackman fax.

Subject: Historical releases/fire response/emergency response

---

Linda Fire Protection District

1286 Scales Ave

Marysville, CA 95901

9/9/09 @ 1445 – Bob Criss – assistant chief of the fire department –

Bob has been with the department for 35 years and cannot recall any incident at the subject property with the exception of minor grass fires (no structures were burned). Bob is going to check his written records for the farm house located on the subject property and call back with any findings.

9/10/09 @ 1110 – Bob leaves me a message

9/10/09 @ 1125 – Call Bob back. He said there have been no incidents of any consequence. They have a total of six incidents at 2176 Hammonton Smartville Road on record. 2 were medical calls, 1 was a downed power line that ignited a small grass fire (15' x 15'), and 3 were "illegal burns" Bob informed me that an illegal burn indicates that yard debris was being burned after hours, or on the wrong day.

8/15/11 @ 11:00 – spoke with Rich Webb and he will research this site to see if there is any additional information. According to both Bob and Rich, the FD does not keep a file on chemical spills or release response items because that is tracked by the CUPA – Yuba County EHD.

8/15/11 @ 16:45 – received a message from Rich and he ran a quiry for the site address and found that the same 6 incidents remain that were previously reported by Bob in 2009. The most recent incident was in late 2008.

ARCADIS
Infrastructure · Water · Environment · Buildings

**TELEPHONE MEMORANDUM**

**003-09363-06**

Date: August 15, 2011

To: Yuba County Environmental Health - Jag 530-749-5450 tel.

From: Scott Hackman 530-749-5454 fax.

Subject: Historical Site Information – 2176 Hammonton Smartville Rd

---

8/11/2009 @ 0900 – No files are available for the Site.

8/25/2009 @ 1315 – Spoke with Jag and confirmed that the spelling of the street name was irrelevant as they search by actual site address # - therefore 2176 did not bring up any files in the YCEHD database.

8/25/2009 @ 1630 – Left a message with Jag regarding 2184 Cecelia Way, Maysville, CA

8/26/2009 @ 1200 – Spoke with Clark Pickell regarding 2184 Cecelia Way and according to Clark there are no files for 2184 Cecelia Way.

10/6/2009 @ 1500 – Left a message for Jag asking if he has any background information pertaining to the Yuba Community College located at 2088 North Beale Road in Marysville, CA.

10/7/2009 @ 1656 – Spoke with Jag and there have been two USTs historically removed from the Yuba College facility. The first UST, a 8,000 gallon UST (4,000 gallon gasoline and 4,000 gallon diesel) was removed on November 2, 2006 in excellent condition. All confirmation samples collected during removal were either non-detect or relatively low concentrations therefore, the YCEHD granted "no further action" with regards to the 8,000 gallon UST in a letter to the Yuba College dated December 20, 2006.

The second UST, a 10,000 gallon diesel UST was removed on April 14, 2009 in excellent condition. All confirmation samples collected during removal were either non-detect or relatively low concentrations therefore, the YCEHD granted "no further action" with regards to the 10,000 gallon diesel UST, piping sump, and the removed piping only in a letter to the Yuba College dated May 8, 2009.

8/15/11 @ 10:51 – left a message for Jag regarding the site, the 2088 North Beale Road property, and the 2184 Cecelia Way property.

8/23/11 @ 12:50: Spoke with Clark Pickell. According to Clark no new information is available for these sites. The RWQCB is close to closing all 12 of the former USTs at the 2088 North Beale Road property.

# Peach Tree Golf and Country Club Information (2043 Simpson Dantoni Rd, Marysville, CA)

# YUBA CO.NTY OFFICE OF EMERGENCY SE ICES
## UNDERGROUND STORAGE TANK
## APPLICATION FOR REMOVAL

DATE OF APPLICATION: April 5, 1988

OWNER: Peach Tree Golf & Country Club
P. O. Box 231
Marysville, Ca 95901
PHONE: (916) 743-1897

FACILITY: Peach Tree Golf & Country Club
Dantoni Rd
Linda, Ca
PHONE: (916) 743-1897

CONTRACTOR'S NAME: Franklin Maintenance
1450 Colusa, P. O. Box 3417,
Yuba City, Ca 95992

CONTRACTOR'S LICENSE #453460
PHONE: (916) 743-1897

**********

| | TANK 1 | TANK 2 | TANK 3 | TANK 4 |
|---|---|---|---|---|
| **SIZE OF TANKS TO BE REMOVED:** | ~~500~~ 1000 | 500 | | |
| **CONTENTS OF TANKS:** | Gas | Diesel | | |

**TANK DISPOSITION:** (Check one.)

_____1. The tank is to be cleaned, and used for scrap. (Provide verification of cleaning at time of inspection.)

_____2. The tank is to be cleaned, and used aboveground for storage of _____, with the Fire Department's written approval. (Attach approval; provide verification of cleaning at time of inspection.)

__X__3. The tank is to be used aboveground for storing the same product, with the Fire Department's written approval. (Attach approval.) The tank is to be located at: Larry Montana's Truck Repair
2078 Colusa Hwy, Yuba City, Ca 95991

_____4. The tank is to be manifested and hauled as a hazardous waste to:

_____

Hauler: _____ EPA# _____

**DESTINATION OF THE CLEANED TANK(S):** (If #1, or #2 is checked above.)

_____

_____

_____

RECEIVED
APR 5 1988
EMERGENCY SERVICES

**CONTINGENCY PLAN FOR POTENTIAL SOIL CONTAMINATION:**

Check one of the following plans:

✓ A. REQUIREMENTS FOR UNDERGROUND STORAGE TANKS CONTAINING GASOLINE OR DIESEL MOTOR FUEL.

1. If there is any evidence of soil contamination, soil samples may be required, by the Office of Emergency Services, to determine the extent of contamination. Samples will be taken from areas likely to have the maximal amount of contamination, and must be analyzed by a state approved analytical laboratory for product constituents approved by the Yuba County Office of Emergency Services. A remedial action plan shall be submitted to the Office of Emergency Services based on the analytical data from the soil samples.

_____ B. REQUIREMENTS FOR ALL OTHER UNDERGROUND STORAGE TANKS.

1. Soil samples may be required by the Office of Emergency Services, if soil contamination is indicated. Soil samples shall be analyzed by a state approved laboratory for the constituents which the tank contained in order to determine the extent of contamination. A remedial action plan may be required based on the analytical data from the soil analysis.

_____ C. SUBMIT ALTERNATIVE CONTINGENCY PLAN OTHER THAN A OR B.

**ALL TEST RESULTS SHALL BE SENT TO THE OFFICE OF EMERGENCY SERVICES.**

I have read, understood, and agree to adhere to the requirements of this application.

APPLICANT'S SIGNATURE _____
Title Owner David Calestini

**FEES: $50.00 PER TANK MUST ACCOMPANY THIS APPLICATION.**

RECEIVED
APR 5 1988
EMERGENCY SERVICES

YUBA COUNTY OFFICE OF EMERGENCY SERVICES
215 5TH ST., MARYSVILLE, CA 95901
(916) 741-6254

YUBA COUNTY OFFICE OF EMERGENCY SERVICES
TANK REMOVAL
INSPECTION REPORT

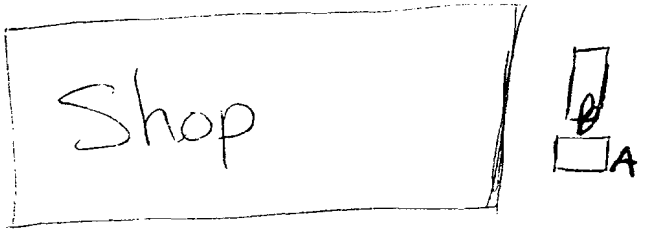
DATE 4/6/88

FACILITY Peach Tree Golf Club CONTRACTOR Franklin Maintenence

WASTE HAULER COMPANY NAME
MAKE OF TRUCK AND LICENSE NUMBER

START TIME: 2:20 END TIME:

SKETCH OF SITE




CONDITION OF REMOVED TANKS AND PIPING good

SOIL SAMPLES

| SAMPLE # | VAPOR/PRODUCT DETECTED | | HYDROCARBON READING |
|---|---|---|---|
| A | YES | NO | 50 |
| B | YES | NO | 100 |
| | YES | NO | |
| | YES | NO | |
| | YES | NO | |
| | YES | NO | |
| | YES | NO | |
| | YES | NO | |
| | YES | NO | |

TANK REMOVAL, PAGE 2

LAB SAMPLES TAKEN BY _____

SAMPLES TAKEN TO (LAB) _____

TO BE ANALYZED FOR:

_____TOTAL PETROLEUM HYDROCARBONS (PREPARED BY METHOD 5030, ANALYZED BY GCFID WITH A FUSED CAPILLARY COLUMN.)

_____BTX (METHOD 8020-SOIL, 602-WATER)

_____TETRAETHYL LEAD (MUST HAVE BACKGROUND SAMPLE) ANALYZED AS TOTAL LEAD.

CAUSE OF LEAKAGE _____

EXTENT OF CONTAMINATION minor

CLEAN-UP ACTIONS:

excavate - aerate

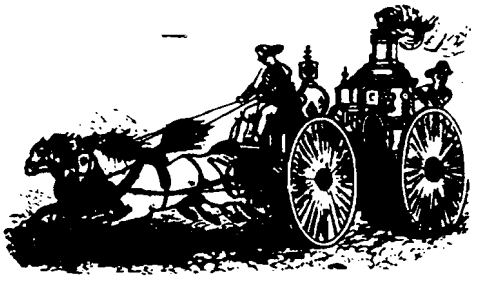
COMMENTS: _____

SITE INSPECTED BY M J Christopherson

# *Walton Fire Protection District*

211 SOUTH WALTON AVENUE
YUBA CITY, CALIFORNIA 95991


April 5, 1988




BUSINESS PHONE 673-7833


Yuba County O.E.S.
215 Fifth Street
Marysville, Ca. 95901

RE: Gas Tank From Peach Tree Country Club

The Walton Fire Protection District has been advised that the underground gas tanks from the above location will be moved to 2078 Colusa Hwy, Yuba City, Larry Montna Equipment Repair, to be used as above ground drain oil storage tanks.

Mike Johner, Chief
Walton Fire Protection District

MJ:kb

The County of Yuba

OFFICE OF EMERGENCY SERVICES

KELLY J. PURDOM
DIRECTOR

(916) 741-6254

August 24, 1990

**RE:** Tank Pull at Peach Tree Golf and Country Club

To Whom It May Concern:

On April 6, 1988 two underground storage tanks were removed from the shop area at Peach Tree Golf and Country Club. Both tanks were noted to be in good condition.

Soil vapor readings from soil beneath the tanks, at the fill ends, were 50 ppm, and 100 ppm, as read on a Gastech Hydrocarbon meter. Extent of the contamination was considered minor. Soil was to be excavated and aerated. The site was considered closed.

Sincerely,

Marcele J. Christofferson

Marcele J. Christofferson
Hazardous Materials Specialist II

ARCADIS

## Appendix B

EDR Environmental Lien Search Report

**Hammonton Smartsville**
SE Corner of Dantoni/Hammonton
Marysville, CA 95901

Inquiry Number: 2556892.7
August 11, 2009

# The EDR Environmental LienSearch™ Report




440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

# EDR Environmental LienSearch™ Report

The EDR Environmental LienSearch Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

***Thank you for your business.***
Please contact EDR at 1-800-352-0050
with any questions or comments.

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# EDR Environmental LienSearch™ Report

**TARGET PROPERTY INFORMATION**

**ADDRESS**

HAMMONTON SMARTSVILLE PROPERTY
SE CORNER OF DANTONI/HAMMONTON SMARTSVILLE ROAD
MARYSVILLE, CA 95901

**RESEARCH SOURCE**

Source 1: Yuba Assessor
Yuba County, California

Source 2: Yuba Recorder
Yuba County, California

**PROPERTY INFORMATION**

**Deed 1:**

Type of Deed: Affidavit Death of Trustee

Title is vested in: Blair T. Butler and Roberta C. Butler, Trustees of the Butler Family Living Trust

Title received from: Roberta C. Butler

Deed Dated: August 26, 2005

Deed Recorded: September 14, 2005

Instrument: 2005R-021943

**Deed 1:**

Type of Deed: Quitclaim Deed

Title is vested in: Blair T. Butler and Roberta C. Butler, Trustees of the Butler Family Living Trust

Title received from: Roberta C. Butler

Deed Dated: July 6, 1994

Deed Recorded: July 7, 1994

Instrument: 94-08490

**Legal Description: Unit 1, in Section 21, T15N, R4E, Yuba County, California. See attached as Exhibit "A".**

**Property Identifiers: 021-150-060**

**ENVIRONMENTAL LIEN**

Environmental Lien: Found ☐ Not Found ☒

**OTHER ACTIVITY AND USE LIMITATIONS (AULs)**

Other AUL's: Found ☐ Not Found ☒

# EDR Environmental LienSearch™ Report

**PROPERTY INFORMATION**

**Deed 1:**

Type of Deed: Individual Quitclaim Deed

Title is vested in: Stuart D. Greenberg and Debra Milani, as Co-Trustees of the Greenberg Family Trust

Title received from: Debra Butler, as to an undivided ¼ interest

Deed Dated: May 7, 2004

Deed Recorded: May 17, 2004

Instrument: 2004R-008822

**Deed 1:**

Type of Deed: Grant Deed

Title is vested in: Blair Butler and Roberta C. Butler, as to an undivided ¼ interest, Stephen Hull and Gayle Hull, as to an undivided ¼ interest, Barry Butler and Debra Butler, as to an undivided ¼ interest and Erich Butler, as to an undivided ¼ interest

Title received from: Arnold R. Bean

Deed Dated: December 19, 1977

Deed Recorded: December 19, 1977

Book: 655

Page: 646

**Legal Description: Section 21, T15N, R4E, Yuba County, California. See attached as Exhibit "B".**

**Property Identifiers: 21-150-032-000**

**ENVIRONMENTAL LIEN**

Environmental Lien: Found ☐ Not Found ☒

**OTHER ACTIVITY AND USE LIMITATIONS (AULs)**

Other AUL's: Found ☐ Not Found ☒

# DEED EXHIBIT A

1/3

2005R-021943

TERRY A. HANSEN
YUBA COUNTY RECORDER
MARYSVILLE, CA
RECORDED ON
09/14/2005 10:48AM
REC FEE: 13.00
PAGE 1 OF 3
DEPUTY INITIALS: BH

RECORDING REQUESTED BY

North State Title Company
Escrow No. 04101155 Order No.
04101155

AND WHEN RECORDED MAIL TO

Roberta Blair
6394 Larkin Road
Live Oak, CA 95963

SPACE ABOVE THIS LINE FOR RECORDER'S USE

# AFFIDAVIT - DEATH OF TRUSTEE

A.P.N. 019-260-058, 021-150-053

STATE OF CALIFORNIA, )

COUNTY OF Sutter )

**Roberta C. Butler**, of legal age, being first duly sworn, and deposes and says:

That **Blair T. Butler**, the decedent mentioned in the attached certified copy of Certificate of Death, is the same person as **Blair T. Butler** named as Trustee in that certain **Quitclaim Deed**, dated **July 6, 1994** executed by **Roberta Butler** to **Blair T. Butler and Roberta C. Butler, Trustees of the Butler Family Living Trust Dated May 10, 1994**, recorded as Instrument No. **94-08488**, on **July 7, 1994** of Official Records of **YUBA** County, California, covering the following described property:

**See Exhibit A attached hereto and made a part hereof.**

3
b

In accordance with Section/Paragraph 3 of the Trust Agreement, **Roberta C. Butler** has been appointed the successor trustee

Dated: **August 26, 2005**

Roberta C. Butler
**Roberta C. Butler**

SUBSCRIBED AND SWORN TO (or affirmed) before me, the undersigned, A Notary Public in and for said State, this **26th** day of **August, 2005** by

Roberta C. Butler,

personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me..

KRISTIN ONSTOTT
COMM. #1506001
NOTARY PUBLIC - CALIFORNIA
SUTTER COUNTY
My Comm. Expires Aug. 7, 2008

Signature
Notary Public in and for said State

(This area for official notarial seal)

Vision Form SAF01CA Rev. 05/06/98

APN 021-150-060
and other properties

**Exhibit A**

A portion of the remainder as shown on Tract Map No. 84-384, "College View Subdivision Unit 1", as recorded in Book 50 of Maps at Page 48, Yuba County Records, situated in Section 21, Township 15 North, Range 4 East, Mount Diablo Base and Meridian, Yuba County, California, more particularly described as follows:

Lot "D" of the Record of Survey Recorded in Book 53 of Maps, at Page 13, Yuba County Records.

The Northeast quarter of Section 28, Township 15 North, Range 4 East, M.D.B. & M.

EXCEPTING THEREFROM the East 452.5 feet and Excepting there from also the County Road. SUBJECT to the right of way and easement of highway purposes granted to the State of California, as appears of record.

EXCEPTING THEREFROM that portion of the Northeast quarter of Section 28, Township 15 North, Range 4 East, M.D.B. & M., being more particularly described as follows:

COMMENCING at the North one-quarter of said Section 28; thence South 00 degrees 06' 54" East, along the line running Northerly and Southerly though the center of said Section 28, a distance of 1253.54 feet to the point of beginning of parcel to be described herein; thence from said true point of beginning North 88 degrees 59' 39" East, parallel with the North line of the Northeast quarter of Section 28, a distance of 1000.00 feet; thence South 00 degrees 05' 39" West, parallel with the East line of said Section 28, a distance of 1297.12 feet to the Northerly right of way of a County Road, known locally as Linda Road; thence North 51 degrees 58' 11" West, along the said Northerly right of way line, a distance of 1265.38 feet to the line running Northerly and Southerly through the center of said Section 28; thence North 00 degrees 06' 54" West, along said line, a distance of 500.00 feet to the point of beginning.

# WASHOE COUNTY DISTRICT HEALTH DEPARTMENT

VITAL STATISTICS
Reno, Nevada

3/3

STATE OF NEVADA — DEPARTMENT OF HUMAN RESOURCES
DIVISION OF HEALTH — SECTION OF VITAL STATISTICS

## CERTIFICATE OF DEATH

ROLL 115 IMAGE 347 2000

LOCAL FILE NUMBER

STATE FILE NUMBER

**DECEDENT**

1. DECEASED—NAME (First, Middle, Last): Blair T. BUTLER
2. DATE OF DEATH (Month, Day, Year): August 8, 2004
3a. COUNTY OF DEATH: Washoe
3b. CITY, TOWN OR LOCATION OF DEATH: Reno
3c. HOSPITAL OR OTHER INSTITUTION—Name (If not either, give street and number): Washoe Medical Center
3d. If Hosp. or Inst., indicate DOA, OP/Emer. Rm. Inpatient (Specify): Inpatient
4. SEX: Male
5. RACE—(e.g., White, Black, American Indian, etc.) (Specify): White
6. Was Decedent of Hispanic Origin? (Specify) ☐ yes ☒ no If yes, specify Mexican, Cuban, Puerto Rican, etc.:
7a. AGE—Last Birthday (Years): 72
7b. UNDER 1 YEAR: MOS / DAYS
7c. UNDER 1 DAY: HOURS / MINS
8. DATE OF BIRTH (Mo., Day, Yr.): August 24, 1931
9a. STATE OF BIRTH (If not U.S.A., name country): California
9b. CITIZEN OF WHAT COUNTRY: USA
10. Decedent's Education. Specify highest grade completed: 14
11. MARRIED, NEVER MARRIED, WIDOWED, DIVORCED (Specify): Married
12. SURVIVING SPOUSE (If wife, give maiden name): Roberta Gomes
13. SOCIAL SECURITY NUMBER: 570-36-5990
14a. USUAL OCCUPATION (Give Kind of Work Done During Most of Working Life, Even if Retired): Launderer
14b. KIND OF BUSINESS OR INDUSTRY: Laundry
15a. RESIDENCE—STATE: California
15b. COUNTY: Sutter
15c. CITY, TOWN, OR LOCATION: Live Oak
15d. STREET AND NUMBER: 6394 Larkin Road
15e. INSIDE CITY LIMITS (Specify Yes or No): Yes

IF DEATH OCCURRED IN INSTITUTION SEE HANDBOOK REGARDING COMPLETION OF RESIDENCE ITEMS

**PARENTS**

16. FATHER—NAME (First, Middle, Last): Frank Butler
17. MOTHER—MAIDEN NAME (First, Middle, Last): Jessie Raub

18a. INFORMANT—NAME (Type or Print): Roberta Butler
18b. MAILING ADDRESS (Street or R.F.D. No., City or Town, State, Zip): 6394 Larkin Road, Live Oak, California 95963

**DISPOSITION**

19a. BURIAL, CREMATION, REMOVAL, OTHER (Specify): Cremation
19b. CEMETERY OR CREMATORY—NAME: Sierra Crematory
19c. LOCATION (City or Town, State): Reno, Nevada
20a. FUNERAL DIRECTOR—SIGNATURE (Or Person Acting as Such): [signature]
20b. FUNERAL DIRECTOR LICENSE NUMBER: 16
20c. NAME AND ADDRESS OF FACILITY: Walton Funeral Home 875 West Second Street, Reno, Nevada 89503

**CERTIFIER**

To be Completed by CERTIFYING PHYSICIAN

21a. To the best of my knowledge, death occurred at the time, date and place and due to the cause(s) stated. (Signature and Title):
21b. DATE SIGNED (Mo., Day, Yr.):
21c. HOUR OF DEATH:
21d. NAME OF ATTENDING PHYSICIAN IF OTHER THAN CERTIFIER (Type or Print):

To be completed by Coroner's Office

22a. On the basis of examination and/or investigation, in my opinion death occurred at the time, date and place and due to the cause(s) and manner stated. (Signature and Title): Vernon O. McCarty
22b. DATE SIGNED (Mo., Day, Yr.): August 10, 2004
22c. HOUR OF DEATH: 1955
22d. PRONOUNCED DEAD (Mo., Day, Yr.): August 8, 2004
22e. PRONOUNCED DEAD (Hour): AT 1955

23a. NAME AND ADDRESS OF CERTIFIER (PHYSICIAN, ATTENDING PHYSICIAN-MEDICAL EXAMINER, OR CORONER) (Type or Print): Vernon O. McCarty, Coroner, P.O. Box 11130, Reno, Nevada 89520
23b. LICENSE NUMBER: WCC S. 35

24a. REGISTRAR (Signature): [signature] Dep.
24b. DATE RECEIVED BY REGISTRAR (Mo., Day, Yr.): August 10, 2004
24c. DEATH DUE TO COMMUNICABLE DISEASE: YES ☐ NO ☒

**CAUSE OF DEATH**

CONDITIONS IF ANY WHICH GAVE RISE TO IMMEDIATE CAUSE STATING THE UNDERLYING CAUSE LAST

25. IMMEDIATE CAUSE (ENTER ONLY ONE CAUSE PER LINE FOR (a), (b), AND (c).)

PART I
(a) Ruptured descending thoracic aorta aneurysm — DUE TO, OR AS A CONSEQUENCE OF: — Interval between onset and death:
(b) Blunt force trauma (fall) — DUE TO, OR AS A CONSEQUENCE OF: — Interval between onset and death:
(c) — Interval between onset and death:

PART II
OTHER SIGNIFICANT CONDITIONS—Conditions contributing to death but not resulting in the underlying cause given in Part I.
26. AUTOPSY (Specify Yes or No): No
27. WAS CASE REFERRED TO CORONER (Specify Yes or No): Yes

28a. ACC., SUICIDE, HOM., UNDET., OR PENDING INVEST. (Specify): Accident
28b. DATE OF INJURY (Mo., Day, Yr.): Aug. 8, 2004
28c. HOUR OF INJURY: 1435 M
28d. DESCRIBE HOW INJURY OCCURRED: Fall from height
28e. WAS INJURY AT WORK (Yes or No): No
28f. PLACE OF INJURY—At home, farm, street, factory, office building, etc. (Specify): Home
28g. LOCATION—STREET OR R.F.D. No., CITY OR TOWN, STATE: 12010 Anna Lane, Truckee, California

STATE REGISTRAR

**No. 269803**

This is to certify that the above is a true and legal copy of the certificate on file in this office.

Deputy Registrar: Barbara Lee Hunt Date: AUG 17 2004

WARNING: IT IS ILLEGAL TO ALTER OR COPY THIS DOCUMENT

94 08490 1/1

RECORDING REQUESTED BY:
Mr. & Mrs Blair T. Butler
6394 Larkin Rd.
Live Oak, CA 95953

WHEN RECORDED MAIL TO:
Same as above:

MAIL TAX STATEMENTS TO:
Same as above

The Undersigned declares:
Transfer TAX: None SDOR
No Consideration. Gift to Revocable Living Trust for Benefit of Grantor(s).
Exempt: R & T 11911

APN: 21-150-52

# QUITCLAIM DEED

I, Roberta Butler, a married woman, hereby remise, release and quitclaim to Blair T. Butler and Roberta C. Butler, Trustees of the BUTLER FAMILY LIVING TRUST DATED MAY 10, 1994, any and all right, title and interest in and to that certain real property situated in the unincorporated area of the County of Yuba, State of California, described as follows:

A portion of the remainder as shown on Tract map No. 84-384, "College View Subdivision Unit 1", as recorded in book 50 of Maps at page 48, Yuba County Records, situated in Section 21, Township 15 North, Range 4 East, Mount Diablo Base and Meridian, Yuba County, California, more particularly described as follows:
Lot "D" of the Record of Survey recorded in Book 33 of Maps, at Page 13, Yuba County Records

Dated: 7-1-94

Roberta Butler
Roberta Butler

State of California )
) ss.
County of Sutter )

On 7/6/94 before me, David D. Edwards a Notary Public, personally appeared Roberta Butler, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

OFFICIAL SEAL
David D. Edwards
NOTARY PUBLIC - CALIFORNIA
SUTTER COUNTY
My Comm. Expires Mar 2, 1998

Notary Public

Current APN 021-150-060

**DEED EXHIBIT B**

1
2

2004R-008822

RECORDING REQUESTED BY

DROBNY LAW OFFICES, INC.
A Professional Corporation
2151 River Plaza Drive, Suite 305
Sacramento, CA 95833

WHEN RECORDED MAIL TO:

DROBNY LAW OFFICES, INC.
A Professional Corporation
2151 River Plaza Drive, Suite 305
Sacramento, CA 95833

TERRY A. HANSEN
YUBA COUNTY RECORDER
MARYSVILLE, CA
RECORDED ON
05/17/2004 03:03PM
REC FEE: 10.00
TRANS TAX:
PENALTY FEE:
PCOR FEE:
MONUMENT FEE:
ADDL INDEX FEE:
LIEN NOTICE FEE:
PR PENALTY FEE:
PAGE 1 OF 2
DEPUTY INITIALS: SH

# INDIVIDUAL QUITCLAIM DEED

The undersigned grantor declares: "This conveyance tranefers the grantor's interest into her revocable living trust."
This is a Trust Transfer under Section 62 of the Revenue and Taxation Code and Grantor has checked the applicable exclusion:
(X) Transfer to a revocable trust. **"Inter Vivos Gift."**
(X) Documentary transfer tax is $-0-. **A Transfer to trustees of a revocable trust not pursuant to a sale. R&T 11930.**
( ) Unincorporated area: ( ) City of _____, and
FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

DEBRA BUTLER, as to an undivided 1/4 interest, **hereby REMISES, RELEASES, and QUITCLAIMS to** STUART D. GREENBERG and DEBRA MILANI, as Co-Trustees of THE GREENBERG FAMILY TRUST, dated May 7, 2004, as to an undivided 1/4 interest

in and to the following described real property in the County of YUBA, State of California:

***LEGAL DESCRIPTION:*** *See Exhibit "A" Attached Hereto And Made A Part Hereof.*
***A.P.N. 21-150-032-000***
***Commonly described as:*** *2176 Hammonton Smartsville Road, Marysville, CA*

DATED: May 7, 2004

Debra Butler
DEBRA BUTLER

STATE OF CALIFORNIA )
)ss.
COUNTY OF SACRAMENTO )

On MAY 7, 2004, before me, MARK S. DROBNY, a notary public, personally appeared DEBRA BUTLER, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the within instrument. WITNESS my hand and official seal.

Mark S. Drobny (Seal)

MARK S. DROBNY
COMM. # 1248885
NOTARY PUBLIC-CALIFORNIA
SACRAMENTO COUNTY
COMM. EXP. JUNE 26, 2004

MAIL TAX STATEMENTS TO: As Previously Designated

EXHIBIT "A"

The Northeast quarter of the Southwest quarter of Section Twenty one (21), Township Fifteen (15) North, Range Four (4) East, M.D.B. & M.

Yuba County

Order No. 77-2737
Escrow No. (H-3919)
Loan No.

WHEN RECORDED MAIL TO:

88.00

6938

FIRST AMERICAN TITLE CO. SUTTER-YUBA
RECORDED IN OFFICIAL RECORDS OF
YUBA COUNTY, CALIFORNIA
AT 25 MIN. PAST 11 A.M.
DEC 19 1977
EARL A. COZAD, COUNTY RECORDER

SPACE ABOVE THIS LINE FOR RECORDER'S USE

MAIL TAX STATEMENTS TO:
(Grantees)
6394 Larkin Road
Live Oak, California

DOCUMENTARY TRANSFER TAX $ 88.00
X Computed on the consideration or value of property conveyed OR
.... Computed on the consideration or value less liens or encumbrances remaining at time of sale.
First American Title Insurance Co.
Signature of Declarant or Agent determining tax — Firm Name

AP 21-150-032

# GRANT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

ARNOLD R. BEAN, an unmarried man

hereby GRANT(S) to HEATH BUTLER and ROBERTA C. BUTLER, his wife, as to an undivided 1/4 interest; STEPHEN HILL and GAYLE HILL, his wife, as to an undivided 1/4 interest; HENRY BUTLER and IRENA BUTLER, his wife, as to an undivided 1/4 interest; and KEION BUTLER, a single man, as to an undivided 1/4 interest;

the real property in the Unincorporated County of Yuba State of California, described as

The Northeast quarter of the Southwest quarter of Section Twenty one (21), Township Fifteen (15) North, Range Four (4) East, M.D.B. & M.

Dated December 19, 1977

Arnold R Bean
ARNOLD R. BEAN

STATE OF CALIFORNIA
COUNTY OF Sutter } ss.

On December 19, 1977
before me, the undersigned, a Notary Public in and for said State, personally appeared Arnold R. Bean

known to me to be the person whose name is subscribed to the within instrument and acknowledged that he executed the same.

WITNESS my hand and official seal.

Signature Carolyn Harlander

OFFICIAL SEAL
CAROLYN HARLANDER
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
SUTTER COUNTY
My Commission Expires March 7, 1980

(This area for official notarial seal)

MAIL TAX STATEMENTS AS DIRECTED ABOVE

BOOK 655 PAGE 646

## Appendix C

EDR Radius Map with GeoCheck®
Report

**Hammonton Smartsville Property**
SE Corner of Dantoni and Hammonton Smartsville Rd
Marysville, CA 95901

Inquiry Number: 02556892.2r
August 04, 2009

# The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

# TABLE OF CONTENTS


| SECTION | PAGE |
|---|---|
| Executive Summary | ES1 |
| Overview Map | 2 |
| Detail Map | 3 |
| Map Findings Summary | 4 |
| Map Findings | 7 |
| Orphan Summary | 31 |
| Government Records Searched/Data Currency Tracking | GR-1 |

**GEOCHECK ADDENDUM**

| | |
|---|---|
| Physical Setting Source Addendum | A-1 |
| Physical Setting Source Summary | A-2 |
| Physical Setting SSURGO Soil Map | A-5 |
| Physical Setting Source Map | A-10 |
| Physical Setting Source Map Findings | A-11 |
| Physical Setting Source Records Searched | A-45 |


***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

SE CORNER OF DANTONI AND HAMMONTON SMARTSVILLE RD
MARYSVILLE, CA 95901

### COORDINATES

| | |
|---|---|
| Latitude (North): | 39.133700 - 39˚ 8' 1.3'' |
| Longitude (West): | 121.537800 - 121˚ 32' 16.1'' |
| Universal Tranverse Mercator: | Zone 10 |
| UTM X (Meters): | 626381.9 |
| UTM Y (Meters): | 4332423.0 |
| Elevation: | 72 ft. above sea level |

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

| | |
|---|---|
| Target Property Map: | 39121-B5 YUBA CITY, CA |
| Most Recent Revision: | 1973 |
| South Map: | 39121-A5 OLIVEHURST, CA |
| Most Recent Revision: | 1973 |

### AERIAL PHOTOGRAPHY IN THIS REPORT

| | |
|---|---|
| Portions of Photo from: | 2006, 2005 |
| Source: | USDA |

## TARGET PROPERTY SEARCH RESULTS

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

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### *Federal NPL site list*

NPL---------- National Priority List

# EXECUTIVE SUMMARY

Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

***Federal Delisted NPL site list***

Delisted NPL ---------- National Priority List Deletions

***Federal CERCLIS list***

CERCLIS ---------- Comprehensive Environmental Response, Compensation, and Liability Information System

***Federal CERCLIS NFRAP site List***

CERC-NFRAP ---------- CERCLIS No Further Remedial Action Planned

***Federal RCRA CORRACTS facilities list***

CORRACTS ---------- Corrective Action Report

***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF ---------- RCRA - Transporters, Storage and Disposal

***Federal RCRA generators list***

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

***Federal institutional controls / engineering controls registries***

US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

***State- and tribal - equivalent NPL***

RESPONSE ---------- State Response Sites

***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF ---------- Solid Waste Information System

***State and tribal leaking storage tank lists***

SLIC ---------- Statewide SLIC Cases
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

***State and tribal registered storage tank lists***

AST ---------- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

***State and tribal voluntary cleanup sites***

VCP ---------- Voluntary Cleanup Program Properties
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

# EXECUTIVE SUMMARY

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS ..... A Listing of Brownfields Sites

***Local Lists of Landfill / Solid Waste Disposal Sites***

DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
WMUDS/SWAT ..... Waste Management Unit Database
HAULERS ..... Registered Waste Tire Haulers Listing
INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands

***Local Lists of Hazardous waste / Contaminated Sites***

US CDL ..... Clandestine Drug Labs
HIST Cal-Sites ..... Historical Calsites Database
Toxic Pits ..... Toxic Pits Cleanup Act Sites

***Local Land Records***

LIENS 2 ..... CERCLA Lien Information
LUCIS ..... Land Use Control Information System
LIENS ..... Environmental Liens Listing
DEED ..... Deed Restriction Listing

***Records of Emergency Release Reports***

HMIRS ..... Hazardous Materials Information Reporting System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing

***Other Ascertainable Records***

RCRA-NonGen ..... RCRA - Non Generators
DOT OPS ..... Incident and Accident Data
DOD ..... Department of Defense Sites
FUDS ..... Formerly Used Defense Sites
CONSENT ..... Superfund (CERCLA) Consent Decrees
ROD ..... Records Of Decision
UMTRA ..... Uranium Mill Tailings Sites
MINES ..... Mines Master Index File
TRIS ..... Toxic Chemical Release Inventory System
TSCA ..... Toxic Substances Control Act
FTTS ..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS ..... FIFRA/TSCA Tracking System Administrative Case Listing
SSTS ..... Section 7 Tracking Systems
ICIS ..... Integrated Compliance Information System
PADS ..... PCB Activity Database System
MLTS ..... Material Licensing Tracking System
RADINFO ..... Radiation Information Database

RAATS RCRA Administrative Action Tracking System
CA BOND EXP. PLAN Bond Expenditure Plan
CA WDS Waste Discharge System
NPDES NPDES Permits Listing
Cortese "Cortese" Hazardous Waste & Substances Sites List
Notify 65 Proposition 65 Records
DRYCLEANERS Cleaner Facilities
WIP Well Investigation Program Case List
EMI Emissions Inventory Data
INDIAN RESERV Indian Reservations
SCRD DRYCLEANERS State Coalition for Remediation of Drycleaners Listing

**EDR PROPRIETARY RECORDS**

***EDR Proprietary Records***

Manufactured Gas Plants EDR Proprietary Manufactured Gas Plants

**SURROUNDING SITES: SEARCH RESULTS**

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

**STANDARD ENVIRONMENTAL RECORDS**

***Federal RCRA generators list***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 11/12/2008 has revealed that there is 1 RCRA-SQG site within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***YUBA COMMUNITY COLLEGE DISTRIC*** | ***2088 N BEALE RD*** | ***SSE 1/4 - 1/2 (0.272 mi.)*** | ***C11*** | ***15*** |

# EXECUTIVE SUMMARY

***Federal ERNS list***

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 12/31/2008 has revealed that there is 1 ERNS site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| 2184 CECELIA WAY | 2184 CECELIA WAY | S 1/8 - 1/4 (0.173 mi.) | A3 | 9 |

***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 05/27/2009 has revealed that there is 1 ENVIROSTOR site within approximately 1.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***LINDA ELEMENTARY SCHOOL***<br>Status: Active | ***6180 DUNNING AVENUE*** | ***W 1/8 - 1/4 (0.185 mi.)*** | ***B5*** | ***9*** |

***State and tribal leaking storage tank lists***

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 07/07/2009 has revealed that there are 2 LUST sites within approximately 0.75 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***YUBA COMMUNITY COLLEGE DISTRIC***<br>Status: Open - Site Assessment | ***2088 N BEALE RD*** | ***SSE 1/4 - 1/2 (0.272 mi.)*** | ***C11*** | ***15*** |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***E-Z SERVE #100969***<br>Status: Open - Site Assessment | ***1822 BEALE RD N*** | ***WSW 1/2 - 1 (0.535 mi.)*** | ***G20*** | ***29*** |

***State and tribal registered storage tank lists***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 07/07/2009 has revealed that there are 3 UST sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***YUBA COMMUNITY COLLEGE DISTRIC*** | ***2088 N BEALE RD*** | ***SSE 1/4 - 1/2 (0.272 mi.)*** | ***C11*** | ***15*** |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| COLLEGE VILLA MARKET | 1947 N. BEALE ROAD | SSW 1/4 - 1/2 (0.294 mi.) | D12 | 24 |
| LALLY FOODMART | 1946 NORTH BEALE ROAD | SSW 1/4 - 1/2 (0.294 mi.) | D13 | 25 |

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Lists of Landfill / Solid Waste Disposal Sites***

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 07/06/2009 has revealed that there is 1 SWRCY site within approximately 0.75 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| TOMRA PACIFIC INC | 1822 N BEALE RD | WSW 1/2 - 1 (0.535 mi.) | G19 | 29 |

***Local Lists of Hazardous waste / Contaminated Sites***

SCH: This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category. depending on the level of threat to public health and safety or the. environment they pose.

A review of the SCH list, as provided by EDR, and dated 05/27/2009 has revealed that there is 1 SCH site within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***LINDA ELEMENTARY SCHOOL*** | ***6180 DUNNING AVENUE*** | ***W 1/8 - 1/4 (0.185 mi.)*** | ***B5*** | ***9*** |

CDL: A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

A review of the CDL list, as provided by EDR, and dated 06/30/2009 has revealed that there are 2 CDL

sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| Not reported | 6165 DUNNING AVE | W 1/8 - 1/4 (0.185 mi.) | B6 | 12 |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| Not reported | 1961 LINDA AVE, APT #2 | SSW 1/8 - 1/4 (0.215 mi.) | 9 | 14 |

***Local Lists of Registered Storage Tanks***

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 3 CA FID UST sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***YUBA COMMUNITY COLLEGE DISTRIC*** | ***2088 N BEALE RD*** | ***SSE 1/4 - 1/2 (0.272 mi.)*** | ***C11*** | ***15*** |
| ***PEACH TREE GOLF AND COUNTRY CL*** | ***2043 SIMPSON DANTONI RD*** | ***N 1/4 - 1/2 (0.395 mi.)*** | ***F18*** | ***28*** |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***7 ELEVEN STORE 16006*** | ***1938 N BEALE RD*** | ***SW 1/4 - 1/2 (0.337 mi.)*** | ***E16*** | ***26*** |

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| YUBA COLLEGE-MARYSVILLE CAMPUS | 2088 N BEALE RD | SSE 1/4 - 1/2 (0.272 mi.) | C10 | 14 |
| PEACH TREE GOLF AND COUNTRY CL | 2043 SIMPSON DANTONI RD | N 1/4 - 1/2 (0.395 mi.) | F17 | 27 |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| 7-ELEVEN FOOD STORE 2201-16006 | 1938 N BEALE RD | SW 1/4 - 1/2 (0.337 mi.) | E15 | 26 |

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 4 SWEEPS UST sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***YUBA COMMUNITY COLLEGE DISTRIC*** | ***2088 N BEALE RD*** | ***SSE 1/4 - 1/2 (0.272 mi.)*** | ***C11*** | ***15*** |
| ***PEACH TREE GOLF AND COUNTRY CL*** | ***2043 SIMPSON DANTONI RD*** | ***N 1/4 - 1/2 (0.395 mi.)*** | ***F18*** | ***28*** |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| COLLEGE VILLA MARKET | 1947 N BEALE RD | SSW 1/4 - 1/2 (0.294 mi.) | D14 | 25 |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***7 ELEVEN STORE 16006*** | ***1938 N BEALE RD*** | ***SW 1/4 - 1/2 (0.337 mi.)*** | ***E16*** | ***26*** |

***Records of Emergency Release Reports***

CHMIRS: The California Hazardous Material Incident Report System contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

A review of the CHMIRS list, as provided by EDR, and dated 12/31/2007 has revealed that there is 1 CHMIRS site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| Not reported | 2184 CECELIA WAY | S 1/8 - 1/4 (0.173 mi.) | A2 | 7 |

***Other Ascertainable Records***

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 04/28/2009 has revealed that there are 2 FINDS sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| CASA MIA MOBILE HOME PARK | 2019 HAMMONTON SMARTVILW | 0 - 1/8 (0.068 mi.) | 1 | 7 |
| LINDA ELEMENTARY | 6180 DUNNING AVE. | W 1/8 - 1/4 (0.185 mi.) | B4 | 9 |

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES].

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***YUBA COMMUNITY COLLEGE DISTRIC*** | ***2088 N BEALE RD*** | ***SSE 1/4 - 1/2 (0.272 mi.)*** | ***C11*** | ***15*** |

# EXECUTIVE SUMMARY

HAZNET: The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000-1,000,000 annually, representing approximately 350,000-500,000 shipments. Data from non-California manifests & continuation sheets are not included at the present time. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, & disposal method. The source is the Department of Toxic Substance Control is the agency

A review of the HAZNET list, as provided by EDR, and dated 12/31/2007 has revealed that there are 2 HAZNET sites within approximately 0.25 miles of the target property.

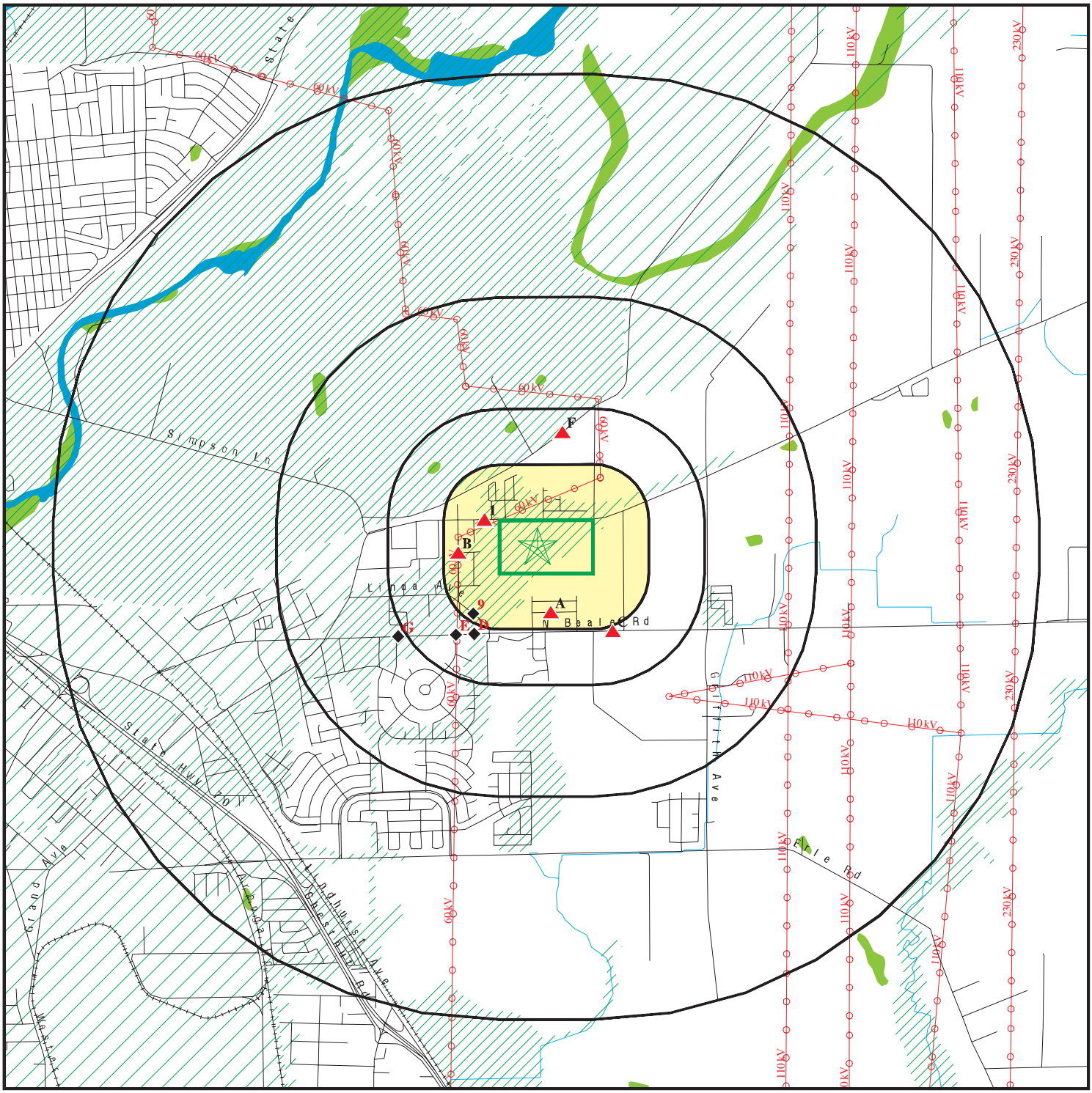
| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| MJUSD MARYSVILLE JOINT USD | 6180 DUNNING AVE | W 1/8 - 1/4 (0.185 mi.) | B7 | 13 |
| LINDA ELEMENTARY/MARYSVILLE JO | 6180 DUNNING AVE | W 1/8 - 1/4 (0.185 mi.) | B8 | 13 |

# EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

| Site Name | Database(s) |
|---|---|
| DAVE & CAROLS MARKET | LUST, HIST CORTESE |
| YUBA TRUCKING | LUST, HIST CORTESE |
| SIX MILE STATION | LUST, HIST CORTESE |
| MAYFAIR PACKING CO | LUST, HIST CORTESE |
| LEWIS HALLWOOD MKT. | CA FID UST, SWEEPS UST |
| RIVER OAKS RANCH | CA FID UST, SWEEPS UST |
| DOUG SCOTT HARRISON | HAZNET, CDL |
| FEATHER RIVER BLVD ONRAMP TO H | CDL |
| 9050 HIGHWAY 70 | CDL |
| HWY 70, 1 MILE N OF MARYSVILLE | CDL |
| 8853 KIBBE RD X HWY 20 | CDL |
| YUBA ST, SO OF 10TH (TRAFFIC S | CDL |
| ATWAL SITE | LUST |
| YUBA NATURAL RESOURCES, INC. | HIST UST |
| BARBACCIA BROS INC. | HIST UST |
| BEN F. MUECK | HIST UST |
| BENJAMIN C. LEMBKE | HIST UST |
| FRANK A KALCIC | HIST UST |
| H. B. ORCHARD CO., INC. | HIST UST |
| MARY L. MUECK | HIST UST |
| NASO ORCHARDS | HIST UST |
| NEAL J. DENNY | HIST UST |
| RIVER OAKS RANCH | HIST UST |
| PACIFIC GAS & ELECTRIC CO | HAZNET |
| WESTERN BLASTING TECHNOLOGIES | HAZNET |
| UNION PACIFIC RAILROAD | HAZNET |
| CALTRANS DIST 3/CONSTR/EA03-376104 | HAZNET |
| CORE-MARK INC | HAZNET |
| RODRIGUEZ ALL BUMPER REPAIR & CUST | HAZNET |
| CALTRANS DIST 3/CONSTR/EA03-1A4314 | HAZNET |
| SBC DBA PACIFIC BELL | HAZNET |
| CALTRANS DIST 3/CONSTR/EA03-4A5704 | HAZNET |
| SIX MILE STATION | HAZNET |
| PEACH TREE GOLF & COUNTRY CLUB | HAZNET |
| BALDWIN CONTRACTING | HAZNET |
| BALDWIN CONTRACTING COMPANY INC | HAZNET |
| PACIFIC GAS & ELECTRIC | HAZNET |
| PACOAST/ M&M FARM SUPPLY | SLIC |
| YSDA | SLIC |
| 8369 HWY 70 | US CDL |
| YUBA SUTTER DISPOSAL | SWRCY |
| DIST 10 DRYER | EMI |

# OVERVIEW MAP - 02556892.2r




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

0 1/2 1 2 Miles

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

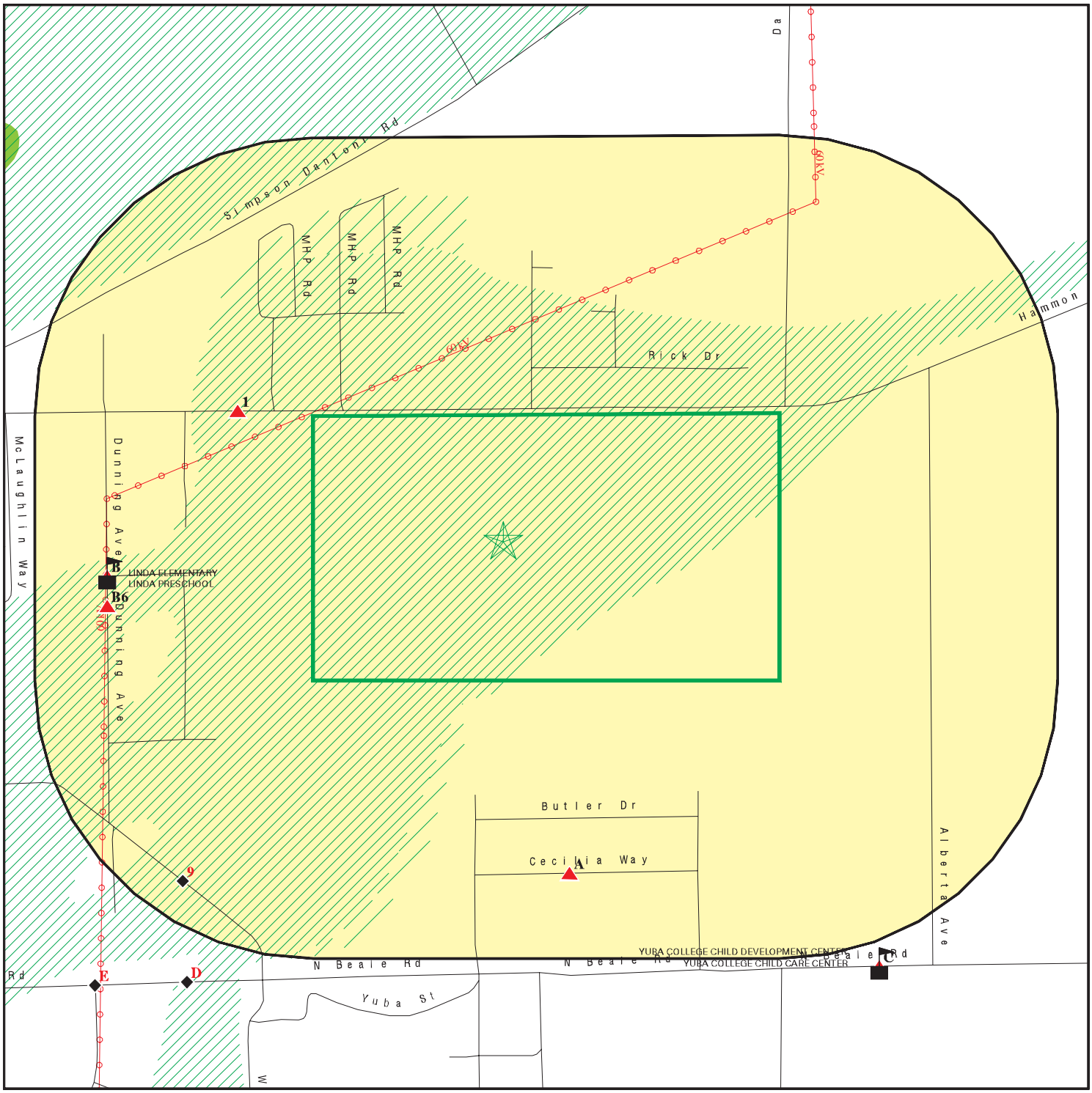
N

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: | Hammonton Smartsville Property | CLIENT: | LFR Inc |
| ADDRESS: | SE Corner of Dantoni and Hammonton Smartsville Rd<br>Marysville CA 95901 | CONTACT: | Scott Hackman |
| | | INQUIRY #: | 02556892.2r |
| LAT/LONG: | 39.1337 / 121.5378 | DATE: | August 04, 2009 1:28 pm |

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# DETAIL MAP - 02556892.2r




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

Power transmission lines

Oil & Gas pipelines

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: | Hammonton Smartsville Property | CLIENT: | LFR Inc |
| ADDRESS: | SE Corner of Dantoni and Hammonton Smartsville Rd<br>Marysville CA 95901 | CONTACT: | Scott Hackman |
| | | INQUIRY #: | 02556892.2r |
| LAT/LONG: | 39.1337 / 121.5378 | DATE: | August 04, 2009 1:29 pm |

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# MAP FINDINGS SUMMARY

| Database | Target Property | Search Distance (Miles) | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| **STANDARD ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Federal NPL site list*** | | | | | | | | |
| NPL | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| Proposed NPL | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| NPL LIENS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| ***Federal Delisted NPL site list*** | | | | | | | | |
| Delisted NPL | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| ***Federal CERCLIS list*** | | | | | | | | |
| CERCLIS | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| ***Federal CERCLIS NFRAP site List*** | | | | | | | | |
| CERC-NFRAP | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| ***Federal RCRA CORRACTS facilities list*** | | | | | | | | |
| CORRACTS | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| ***Federal RCRA non-CORRACTS TSD facilities list*** | | | | | | | | |
| RCRA-TSDF | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| ***Federal RCRA generators list*** | | | | | | | | |
| RCRA-LQG | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| RCRA-SQG | | 0.500 | 0 | 0 | 1 | NR | NR | 1 |
| RCRA-CESQG | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal institutional controls / engineering controls registries*** | | | | | | | | |
| US ENG CONTROLS | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| US INST CONTROL | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| ***Federal ERNS list*** | | | | | | | | |
| ERNS | | 0.250 | 0 | 1 | NR | NR | NR | 1 |
| ***State- and tribal - equivalent NPL*** | | | | | | | | |
| RESPONSE | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| ***State- and tribal - equivalent CERCLIS*** | | | | | | | | |
| ENVIROSTOR | | 1.250 | 0 | 1 | 0 | 0 | 0 | 1 |
| ***State and tribal landfill and/or solid waste disposal site lists*** | | | | | | | | |
| SWF/LF | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| ***State and tribal leaking storage tank lists*** | | | | | | | | |
| LUST | | 0.750 | 0 | 0 | 1 | 1 | NR | 2 |
| SLIC | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| INDIAN LUST | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Target Property | Search Distance (Miles) | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| ***State and tribal registered storage tank lists*** | | | | | | | | |
| UST | | 0.500 | 0 | 0 | 3 | NR | NR | 3 |
| AST | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| INDIAN UST | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| ***State and tribal voluntary cleanup sites*** | | | | | | | | |
| VCP | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| INDIAN VCP | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| **ADDITIONAL ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Local Brownfield lists*** | | | | | | | | |
| US BROWNFIELDS | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| ***Local Lists of Landfill / Solid Waste Disposal Sites*** | | | | | | | | |
| DEBRIS REGION 9 | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| ODI | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| WMUDS/SWAT | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| SWRCY | | 0.750 | 0 | 0 | 0 | 1 | NR | 1 |
| HAULERS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| INDIAN ODI | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| ***Local Lists of Hazardous waste / Contaminated Sites*** | | | | | | | | |
| US CDL | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| HIST Cal-Sites | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| SCH | | 0.500 | 0 | 1 | 0 | NR | NR | 1 |
| Toxic Pits | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| CDL | | 0.250 | 0 | 2 | NR | NR | NR | 2 |
| ***Local Lists of Registered Storage Tanks*** | | | | | | | | |
| CA FID UST | | 0.500 | 0 | 0 | 3 | NR | NR | 3 |
| HIST UST | | 0.500 | 0 | 0 | 3 | NR | NR | 3 |
| SWEEPS UST | | 0.500 | 0 | 0 | 4 | NR | NR | 4 |
| ***Local Land Records*** | | | | | | | | |
| LIENS 2 | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| LUCIS | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| LIENS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| DEED | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| ***Records of Emergency Release Reports*** | | | | | | | | |
| HMIRS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| CHMIRS | | 0.250 | 0 | 1 | NR | NR | NR | 1 |
| LDS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| MCS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| ***Other Ascertainable Records*** | | | | | | | | |
| RCRA-NonGen | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Target Property | Search Distance (Miles) | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| DOT OPS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| DOD | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| FUDS | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| CONSENT | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| ROD | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| UMTRA | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| MINES | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| TRIS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| TSCA | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| FTTS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| HIST FTTS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| SSTS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| ICIS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| PADS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| MLTS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| RADINFO | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| FINDS | | 0.250 | 1 | 1 | NR | NR | NR | 2 |
| RAATS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| CA BOND EXP. PLAN | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| CA WDS | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| NPDES | | TP | NR | NR | NR | NR | NR | 0 |
| Cortese | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| HIST CORTESE | | 0.500 | 0 | 0 | 1 | NR | NR | 1 |
| Notify 65 | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| DRYCLEANERS | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| WIP | | 0.500 | 0 | 0 | 0 | NR | NR | 0 |
| HAZNET | | 0.250 | 0 | 2 | NR | NR | NR | 2 |
| EMI | | 0.250 | 0 | 0 | NR | NR | NR | 0 |
| INDIAN RESERV | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |
| SCRD DRYCLEANERS | | 0.750 | 0 | 0 | 0 | 0 | NR | 0 |
| **EDR PROPRIETARY RECORDS** | | | | | | | | |
| ***EDR Proprietary Records*** | | | | | | | | |
| Manufactured Gas Plants | | 1.250 | 0 | 0 | 0 | 0 | 0 | 0 |

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

**1**
**West**
**< 1/8**
**0.068 mi.**
**359 ft.**

**CASA MIA MOBILE HOME PARK**
**2019 HAMMONTON SMARTVILLE**
**MARYSVILLE, CA 95901**

**FINDS** **1008043998**
**N/A**

**Relative:**
**Higher**

**Actual:**
**72 ft.**

FINDS:
Other Pertinent Environmental Activity Identified at Site

Registry ID: 110013178364

SDWIS [WS] (Safe Drinking Water Information System (Water System) ). Water Systems can have one or more water system facilities. The water system will purchase water from several facilities. Drinking water information is stored in EPA's SDWIS, which contains information about public water systems and their violations of EPA's regulations for safe drinking water. These statutes and accompanying regulations establish maximum contaminant levels (MCL), treatment techniques, and monitoring and reporting requirements to ensure that water provided to customers is safe for human consumption.

---

**A2**
**South**
**1/8-1/4**
**0.173 mi.**
**915 ft.**

**2184 CECELIA WAY**
**MARYSVILLE, CA 95901**

**Site 1 of 2 in cluster A**

**CHMIRS** **S109037335**
**N/A**

**Relative:**
**Higher**

**Actual:**
**73 ft.**

CHMIRS:

| | |
|---|---|
| OES Incident Number: | 07-2185 |
| OES notification: | 4/7/2007 02:29:56 PM |
| OES Date: | Not reported |
| OES Time: | Not reported |
| Incident Date: | Not reported |
| **Date Completed:** | **Not reported** |
| Property Use: | Not reported |
| Agency Id Number: | Not reported |
| Agency Incident Number: | Not reported |
| Time Notified: | Not reported |
| Time Completed: | Not reported |
| Surrounding Area: | Not reported |
| Estimated Temperature: | Not reported |
| Property Management: | Not reported |
| Special Studies 1: | Not reported |
| Special Studies 2: | Not reported |
| Special Studies 3: | Not reported |
| Special Studies 4: | Not reported |
| Special Studies 5: | Not reported |
| Special Studies 6: | Not reported |
| More Than Two Substances Involved?: | Not reported |
| Resp Agncy Personel # Of Decontaminated: | Not reported |
| Responding Agency Personel # Of Injuries: | Not reported |
| Responding Agency Personel # Of Fatalities: | Not reported |
| Others Number Of Decontaminated: | Not reported |
| Others Number Of Injuries: | Not reported |
| Others Number Of Fatalities: | Not reported |
| Vehicle Make/year: | Not reported |
| Vehicle License Number: | Not reported |
| Vehicle State: | Not reported |
| Vehicle Id Number: | Not reported |

**(Continued)** **S109037335**

| | |
|---|---|
| CA/DOT/PUC/ICC Number: | Not reported |
| Company Name: | Not reported |
| Reporting Officer Name/ID: | Not reported |
| Report Date: | Not reported |
| Comments: | Not reported |
| Facility Telephone: | Not reported |
| Waterway Involved: | Not reported |
| Waterway: | Not reported |
| Spill Site: | Not reported |
| Cleanup By: | Unknown |
| Containment: | Not reported |
| What Happened: | Not reported |
| Type: | Not reported |
| Measure: | Not reported |
| Other: | Not reported |
| Date/Time: | Not reported |
| Year: | 2007 |
| Agency: | NRC |
| Incident Date: | 4/7/2007 12:00:00 AM |
| Admin Agency: | Yuba County Office of Emergency Services |
| Amount: | Not reported |
| Contained: | Unknown |
| Site Type: | Residence |
| E Date: | Not reported |
| Substance: | Unknown substance |
| Quantity Released: | Not reported |
| BBLS: | 0 |
| Cups: | 0 |
| CUFT: | 0 |
| Gallons: | 0.000000 |
| Grams: | 0 |
| Pounds: | 0 |
| Liters: | 0 |
| Ounces: | 0 |
| Pints: | 0 |
| Quarts: | 0 |
| Sheen: | 0 |
| Tons: | 0 |
| Unknown: | 0 |
| Description: | Not reported |
| Evacuations: | 0 |
| Number of Injuries: | 0 |
| Number of Fatalities: | 0 |
| Description: | CALLER IS REPORTING A RELEASE OF MATERIAL FROM HIS NEIGHBORS HOUSE THAT IS BURNING HIS EYES AND NOSTRILS. THE CALLER STATED THAT THE MATERIAL SMELLS LIKE SOME SORT OF BUG REPELLANT. WHEN THE CALLER CONFRONTED THE NEIGHBOR HE SAID THAT IT WAS NOT ANY OF HIS BUSINESS. |

**A3**
**South**
**1/8-1/4**
**0.173 mi.**
**915 ft.**

**2184 CECELIA WAY**
**2184 CECELIA WAY**
**MARYSVILLE, CA 95901**

**Site 2 of 2 in cluster A**

**ERNS** **2007308360**
**N/A**

**Relative:**
**Higher**

**Actual:**
**73 ft.**

Click this hyperlink while viewing on your computer to access additional ERNS detail in the EDR Site Report.

---

**B4**
**West**
**1/8-1/4**
**0.185 mi.**
**976 ft.**

**LINDA ELEMENTARY**
**6180 DUNNING AVE.**
**MARYSVILLE, CA 95901**

**Site 1 of 5 in cluster B**

**FINDS** **1008298748**
**N/A**

**Relative:**
**Higher**

**Actual:**
**72 ft.**

FINDS:
Other Pertinent Environmental Activity Identified at Site

Registry ID: 110021907301

Not reported

NCES (National Center for Education Statistics) is the primary federal entity for collecting and analyzing data related to education in the United States and other nations and the institute of education sciences.

---

**B5**
**West**
**1/8-1/4**
**0.185 mi.**
**976 ft.**

**LINDA ELEMENTARY SCHOOL**
**6180 DUNNING AVENUE**
**MARYSVILLE, CA 95901**

**Site 2 of 5 in cluster B**

**SCH** **S109422394**
**ENVIROSTOR** **N/A**

**Relative:**
**Higher**

**Actual:**
**72 ft.**

SCH:

| | |
|---|---|
| Facility ID: | 60001038 |
| Site Type: | School Investigation |
| Site Type Detail: | School |
| Acres: | 5.5 |
| National Priorities List: | NO |
| Cleanup Oversight Agencies: | SMBRP |
| Lead Agency: | SMBRP |
| Lead Agency Description: | DTSC - Site Mitigation And Brownfield Reuse Program |
| Project Manager: | MARY GASPARI |
| Supervisor: | Mark Malinowski |
| Division Branch: | Sacramento |
| Site Code: | 104664-11 |
| Assembly: | 03 |
| Senate: | 04 |
| Special Program Status: | Not reported |
| Status: | Active |
| Status Date: | 2009-01-08 00:00:00 |
| Restricted Use: | NO |
| Funding: | School District |
| Latitude: | 39.1324333333334 |
| Longitude: | -121.545225333333 |
| Alias Name: | 104664-11 |
| Alias Type: | Project Code (Site Code) |

**LINDA ELEMENTARY SCHOOL (Continued)** **S109422394**

Alias Name: 021-032-006
Alias Type: APN
Alias Name: 60001038
Alias Type: Envirostor ID Number
Alias Name: 021-071-001
Alias Type: APN

APN: 021-032-006, 021-071-001
APN Description: Not reported
APN Description: Not reported
Comments: Not reported

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 2009-04-23 00:00:00

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 2009-02-23 00:00:00

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 2009-05-22 00:00:00

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 2009-01-23 00:00:00

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 2009-01-23 00:00:00

Confirmed: 30207-NO,31001
Confirmed Description: Not reported
Confirmed Description: Not reported
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Site Screening
Future Due Date: 2009
Media Affected: 31001, 30004, 30006, 30007, 30008, 30010, 30013, 30018, 30207
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported
Media Affected Desc: Not reported

Management:
Management Required: NONE SPECIFIED

**LINDA ELEMENTARY SCHOOL (Continued)** **S109422394**

Management Required Desc: Not reported
Potential: SOIL, UE
Potenital Description: Not reported
Potenital Description: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported
PastUse: SCHOOL - ELEMENTARY, TRANSFORMER REPAIR

ENVIROSTOR:
Site Type: School Investigation
Site Type Detailed: School
Acres: 5.5
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: MARY GASPARI
Supervisor: Mark Malinowski
Division Branch: Sacramento
Facility ID: 60001038
Site Code: 104664-11
Assembly: 03
Senate: 04
Special Program: Not reported
Status: Active
Status Date: 2009-01-08 00:00:00
Restricted Use: NO
Funding: School District
Latitude: 39.1324333333334
Longitude: -121.545225333333
Alias Name: 104664-11
Alias Type: Project Code (Site Code)
Alias Name: 021-032-006
Alias Type: APN
Alias Name: 60001038
Alias Type: Envirostor ID Number
Alias Name: 021-071-001
Alias Type: APN

APN: 021-032-006, 021-071-001
APN Description: Not reported
APN Description: Not reported
Comments: Not reported

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 2009-04-23 00:00:00

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 2009-02-23 00:00:00

**LINDA ELEMENTARY SCHOOL (Continued)** **S109422394**

| | |
|---|---|
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Correspondence |
| Completed Date: | 2009-05-22 00:00:00 |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Other Report |
| Completed Date: | 2009-01-23 00:00:00 |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Other Report |
| Completed Date: | 2009-01-23 00:00:00 |
| Confirmed: | 30207-NO,31001 |
| Confirmed Description: | Not reported |
| Confirmed Description: | Not reported |
| Future Area Name: | PROJECT WIDE |
| Future Sub Area Name: | Not reported |
| Future Document Type: | Site Screening |
| Future Due Date: | 2009 |
| Media Affected: | 31001, 30004, 30006, 30007, 30008, 30010, 30013, 30018, 30207 |
| Media Affected Desc: | Not reported |
| Media Affected Desc: | Not reported |
| Media Affected Desc: | Not reported |
| Media Affected Desc: | Not reported |
| Media Affected Desc: | Not reported |
| Media Affected Desc: | Not reported |
| Media Affected Desc: | Not reported |
| Media Affected Desc: | Not reported |
| Media Affected Desc: | Not reported |

Management:

| | |
|---|---|
| Management Required: | NONE SPECIFIED |
| Management Required Desc: | Not reported |
| Potential: | SOIL, UE |
| Potenital Description: | Not reported |
| Potenital Description: | Not reported |
| Schedule Area Name: | Not reported |
| Schedule Sub Area Name: | Not reported |
| Schedule Document Type: | Not reported |
| Schedule Due Date: | Not reported |
| Schedule Revised Date: | Not reported |
| PastUse: | SCHOOL - ELEMENTARY, TRANSFORMER REPAIR |

---

**B6** **CDL** **S107535376**
**West** **6165 DUNNING AVE** **N/A**
**1/8-1/4** **LINDA, CA 95991**
**0.185 mi.**
**976 ft.** **Site 3 of 5 in cluster B**

**Relative:**
**Higher**

**Actual:**
**72 ft.**

CDL:

| | |
|---|---|
| Facility ID: | 199902085 |
| Lab Type: | Illegal Drug Lab (L) - location where an illegal drug lab was operated or drug lab equipment and/or materials were stored. |

**B7** **MJUSD MARYSVILLE JOINT USD** **HAZNET** **S103977957**
**West** **6180 DUNNING AVE** **N/A**
**1/8-1/4** **MARYSVILLE, CA 95901**
**0.185 mi.**
**976 ft.** **Site 4 of 5 in cluster B**

**Relative:**
**Higher**

**Actual:**
**72 ft.**

HAZNET:

| | |
|---|---|
| Gepaid: | CAC001055520 |
| Contact: | MJUSD |
| Telephone: | 0000000000 |
| Facility Addr2: | Not reported |
| Mailing Name: | Not reported |
| Mailing Address: | 1919 B ST |
| Mailing City,St,Zip: | MARYSVILLE, CA 959010000 |
| Gen County: | Yuba |
| TSD EPA ID: | CAD981388952 |
| TSD County: | Shasta |
| Waste Category: | Asbestos-containing waste |
| Disposal Method: | Disposal, Land Fill |
| Tons: | 16.8560 |
| Facility County: | Yuba |

---

**B8** **LINDA ELEMENTARY/MARYSVILLE JOINT USD** **HAZNET** **S102803390**
**West** **6180 DUNNING AVE** **N/A**
**1/8-1/4** **MARYSVILLE, CA 95901**
**0.185 mi.**
**976 ft.** **Site 5 of 5 in cluster B**

**Relative:**
**Higher**

**Actual:**
**72 ft.**

HAZNET:

| | |
|---|---|
| Gepaid: | CAC001039176 |
| Contact: | MARYSVILLE JOINT USD |
| Telephone: | 0000000000 |
| Facility Addr2: | Not reported |
| Mailing Name: | Not reported |
| Mailing Address: | 1919 B ST |
| Mailing City,St,Zip: | MARYSVILLE, CA 959010000 |
| Gen County: | Yuba |
| TSD EPA ID: | CAD981388952 |
| TSD County: | Shasta |
| Waste Category: | Asbestos-containing waste |
| Disposal Method: | Disposal, Land Fill |
| Tons: | 16.8560 |
| Facility County: | Yuba |

| | |
|---|---|
| Gepaid: | CAC001039176 |
| Contact: | MARYSVILLE JOINT USD |
| Telephone: | 0000000000 |
| Facility Addr2: | Not reported |
| Mailing Name: | Not reported |
| Mailing Address: | 1919 B ST |
| Mailing City,St,Zip: | MARYSVILLE, CA 959010000 |
| Gen County: | Yuba |
| TSD EPA ID: | CAD981388952 |
| TSD County: | Shasta |
| Waste Category: | Asbestos-containing waste |
| Disposal Method: | Disposal, Land Fill |
| Tons: | 6.7424 |
| Facility County: | Yuba |

**9**
**SSW**
**1/8-1/4**
**0.215 mi.**
**1135 ft.**

**1961 LINDA AVE, APT #2**
**LINDA, CA 95901**

**CDL** **S107530391**
**N/A**

**Relative:**
**Lower**

**Actual:**
**70 ft.**

CDL:
Facility ID: 199903166
Lab Type: Illegal Drug Lab (L) - location where an illegal drug lab was operated or drug lab equipment and/or materials were stored.

---

**C10**
**SSE**
**1/4-1/2**
**0.272 mi.**
**1438 ft.**

**YUBA COLLEGE-MARYSVILLE CAMPUS**
**2088 N BEALE RD**
**MARYSVILLE, CA 95901**

**Site 1 of 2 in cluster C**

**HIST UST** **U001616224**
**N/A**

**Relative:**
**Higher**

**Actual:**
**72 ft.**

HIST UST:
Region: STATE
Facility ID: 00000038815
Facility Type: Other
Other Type: EDUCATIONAL INSTITUT
Total Tanks: 0008
Contact Name: DON NOBLIN
Telephone: 9167416775
Owner Name: YUBA COMMUNITY COLLEGE DISTRIC
Owner Address: 2088 N. BEALE ROAD
Owner City,St,Zip: MARYSVILLE, CA 95901

Tank Num: 001
Container Num: 4
Year Installed: 1963
Tank Capacity: 00000350
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: None

Tank Num: 002
Container Num: 5
Year Installed: 1963
Tank Capacity: 00000550
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: None

Tank Num: 003
Container Num: 6
Year Installed: 1974
Tank Capacity: 00000000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 004
Container Num: 7
Year Installed: 1963
Tank Capacity: 00000000

**YUBA COLLEGE-MARYSVILLE CAMPUS (Continued)** **U001616224**

Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 005
Container Num: 1
Year Installed: 1963
Tank Capacity: 00000200
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: None

Tank Num: 006
Container Num: 3
Year Installed: 1963
Tank Capacity: 00000200
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: None

Tank Num: 007
Container Num: 2
Year Installed: 1978
Tank Capacity: 00000000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: None

Tank Num: 008
Container Num: 8
Year Installed: 1974
Tank Capacity: 00000000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Stock Inventor

---

**C11** **YUBA COMMUNITY COLLEGE DISTRICT** **RCRA-SQG** **1000142179**
**SSE** **2088 N BEALE RD** **FINDS** **CAD076120021**
**1/4-1/2** **MARYSVILLE, CA 95901** **HAZNET**
**0.272 mi.** **LUST**
**1438 ft.** **Site 2 of 2 in cluster C** **UST**
**CA FID UST**
**Relative:** **SWEEPS UST**
**Higher** **HIST CORTESE**
**MANIFEST**

**Actual:**
**72 ft.**

RCRA-SQG:
Date form received by agency: 07/13/1987
Facility name: YUBA COMMUNITY COLLEGE DISTRICT
Facility address: 2088 N BEALE RD
MARYSVILLE, CA 95901
EPA ID: CAD076120021
Contact: ENVIRONMENTAL MANAGER

**YUBA COMMUNITY COLLEGE DISTRICT (Continued)** **1000142179**

Contact address: 2088 N BEALE RD
MARYSVILLE, CA 95901
Contact country: US
Contact telephone: (916) 741-6775
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: District
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: YUBA COMMUNITY COLLEGE DISTRICT
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site

**YUBA COMMUNITY COLLEGE DISTRICT (Continued)** **1000142179**

Registry ID: 110002658115

Not reported

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

California - Hazardous Waste Tracking System - Datamart

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and its Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

HAZNET:

| | |
|---|---|
| Gepaid: | CAD076120021 |
| Contact: | YUBA COMMUNITY COLLEGE DIST |
| Telephone: | 0000000000 |
| Facility Addr2: | Not reported |
| Mailing Name: | Not reported |
| Mailing Address: | 2088 N BEALE RD |
| Mailing City,St,Zip: | MARYSVILLE, CA 959017605 |
| Gen County: | Yuba |
| TSD EPA ID: | Not reported |
| TSD County: | 0 |
| Waste Category: | Asbestos-containing waste |
| Disposal Method: | Disposal, Land Fill |
| Tons: | 25.2840 |
| Facility County: | Yuba |

**YUBA COMMUNITY COLLEGE DISTRICT (Continued)** **1000142179**

Gepaid: CAD076120021
Contact: YUBA COMMUNITY COLLEGE DIST
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2088 N BEALE RD
Mailing City,St,Zip: MARYSVILLE, CA 959017605
Gen County: Yuba
TSD EPA ID: CAD982042475
TSD County: Solano
Waste Category: Asbestos-containing waste
Disposal Method: Disposal, Land Fill
Tons: 64.0528
Facility County: Yuba

Gepaid: CAD076120021
Contact: YUBA COMMUNITY COLLEGE DIST
Telephone: 0000000000
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2088 N BEALE RD
Mailing City,St,Zip: MARYSVILLE, CA 959017605
Gen County: Yuba
TSD EPA ID: CAT000646117
TSD County: Kings
Waste Category: Other inorganic solid waste
Disposal Method: Treatment, Tank
Tons: .3750
Facility County: Yuba

Gepaid: CAD076120021
Contact: J R NEFF/DIR OF MAINT & OPER
Telephone: 5307416775
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2088 N BEALE RD attn: 142M
Mailing City,St,Zip: MARYSVILLE, CA 959017605
Gen County: Yuba
TSD EPA ID: CAD982042475
TSD County: Solano
Waste Category: Asbestos-containing waste
Disposal Method: H132
Tons: 2.8
Facility County: Yuba

Gepaid: CAD076120021
Contact: J R NEFF/DIR OF MAINT & OPER
Telephone: 5307416775
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: 2088 N BEALE RD attn: 142M
Mailing City,St,Zip: MARYSVILLE, CA 959017605
Gen County: Yuba
TSD EPA ID: CAD980884183
TSD County: Sacramento
Waste Category: Other inorganic solid waste
Disposal Method: H141

**YUBA COMMUNITY COLLEGE DISTRICT (Continued)** **1000142179**

Tons: 0.02
Facility County: Yuba

Click this hyperlink while viewing on your computer to access
26 additional CA_HAZNET: record(s) in the EDR Site Report.

LUST:
Region: STATE
Global Id: T0611500050
Latitude: 39.1278584
Longitude: -121.5419272
Case Type: LUST Cleanup Site
Status: Open - Site Assessment
Status Date: 1992-10-19 00:00:00
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker: Not reported
Local Agency: YUBA COUNTY
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminats of Concern: Diesel
Site History: Not reported

LUST REG 5:
Region: 5
Status: Preliminary site assessment underway
Case Number: 580063
Case Type: Soil only
Substance: DIESEL
Staff Initials: MK
Lead Agency: Regional
Program: LUST
MTBE Code: N/A

UST:
Global ID: 12525
Latitude: 39.1261110940052
Longitude: -121.536297798157

CA FID UST:
Facility ID: 58000042
Regulated By: UTNKA
Regulated ID: 00038815
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 9167416700
Mail To: Not reported
Mailing Address: 2088 N BEALE RD
Mailing Address 2: Not reported
Mailing City,St,Zip: MARYSVILLE 95901
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported

**YUBA COMMUNITY COLLEGE DISTRICT (Continued)** **1000142179**

EPA ID: Not reported
Comments: Not reported
Status: Active

SWEEPS UST:
Status: Not reported
Comp Number: 38815
Number: Not reported
Board Of Equalization: 44-031467
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 58-000-038815-000001
Actv Date: Not reported
Capacity: 350
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: DIESEL
Number Of Tanks: 8

Status: Not reported
Comp Number: 38815
Number: Not reported
Board Of Equalization: 44-031467
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 58-000-038815-000002
Actv Date: Not reported
Capacity: 550
Tank Use: OIL
Stg: WASTE
Content: WASTE OIL
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 38815
Number: Not reported
Board Of Equalization: 44-031467
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 58-000-038815-000003
Actv Date: Not reported
Capacity: 1
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: DIESEL
Number Of Tanks: Not reported

Status: Not reported

**YUBA COMMUNITY COLLEGE DISTRICT (Continued)** **1000142179**

Comp Number: 38815
Number: Not reported
Board Of Equalization: 44-031467
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 58-000-038815-000004
Actv Date: Not reported
Capacity: 1
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 38815
Number: Not reported
Board Of Equalization: 44-031467
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 58-000-038815-000005
Actv Date: Not reported
Capacity: 200
Tank Use: OIL
Stg: WASTE
Content: WASTE OIL
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 38815
Number: Not reported
Board Of Equalization: 44-031467
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 58-000-038815-000006
Actv Date: Not reported
Capacity: 200
Tank Use: OIL
Stg: WASTE
Content: WASTE OIL
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 38815
Number: Not reported
Board Of Equalization: 44-031467
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported

**YUBA COMMUNITY COLLEGE DISTRICT (Continued)** **1000142179**

Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 58-000-038815-000007
Actv Date: Not reported
Capacity: 20000
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: DIESEL
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 38815
Number: Not reported
Board Of Equalization: 44-031467
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 58-000-038815-000008
Actv Date: Not reported
Capacity: 1
Tank Use: M.V. FUEL
Stg: PRODUCT
Content: LEADED
Number Of Tanks: Not reported

Status: A
Comp Number: 38815
Number: 6
Board Of Equalization: 44-031467
Ref Date: 12-13-93
Act Date: 05-23-94
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 58-000-038815-000009
Actv Date: 10-09-89
Capacity: 8000
Tank Use: M.V. FUEL
Stg: P
Content: DIESEL
Number Of Tanks: 4

Status: A
Comp Number: 38815
Number: 6
Board Of Equalization: 44-031467
Ref Date: 12-13-93
Act Date: 05-23-94
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 58-000-038815-000010
Actv Date: 07-23-92
Capacity: 10000
Tank Use: M.V. FUEL

**YUBA COMMUNITY COLLEGE DISTRICT (Continued)** **1000142179**

Stg: P
Content: DIESEL
Number Of Tanks: Not reported

Status: A
Comp Number: 38815
Number: 6
Board Of Equalization: 44-031467
Ref Date: 12-13-93
Act Date: 05-23-94
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 58-000-038815-000011
Actv Date: 12-13-93
Capacity: 4000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: A
Comp Number: 38815
Number: 6
Board Of Equalization: 44-031467
Ref Date: 12-13-93
Act Date: 05-23-94
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: 2
Swrcb Tank Id: 58-000-038815-000012
Actv Date: 12-13-93
Capacity: 4000
Tank Use: M.V. FUEL
Stg: P
Content: DIESEL
Number Of Tanks: Not reported

CORTESE:
Region: CORTESE
Facility County Code: 58
Reg By: LTNKA
Reg Id: 580063

NY MANIFEST:
EPA ID: CAD076120021
Country: USA
Mailing Name: YUBA COLLEGE
Mailing Contact: RUBY L. HENRY
Mailing Address: 2088 NORTH BEALE ROAD
Mailing Address 2: Not reported
Mailing City: MARYSVILLE
Mailing State: CA
Mailing Zip: 95901
Mailing Zip4: Not reported
Mailing Country: USA

**YUBA COMMUNITY COLLEGE DISTRICT (Continued)** **1000142179**

Mailing Phone: 916-741-6700

Document ID: NYB2623455
Manifest Status: Completed copy
Trans1 State ID: Not reported
Trans2 State ID: 11282PNY
Generator Ship Date: 910903
Trans1 Recv Date: 910903
Trans2 Recv Date: 910903
TSD Site Recv Date: 910913
Part A Recv Date: 910927
Part B Recv Date: 910926
Generator EPA ID: CAD076120021
Trans1 EPA ID: NYD980769947
Trans2 EPA ID: NYD980769947
TSDF ID: NYD000632372
Waste Code: D002 - NON-LISTED CORROSIVE WASTES
Quantity: 00100
Units: P - Pounds
Number of Containers: 001
Container Type: DM - Metal drums, barrels
Handling Method: T Chemical, physical, or biological treatment.
Specific Gravity: 100
Year: 91
Manifest Tracking Num: Not reported
Import Ind: Not reported
Export Ind: Not reported
Discr Quantity Ind: Not reported
Discr Type Ind: Not reported
Discr Residue Ind: Not reported
Discr Partial Reject Ind: Not reported
Discr Full Reject Ind: Not reported
Manifest Ref Num: Not reported
Alt Fac RCRA Id: Not reported
Alt Fac Sign Date: Not reported
Mgmt Method Type Code: Not reported

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**D12** **COLLEGE VILLA MARKET** **UST** **U003939357**
**SSW** **1947 N. BEALE ROAD** **N/A**
**1/4-1/2** **MARYSVILLE, CA 95901**
**0.294 mi.**
**1552 ft.** **Site 1 of 3 in cluster D**

**Relative:**
**Lower**

**Actual:**
**68 ft.**

UST:
Global ID: 12521
Latitude: 39.1281959721911
Longitude: -121.544451713562

**D13** **LALLY FOODMART** **UST** **U003940859**
**SSW** **1946 NORTH BEALE ROAD** **N/A**
**1/4-1/2** **MARYSVILLE, CA 95901**
**0.294 mi.**
**1552 ft.** **Site 2 of 3 in cluster D**

**Relative:**
**Lower**

**Actual:**
**68 ft.**

UST:
Global ID: 12507
Latitude: 39.1275426337702
Longitude: -121.544339060783

---

**D14** **COLLEGE VILLA MARKET** **SWEEPS UST** **S106924803**
**SSW** **1947 N BEALE RD** **N/A**
**1/4-1/2** **MARYSVILLE, CA 95901**
**0.294 mi.**
**1552 ft.** **Site 3 of 3 in cluster D**

**Relative:**
**Lower**

**Actual:**
**68 ft.**

SWEEPS UST:
Status: A
Comp Number: 439
Number: 2
Board Of Equalization: Not reported
Ref Date: 03-06-93
Act Date: 05-26-94
Created Date: 05-26-94
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 58-000-000439-000001
Actv Date: 04-06-94
Capacity: 8000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: 2

Status: A
Comp Number: 439
Number: 2
Board Of Equalization: Not reported
Ref Date: 03-06-93
Act Date: 05-26-94
Created Date: 05-26-94
Tank Status: A
Owner Tank Id: 2
Swrcb Tank Id: 58-000-000439-000002
Actv Date: 04-06-94
Capacity: 8000
Tank Use: M.V. FUEL
Stg: P
Content: PRM UNLEADED
Number Of Tanks: Not reported

**E15**
**SW**
**1/4-1/2**
**0.337 mi.**
**1778 ft.**

**7-ELEVEN FOOD STORE 2201-16006**
**1938 N BEALE RD**
**MARYSVILLE, CA 95901**

**Site 1 of 2 in cluster E**

**HIST UST** **1000282128**
**N/A**

**Relative:**
**Lower**

**Actual:**
**70 ft.**

HIST UST:

| | |
|---|---|
| Region: | STATE |
| Facility ID: | 00000012295 |
| Facility Type: | Gas Station |
| Other Type: | Not reported |
| Total Tanks: | 0002 |
| Contact Name: | IQBAL & JOGINDER GILL |
| Telephone: | 9167862035 |
| Owner Name: | THE SOUTHLAND CORPORATION |
| Owner Address: | 5820 STONERIDGE MALL ROAD, #31 |
| Owner City,St,Zip: | PLEASANTON, CA 94566 |
| | |
| Tank Num: | 001 |
| Container Num: | 16006-1 |
| Year Installed: | Not reported |
| Tank Capacity: | 00010000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | REGULAR |
| Tank Construction: | Not reported |
| Leak Detection: | Visual, Stock Inventor |
| | |
| Tank Num: | 002 |
| Container Num: | 16006-2 |
| Year Installed: | Not reported |
| Tank Capacity: | 00010000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | UNLEADED |
| Tank Construction: | Not reported |
| Leak Detection: | Visual, Stock Inventor |

---

**E16**
**SW**
**1/4-1/2**
**0.337 mi.**
**1778 ft.**

**7 ELEVEN STORE 16006**
**1938 N BEALE RD**
**MARYSVILLE, CA 95901**

**Site 2 of 2 in cluster E**

**CA FID UST** **S101596437**
**SWEEPS UST** **N/A**

**Relative:**
**Lower**

**Actual:**
**70 ft.**

CA FID UST:

| | |
|---|---|
| Facility ID: | 58000171 |
| Regulated By: | UTNKI |
| Regulated ID: | 00012295 |
| Cortese Code: | Not reported |
| SIC Code: | Not reported |
| Facility Phone: | Not reported |
| Mail To: | Not reported |
| Mailing Address: | 801 RIVERSIDE AVE |
| Mailing Address 2: | Not reported |
| Mailing City,St,Zip: | MARYSVILLE 95901 |
| Contact: | Not reported |
| Contact Phone: | Not reported |
| DUNs Number: | Not reported |
| NPDES Number: | Not reported |
| EPA ID: | Not reported |
| Comments: | Not reported |
| Status: | Inactive |

**7 ELEVEN STORE 16006 (Continued)** **S101596437**

SWEEPS UST:

| | |
|---|---|
| Status: | Not reported |
| Comp Number: | 12295 |
| Number: | Not reported |
| Board Of Equalization: | 44-000182 |
| Ref Date: | Not reported |
| Act Date: | Not reported |
| Created Date: | Not reported |
| Tank Status: | Not reported |
| Owner Tank Id: | Not reported |
| Swrcb Tank Id: | 58-000-012295-000002 |
| Actv Date: | Not reported |
| Capacity: | 10000 |
| Tank Use: | M.V. FUEL |
| Stg: | PRODUCT |
| Content: | REG UNLEADED |
| Number Of Tanks: | Not reported |

| | |
|---|---|
| Status: | Not reported |
| Comp Number: | 12295 |
| Number: | Not reported |
| Board Of Equalization: | 44-000182 |
| Ref Date: | Not reported |
| Act Date: | Not reported |
| Created Date: | Not reported |
| Tank Status: | Not reported |
| Owner Tank Id: | Not reported |
| Swrcb Tank Id: | 58-000-012295-000001 |
| Actv Date: | Not reported |
| Capacity: | 10000 |
| Tank Use: | M.V. FUEL |
| Stg: | PRODUCT |
| Content: | PRM UNLEADED |
| Number Of Tanks: | 2 |

---

**F17** **PEACH TREE GOLF AND COUNTRY CL** **HIST UST** **U001616193**
**North** **2043 SIMPSON DANTONI RD** **N/A**
**1/4-1/2** **MARYSVILLE, CA 95901**
**0.395 mi.**
**2085 ft.** **Site 1 of 2 in cluster F**

**Relative:**
**Higher**

**Actual:**
**74 ft.**

HIST UST:

| | |
|---|---|
| Region: | STATE |
| Facility ID: | 00000047901 |
| Facility Type: | Other |
| Other Type: | PRIVATE COUNTRY CLUB |
| Total Tanks: | 0002 |
| Contact Name: | JERRY RICE |
| Telephone: | 9167431897 |
| Owner Name: | PEACH TREE GOLF AND COUNTRY CL |
| Owner Address: | 2043 SIMPSON DANTONI ROAD |
| Owner City,St,Zip: | MARYSVILLE, CA 95901 |

| | |
|---|---|
| Tank Num: | 001 |
| Container Num: | 2 |
| Year Installed: | 1959 |
| Tank Capacity: | 00000000 |

**PEACH TREE GOLF AND COUNTRY CL (Continued)** **U001616193**

Tank Used for: PRODUCT
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: None

Tank Num: 002
Container Num: 2
Year Installed: 1959
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: None

---

**F18** **PEACH TREE GOLF AND COUNTRY CL** **CA FID UST** **S101628672**
**North** **2043 SIMPSON DANTONI RD** **SWEEPS UST** **N/A**
**1/4-1/2** **MARYSVILLE, CA 95901**
**0.395 mi.**
**2085 ft.** **Site 2 of 2 in cluster F**

**Relative:**
**Higher**

**Actual:**
**74 ft.**

CA FID UST:
Facility ID: 58000448
Regulated By: UTNKI
Regulated ID: 00047901
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 9167431897
Mail To: Not reported
Mailing Address: P O BOX
Mailing Address 2: Not reported
Mailing City,St,Zip: MARYSVILLE 95901
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Inactive

SWEEPS UST:
Status: Not reported
Comp Number: 47901
Number: Not reported
Board Of Equalization: Not reported
Ref Date: Not reported
Act Date: Not reported
Created Date: Not reported
Tank Status: Not reported
Owner Tank Id: Not reported
Swrcb Tank Id: 58-000-047901-000001
Actv Date: Not reported
Capacity: 1
Tank Use: UNKNOWN
Stg: PRODUCT
Content: Not reported
Number Of Tanks: 2

**PEACH TREE GOLF AND COUNTRY CL (Continued)** **S101628672**

| | |
|---|---|
| Status: | Not reported |
| Comp Number: | 47901 |
| Number: | Not reported |
| Board Of Equalization: | Not reported |
| Ref Date: | Not reported |
| Act Date: | Not reported |
| Created Date: | Not reported |
| Tank Status: | Not reported |
| Owner Tank Id: | Not reported |
| Swrcb Tank Id: | 58-000-047901-000002 |
| Actv Date: | Not reported |
| Capacity: | 1000 |
| Tank Use: | M.V. FUEL |
| Stg: | PRODUCT |
| Content: | LEADED |
| Number Of Tanks: | Not reported |

---

**G19** **TOMRA PACIFIC INC** **SWRCY** **S107869682**
**WSW** **1822 N BEALE RD** **N/A**
**1/2-1** **MARYSVILLE, CA 95901**
**0.535 mi.**
**2823 ft.** **Site 1 of 2 in cluster G**

**Relative:**
**Lower**

**Actual:**
**69 ft.**

SWRCY:

| | |
|---|---|
| Certification Status: | O |
| Facility Phone Number: | Not reported |
| Date facility became certified: | 4/10/2006 |
| Date facility began operating: | 4/28/2006 |
| Date facility ceased operating: | Still operating |
| Whether The Facility Is Grandfathered: | Not reported |
| Convenience Zone Where Faciltiy Located: | 4259 |
| Convenience Zone Where Faciltiy Located 2: | Not Accepted |
| Convenience Zone Where Faciltiy Located 3: | Not Accepted |
| Convenience Zone Where Faciltiy Located 4: | Not Accepted |
| Convenience Zone Where Faciltiy Located 5: | Not Accepted |
| Convenience Zone Where Faciltiy Located 6: | Not Accepted |
| Convenience Zone Where Faciltiy Located 7: | Not Accepted |
| Aluminum Beverage Containers Redeemed: | AL |
| Glass Beverage Containers Redeemed: | GL |
| Plastic Beverage Containers Redeemed: | PL |
| Other mat beverage containers redeemed: | Not reported |
| Refillable Beverage Containers Redeemed: | Not reported |

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**G20** **E-Z SERVE #100969** **LUST** **S104403963**
**WSW** **1822 BEALE RD N** **HIST CORTESE** **N/A**
**1/2-1** **MARYSVILLE, CA 95901**
**0.535 mi.**
**2823 ft.** **Site 2 of 2 in cluster G**

**Relative:**
**Lower**

**Actual:**
**69 ft.**

LUST:

| | |
|---|---|
| Region: | STATE |
| Global Id: | T0611500023 |
| Latitude: | 39.1279404 |
| Longitude: | -121.5490864 |
| Case Type: | LUST Cleanup Site |
| Status: | Open - Site Assessment |

**E-Z SERVE #100969 (Continued)** **S104403963**

Status Date: 2009-06-30 00:00:00
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker: Not reported
Local Agency: YUBA COUNTY
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminats of Concern: Gasoline
Site History: Not reported

LUST REG 5:
Region: 5
Status: Remediation Plan
Case Number: 580034
Case Type: Drinking Water Aquifer affected
Substance: GASOLINE
Staff Initials: MK
Lead Agency: Regional
Program: LUST
MTBE Code: 6

CORTESE:
Region: CORTESE
Facility County Code: 58
Reg By: LTNKA
Reg Id: 580034

ORPHAN SUMMARY

| City | EDR ID | Site Name | Site Address | Zip | Database(s) |
|---|---|---|---|---|---|
| HALLWOOD | S105094426 | DOUG SCOTT HARRISON | 2947 HWY 20 | 95901 | HAZNET, CDL |
| LINDA | S107538491 | | FEATHER RIVER BLVD ONRAMP TO H | 95901 | CDL |
| MARYSVILLE | S101628643 | LEWIS HALLWOOD MKT. | 2789 HIGHWAY 20 | 95901 | CA FID UST, SWEEPS UST |
| MARYSVILLE | S104163775 | DAVE & CAROLS MARKET | 2757 HWY 20 | 95901 | LUST, HIST CORTESE |
| MARYSVILLE | S104163787 | YUBA TRUCKING | 2689 HWY 20 | 95901 | LUST, HIST CORTESE |
| MARYSVILLE | S106486793 | PACOAST/ M&M FARM SUPPLY | 2209 HWY 20 | 95901 | SLIC |
| MARYSVILLE | S107138368 | YUBA SUTTER DISPOSAL | 1630 HIGHWAY 20 | 95901 | SWRCY |
| MARYSVILLE | S107140109 | PACIFIC GAS & ELECTRIC CO | HWY 20 AT LEVEE RD | 95901 | HAZNET |
| MARYSVILLE | S108757926 | WESTERN BLASTING TECHNOLOGIES | 2689 HIGHWAY 20 | 95901 | HAZNET |
| MARYSVILLE | S102797786 | UNION PACIFIC RAILROAD | ROUTE 70 / NORTH BEAL ST. | 95901 | HAZNET |
| MARYSVILLE | S105024890 | SIX MILE STATION | 8991 HWY 70 | 95901 | LUST, HIST CORTESE |
| MARYSVILLE | S105024891 | MAYFAIR PACKING CO | 7880 HWY 70 (AKA OROVILLE HWY) | 95901 | LUST, HIST CORTESE |
| MARYSVILLE | S105937515 | DIST 10 DRYER | 8969 HIGHWAY 70 | 95901 | EMI |
| MARYSVILLE | S107536953 | | 9050 HIGHWAY 70 | 95901 | CDL |
| MARYSVILLE | S107619737 | ATWAL SITE | 9501 HIGHWAY 70 | 95901 | LUST |
| MARYSVILLE | S108200474 | CALTRANS DIST 3/CONSTR/EA03-376104 | ROUTE 70 PM 7.3 | 95901 | HAZNET |
| MARYSVILLE | S108203686 | CORE-MARK INC | HWY 70 N OF EAST NICHOLAS MILE | 95901 | HAZNET |
| MARYSVILLE | S108218699 | RODRIGUEZ ALL BUMPER REPAIR & CUST | 7903 HIGHWAY 70 | 95901 | HAZNET |
| MARYSVILLE | 1011859634 | 8369 HWY 70 | 8369 HWY 70 | | US CDL |
| MARYSVILLE | S107538875 | | HWY 70, 1 MILE N OF MARYSVILLE | 95901 | CDL |
| MARYSVILLE | S109424204 | CALTRANS DIST 3/CONSTR/EA03-1A4314 | RTE 99 NB PM 9 | 95901 | HAZNET |
| MARYSVILLE | S108219872 | SBC DBA PACIFIC BELL | 4204 CAMP BELE HWY | 95901 | HAZNET |
| MARYSVILLE | S109424208 | CALTRANS DIST 3/CONSTR/EA03-4A5704 | CORNER OF HWY 70 / WOODRUFF | 95901 | HAZNET |
| MARYSVILLE | U001616226 | YUBA NATURAL RESOURCES, INC. | 7971 HAMMONTON STAR ROUTE | 95901 | HIST UST |
| MARYSVILLE | S107536855 | | 8853 KIBBE RD X HWY 20 | 95901 | CDL |
| MARYSVILLE | S109521516 | YSDA | NORTH LEVEE ROAD X HIGHWAY 20 | | SLIC |
| MARYSVILLE | S101628678 | RIVER OAKS RANCH | 10850 OROVILLE HWY MARYSVI | 95901 | CA FID UST, SWEEPS UST |
| MARYSVILLE | S103988156 | SIX MILE STATION | 8995 OROVILLE HWY | 95901 | HAZNET |
| MARYSVILLE | U001616088 | BARBACCIA BROS INC. | 11289 OROVILLE HWY | 95901 | HIST UST |
| MARYSVILLE | U001616091 | BEN F. MUECK | 11232 OROVILLE HWY | 95901 | HIST UST |
| MARYSVILLE | U001616092 | BENJAMIN C. LEMBKE | 10464 OROVILLE HWY. | 95901 | HIST UST |
| MARYSVILLE | U001616124 | FRANK A KALCIC | 9447 OROVILLE HWY | 95901 | HIST UST |
| MARYSVILLE | U001616129 | H. B. ORCHARD CO., INC. | 9909 OROVILLE HWY | 95901 | HIST UST |
| MARYSVILLE | U001616161 | MARY L. MUECK | 9198 OROVILLE HWY. | 95901 | HIST UST |
| MARYSVILLE | U001616177 | NASO ORCHARDS | 9050 OROVILLE HWY. | 95901 | HIST UST |
| MARYSVILLE | U001616178 | NEAL J. DENNY | 10122 OROVILLE HWY. | 95901 | HIST UST |
| MARYSVILLE | U001616200 | RIVER OAKS RANCH | 10850 OROVILLE HWY MARYSVILLE | 95901 | HIST UST |
| MARYSVILLE | S108752863 | PEACH TREE GOLF & COUNTRY CLUB | 2043 SIMSON DANTONI RD | 95901 | HAZNET |
| MARYSVILLE | S103678108 | BALDWIN CONTRACTING | 9TH YUBA ST | 95901 | HAZNET |
| MARYSVILLE | S108742936 | BALDWIN CONTRACTING COMPANY INC | 9TH YUBA ST | 95901 | HAZNET |
| MARYSVILLE | S107541259 | | YUBA ST, SO OF 10TH (TRAFFIC S | | CDL |
| OROVILLE | S107143783 | PACIFIC GAS & ELECTRIC | 11402 OROVILLE HWY | 95901 | HAZNET |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

**STANDARD ENVIRONMENTAL RECORDS**

***Federal NPL site list***

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 02/02/2009
Date Data Arrived at EDR: 02/12/2009
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 46

Source: EPA
Telephone: N/A
Last EDR Contact: 07/31/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/23/2009
Date Data Arrived at EDR: 04/28/2009
Date Made Active in Reports: 05/19/2009
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 07/31/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

***Federal Delisted NPL site list***

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 02/02/2009
Date Data Arrived at EDR: 02/12/2009
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 46

Source: EPA
Telephone: N/A
Last EDR Contact: 07/31/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

***Federal CERCLIS list***

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/09/2009
Date Data Arrived at EDR: 01/30/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 101

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 07/14/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Quarterly

***Federal CERCLIS NFRAP site List***

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 12/03/2007
Date Data Arrived at EDR: 12/06/2007
Date Made Active in Reports: 02/20/2008
Number of Days to Update: 76

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 06/15/2009
Next Scheduled EDR Contact: 09/14/2009
Data Release Frequency: Quarterly

***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2009
Date Data Arrived at EDR: 04/02/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 39

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/01/2009
Next Scheduled EDR Contact: 08/31/2009
Data Release Frequency: Quarterly

***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Transporters, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 11/12/2008
Date Data Arrived at EDR: 11/18/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 118

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 07/23/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Quarterly

***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/12/2008
Date Data Arrived at EDR: 11/18/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 118

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 07/23/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 11/12/2008
Date Data Arrived at EDR: 11/18/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 118

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 07/23/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/12/2008
Date Data Arrived at EDR: 11/18/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 118

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 07/23/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Varies

***Federal institutional controls / engineering controls registries***

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/31/2009
Date Data Arrived at EDR: 04/22/2009
Date Made Active in Reports: 05/05/2009
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/29/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/31/2009
Date Data Arrived at EDR: 04/22/2009
Date Made Active in Reports: 05/05/2009
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/29/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Varies

***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 01/30/2009
Date Made Active in Reports: 05/19/2009
Number of Days to Update: 109

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 07/21/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Annually

***State- and tribal - equivalent NPL***

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 05/27/2009
Date Data Arrived at EDR: 05/27/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 19

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/27/2009
Next Scheduled EDR Contact: 08/24/2009
Data Release Frequency: Quarterly

***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 05/27/2009
Date Data Arrived at EDR: 05/27/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 19

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/27/2009
Next Scheduled EDR Contact: 08/24/2009
Data Release Frequency: Quarterly

***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 03/09/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Integrated Waste Management Board
Telephone: 916-341-6320
Last EDR Contact: 07/31/2009
Next Scheduled EDR Contact: 09/07/2009
Data Release Frequency: Quarterly

***State and tribal leaking storage tank lists***

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 07/13/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/03/2009
Next Scheduled EDR Contact: 11/02/2009
Data Release Frequency: Varies

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 06/01/2009
Next Scheduled EDR Contact: 08/31/2009
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 05/18/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 06/29/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 07/07/2009
Date Data Arrived at EDR: 07/09/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 14

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 07/09/2009
Next Scheduled EDR Contact: 10/05/2009
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 05/18/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 07/06/2009
Next Scheduled EDR Contact: 10/05/2009
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 05/11/2009
Next Scheduled EDR Contact: 08/10/2009
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 06/22/2009
Next Scheduled EDR Contact: 09/21/2009
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/20/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Quarterly

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 07/07/2009
Date Data Arrived at EDR: 07/09/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 14

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 07/09/2009
Next Scheduled EDR Contact: 10/05/2009
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 05/18/2009
Next Scheduled EDR Contact: 08/17/2008
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 07/06/2009
Next Scheduled EDR Contact: 10/05/2009
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 05/11/2009
Next Scheduled EDR Contact: 08/10/2009
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/20/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 06/28/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 06/28/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 06/01/2009
Next Scheduled EDR Contact: 08/31/2009
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 06/28/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 05/26/2009
Next Scheduled EDR Contact: 08/24/2009
Data Release Frequency: Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 12/15/2008
Date Data Arrived at EDR: 12/16/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/20/2009
Date Data Arrived at EDR: 05/20/2009
Date Made Active in Reports: 05/29/2009
Number of Days to Update: 9

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 06/04/2009
Date Data Arrived at EDR: 06/05/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 12
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/24/2009
Date Data Arrived at EDR: 05/20/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 28
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/20/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 06/01/2009
Date Data Arrived at EDR: 06/03/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 14
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/19/2009
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 25
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/24/2009
Date Data Arrived at EDR: 03/03/2009
Date Made Active in Reports: 05/05/2009
Number of Days to Update: 63
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Semi-Annually

***State and tribal registered storage tank lists***

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 07/07/2009
Date Data Arrived at EDR: 07/09/2009
Date Made Active in Reports: 07/24/2009
Number of Days to Update: 15
Source: SWRCB
Telephone: 916-480-1028
Last EDR Contact: 07/09/2009
Next Scheduled EDR Contact: 10/05/2009
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
Registered Aboveground Storage Tanks.

Date of Government Version: 02/01/2009
Date Data Arrived at EDR: 06/10/2009
Date Made Active in Reports: 07/20/2009
Number of Days to Update: 40
Source: State Water Resources Control Board
Telephone: 916-341-5712
Last EDR Contact: 07/27/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/19/2009
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 25

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/24/2009
Date Data Arrived at EDR: 03/03/2009
Date Made Active in Reports: 05/05/2009
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 09/08/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 10/16/2008
Number of Days to Update: 27

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/20/2009
Date Data Arrived at EDR: 05/20/2009
Date Made Active in Reports: 05/29/2009
Number of Days to Update: 9

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/01/2008
Date Data Arrived at EDR: 12/30/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 76

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/22/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 06/01/2009
Date Data Arrived at EDR: 06/03/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 14

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 06/04/2009
Date Data Arrived at EDR: 06/05/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 12

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/15/2008
Date Data Arrived at EDR: 12/16/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 90

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Quarterly

***State and tribal voluntary cleanup sites***

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 04/02/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 07/20/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 05/27/2009
Date Data Arrived at EDR: 05/27/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 19

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/27/2009
Next Scheduled EDR Contact: 08/24/2009
Data Release Frequency: Quarterly

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 10/01/2008
Date Data Arrived at EDR: 11/14/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 07/14/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Semi-Annually

***Local Lists of Landfill / Solid Waste Disposal Sites***

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 03/25/2008
Date Data Arrived at EDR: 04/17/2008
Date Made Active in Reports: 05/15/2008
Number of Days to Update: 28

Source: EPA, Region 9
Telephone: 415-972-3336
Last EDR Contact: 07/13/2009
Next Scheduled EDR Contact: 09/21/2009
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 06/01/2009
Next Scheduled EDR Contact: 08/31/2009
Data Release Frequency: Quarterly

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 07/06/2009
Date Data Arrived at EDR: 07/24/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 10

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 07/09/2009
Next Scheduled EDR Contact: 10/05/2009
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 05/28/2009
Date Data Arrived at EDR: 05/29/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 17

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 06/08/2009
Next Scheduled EDR Contact: 09/07/2009
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 05/26/2009
Next Scheduled EDR Contact: 08/24/2009
Data Release Frequency: Varies

***Local Lists of Hazardous waste / Contaminated Sites***

CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 10/31/2008
Date Made Active in Reports: 12/23/2008
Number of Days to Update: 53

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/26/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 05/27/2009
Date Data Arrived at EDR: 05/27/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 19

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/27/2009
Next Scheduled EDR Contact: 08/24/2009
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2009
Date Data Arrived at EDR: 07/23/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 11

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 07/20/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Varies

***Local Lists of Registered Storage Tanks***

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 06/22/2009
Date Data Arrived at EDR: 06/22/2009
Date Made Active in Reports: 07/20/2009
Number of Days to Update: 28

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 06/21/2009
Next Scheduled EDR Contact: 09/21/2009
Data Release Frequency: Varies

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

***Local Land Records***

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 05/29/2009
Date Data Arrived at EDR: 06/03/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 05/18/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 06/08/2009
Next Scheduled EDR Contact: 09/07/2009
Data Release Frequency: Varies

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 05/15/2009
Date Data Arrived at EDR: 05/19/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 27

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/03/2009
Next Scheduled EDR Contact: 11/02/2009
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/29/2009
Date Data Arrived at EDR: 07/01/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 22

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 12/30/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Semi-Annually

***Records of Emergency Release Reports***

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/31/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/29/2009
Number of Days to Update: 43

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 07/16/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 05/09/2008
Date Made Active in Reports: 06/20/2008
Number of Days to Update: 42

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 05/18/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 07/07/2009
Date Data Arrived at EDR: 07/09/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 14

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 07/09/2009
Next Scheduled EDR Contact: 10/05/2009
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 07/07/2009
Date Data Arrived at EDR: 07/09/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 14

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 07/09/2009
Next Scheduled EDR Contact: 10/05/2009
Data Release Frequency: Quarterly

***Other Ascertainable Records***

RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 11/12/2008
Date Data Arrived at EDR: 11/18/2008
Date Made Active in Reports: 03/16/2009
Number of Days to Update: 118

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 07/23/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 05/14/2008
Date Data Arrived at EDR: 05/28/2008
Date Made Active in Reports: 08/08/2008
Number of Days to Update: 72

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/27/2009
Next Scheduled EDR Contact: 08/24/2009
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 703-692-8801
Last EDR Contact: 05/08/2009
Next Scheduled EDR Contact: 08/03/2009
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 09/05/2008
Date Made Active in Reports: 09/23/2008
Number of Days to Update: 18

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 07/01/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 01/27/2009
Date Data Arrived at EDR: 04/23/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 18

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/20/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/23/2009
Date Data Arrived at EDR: 04/28/2009
Date Made Active in Reports: 05/19/2009
Number of Days to Update: 21

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 07/31/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 01/05/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 05/08/2009
Number of Days to Update: 1

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 06/15/2009
Next Scheduled EDR Contact: 09/14/2009
Data Release Frequency: Varies

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/19/2009
Date Data Arrived at EDR: 03/24/2009
Date Made Active in Reports: 05/05/2009
Number of Days to Update: 42

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 06/23/2009
Next Scheduled EDR Contact: 09/21/2009
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 04/09/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 69

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 06/16/2009
Next Scheduled EDR Contact: 09/14/2009
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002
Date Data Arrived at EDR: 04/14/2006
Date Made Active in Reports: 05/30/2006
Number of Days to Update: 46

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 07/14/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 06/15/2009
Next Scheduled EDR Contact: 09/14/2009
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 06/15/2009
Next Scheduled EDR Contact: 09/14/2009
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 03/14/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 35
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/14/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 03/20/2009
Date Data Arrived at EDR: 03/20/2009
Date Made Active in Reports: 05/05/2009
Number of Days to Update: 46
Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 07/13/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 02/26/2009
Date Data Arrived at EDR: 05/20/2009
Date Made Active in Reports: 05/29/2009
Number of Days to Update: 9
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 05/04/2009
Next Scheduled EDR Contact: 08/03/2009
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/02/2009
Date Data Arrived at EDR: 04/24/2009
Date Made Active in Reports: 05/19/2009
Number of Days to Update: 25
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 06/29/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/28/2009
Date Data Arrived at EDR: 04/29/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 12
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/28/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/28/2009
Date Data Arrived at EDR: 05/01/2009
Date Made Active in Reports: 05/19/2009
Number of Days to Update: 18

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/29/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 02/19/2009
Date Made Active in Reports: 05/22/2009
Number of Days to Update: 92

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/08/2009
Next Scheduled EDR Contact: 09/07/2009
Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 03/09/2009
Date Data Arrived at EDR: 03/13/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 26

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 06/11/2009
Next Scheduled EDR Contact: 09/07/2009
Data Release Frequency: Quarterly

CA WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 06/15/2009
Next Scheduled EDR Contact: 09/14/2009
Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 07/21/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 07/21/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES].

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 07/13/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 07/21/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 06/29/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 07/21/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 02/17/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 50

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 05/08/2009
Next Scheduled EDR Contact: 08/03/2009
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 07/14/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 9

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 07/14/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 05/08/2009
Next Scheduled EDR Contact: 08/03/2009
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 04/13/2009
Date Data Arrived at EDR: 04/14/2009
Date Made Active in Reports: 06/17/2009
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 06/22/2009
Next Scheduled EDR Contact: 08/10/2009
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 05/08/2009
Next Scheduled EDR Contact: 08/03/2009
Data Release Frequency: N/A

**EDR PROPRIETARY RECORDS**

***EDR Proprietary Records***

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

**COUNTY RECORDS**

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/20/2009
Date Data Arrived at EDR: 07/20/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 14

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/20/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/20/2009
Date Data Arrived at EDR: 07/20/2009
Date Made Active in Reports: 07/31/2009
Number of Days to Update: 11

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/20/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/27/2009
Date Data Arrived at EDR: 05/28/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 18

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 05/26/2009
Next Scheduled EDR Contact: 08/24/2009
Data Release Frequency: Semi-Annually

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/21/2009
Date Data Arrived at EDR: 07/23/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 11

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 08/03/2009
Next Scheduled EDR Contact: 11/02/2009
Data Release Frequency: Semi-Annually

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 06/15/2009
Date Data Arrived at EDR: 06/15/2009
Date Made Active in Reports: 07/20/2009
Number of Days to Update: 35

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 06/15/2009
Next Scheduled EDR Contact: 08/31/2009
Data Release Frequency: Quarterly

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 07/07/1999
Date Made Active in Reports: N/A
Number of Days to Update: 0

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 07/13/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/26/2008
Date Data Arrived at EDR: 01/27/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 71

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 07/10/2009
Next Scheduled EDR Contact: 08/10/2009
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 05/12/2009
Date Data Arrived at EDR: 05/14/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 32

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 05/12/2009
Next Scheduled EDR Contact: 08/10/2009
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 06/08/2009
Next Scheduled EDR Contact: 09/07/2009
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 02/11/2009
Date Data Arrived at EDR: 04/23/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 18

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 05/11/2009
Next Scheduled EDR Contact: 08/10/2009
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 05/11/2009
Date Data Arrived at EDR: 05/19/2009
Date Made Active in Reports: 06/12/2009
Number of Days to Update: 24

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 05/11/2009
Next Scheduled EDR Contact: 08/10/2009
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 06/03/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 02/23/2009
Date Data Arrived at EDR: 02/24/2009
Date Made Active in Reports: 04/09/2009
Number of Days to Update: 44

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 06/12/2009
Next Scheduled EDR Contact: 08/10/2009
Data Release Frequency: Semi-Annually

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 05/18/2009
Date Data Arrived at EDR: 06/15/2009
Date Made Active in Reports: 07/20/2009
Number of Days to Update: 35

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 07/27/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 07/09/2008
Date Data Arrived at EDR: 07/09/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 22

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 06/21/2009
Next Scheduled EDR Contact: 09/21/2009
Data Release Frequency: Semi-Annually

Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 06/22/2009
Next Scheduled EDR Contact: 09/21/2009
Data Release Frequency: Annually

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/06/2009
Date Data Arrived at EDR: 06/09/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 6
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 06/03/2009
Next Scheduled EDR Contact: 08/31/2009
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 03/02/2009
Date Data Arrived at EDR: 03/27/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 12
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 06/03/2009
Next Scheduled EDR Contact: 08/31/2009
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/06/2009
Date Data Arrived at EDR: 06/09/2009
Date Made Active in Reports: 06/12/2009
Number of Days to Update: 3
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: 08/31/2009
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 07/15/2009
Date Data Arrived at EDR: 07/16/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 7
Source: Placer County Health and Human Services
Telephone: 530-889-7312
Last EDR Contact: 06/28/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/14/2009
Date Data Arrived at EDR: 04/15/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 26
Source: Department of Public Health
Telephone: 951-358-5055
Last EDR Contact: 07/27/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 05/06/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 05/14/2009
Number of Days to Update: 7
Source: Health Services Agency
Telephone: 951-358-5055
Last EDR Contact: 07/27/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 06/04/2009
Date Data Arrived at EDR: 07/28/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 6

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/28/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 06/04/2009
Date Data Arrived at EDR: 07/28/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 6

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/28/2009
Next Scheduled EDR Contact: 10/26/2009
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 06/29/2009
Date Data Arrived at EDR: 07/01/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 22

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 06/01/2009
Next Scheduled EDR Contact: 08/31/2009
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 07/16/2008
Date Data Arrived at EDR: 10/29/2008
Date Made Active in Reports: 11/26/2008
Number of Days to Update: 28

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 07/02/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 11/01/2008
Date Data Arrived at EDR: 12/23/2008
Date Made Active in Reports: 01/27/2009
Number of Days to Update: 35

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 05/18/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 06/16/2009
Date Data Arrived at EDR: 07/01/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 22

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 07/01/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Varies

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 06/01/2009
Next Scheduled EDR Contact: 08/31/2009
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 10/01/2008
Number of Days to Update: 12

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 06/15/2009
Next Scheduled EDR Contact: 08/31/2009
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 04/22/2009
Date Data Arrived at EDR: 05/12/2009
Date Made Active in Reports: 06/12/2009
Number of Days to Update: 31

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 07/13/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Semi-Annually

SAN MATEO COUNTY:

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 07/27/2009
Date Data Arrived at EDR: 07/28/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 6

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 07/06/2009
Next Scheduled EDR Contact: 10/05/2009
Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 04/07/2009
Date Data Arrived at EDR: 04/07/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 34

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 07/06/2009
Next Scheduled EDR Contact: 10/05/2009
Data Release Frequency: Semi-Annually

SANTA CLARA COUNTY:

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 05/29/2009
Date Data Arrived at EDR: 06/01/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 14

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 06/22/2009
Next Scheduled EDR Contact: 09/21/2009
Data Release Frequency: Varies

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 06/01/2009
Date Data Arrived at EDR: 06/01/2009
Date Made Active in Reports: 06/15/2009
Number of Days to Update: 14

Source: City of San Jose Fire Department
Telephone: 408-277-4659
Last EDR Contact: 06/01/2009
Next Scheduled EDR Contact: 08/31/2009
Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 07/01/2009
Date Data Arrived at EDR: 07/07/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 16

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/22/2009
Next Scheduled EDR Contact: 09/21/2009
Data Release Frequency: Quarterly

Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 07/01/2009
Date Data Arrived at EDR: 07/10/2009
Date Made Active in Reports: 07/24/2009
Number of Days to Update: 14

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/22/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/20/2009
Date Data Arrived at EDR: 07/20/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 14

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 07/20/2009
Next Scheduled EDR Contact: 10/19/2009
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 04/01/2009
Date Data Arrived at EDR: 04/02/2009
Date Made Active in Reports: 04/09/2009
Number of Days to Update: 7

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 06/29/2009
Next Scheduled EDR Contact: 09/28/2009
Data Release Frequency: Semi-Annually

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 06/02/2009
Date Data Arrived at EDR: 06/15/2009
Date Made Active in Reports: 07/23/2009
Number of Days to Update: 38

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/12/2009
Next Scheduled EDR Contact: 09/07/2009
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2008
Date Data Arrived at EDR: 09/04/2008
Date Made Active in Reports: 09/18/2008
Number of Days to Update: 14

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/17/2009
Next Scheduled EDR Contact: 08/17/2009
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/09/2009
Next Scheduled EDR Contact: 09/07/2009
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 06/26/2009
Date Data Arrived at EDR: 07/09/2009
Date Made Active in Reports: 07/24/2009
Number of Days to Update: 15

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/09/2009
Next Scheduled EDR Contact: 10/05/2009
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 04/21/2009
Date Data Arrived at EDR: 05/06/2009
Date Made Active in Reports: 05/14/2009
Number of Days to Update: 8

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 07/13/2009
Next Scheduled EDR Contact: 10/12/2009
Data Release Frequency: Annually

**OTHER DATABASE(S)**

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 12/11/2008
Date Made Active in Reports: 03/19/2009
Number of Days to Update: 98

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 07/21/2009
Next Scheduled EDR Contact: 09/07/2009
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 05/05/2009
Date Made Active in Reports: 05/22/2009
Number of Days to Update: 17

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 08/04/2009
Next Scheduled EDR Contact: 11/02/2009
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 05/22/2009
Date Data Arrived at EDR: 05/27/2009
Date Made Active in Reports: 07/01/2009
Number of Days to Update: 35

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/27/2009
Next Scheduled EDR Contact: 08/24/2009
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 09/11/2008
Date Made Active in Reports: 10/02/2008
Number of Days to Update: 21

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/08/2009
Next Scheduled EDR Contact: 09/07/2009
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 06/01/2009
Date Data Arrived at EDR: 06/12/2009
Date Made Active in Reports: 06/29/2009
Number of Days to Update: 17

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 06/15/2009
Next Scheduled EDR Contact: 09/14/2009
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 08/22/2008
Date Made Active in Reports: 09/08/2008
Number of Days to Update: 17

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 07/06/2009
Next Scheduled EDR Contact: 10/05/2009
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: PennWell Corporation
Telephone: (800) 823-6277
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

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

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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**STREET AND ADDRESS INFORMATION**

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# GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

**TARGET PROPERTY ADDRESS**

HAMMONTON SMARTSVILLE PROPERTY
SE CORNER OF DANTONI AND HAMMONTON SMARTSVILLE RD
MARYSVILLE, CA 95901

**TARGET PROPERTY COORDINATES**

| | |
|---|---|
| Latitude (North): | 39.13370 - 39˚ 8' 1.3" |
| Longitude (West): | 121.5378 - 121˚ 32' 16.1" |
| Universal Tranverse Mercator: | Zone 10 |
| UTM X (Meters): | 626381.9 |
| UTM Y (Meters): | 4332423.0 |
| Elevation: | 72 ft. above sea level |

**USGS TOPOGRAPHIC MAP**

| | |
|---|---|
| Target Property Map: | 39121-B5 YUBA CITY, CA |
| Most Recent Revision: | 1973 |
| South Map: | 39121-A5 OLIVEHURST, CA |
| Most Recent Revision: | 1973 |

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

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

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

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

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW DIRECTION INFORMATION**

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

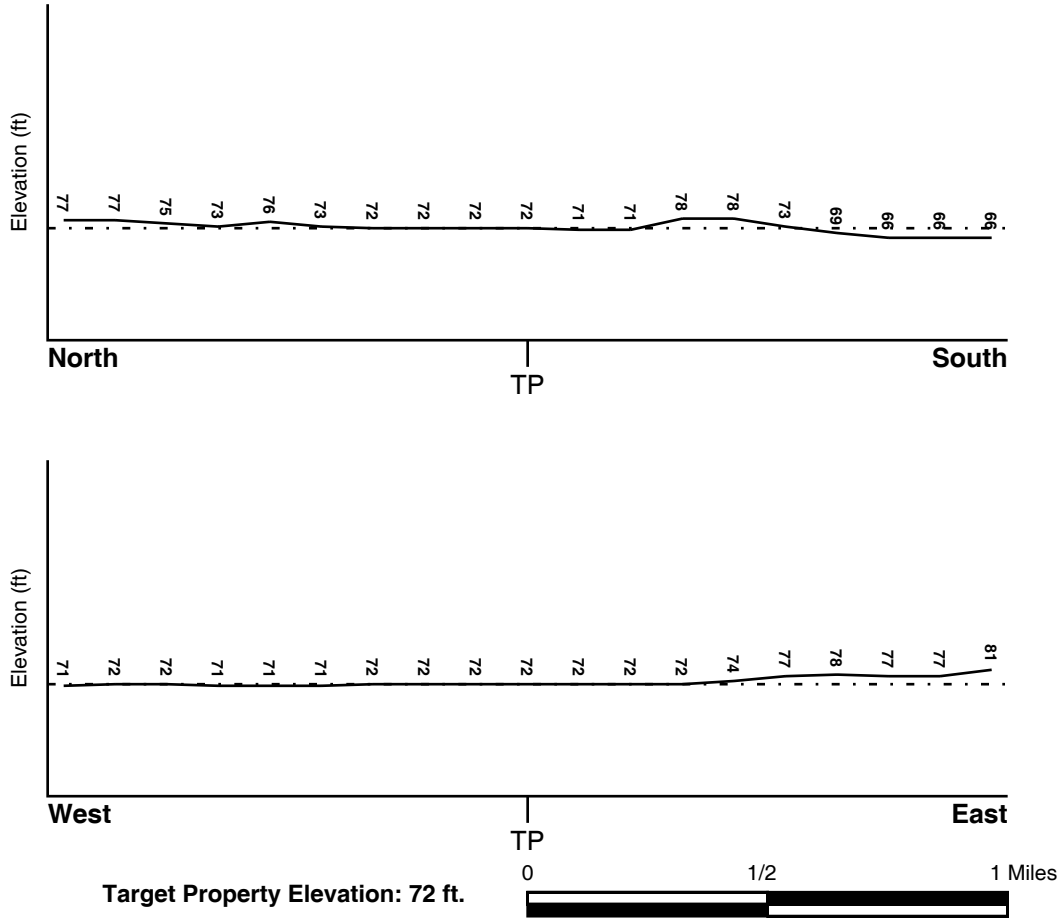
**TOPOGRAPHIC INFORMATION**

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

**TARGET PROPERTY TOPOGRAPHY**

General Topographic Gradient: General South

**SURROUNDING TOPOGRAPHY: ELEVATION PROFILES**




Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

### FEMA FLOOD ZONE

| Target Property County | FEMA Flood Electronic Data |
|---|---|
| YUBA, CA | YES - refer to the Overview Map and Detail Map |

Flood Plain Panel at Target Property: 0604270295B

Additional Panels in search area: 0604270360B

### NATIONAL WETLAND INVENTORY

| NWI Quad at Target Property | NWI Electronic Data Coverage |
|---|---|
| YUBA CITY | YES - refer to the Overview Map and Detail Map |

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

***Site-Specific Hydrogeological Data*:***

Search Radius: 1.25 miles
Status: Not found

## AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

| MAP ID | LOCATION FROM TP | GENERAL DIRECTION GROUNDWATER FLOW |
|---|---|---|
| Not Reported | | |

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

**GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

**ROCK STRATIGRAPHIC UNIT**

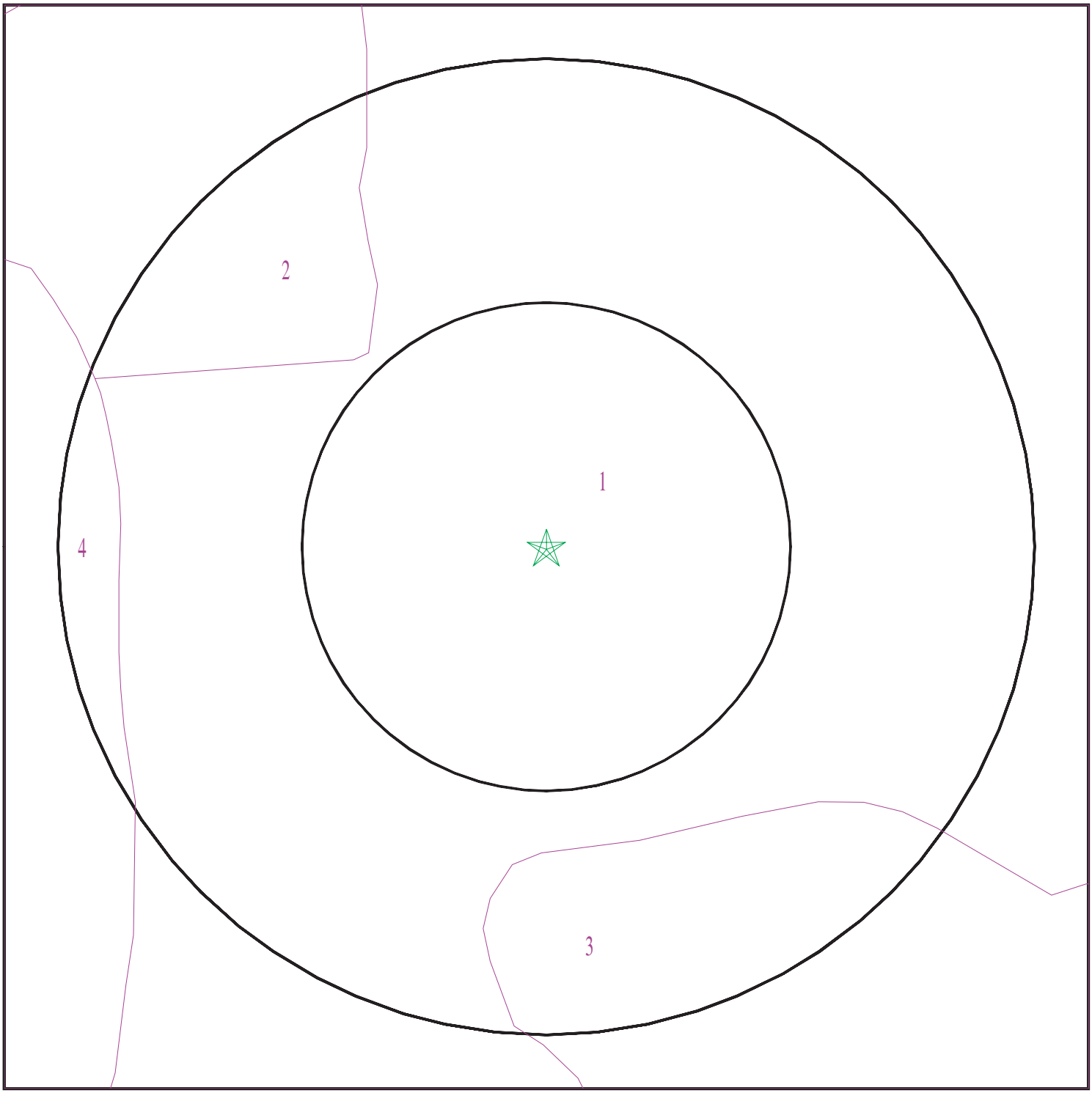
| | |
|---|---|
| Era: | Cenozoic |
| System: | Quaternary |
| Series: | Quaternary |
| Code: | Q *(decoded above as Era, System & Series)* |

**GEOLOGIC AGE IDENTIFICATION**

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 02556892.2r




Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

| | | | |
|---|---|---|---|
| SITE NAME: | Hammonton Smartsville Property | CLIENT: | LFR Inc |
| ADDRESS: | SE Corner of Dantoni and Hammonton Smartsville Rd<br>Marysville CA 95901 | CONTACT: | Scott Hackman |
| LAT/LONG: | 39.1337 / 121.5378 | INQUIRY #: | 02556892.2r |
| | | DATE: | August 04, 2009 1:29 pm |

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# 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.

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**Soil Map ID: 1**

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: 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: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 16 inches | loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 0.42<br>Min: 0.01 | Max: 7.8<br>Min: 6.1 |
| 2 | 16 inches | 25 inches | clay | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 0.42<br>Min: 0.01 | Max: 7.8<br>Min: 6.1 |

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**Soil Map ID: 2**

Soil Component Name: SAN JOAQUIN

Soil Surface Texture: 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: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 16 inches | loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 0.42 Min: 0.01 | Max: 7.8 Min: 6.1 |
| 2 | 16 inches | 25 inches | clay | Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils. | FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay | Max: 0.42 Min: 0.01 | Max: 7.8 Min: 6.1 |

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**Soil Map ID: 3**

Soil Component Name: OAKDALE

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 | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 9 inches | sandy loam | Not reported | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 42<br>Min: 14 | Max: 7.3<br>Min: 6.1 |
| 2 | 9 inches | 53 inches | sandy clay loam | Not reported | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 42<br>Min: 14 | Max: 7.3<br>Min: 6.1 |
| 3 | 53 inches | 70 inches | loamy sand | Not reported | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 42<br>Min: 14 | Max: 7.3<br>Min: 6.1 |

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**Soil Map ID: 4**

Soil Component Name: OAKDALE

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:
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 9 inches | sandy loam | Not reported | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 42<br>Min: 14 | Max: 7.3<br>Min: 6.1 |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | Saturated hydraulic conductivity micro m/sec | Soil Reaction (pH) |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | | |
| 2 | 9 inches | 53 inches | coarse sandy loam | Not reported | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 42<br>Min: 14 | Max: 7.3<br>Min: 6.1 |
| 3 | 53 inches | 70 inches | loamy sand | Not reported | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 42<br>Min: 14 | Max: 7.3<br>Min: 6.1 |

**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**

| DATABASE | SEARCH DISTANCE (miles) |
|---|---|
| Federal USGS | 1.000 |
| Federal FRDS PWS | Nearest PWS within 1 mile |
| State Database | 1.000 |

**FEDERAL USGS WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 1 | USGS3229056 | 1/4 - 1/2 Mile NNE |
| 3 | USGS3229011 | 1/4 - 1/2 Mile SE |
| 7 | USGS3229027 | 1/4 - 1/2 Mile WSW |
| 8 | USGS3229052 | 1/4 - 1/2 Mile ENE |
| 9 | USGS3229068 | 1/4 - 1/2 Mile NNW |
| B10 | USGS3229041 | 1/4 - 1/2 Mile ENE |
| 11 | USGS3228992 | 1/4 - 1/2 Mile South |
| B12 | USGS3229043 | 1/4 - 1/2 Mile ENE |
| 14 | USGS3229010 | 1/4 - 1/2 Mile ESE |
| C15 | USGS3229038 | 1/2 - 1 Mile West |
| 16 | USGS3229081 | 1/2 - 1 Mile North |
| C17 | USGS3229044 | 1/2 - 1 Mile West |
| 18 | USGS3229046 | 1/2 - 1 Mile ENE |
| 19 | USGS3229060 | 1/2 - 1 Mile ENE |
| 20 | USGS3229034 | 1/2 - 1 Mile East |

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**FEDERAL USGS WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 21 | USGS3228900 | 1/2 - 1 Mile NNW |
| E25 | USGS3229078 | 1/2 - 1 Mile NW |
| E26 | USGS3229079 | 1/2 - 1 Mile NW |
| 27 | USGS3229042 | 1/2 - 1 Mile East |
| 28 | USGS3228993 | 1/2 - 1 Mile ESE |
| 29 | USGS3229159 | 1/2 - 1 Mile SW |
| 30 | USGS3228923 | 1/2 - 1 Mile NNW |
| F33 | USGS3228927 | 1/2 - 1 Mile NNE |
| 34 | USGS3229021 | 1/2 - 1 Mile West |
| 35 | USGS3229059 | 1/2 - 1 Mile ENE |
| 37 | USGS3229040 | 1/2 - 1 Mile East |
| 38 | USGS3228936 | 1/2 - 1 Mile North |
| 39 | USGS3229050 | 1/2 - 1 Mile West |
| G40 | USGS3228939 | 1/2 - 1 Mile NNW |
| G41 | USGS3228938 | 1/2 - 1 Mile NNW |
| 42 | USGS3229075 | 1/2 - 1 Mile WNW |

**FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION**

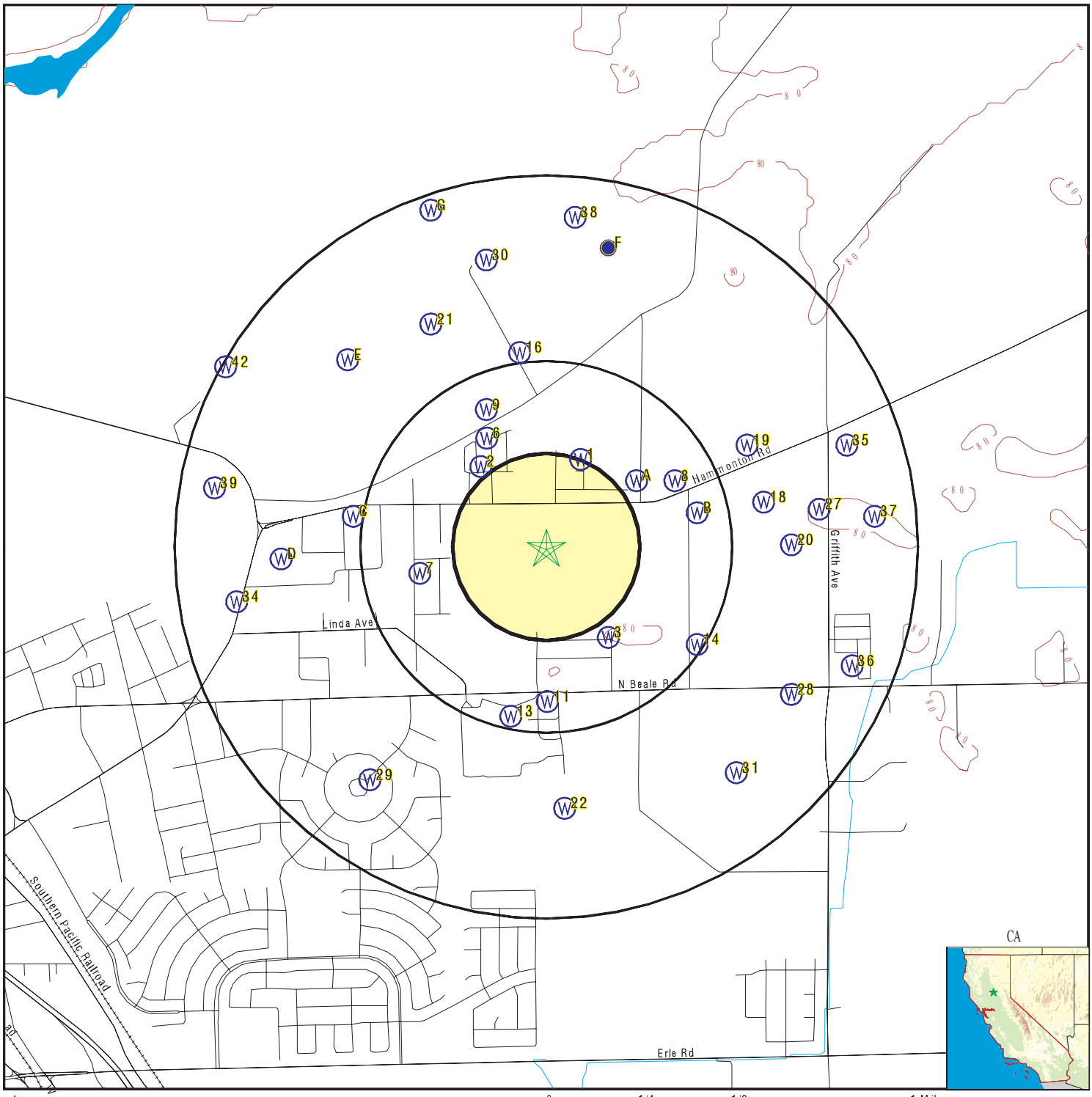
| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| No PWS System Found | | |

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

**STATE DATABASE WELL INFORMATION**

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 2 | 12625 | 1/4 - 1/2 Mile NW |
| A4 | 12627 | 1/4 - 1/2 Mile NE |
| A5 | 22202 | 1/4 - 1/2 Mile NE |
| 6 | 12626 | 1/4 - 1/2 Mile NNW |
| 13 | CADW20000041018 | 1/4 - 1/2 Mile SSW |
| 22 | 12638 | 1/2 - 1 Mile South |
| D23 | 12639 | 1/2 - 1 Mile West |
| D24 | 12624 | 1/2 - 1 Mile West |
| 31 | 12637 | 1/2 - 1 Mile SE |
| F32 | CADW20000041043 | 1/2 - 1 Mile North |
| 36 | 12628 | 1/2 - 1 Mile ESE |

# PHYSICAL SETTING SOURCE MAP - 02556892.2r




- 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
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

| | | | |
|---|---|---|---|
| SITE NAME: | Hammonton Smartsville Property | CLIENT: | LFR Inc |
| ADDRESS: | SE Corner of Dantoni and Hammonton Smartsville Rd<br>Marysville CA 95901 | CONTACT: | Scott Hackman |
| | | INQUIRY #: | 02556892.2r |
| LAT/LONG: | 39.1337 / 121.5378 | DATE: | August 04, 2009 1:29 pm |

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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**1**
**NNE** **FED USGS** **USGS3229056**
**1/4 - 1/2 Mile**
**Higher**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390814121320601 |
| Site name: | 015N004E21F002M | | |
| Latitude: | 390814 | | |
| Longitude: | 1213206 | Dec lat: | 39.1371145 |
| Dec lon: | -121.53607521 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SWSENWS21T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770321 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**2**
**NW** **CA WELLS** **12625**
**1/4 - 1/2 Mile**
**Higher**

**Water System Information:**

| | | | |
|---|---|---|---|
| Prime Station Code: | 15N/04E-21E01 M | User ID: | 58C |
| FRDS Number: | 5800811001 | County: | Yuba |
| District Number: | 88 | Station Type: | WELL/AMBNT/MUN/INTAKE |
| Water Type: | Well/Groundwater | Well Status: | Active Raw |
| Source Lat/Long: | 390813.0 1213224.0 | Precision: | 1,000 Feet (10 Seconds) |
| Source Name: | WELL 01 | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number: 5800811
System Name: CASA MIA MOBILE HOME PARK
Organization That Operates System:
Not Reported
Pop Served: Unknown, Small System Connections: Unknown, Small System
Area Served: Not Reported

| | | | |
|---|---|---|---|
| Sample Collected: | 01/03/2008 00:00:00 | Findings: | 19.39 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 10/03/2007 00:00:00 | Findings: | 20.01 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 07/05/2007 00:00:00 | Findings: | 17.49 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 04/04/2007 00:00:00 | Findings: | 25.1 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 03/21/2007 00:00:00 | Findings: | 25.6 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 01/03/2007 00:00:00 | Findings: | 24.5 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 11.9 |
| Chemical: | AGGRSSIVE INDEX (CORROSIVITY) | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 5790 UG/L |
| Chemical: | NITRATE + NITRITE (AS N) | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 13 C |
| Chemical: | SOURCE TEMPERATURE C | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 846 US |
| Chemical: | SPECIFIC CONDUCTANCE | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 7.3 |
| Chemical: | PH, LABORATORY | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 238 MG/L |
| Chemical: | ALKALINITY (TOTAL) AS CACO3 | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 291 MG/L |
| Chemical: | BICARBONATE ALKALINITY | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 407 MG/L |
| Chemical: | HARDNESS (TOTAL) AS CACO3 | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 66.8 MG/L |
| Chemical: | CALCIUM | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 58.3 MG/L |
| Chemical: | MAGNESIUM | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 14.7 MG/L |
| Chemical: | SODIUM | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 24.7 MG/L |
| Chemical: | CHLORIDE | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 114 UG/L |
| Chemical: | BARIUM | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 137 UG/L |
| Chemical: | IRON | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 39 UG/L |
| Chemical: | MANGANESE | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 12 UG/L |
| Chemical: | NICKEL | | |

| | | | |
|---|---|---|---|
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 12 UG/L |
| Chemical: | SILVER | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 509 MG/L |
| Chemical: | TOTAL DISSOLVED SOLIDS | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | .564 |
| Chemical: | LANGELIER INDEX @ 60 C | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | - .055 |
| Chemical: | LANGELIER INDEX AT SOURCE TEMP. | | |
| Sample Collected: | 12/20/2006 00:00:00 | Findings: | 25.6 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 03/15/2006 00:00:00 | Findings: | 5370 UG/L |
| Chemical: | NITRATE + NITRITE (AS N) | | |
| Sample Collected: | 03/15/2006 00:00:00 | Findings: | 23.8 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 03/16/2005 00:00:00 | Findings: | 22.5 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 09/15/2004 00:00:00 | Findings: | 4 PCI/L |
| Chemical: | GROSS ALPHA | | |
| Sample Collected: | 09/15/2004 00:00:00 | Findings: | 2.5 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 06/16/2004 00:00:00 | Findings: | 4 PCI/L |
| Chemical: | GROSS ALPHA | | |
| Sample Collected: | 06/16/2004 00:00:00 | Findings: | 2.5 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 03/17/2004 00:00:00 | Findings: | 4 PCI/L |
| Chemical: | GROSS ALPHA | | |
| Sample Collected: | 03/17/2004 00:00:00 | Findings: | 2.5 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 03/17/2004 00:00:00 | Findings: | 17.9 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | .6 UG/L |
| Chemical: | TETRACHLOROETHYLENE | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 13 C |
| Chemical: | SOURCE TEMPERATURE C | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 936 US |
| Chemical: | SPECIFIC CONDUCTANCE | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 7.3 |
| Chemical: | PH, LABORATORY | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 316 MG/L |
| Chemical: | ALKALINITY (TOTAL) AS CACO3 | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 385 MG/L |
| Chemical: | BICARBONATE ALKALINITY | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 458 MG/L |
| Chemical: | HARDNESS (TOTAL) AS CACO3 | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 75.8 MG/L |
| Chemical: | CALCIUM | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 65.3 MG/L |
| Chemical: | MAGNESIUM | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 13.7 MG/L |
| Chemical: | SODIUM | | |

| | | | |
|---|---|---|---|
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 31.3 MG/L |
| Chemical: | CHLORIDE | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 24 UG/L |
| Chemical: | MANGANESE | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 4 PCI/L |
| Chemical: | GROSS ALPHA | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 2.5 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 583 MG/L |
| Chemical: | TOTAL DISSOLVED SOLIDS | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | .7 |
| Chemical: | LANGELIER INDEX @ 60 C | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | .1 |
| Chemical: | LANGELIER INDEX AT SOURCE TEMP. | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 12.1 |
| Chemical: | AGGRSSIVE INDEX (CORROSIVITY) | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 1.8 UG/L |
| Chemical: | CHROMIUM (TOTAL CR-CRVI SCREEN) | | |
| Sample Collected: | 03/19/2003 00:00:00 | Findings: | 28 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 03/19/2003 00:00:00 | Findings: | 6323 UG/L |
| Chemical: | NITRATE + NITRITE (AS N) | | |
| Sample Collected: | 03/20/2002 00:00:00 | Findings: | 29.9 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 03/20/2002 00:00:00 | Findings: | 2.2 UG/L |
| Chemical: | CHROMIUM (TOTAL CR-CRVI SCREEN) | | |

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**3**
**SE**
**1/4 - 1/2 Mile**
**Higher**

**FED USGS** **USGS3229011**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390749121320101 |
| Site name: | 015N004E21P002M | | |
| Latitude: | 390749 | | |
| Longitude: | 1213201 | Dec lat: | 39.13017016 |
| Dec lon: | -121.53468612 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NESESWS21T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 82.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770328 | Mean greenwich time offset: | PST |

| | | | |
|---|---|---|---|
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**A4**
**NE** **CA WELLS** **12627**
**1/4 - 1/2 Mile**
**Higher**

**Water System Information:**

| | | | |
|---|---|---|---|
| Prime Station Code: | 15N/04E-21F03 M | User ID: | BUG |
| FRDS Number: | 5810002011 | County: | Yuba |
| District Number: | 02 | Station Type: | WELL/AMBNT |
| Water Type: | Well/Groundwater | Well Status: | Active Raw |
| Source Lat/Long: | 390811.1 1213156.9 | Precision: | 1,000 Feet (10 Seconds) |
| Source Name: | WELL 15 | | |
| System Number: | 5810002 | | |
| System Name: | Linda County Water District | | |
| Organization That Operates System: | 1280 SCALES STREET<br>MARYSVILLE, CA 95901 | | |
| Pop Served: | 12000 | Connections: | 2676 |
| Area Served: | LINDA | | |
| Sample Collected: | 10/17/2007 00:00:00 | Findings: | .541 PCI/L |
| Chemical: | RADIUM 228 COUNTING ERROR | | |
| Sample Collected: | 10/17/2007 00:00:00 | Findings: | .5 PCI/L |
| Chemical: | RADIUM 228 MDA95 | | |
| Sample Collected: | 03/22/2007 00:00:00 | Findings: | .541 PCI/L |
| Chemical: | RADIUM 228 COUNTING ERROR | | |
| Sample Collected: | 09/27/2006 00:00:00 | Findings: | 234 US |
| Chemical: | SPECIFIC CONDUCTANCE | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 71 MG/L |
| Chemical: | HARDNESS (TOTAL) AS CACO3 | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 17.2 MG/L |
| Chemical: | CALCIUM | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 6.8 MG/L |
| Chemical: | MAGNESIUM | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 23.8 MG/L |
| Chemical: | SODIUM | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 16.4 MG/L |
| Chemical: | CHLORIDE | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 189 UG/L |
| Chemical: | MANGANESE | | |

| | | | |
|---|---|---|---|
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 175 MG/L |
| Chemical: | TOTAL DISSOLVED SOLIDS | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | - .7 |
| Chemical: | LANGELIER INDEX @ 60 C | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | - 1.3 |
| Chemical: | LANGELIER INDEX AT SOURCE TEMP. | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | .42 NTU |
| Chemical: | TURBIDITY, LABORATORY | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 10.6 |
| Chemical: | AGGRSSIVE INDEX (CORROSIVITY) | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 118 MG/L |
| Chemical: | BICARBONATE ALKALINITY | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 96.6 MG/L |
| Chemical: | ALKALINITY (TOTAL) AS CACO3 | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 7 |
| Chemical: | PH, LABORATORY | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 229 US |
| Chemical: | SPECIFIC CONDUCTANCE | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 2 TON |
| Chemical: | ODOR THRESHOLD @ 60 C | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 3 UNITS |
| Chemical: | COLOR | | |
| Sample Collected: | 10/29/2003 00:00:00 | Findings: | 13 C |
| Chemical: | SOURCE TEMPERATURE C | | |
| Sample Collected: | 07/09/2003 00:00:00 | Findings: | .5 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 04/02/2003 00:00:00 | Findings: | .5 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 01/15/2003 00:00:00 | Findings: | .5 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 12/11/2002 00:00:00 | Findings: | .5 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 07/22/2002 00:00:00 | Findings: | 130 UG/L |
| Chemical: | BORON | | |

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**A5**
**NE**
**1/4 - 1/2 Mile**
**Higher**

**CA WELLS** **22202**

**Water System Information:**

| | | | |
|---|---|---|---|
| Prime Station Code: | B58/002-15FILTR | User ID: | BUG |
| FRDS Number: | 5810002014 | County: | Yuba |
| District Number: | 02 | Station Type: | WELL/AMBNT |
| Water Type: | Well/Groundwater | Well Status: | Active Treated |
| Source Lat/Long: | 390811.5 1213156.5 | Precision: | 1,000 Feet (10 Seconds) |
| Source Name: | WELL 15 FILTER | | |

System Number: 5810002
System Name: Linda County Water District
Organization That Operates System:
1280 SCALES STREET
MARYSVILLE, CA 95901
Pop Served: 12000 Connections: 2676
Area Served: LINDA

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**6**
**NNW** **CA WELLS** **12626**
**1/4 - 1/2 Mile**
**Higher**

**Water System Information:**

| | | | |
|---|---|---|---|
| Prime Station Code: | 15N/04E-21E02 M | User ID: | 58C |
| FRDS Number: | 5800811002 | County: | Yuba |
| District Number: | 88 | Station Type: | WELL/AMBNT/MUN/INTAKE |
| Water Type: | Well/Groundwater | Well Status: | Active Raw |
| Source Lat/Long: | 390817.0 1213223.0 | Precision: | 1,000 Feet (10 Seconds) |
| Source Name: | WELL 02 | | |
| System Number: | 5800811 | | |
| System Name: | CASA MIA MOBILE HOME PARK | | |
| Organization That Operates System: | Not Reported | | |
| Pop Served: | Unknown, Small System | Connections: | Unknown, Small System |
| Area Served: | Not Reported | | |
| Sample Collected: | 03/21/2007 00:00:00 | Findings: | 25 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 03/15/2006 00:00:00 | Findings: | 3410 UG/L |
| Chemical: | NITRATE + NITRITE (AS N) | | |
| Sample Collected: | 03/15/2006 00:00:00 | Findings: | 15.1 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 03/16/2005 00:00:00 | Findings: | 18.4 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 09/15/2004 00:00:00 | Findings: | 4.3 PCI/L |
| Chemical: | GROSS ALPHA | | |
| Sample Collected: | 09/15/2004 00:00:00 | Findings: | 4.1 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 06/16/2004 00:00:00 | Findings: | 4.1 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 06/16/2004 00:00:00 | Findings: | 4.3 PCI/L |
| Chemical: | GROSS ALPHA | | |
| Sample Collected: | 03/17/2004 00:00:00 | Findings: | 14 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 03/17/2004 00:00:00 | Findings: | 4.1 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 03/17/2004 00:00:00 | Findings: | 4.3 PCI/L |
| Chemical: | GROSS ALPHA | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 13 C |
| Chemical: | SOURCE TEMPERATURE C | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 833 US |
| Chemical: | SPECIFIC CONDUCTANCE | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 7.3 |
| Chemical: | PH, LABORATORY | | |

| | | | |
|---|---|---|---|
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 272 MG/L |
| Chemical: | ALKALINITY (TOTAL) AS CACO3 | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 332 MG/L |
| Chemical: | BICARBONATE ALKALINITY | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 408 MG/L |
| Chemical: | HARDNESS (TOTAL) AS CACO3 | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 67.6 MG/L |
| Chemical: | CALCIUM | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 58.1 MG/L |
| Chemical: | MAGNESIUM | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 12.3 MG/L |
| Chemical: | SODIUM | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 26.4 MG/L |
| Chemical: | CHLORIDE | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 6.2 UG/L |
| Chemical: | ARSENIC | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 124 UG/L |
| Chemical: | BARIUM | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 1940 UG/L |
| Chemical: | IRON | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 110 UG/L |
| Chemical: | MANGANESE | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 13 UG/L |
| Chemical: | SILVER | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 4.3 PCI/L |
| Chemical: | GROSS ALPHA | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 4.1 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 521 MG/L |
| Chemical: | TOTAL DISSOLVED SOLIDS | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | .6 |
| Chemical: | LANGELIER INDEX @ 60 C | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | - .01 |
| Chemical: | LANGELIER INDEX AT SOURCE TEMP. | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 12 |
| Chemical: | AGGRSSIVE INDEX (CORROSIVITY) | | |
| Sample Collected: | 12/17/2003 00:00:00 | Findings: | 9.6 UG/L |
| Chemical: | CHROMIUM (TOTAL CR-CRVI SCREEN) | | |
| Sample Collected: | 03/19/2003 00:00:00 | Findings: | 13 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 03/19/2003 00:00:00 | Findings: | 2935 UG/L |
| Chemical: | NITRATE + NITRITE (AS N) | | |
| Sample Collected: | 03/20/2002 00:00:00 | Findings: | 16.7 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 03/20/2002 00:00:00 | Findings: | 2.2 UG/L |
| Chemical: | CHROMIUM (TOTAL CR-CRVI SCREEN) | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**7**
**WSW** **FED USGS** **USGS3229027**
**1/4 - 1/2 Mile**
**Higher**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390758121323501 |
| Site name: | 015N004E20J001M | | |
| Latitude: | 390758 | | |
| Longitude: | 1213235 | Dec lat: | 39.1326701 |
| Dec lon: | -121.54413088 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SENESES20T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 65.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | 19560711 |
| Date inventoried: | 19770227 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | 335 | Hole depth: | 335 |
| Source of depth data: | geologist | | |
| Project number: | 0479435800 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**8**
**ENE** **FED USGS** **USGS3229052**
**1/4 - 1/2 Mile**
**Higher**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390811121314901 |
| Site name: | 015N004E21G001M | | |
| Latitude: | 390811 | | |
| Longitude: | 1213149 | Dec lat: | 39.13628119 |
| Dec lon: | -121.53135284 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SWSWNES21T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |

| | | | |
|---|---|---|---|
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | 19740625 |
| Date inventoried: | 19760401 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | 108 | Hole depth: | 108 |
| Source of depth data: | driller | | |
| Project number: | 7479433400 | | |
| Real time data flag: | 0 | Daily flow data begin date: | 0000-00-00 |
| Daily flow data end date: | 0000-00-00 | Daily flow data count: | 0 |
| Peak flow data begin date: | 0000-00-00 | Peak flow data end date: | 0000-00-00 |
| Peak flow data count: | 0 | Water quality data begin date: | 0000-00-00 |
| Water quality data end date: | 0000-00-00 | Water quality data count: | 0 |
| Ground water data begin date: | 1974-06-25 | Ground water data end date: | 1974-06-25 |
| Ground water data count: | 1 | | |

Ground-water levels, Number of Measurements: 1

| Date | Feet below Surface | Feet to Sealevel |
|---|---|---|
| 1974-06-25 | 50.00 | |

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**9**
**NNW**
**1/4 - 1/2 Mile**
**Higher**

**FED USGS** **USGS3229068**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390821121322301 |
| Site name: | 015N004E21D001M | | |
| Latitude: | 390821 | | |
| Longitude: | 1213223 | Dec lat: | 39.13905891 |
| Dec lon: | -121.54079761 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SWNWNWS21T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | 19600325 |
| Date inventoried: | 19760407 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | 235 | Hole depth: | 245 |
| Source of depth data: | driller | | |
| Project number: | 0479435800 | | |
| Real time data flag: | 0 | Daily flow data begin date: | 0000-00-00 |
| Daily flow data end date: | 0000-00-00 | Daily flow data count: | 0 |
| Peak flow data begin date: | 0000-00-00 | Peak flow data end date: | 0000-00-00 |

| | | | |
|---|---|---|---|
| Peak flow data count: | 0 | Water quality data begin date: | 1968-06-18 |
| Water quality data end date: | 1976-07-14 | Water quality data count: | 5 |
| Ground water data begin date: | 0000-00-00 | Ground water data end date: | 0000-00-00 |
| Ground water data count: | 0 | | |

Ground-water levels, Number of Measurements: 0

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**B10**
**ENE** **FED USGS** **USGS3229041**
**1/4 - 1/2 Mile**
**Higher**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390806121314501 |
| Site name: | 015N004E21K002M | | |
| Latitude: | 390806 | | |
| Longitude: | 1213145 | Dec lat: | 39.13489232 |
| Dec lon: | -121.53024167 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NWNWSES21T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | 19740427 |
| Date inventoried: | 19760401 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | 104 | Hole depth: | 105 |
| Source of depth data: | driller | | |
| Project number: | 7479433400 | | |
| Real time data flag: | 0 | Daily flow data begin date: | 0000-00-00 |
| Daily flow data end date: | 0000-00-00 | Daily flow data count: | 0 |
| Peak flow data begin date: | 0000-00-00 | Peak flow data end date: | 0000-00-00 |
| Peak flow data count: | 0 | Water quality data begin date: | 0000-00-00 |
| Water quality data end date: | 0000-00-00 | Water quality data count: | 0 |
| Ground water data begin date: | 1974-04-27 | Ground water data end date: | 1974-04-27 |
| Ground water data count: | 1 | | |

Ground-water levels, Number of Measurements: 1

| Date | Feet below Surface | Feet to Sealevel |
|---|---|---|
| 1974-04-27 | 42.00 | |

---

**11**
**South** **FED USGS** **USGS3228992**
**1/4 - 1/2 Mile**
**Higher**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390740121321201 |
| Site name: | 015N004E28D001M | | |
| Latitude: | 390740 | | |
| Longitude: | 1213212 | Dec lat: | 39.12767018 |
| Dec lon: | -121.53774171 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NENWNWS28T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 75.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | 19711217 |
| Date inventoried: | 19760401 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | 114 | Hole depth: | 210 |
| Source of depth data: | driller | | |
| Project number: | 7479433400 | | |
| Real time data flag: | 0 | Daily flow data begin date: | 0000-00-00 |
| Daily flow data end date: | 0000-00-00 | Daily flow data count: | 0 |
| Peak flow data begin date: | 0000-00-00 | Peak flow data end date: | 0000-00-00 |
| Peak flow data count: | 0 | Water quality data begin date: | 0000-00-00 |
| Water quality data end date: | 0000-00-00 | Water quality data count: | 0 |
| Ground water data begin date: | 1971-12-17 | Ground water data end date: | 1971-12-17 |
| Ground water data count: | 1 | | |

Ground-water levels, Number of Measurements: 1

| Date | Feet below Surface | Feet to Sealevel |
|---|---|---|
| 1971-12-17 | 63.00 | |

---

**B12**
**ENE**
**1/4 - 1/2 Mile**
**Higher**

**FED USGS USGS3229043**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390807121314501 |
| Site name: | 015N004E21K001M | | |
| Latitude: | 390807 | | |
| Longitude: | 1213145 | Dec lat: | 39.1351701 |
| Dec lon: | -121.53024167 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NWNWSES T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | 19740813 |
| Date inventoried: | 19760401 | Mean greenwich time offset: | PST |

| | | | |
|---|---|---|---|
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | 108 | Hole depth: | 108 |
| Source of depth data: | driller | | |
| Project number: | 7479433400 | | |
| Real time data flag: | 0 | Daily flow data begin date: | 0000-00-00 |
| Daily flow data end date: | 0000-00-00 | Daily flow data count: | 0 |
| Peak flow data begin date: | 0000-00-00 | Peak flow data end date: | 0000-00-00 |
| Peak flow data count: | 0 | Water quality data begin date: | 0000-00-00 |
| Water quality data end date: | 0000-00-00 | Water quality data count: | 0 |
| Ground water data begin date: | 1974-08-13 | Ground water data end date: | 1974-08-13 |
| Ground water data count: | 1 | | |

Ground-water levels, Number of Measurements: 1

| Date | Feet below Surface | Feet to Sealevel |
|---|---|---|
| 1974-08-13 | 55.00 | |

---

**13**
**SSW**
**1/4 - 1/2 Mile**
**Higher**

**CA WELLS** **CADW20000041018**

| | |
|---|---|
| Longitude: | 121.5385 |
| Latitude: | 39.1272 |
| Stwellno: | 15N04E28D001M |
| Districtco: | 7 |
| Welluseco: | I |
| Countycode: | 58 |
| Gwcode: | 502106 |
| Site id: | CADW20000041018 |

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**14**
**ESE**
**1/4 - 1/2 Mile**
**Higher**

**FED USGS** **USGS3229010**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390748121314501 |
| Site name: | 015N004E22Q001M | | |
| Latitude: | 390748 | | |
| Longitude: | 1213145 | Dec lat: | 39.12989239 |
| Dec lon: | -121.53024155 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SWSWSES22T15NR04EM |
| Location map: | 7479433400 | Map scale: | 24000 |
| Altitude: | 75.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770322 | Mean greenwich time offset: | PST |

| | | | |
|---|---|---|---|
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | YUBACITY | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**C15**
**West**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS3229038**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390805121324701 |
| Site name: | 015N004E20K004M | | |
| Latitude: | 390805 | | |
| Longitude: | 1213247 | Dec lat: | 39.13461451 |
| Dec lon: | -121.54746435 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NENWSES20T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | 19661220 |
| Date inventoried: | 19760401 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | 78.0 | Hole depth: | 79.0 |
| Source of depth data: | driller | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**16**
**North**
**1/2 - 1 Mile**
**Higher** | **FED USGS** | **USGS3229081**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390829121321701 |
| Site name: | 015N004E21D002M | | |
| Latitude: | 390829 | | |
| Longitude: | 1213217 | Dec lat: | 39.14128111 |
| Dec lon: | -121.53913095 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NWNWNWS21T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770314 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**C17**
**West**
**1/2 - 1 Mile**
**Higher** | **FED USGS** | **USGS3229044**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390807121324701 |
| Site name: | 015N004E20K005M | | |
| Latitude: | 390807 | | |
| Longitude: | 1213247 | Dec lat: | 39.13517006 |
| Dec lon: | -121.54746437 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NENWSES20T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |

| | | | |
|---|---|---|---|
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | 19660711 |
| Date inventoried: | 19760401 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | 75.0 | Hole depth: | 76.0 |
| Source of depth data: | driller | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**18**
**ENE**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS3229046**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390808121313301 |
| Site name: | 015N004E21J004M | | |
| Latitude: | 390808 | | |
| Longitude: | 1213133 | Dec lat: | 39.13544788 |
| Dec lon: | -121.52690826 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NENESES21T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770323 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |

| | | | |
|---|---|---|---|
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**19**
**ENE** **FED USGS** **USGS3229060**
**1/2 - 1 Mile**
**Higher**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390816121313601 |
| Site name: | 015N004E21G002M | | |
| Latitude: | 390816 | | |
| Longitude: | 1213136 | Dec lat: | 39.13767007 |
| Dec lon: | -121.52774167 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SESWNES21T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770321 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**20**
**East** **FED USGS** **USGS3229034**
**1/2 - 1 Mile**
**Higher**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390802121312801 |
| Site name: | 015N004E21J001M | | |
| Latitude: | 390802 | | |
| Longitude: | 1213128 | Dec lat: | 39.13378124 |
| Dec lon: | -121.52551929 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SWNESES21T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 76.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770323 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**21**
**NNW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS3228900**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390833121323301 |
| Site name: | 015N004E20A001M | | |
| Latitude: | 390833 | | |
| Longitude: | 1213233 | Dec lat: | 39.14239219 |
| Dec lon: | -121.54357554 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NENENES20T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 73.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770310 | Mean greenwich time offset: | PST |

| | | | |
|---|---|---|---|
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**22**
**South** **CA WELLS** **12638**
**1/2 - 1 Mile**
**Lower**

**Water System Information:**

| | | | |
|---|---|---|---|
| Prime Station Code: | 15N/04E-28E01 M | User ID: | 58C |
| FRDS Number: | 5800830001 | County: | Yuba |
| District Number: | 88 | Station Type: | WELL/AMBNT/MUN/INTAKE |
| Water Type: | Well/Groundwater | Well Status: | Active Raw |
| Source Lat/Long: | 390725.0 1213209.0 | Precision: | 1,000 Feet (10 Seconds) |
| Source Name: | WELL 01 | | |
| System Number: | 5800830 | | |
| System Name: | YUBA COLLEGE | | |
| Organization That Operates System: | Not Reported | | |
| Pop Served: | Unknown, Small System | Connections: | Unknown, Small System |
| Area Served: | Not Reported | | |

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**D23**
**West** **CA WELLS** **12639**
**1/2 - 1 Mile**
**Lower**

**Water System Information:**

| | | | |
|---|---|---|---|
| Prime Station Code: | 15N/04E-29A02 M | User ID: | BUG |
| FRDS Number: | 5810002004 | County: | Yuba |
| District Number: | 02 | Station Type: | WELL/AMBNT/MUN/INTAKE/SUPPLY |
| Water Type: | Well/Groundwater | Well Status: | Destroyed |
| Source Lat/Long: | 390800.0 1213300.0 | Precision: | 0.5 Mile (30 Seconds) |
| Source Name: | WELL 09 - DESTROYED | | |
| System Number: | 5810002 | | |
| System Name: | Linda County Water District | | |
| Organization That Operates System: | 1280 SCALES STREET<br>MARYSVILLE, CA 95901 | | |
| Pop Served: | 12000 | Connections: | 2676 |
| Area Served: | LINDA | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**D24**
**West**
**1/2 - 1 Mile**
**Lower** | **CA WELLS** | **12624**

**Water System Information:**

| | | | |
|---|---|---|---|
| Prime Station Code: | 15N/04E-20J02 M | User ID: | BUG |
| FRDS Number: | 5810002003 | County: | Yuba |
| District Number: | 02 | Station Type: | WELL/AMBNT/MUN/INTAKE/SUPPLY |
| Water Type: | Well/Groundwater | Well Status: | Destroyed |
| Source Lat/Long: | 390800.0 1213300.0 | Precision: | 0.5 Mile (30 Seconds) |
| Source Name: | WELL 07 - DESTROYED | | |
| System Number: | 5810002 | | |
| System Name: | Linda County Water District | | |
| Organization That Operates System: | | | |
| | 1280 SCALES STREET | | |
| | MARYSVILLE, CA 95901 | | |
| Pop Served: | 12000 | Connections: | 2676 |
| Area Served: | LINDA | | |

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**E25**
**NW**
**1/2 - 1 Mile**
**Higher** | **FED USGS** | **USGS3229078**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390828121324801 |
| Site name: | 015N004E20B001M | | |
| Latitude: | 390828 | | |
| Longitude: | 1213248 | Dec lat: | 39.14100331 |
| Dec lon: | -121.54774229 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SENWNES20T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770310 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**E26**
**NW**
**1/2 - 1 Mile**
**Higher** | **FED USGS** | **USGS3229079**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390828121324802 |
| Site name: | 015N004E20B002M | | |
| Latitude: | 390828 | | |
| Longitude: | 1213248 | Dec lat: | 39.14100331 |
| Dec lon: | -121.54774229 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SENWNES20T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770310 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**27**
**East**
**1/2 - 1 Mile**
**Higher** | **FED USGS** | **USGS3229042**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390807121312301 |
| Site name: | 015N004E21J003M | | |
| Latitude: | 390807 | | |
| Longitude: | 1213123 | Dec lat: | 39.13517011 |
| Dec lon: | -121.5241304 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NENESES21T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |

| | | | |
|---|---|---|---|
| Altitude: | 80.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | 19670928 |
| Date inventoried: | 19760401 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | 100 | Hole depth: | 100 |
| Source of depth data: | driller | | |
| Project number: | 7479433400 | | |
| Real time data flag: | 0 | Daily flow data begin date: | 0000-00-00 |
| Daily flow data end date: | 0000-00-00 | Daily flow data count: | 0 |
| Peak flow data begin date: | 0000-00-00 | Peak flow data end date: | 0000-00-00 |
| Peak flow data count: | 0 | Water quality data begin date: | 1976-08-17 |
| Water quality data end date: | 1976-08-17 | Water quality data count: | 1 |
| Ground water data begin date: | 1967-09-28 | Ground water data end date: | 1967-09-28 |
| Ground water data count: | 1 | | |

Ground-water levels, Number of Measurements: 1

| Date | Feet below Surface | Feet to Sealevel |
|---|---|---|
| 1967-09-28 | 65.00 | |

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**28**
**ESE**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS3228993**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390741121312801 |
| Site name: | 015N004E28A001M | | |
| Latitude: | 390741 | | |
| Longitude: | 1213128 | Dec lat: | 39.12794798 |
| Dec lon: | -121.52551915 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NENENES28T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770328 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |

| | | | |
|---|---|---|---|
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**29**
**SW**
**1/2 - 1 Mile**
**Lower**

**FED USGS** **USGS3229159**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390729121324401 |
| Site name: | 015N004E29A002M | | |
| Latitude: | 390729 | | |
| Longitude: | 1213244 | Dec lat: | 39.12461465 |
| Dec lon: | -121.54663077 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SWNENES29T15NR04EM |
| Location map: | OLIVEHURST | Map scale: | 24000 |
| Altitude: | 65.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | 19751204 |
| Date inventoried: | 19770329 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | 134 | Hole depth: | 145 |
| Source of depth data: | driller | | |
| Project number: | 0479435800 | | |
| Real time data flag: | 0 | Daily flow data begin date: | 0000-00-00 |
| Daily flow data end date: | 0000-00-00 | Daily flow data count: | 0 |
| Peak flow data begin date: | 0000-00-00 | Peak flow data end date: | 0000-00-00 |
| Peak flow data count: | 0 | Water quality data begin date: | 0000-00-00 |
| Water quality data end date: | 0000-00-00 | Water quality data count: | 0 |
| Ground water data begin date: | 1975-12-04 | Ground water data end date: | 1975-12-04 |
| Ground water data count: | 1 | | |

Ground-water levels, Number of Measurements: 1

| Date | Feet below Surface | Feet to Sealevel |
|---|---|---|
| 1975-12-04 | 49.50 | |

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**30**
**NNW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS3228923**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390842121322301 |
| Site name: | 015N004E16N003M | | |
| Latitude: | 390842 | | |
| Longitude: | 1213223 | Dec lat: | 39.14489216 |
| Dec lon: | -121.54079774 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SWSWSWS16T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 75.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770310 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**31**
**SE**
**1/2 - 1 Mile**
**Lower**

**CA WELLS** **12637**

**Water System Information:**

| | | | |
|---|---|---|---|
| Prime Station Code: | 15N/04E-28A01 M | User ID: | 58C |
| FRDS Number: | 5800852001 | County: | Yuba |
| District Number: | 88 | Station Type: | WELL/AMBNT/MUN/INTAKE |
| Water Type: | Well/Groundwater | Well Status: | Active Raw |
| Source Lat/Long: | 390730.0 1213138.0 | Precision: | 1,000 Feet (10 Seconds) |
| Source Name: | WELL 01 | | |
| System Number: | 5800852 | | |
| System Name: | CHRISTOPHER SIMS RENTALS | | |
| Organization That Operates System: | Not Reported | | |
| Pop Served: | Unknown, Small System | Connections: | Unknown, Small System |
| Area Served: | Not Reported | | |
| Sample Collected: | 06/26/2007 00:00:00 | Findings: | 4.162 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 820 UG/L |
| Chemical: | NITRATE + NITRITE (AS N) | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 13 C |
| Chemical: | SOURCE TEMPERATURE C | | |

| | | | |
|---|---|---|---|
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 473 US |
| Chemical: | SPECIFIC CONDUCTANCE | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 7.5 |
| Chemical: | PH, LABORATORY | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 185 MG/L |
| Chemical: | ALKALINITY (TOTAL) AS CACO3 | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 199 MG/L |
| Chemical: | HARDNESS (TOTAL) AS CACO3 | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 32.4 MG/L |
| Chemical: | CALCIUM | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 28.7 MG/L |
| Chemical: | MAGNESIUM | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 15.5 MG/L |
| Chemical: | SODIUM | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 27.6 MG/L |
| Chemical: | CHLORIDE | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 2.3 UG/L |
| Chemical: | ARSENIC | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 114 UG/L |
| Chemical: | MANGANESE | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 14 UG/L |
| Chemical: | SILVER | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 245 MG/L |
| Chemical: | TOTAL DISSOLVED SOLIDS | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | .429 |
| Chemical: | LANGELIER INDEX @ 60 C | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | - .196 |
| Chemical: | LANGELIER INDEX AT SOURCE TEMP. | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 3.63 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 12/13/2006 00:00:00 | Findings: | 11.7 |
| Chemical: | AGGRSSIVE INDEX (CORROSIVITY) | | |
| Sample Collected: | 06/13/2006 00:00:00 | Findings: | 50.9 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 03/09/2005 00:00:00 | Findings: | 48.7 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 12/22/2004 00:00:00 | Findings: | 5.2 UG/L |
| Chemical: | TRICHLOROFLUOROMETHANE | | |
| Sample Collected: | 12/08/2004 00:00:00 | Findings: | 42 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 09/08/2004 00:00:00 | Findings: | 41.7 MG/L |
| Chemical: | NITRATE (AS NO3) | | |
| Sample Collected: | 09/10/2003 00:00:00 | Findings: | 1.2 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 05/21/2003 00:00:00 | Findings: | 1.2 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 12/17/2002 00:00:00 | Findings: | 1.2 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 12/17/2002 00:00:00 | Findings: | 46.9 MG/L |
| Chemical: | NITRATE (AS NO3) | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**F32**
**North**
**1/2 - 1 Mile**
**Higher** | **CA WELLS** | **CADW20000041043**

| | |
|---|---|
| Longitude: | 121.5339 |
| Latitude: | 39.1454 |
| Stwellno: | 15N04E16P001M |
| Districtco: | 7 |
| Welluseco: | I |
| Countycode: | 58 |
| Gwcode: | 502106 |
| Site id: | CADW20000041043 |

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**F33**
**NNE**
**1/2 - 1 Mile**
**Higher** | **FED USGS** | **USGS3228927**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390844121320001 |
| Site name: | 015N004E16P003M | | |
| Latitude: | 390844 | | |
| Longitude: | 1213200 | Dec lat: | 39.14544772 |
| Dec lon: | -121.53440869 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NWSESWS16T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 74.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770314 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**34**
**West**
**1/2 - 1 Mile**
**Lower**

**FED USGS** **USGS3229021**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390754121330801 |
| Site name: | 015N004E20P002M | | |
| Latitude: | 390754 | | |
| Longitude: | 1213308 | Dec lat: | 39.13155899 |
| Dec lon: | -121.55329778 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NESESWS20T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 67.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770309 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**35**
**ENE**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS3229059**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390816121311801 |
| Site name: | 015N004E22E001M | | |
| Latitude: | 390816 | | |
| Longitude: | 1213118 | Dec lat: | 39.13767008 |
| Dec lon: | -121.52274153 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NWSWNWS22T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |

| | | | |
|---|---|---|---|
| Altitude: | 70.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770322 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**36**
**ESE** **CA WELLS** **12628**
**1/2 - 1 Mile**
**Higher**

**Water System Information:**

| | | | |
|---|---|---|---|
| Prime Station Code: | 15N/04E-22N01 M | User ID: | 58C |
| FRDS Number: | 5800832001 | County: | Yuba |
| District Number: | 88 | Station Type: | WELL/AMBNT/MUN/INTAKE |
| Water Type: | Well/Groundwater | Well Status: | Active Raw |
| Source Lat/Long: | 390745.0 1213117.0 | Precision: | 1,000 Feet (10 Seconds) |
| Source Name: | WELL 03 | | |
| System Number: | 5800832 | | |
| System Name: | CASTLEWOOD MOBILE HOME PARK | | |
| Organization That Operates System: | Not Reported | | |
| Pop Served: | Unknown, Small System | Connections: | Unknown, Small System |
| Area Served: | Not Reported | | |
| Sample Collected: | 12/19/2007 00:00:00 | Findings: | 170 UG/L |
| Chemical: | MANGANESE | | |
| Sample Collected: | 09/21/2007 00:00:00 | Findings: | 160 UG/L |
| Chemical: | MANGANESE | | |
| Sample Collected: | 06/14/2007 00:00:00 | Findings: | 170 UG/L |
| Chemical: | MANGANESE | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | 11.7 |
| Chemical: | AGGRSSIVE INDEX (CORROSIVITY) | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | 18 C |
| Chemical: | SOURCE TEMPERATURE C | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | 220 US |
| Chemical: | SPECIFIC CONDUCTANCE | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | 8 |
| Chemical: | PH, LABORATORY | | |

| | | | |
|---|---|---|---|
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | 115 MG/L |
| Chemical: | ALKALINITY (TOTAL) AS CACO3 | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | 140 MG/L |
| Chemical: | BICARBONATE ALKALINITY | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | 89 MG/L |
| Chemical: | HARDNESS (TOTAL) AS CACO3 | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | 19 MG/L |
| Chemical: | CALCIUM | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | 10 MG/L |
| Chemical: | MAGNESIUM | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | 11 MG/L |
| Chemical: | SODIUM | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | 5.9 MG/L |
| Chemical: | CHLORIDE | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | 170 UG/L |
| Chemical: | MANGANESE | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | 130 MG/L |
| Chemical: | TOTAL DISSOLVED SOLIDS | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | .46 |
| Chemical: | LANGELIER INDEX @ 60 C | | |
| Sample Collected: | 05/27/2003 00:00:00 | Findings: | - .32 |
| Chemical: | LANGELIER INDEX AT SOURCE TEMP. | | |
| Sample Collected: | 03/17/2003 00:00:00 | Findings: | .4 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 12/09/2002 00:00:00 | Findings: | .4 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 09/24/2002 00:00:00 | Findings: | .4 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |
| Sample Collected: | 04/24/2002 00:00:00 | Findings: | .4 PCI/L |
| Chemical: | GROSS ALPHA COUNTING ERROR | | |

---

**37**
**East**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS3229040**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390806121311301 |
| Site name: | 015N004E22M001M | | |
| Latitude: | 390806 | | |
| Longitude: | 1213113 | Dec lat: | 39.13489234 |
| Dec lon: | -121.52135254 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NWNWSWS22T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 80.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770322 | Mean greenwich time offset: | PST |

| | | | |
|---|---|---|---|
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**38**
**North**
**1/2 - 1 Mile**
**Lower**

**FED USGS** **USGS3228936**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390848121320701 |
| Site name: | 015N004E16P001M | | |
| Latitude: | 390848 | | |
| Longitude: | 1213207 | Dec lat: | 39.14655882 |
| Dec lon: | -121.53635322 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | NWSESWS16T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 69.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770310 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**39**
**West**
**1/2 - 1 Mile**
**Higher** | **FED USGS** | **USGS3229050**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390810121331201 |
| Site name: | 015N004E20F001M | | |
| Latitude: | 390810 | | |
| Longitude: | 1213312 | Dec lat: | 39.13600337 |
| Dec lon: | -121.55440902 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SWSENWS20T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 71.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770309 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**G40**
**NNW**
**1/2 - 1 Mile**
**Higher** | **FED USGS** | **USGS3228939**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390849121323302 |
| Site name: | 015N004E17J003M | | |
| Latitude: | 390849 | | |
| Longitude: | 1213233 | Dec lat: | 39.14683657 |
| Dec lon: | -121.54357564 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SENESES17T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |

| | | | |
|---|---|---|---|
| Altitude: | 69.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Yuba. California. Area = 34 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770310 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**G41**
**NNW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS3228938**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390849121323301 |
| Site name: | 015N004E17J002M | | |
| Latitude: | 390849 | | |
| Longitude: | 1213233 | Dec lat: | 39.14683657 |
| Dec lon: | -121.54357564 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SENESES17T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 69.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Yuba. California. Area = 34 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770310 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |

| | | | |
|---|---|---|---|
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

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**42**
**WNW**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS3229075**

| | | | |
|---|---|---|---|
| Agency cd: | USGS | Site no: | 390827121331001 |
| Site name: | 015N004E20C001M | | |
| Latitude: | 390827 | | |
| Longitude: | 1213310 | Dec lat: | 39.14072553 |
| Dec lon: | -121.55385356 | Coor meth: | M |
| Coor accr: | S | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 06 |
| State: | 06 | County: | 115 |
| Country: | US | Land net: | SENENWS20T15NR04EM |
| Location map: | YUBA CITY | Map scale: | 24000 |
| Altitude: | 68.00 | | |
| Altitude method: | Interpolated from topographic map | | |
| Altitude accuracy: | 2.5 | | |
| Altitude datum: | National Geodetic Vertical Datum of 1929 | | |
| Hydrologic: | Lower Feather. California. Area = 681 sq.mi. | | |
| Topographic: | Valley flat | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | 19770310 | Mean greenwich time offset: | PST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | Not Reported | | |
| Well depth: | Not Reported | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | | |
| Project number: | 7479433400 | | |
| Real time data flag: | Not Reported | Daily flow data begin date: | Not Reported |
| Daily flow data end date: | Not Reported | Daily flow data count: | Not Reported |
| Peak flow data begin date: | Not Reported | Peak flow data end date: | Not Reported |
| Peak flow data count: | Not Reported | Water quality data begin date: | Not Reported |
| Water quality data end date: | Not Reported | Water quality data count: | Not Reported |
| Ground water data begin date: | Not Reported | Ground water data end date: | Not Reported |
| Ground water data count: | Not Reported | | |

Ground-water levels, Number of Measurements: 0

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
# RADON

**AREA RADON INFORMATION**

State Database: CA Radon

Radon Test Results

| Zip | Total Sites | > 4 Pci/L | Pct. > 4 Pci/L |
|---|---|---|---|
| 95901 | 14 | 0 | 0.00 |

Federal EPA Radon Zone for YUBA County: 2

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

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Federal Area Radon Information for Zip Code: 95901

Number of sites tested: 9

| Area | Average Activity | % <4 pCi/L | % 4-20 pCi/L | % >20 pCi/L |
|---|---|---|---|---|
| Living Area - 1st Floor | 0.689 pCi/L | 100% | 0% | 0% |
| Living Area - 2nd Floor | Not Reported | Not Reported | Not Reported | Not Reported |
| Basement | 1.600 pCi/L | 100% | 0% | 0% |

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

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

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 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

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

## HYDROGEOLOGIC INFORMATION

AQUIFLOW$^{R}$ 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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ARCADIS

## Appendix D

Historical Topographic Maps

**Hammonton Smartsville Property**
SE Corner of Dantoni and Hammonton Smartsville Rd
Marysville, CA 95901

Inquiry Number: 2556892.4
August 04, 2009

# The EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

# EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

***Thank you for your business.***
Please contact EDR at 1-800-352-0050
with any questions or comments.

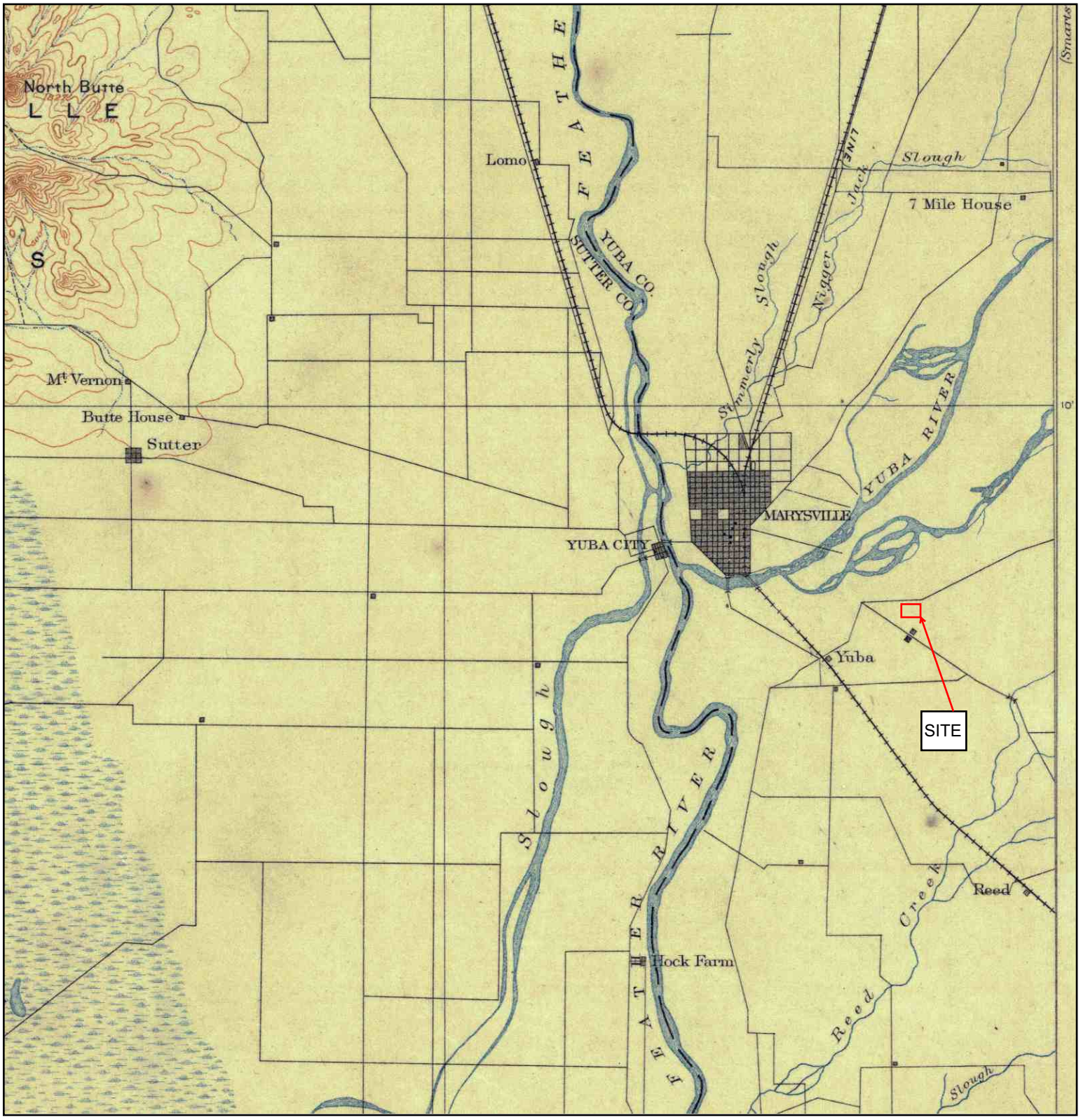

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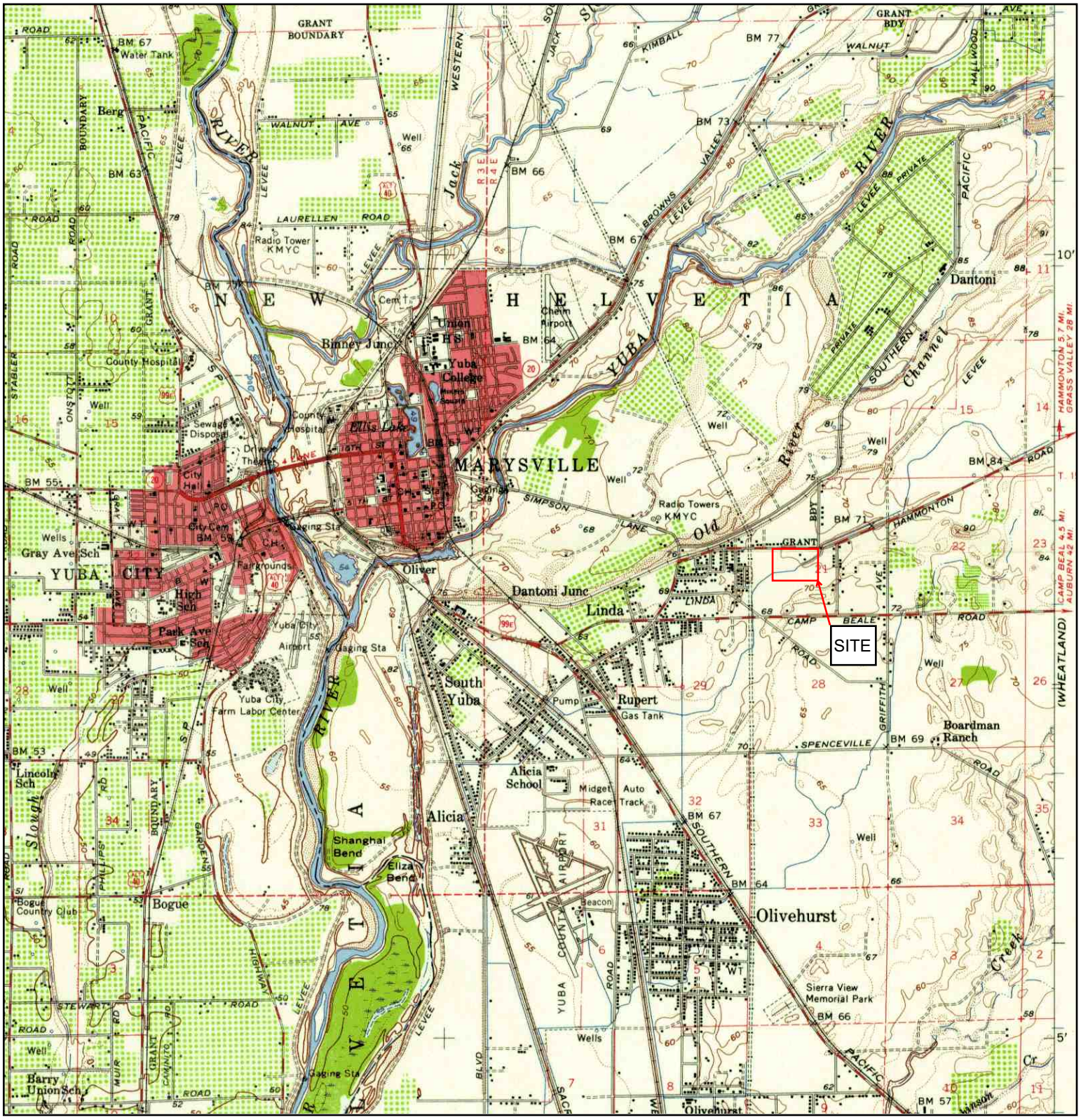
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# Historical Topographic Map



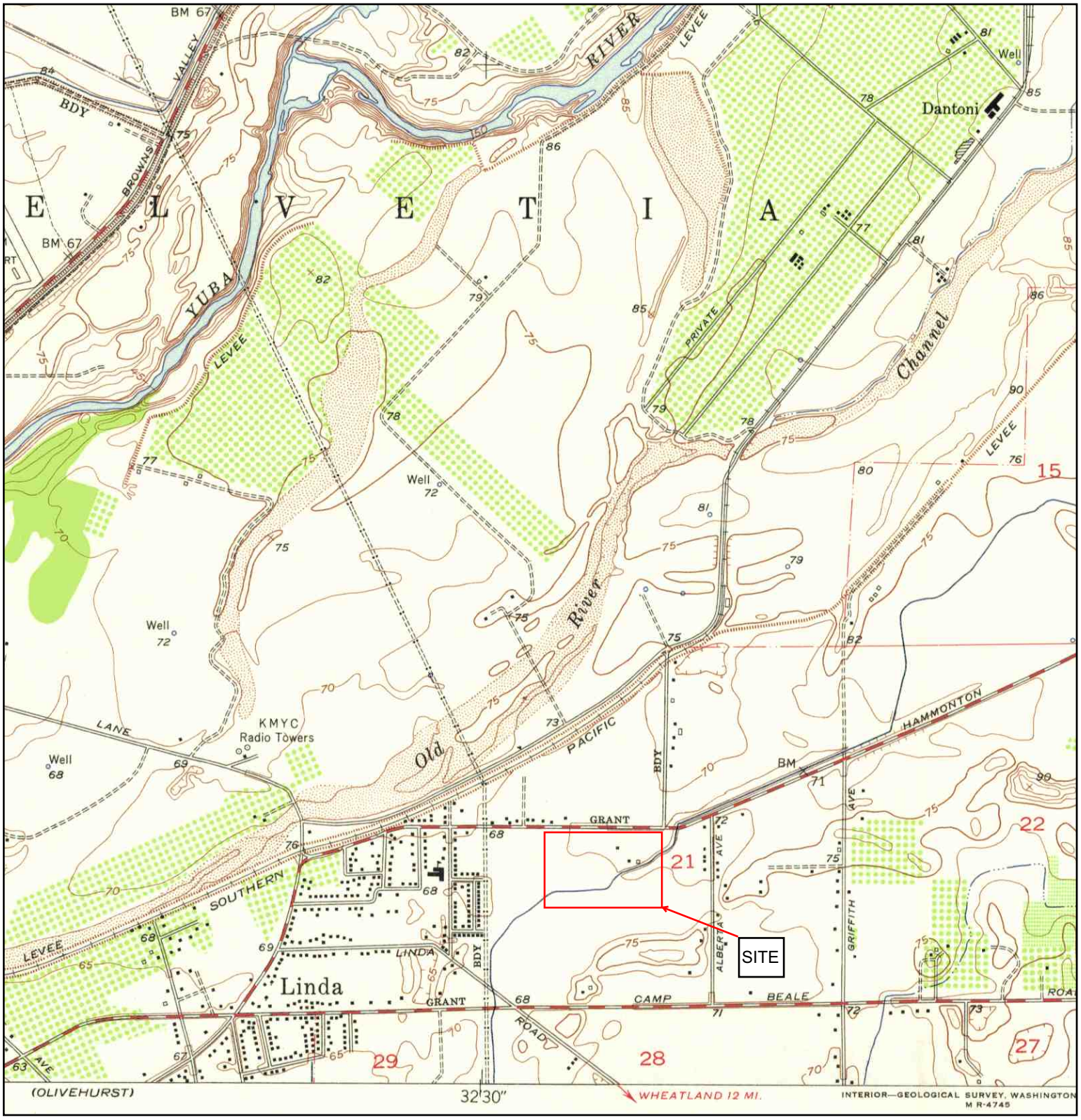

| | | | |
|---|---|---|---|
| N | TARGET QUAD<br>NAME: MARYSVILLE<br>MAP YEAR: 1895<br><br>SERIES: 30<br>SCALE: 1:125000 | SITE NAME: Hammonton Smartsville Property<br>ADDRESS: SE Corner of Dantoni and Hammonton Smartsville Rd<br>Marysville, CA 95901<br>LAT/LONG: 39.1337 / 121.537 | CLIENT: LFR Inc<br>CONTACT: Scott Hackman<br>INQUIRY#: 2556892.4<br>RESEARCH DATE: 08/04/2009 |

# Historical Topographic Map



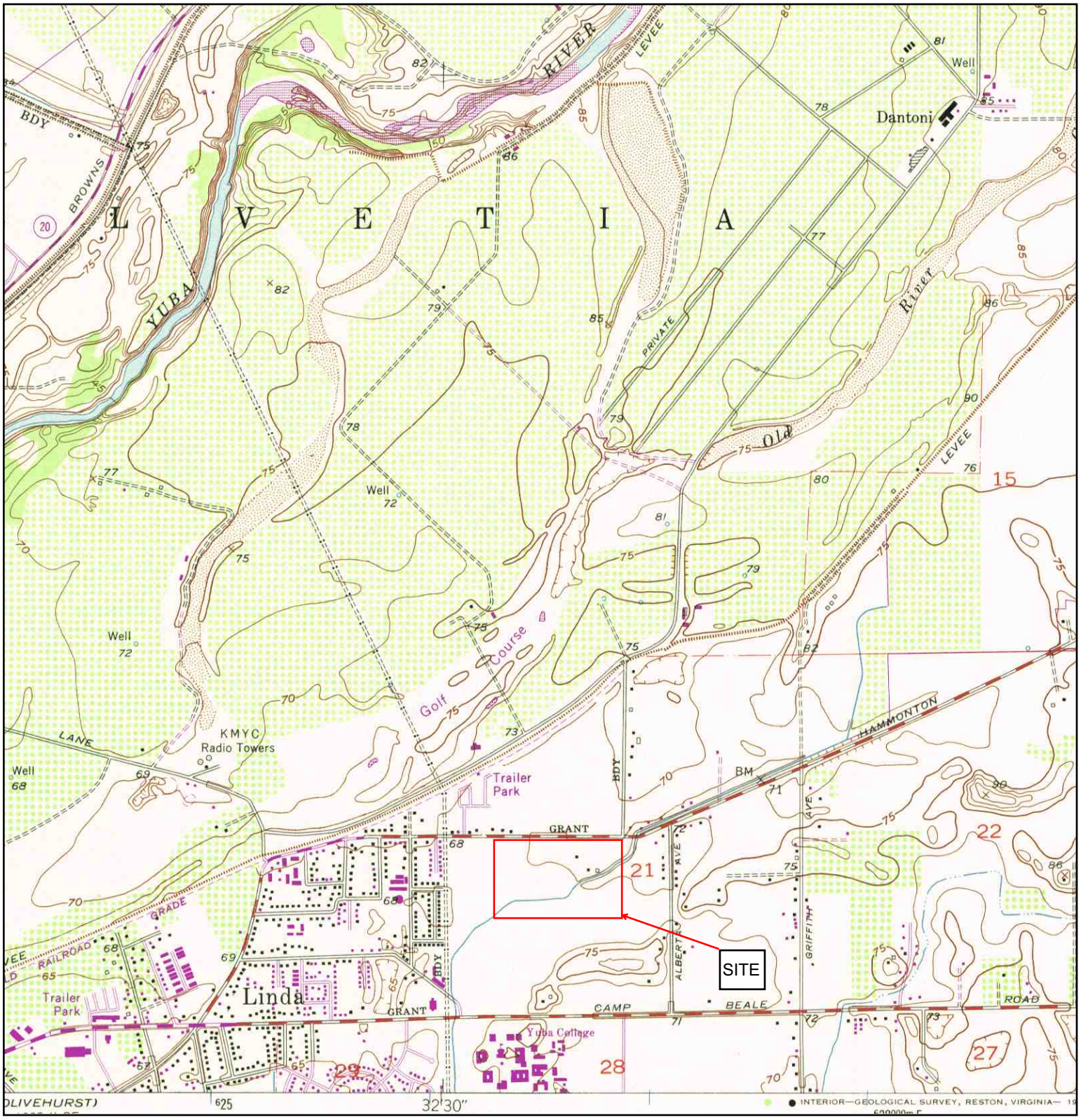

| | | | |
|---|---|---|---|
| N | TARGET QUAD<br>NAME: MARYSVILLE<br>MAP YEAR: 1952<br><br>SERIES: 15<br>SCALE: 1:62500 | SITE NAME: Hammonton Smartsville Property<br>ADDRESS: SE Corner of Dantoni and Hammonton Smartsville Rd<br>Marysville, CA 95901<br>LAT/LONG: 39.1337 / 121.537 | CLIENT: LFR Inc<br>CONTACT: Scott Hackman<br>INQUIRY#: 2556892.4<br>RESEARCH DATE: 08/04/2009 |

# Historical Topographic Map




| | | | |
|---|---|---|---|
| N | TARGET QUAD<br>NAME: YUBA CITY<br>MAP YEAR: 1952<br><br>SERIES: 7.5<br>SCALE: 1:24000 | SITE NAME: Hammonton Smartsville Property<br>ADDRESS: SE Corner of Dantoni and Hammonton Smartsville Rd<br>Marysville, CA 95901<br>LAT/LONG: 39.1337 / 121.537 | CLIENT: LFR Inc<br>CONTACT: Scott Hackman<br>INQUIRY#: 2556892.4<br>RESEARCH DATE: 08/04/2009 |

# Historical Topographic Map




| | | | |
|---|---|---|---|
| N | TARGET QUAD<br>NAME: YUBA CITY<br>MAP YEAR: 1973<br>PHOTOREVISED FROM:1952<br>SERIES: 7.5<br>SCALE: 1:24000 | SITE NAME: Hammonton Smartsville Property<br>ADDRESS: SE Corner of Dantoni and Hammonton Smartsville Rd<br>Marysville, CA 95901<br>LAT/LONG: 39.1337 / 121.537 | CLIENT: LFR Inc<br>CONTACT: Scott Hackman<br>INQUIRY#: 2556892.4<br>RESEARCH DATE: 08/04/2009 |

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# Appendix E

Aerial Photographs

**Hammonton Smartsville Property**
SE Corner of Dantoni and Hammonton Smartsville Rd
Marysville, CA 95901

Inquiry Number: 2556892.5
August 05, 2009

# The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

# EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDRs professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

**When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.**

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## Date EDR Searched Historical Sources:

Aerial Photography August 05, 2009

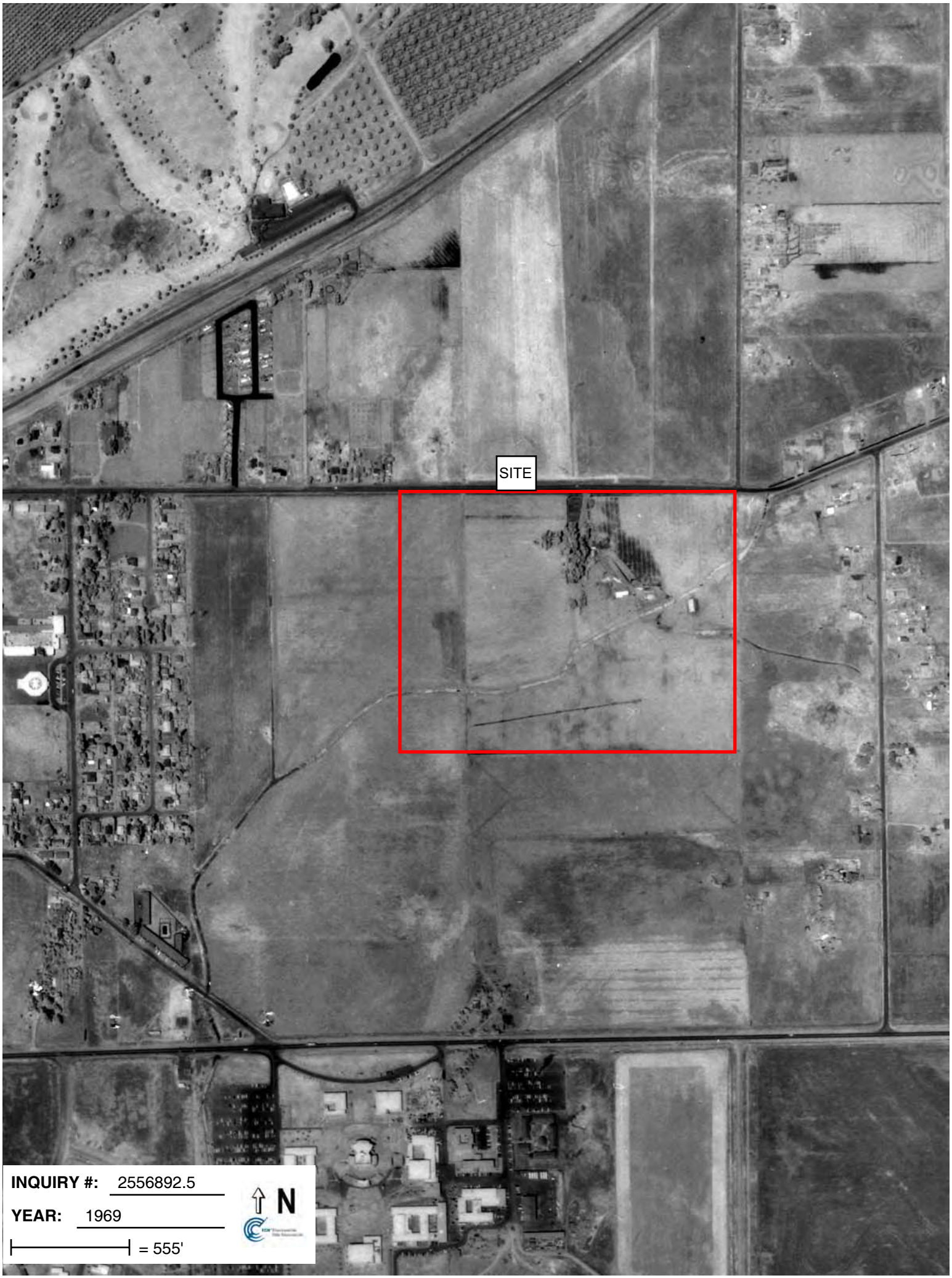
## Target Property:

SE Corner of Dantoni and Hammonton Smartsville Rd

Marysville, CA 95901

| *Year* | *Scale* | *Details* | *Source* |
|---|---|---|---|
| 1947 | Aerial Photograph. Scale: 1"=473' | Flight Year: 1947 | USGS |
| 1969 | Aerial Photograph. Scale: 1"=555' | Flight Year: 1969 | Cartwright |
| 1974 | Aerial Photograph. Scale: 1"=541' | Flight Year: 1974 | NASA |
| 1984 | Aerial Photograph. Scale: 1"=690' | Flight Year: 1984 | USGS |
| 1987 | Aerial Photograph. Scale: 1"=666' | Flight Year: 1987 | USGS |
| 1998 | Aerial Photograph. Scale: 1"=666' | Flight Year: 1998 | USGS |
| 2005 | Aerial Photograph. 1" = 604' | Flight Year: 2005 | EDR |


SITE
INQUIRY #: 2556892.5
YEAR: 1947
= 473'
N

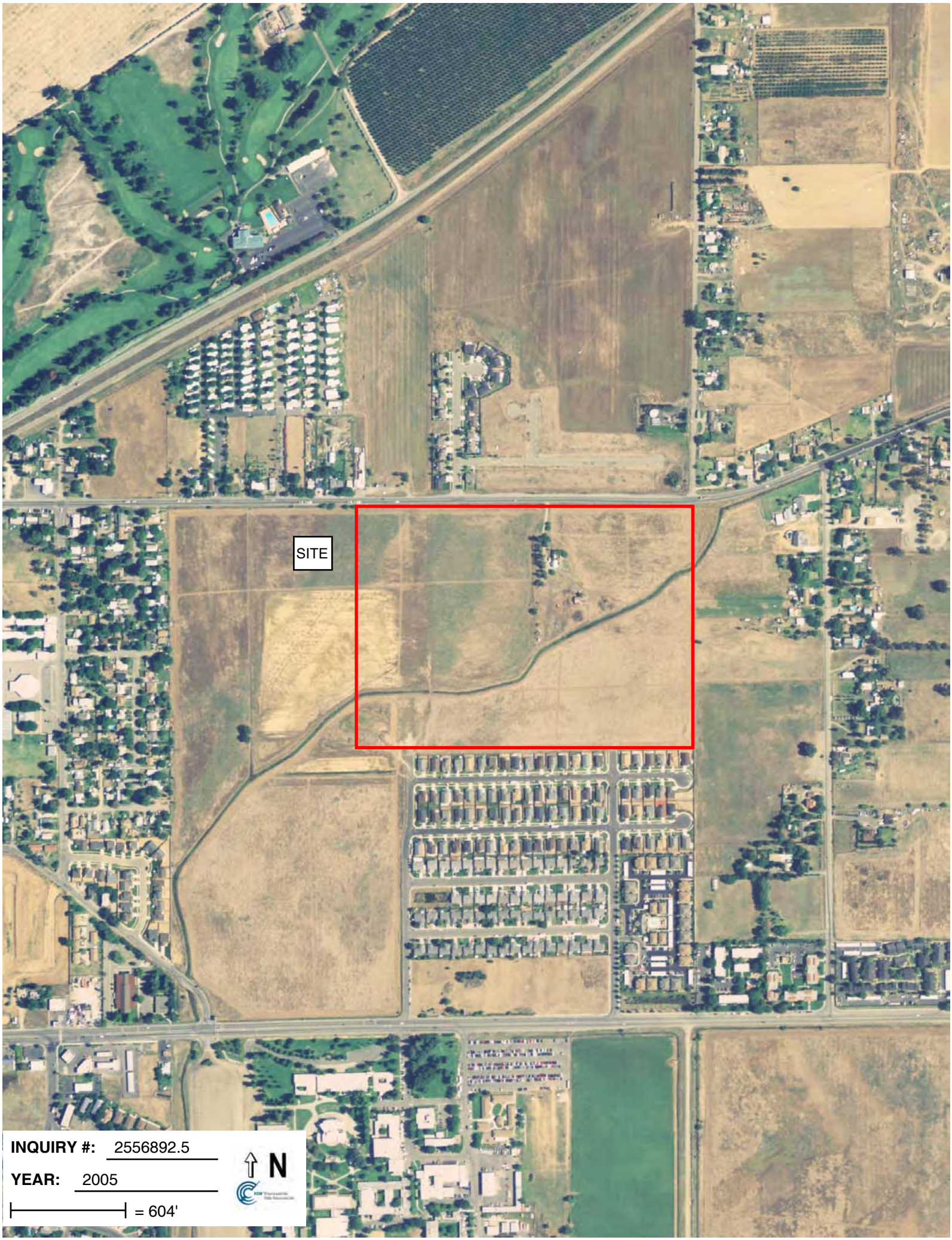

SITE
INQUIRY #: 2556892.5
YEAR: 1969
= 555'
N


SITE
INQUIRY #: 2556892.5
YEAR: 1974
= 541'
N


SITE
INQUIRY #: 2556892.5
YEAR: 1984
= 690'
N


SITE
INQUIRY #: 2556892.5
YEAR: 1987
= 666'
N


SITE
INQUIRY #: 2556892.5
YEAR: 1998
= 666'
N


SITE
INQUIRY #: 2556892.5
YEAR: 2005
= 604'
N

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# Appendix F

Sanborn® Map Report

**Hammonton Smartsville Property**
SE Corner of Dantoni and Hammonton Smartsville Rd
Marysville, CA 95901

Inquiry Number: 2556892.3
August 04, 2009

# Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

# Certified Sanborn® Map Report

8/04/09

**Site Name:**
Hammonton Smartsville
SE Corner of Dantoni and
Marysville, CA 95901

EDR Inquiry # 2556892.3

**Client Name:**
LFR Inc
1410 Rocky Ridge
Roseville, CA 95661

Contact: Scott Hackman

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by LFR Inc were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

## *Certified Sanborn Results:*

**Site Name:** Hammonton Smartsville Property
**Address:** SE Corner of Dantoni and Hammonton
**City, State, Zip:** Marysville, CA 95901
**Cross Street:**
**P.O. #** NA
**Project:** 0936306-001
**Certification #** 13FE-460B-AA4C

Sanborn® Library search results
Certification # 13FE-460B-AA4C

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

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LFR Inc (the client) is permitted to make up to THREE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

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## Appendix G

EDR City Directory Abstract Report

**Hammonton Smartsville Property**
2176 Hammonton Smartsville Rd
Marysville, CA 95901

Inquiry Number: 2574390.1
August 27, 2009

# The EDR-City Directory Abstract

Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

# TABLE OF CONTENTS

## SECTION

**Executive Summary**

**Findings**

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# 2009 Enhancements to EDR City Directory Abstract

New for 2009, the EDR City Directory Abstract has been enhanced with additional information and features. These enhancements will make your city directory research process more efficient, flexible, and insightful than ever before. The enhancements will improve the options for selecting adjoining properties, and will speed up your review of the report.

**City Directory Report.** Three important enhancements have been made to the EDR City Directory Abstract:

1. *Executive Summary.* The report begins with an Executive Summary that lists the sources consulted in the preparation of the report. Where available, a parcel map is also provided within the report, showing the locations of properties researched.

2. *Page Images.* Where available, the actual page source images will be included in the Appendix, so that you can review them for information that may provide additional insight. EDR has copyright permission to include these images.

3. *Findings Listed by Location.* Another useful enhancement is that findings are now grouped by address. This will significantly reduce the time you need to review your abstracts. Findings are provided under each property address, listed in reverse chronological order and referencing the source for each entry.

**Options for Selecting Adjoining Properties.** Ensuring that the right adjoining property addresses are searched is one of the biggest challenges that environmental professionals face when conducting city directory historical research. EDR's new enhancements make it easier for you to meet this challenge. Now, when you place an order for the EDR City Directory Abstract, you have the following choices for determining which addresses should be researched.

1. *You Select Addresses and EDR Selects Addresses.* Use the "Add Another Address" feature to specify the addresses you want researched. Your selections will be supplemented by addresses selected by EDR researchers using our established research methods. Where available, a digital map will be shown, indicating property lines overlaid on a color aerial photo and their corresponding addresses. Simply use the address list below the map to check off which properties shown on the map you want to include. You may also select other addresses using the "Add Another Address" feature at the bottom of the list.

2. *EDR Selects Addresses.* Choose this method if you want EDR's researchers to select the addresses to be researched for you, using our established research methods.

3. *You Select Addresses.* Use this method for research based solely on the addresses you select or enter into the system.

4. *Hold City Directory Research Option.* If you choose to select your own adjoining addresses, you may pause production of your EDR City Directory Abstract report until you have had a chance to look at your other EDR reports and sources. Sources for property addresses include: your Certified Sanborn Map Report may show you the location of property addresses; the new EDR Property Tax Map Report may show the location of property addresses; and your field research can supplement these sources with additional address information. To use this capability, simply click "Hold City Directory research" box under "Other Options" at the bottom of the page. Once you have determined what addresses you want researched, go to your EDR Order Status page, select the EDR City Directory Abstract, and enter the addresses and submit for production.

Questions? Contact your EDR representative at 800-352-0050. For more information about all of EDR's 2009 report and service enhancements, visit www.edrnet.com/2009enhancements

# EXECUTIVE SUMMARY

## DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

## RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

| Year | Source | TP | Adjoining | Text Abstract | Source Image |
|---|---|---|---|---|---|
| 2001 | Polk's City Directory | X | X | X | - |
| 1996 | Polk's City Directory | X | X | X | - |
| 1990 | Polk's City Directory | X | X | X | - |
| 1986 | Polk's City Directory | X | X | X | - |
| 1981 | Polk's City Directory | X | X | X | - |
| 1975 | Polk's City Directory | - | X | X | - |
| 1970 | Polk's City Directory | - | X | X | - |
| 1965 | Polk's City Directory | - | X | X | - |
| 1960 | Polk's City Directory | - | - | - | - |

# FINDINGS

## TARGET PROPERTY INFORMATION

### ADDRESS

2176 Hammonton Smartsville Rd
Marysville, CA 95901

### FINDINGS DETAIL

Target Property research detail.

| *Year* | *Uses* | *Source* |
|---|---|---|
| 2001 | Residential | Polk's City Directory |
| 1996 | Residential | Polk's City Directory |
| 1990 | Residential | Polk's City Directory |
| 1986 | Residential | Polk's City Directory |
| 1981 | Residential | Polk's City Directory |

# FINDINGS

## ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

### Dantoni Rd

**6257 Dantoni Rd**

| *Year* | *Uses* | *Source* |
|---|---|---|
| 2001 | Residential | Polk's City Directory |
| 1996 | Residential | Polk's City Directory |

### Hammonton Smartsville Rd

**2077 Hammonton Smartsville Rd**

| *Year* | *Uses* | *Source* |
|---|---|---|
| 2001 | Residential | Polk's City Directory |
| 1990 | Residential | Polk's City Directory |
| 1986 | Residential | Polk's City Directory |

**2085 Hammonton Smartsville Rd**

| *Year* | *Uses* | *Source* |
|---|---|---|
| 2001 | Residential | Polk's City Directory |
| 1996 | Residential | Polk's City Directory |
| 1990 | Residential | Polk's City Directory |
| 1986 | No Return | Polk's City Directory |

**2089 Hammonton Smartsville Rd**

| *Year* | *Uses* | *Source* |
|---|---|---|
| 2001 | Linda Saw & Mower Shop | Polk's City Directory |
| 1996 | Linda Saw & Mower Shop | Polk's City Directory |
| 1990 | Linda Saw & Mower Shop | Polk's City Directory |
| 1986 | Linda Saw & Mower Shop | Polk's City Directory |

**2273 Hammonton Smartsville Rd**

| *Year* | *Uses* | *Source* |
|---|---|---|
| 2001 | Residential | Polk's City Directory |
| 1996 | Residential | Polk's City Directory |
| 1990 | Residential | Polk's City Directory |
| 1986 | Residential | Polk's City Directory |

# FINDINGS

**2279 Hammonton Smartsville Rd**

| Year | Uses | Source |
|---|---|---|
| 2001 | Residential | Polk's City Directory |
| 1990 | Residential | Polk's City Directory |
| 1986 | Residential | Polk's City Directory |

**2289 Hammonton Smartsville Rd**

| Year | Uses | Source |
|---|---|---|
| 2001 | Residential | Polk's City Directory |
| 1990 | Residential | Polk's City Directory |
| 1986 | Residential | Polk's City Directory |

## Hammonton Smartsville Rd (Hammonton Rd)

**2077 Hammonton Smartsville Rd (Hammonton Rd)**

| Year | Uses | Source |
|---|---|---|
| 1981 | Residential | Polk's City Directory |
| 1975 | Residential | Polk's City Directory |
| 1970 | Residential | Polk's City Directory |
| 1965 | Residential | Polk's City Directory |

**2085 Hammonton Smartsville Rd (Hammonton Rd)**

| Year | Uses | Source |
|---|---|---|
| 1981 | Residential | Polk's City Directory |
| 1975 | Vacant | Polk's City Directory |
| 1970 | Residential | Polk's City Directory |
| 1965 | Residential | Polk's City Directory |

**2089 Hammonton Smartsville Rd (Hammonton Rd)**

| Year | Uses | Source |
|---|---|---|
| 1981 | Linda Saw & Mower Shop | Polk's City Directory |
| 1975 | Linda Saw & Mower Shop | Polk's City Directory |
| 1970 | Linda Saw & Mower Shop | Polk's City Directory |
| 1965 | Linda Saw & Mower Shop | Polk's City Directory |

**2239 Hammonton Smartsville Rd (Hammonton Rd)**

| Year | Uses | Source |
|---|---|---|
| 1981 | Vacant | Polk's City Directory |

# FINDINGS

**2273 Hammonton Smartsville Rd (Hammonton Rd)**

| *Year* | *Uses* | *Source* |
|---|---|---|
| 1981 | Residential | Polk's City Directory |

**2279 Hammonton Smartsville Rd (Hammonton Rd)**

| *Year* | *Uses* | *Source* |
|---|---|---|
| 1981 | Residential | Polk's City Directory |

**2289 Hammonton Smartsville Rd (Hammonton Rd)**

| *Year* | *Uses* | *Source* |
|---|---|---|
| 1981 | Residential | Polk's City Directory |

# FINDINGS

## STREET NOT LISTED IN RESEARCH SOURCE

The following Streets were researched for this report, and the Streets were not listed in the research source.

| Street Researched | Street Not Listed in Research Source |
|---|---|
| Dantoni Rd | 1981, 1975, 1970, 1965, 1960 |

## TARGET PROPERTY: ADDRESS NOT LISTED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not listed in the research source.

| Address Researched | Address Not Listed in Research Source |
|---|---|
| 2176 Hammonton Smartsville Rd | 1975, 1970, 1965, 1960 |

## ADJOINING PROPERTY: ADDRESSES NOT LISTED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not listed in research source.

| Address Researched | Address Not Listed in Research Source |
|---|---|
| 2077 Hammonton Smartsville Rd | 1996 |
| 2077 Hammonton Smartsville Rd (Hammonton Rd) | 1960 |
| 2085 Hammonton Smartsville Rd (Hammonton Rd) | 1960 |
| 2089 Hammonton Smartsville Rd (Hammonton Rd) | 1960 |
| 2239 Hammonton Smartsville Rd (Hammonton Rd) | 1975, 1970, 1965, 1960 |
| 2273 Hammonton Smartsville Rd (Hammonton Rd) | 1975, 1970, 1965, 1960 |
| 2279 Hammonton Smartsville Rd | 1996 |
| 2279 Hammonton Smartsville Rd (Hammonton Rd) | 1975, 1970, 1965, 1960 |
| 2289 Hammonton Smartsville Rd | 1996 |
| 2289 Hammonton Smartsville Rd (Hammonton Rd) | 1975, 1970, 1965, 1960 |
| 6257 Dantoni Rd | 1990, 1986 |

**Hammonton Smartsville Property**
SE Corner of Dantoni and Hammonton Smartsville Rd
Marysville, CA 95901

Inquiry Number: 2556892.8
August 04, 2009

# The EDR Property Tax Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

# EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

## NO COVERAGE

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## Appendix H

Environmental Hazards Survey Information

Table 1
Environmental Hazards Survey Summary Table

| **School Site** | **Hammonton Smartville Property** |
|---|---|
| **Address** | 2176 Hammonton Smartville Rd, Marysville, CA |
| **Power Lines** | **Yes** |
| Any within 1500 ft? | (1)Pease-Rio OSO, (2) Palermo-Nicolaus & (3) Palermo-Bogue |
| Distance from Site (feet) | 600 |
| Kilovolts | 115 |
| **Transformers/Cell Towers** | **On-Site: Yes; Off-Site: No** |
| Any on or near Site? | On-Site: 2 pole-mounted transformers; Off-Site: None |
| Distance from Site (feet) | N/A |
| **Railroad Tracks** | **See Table 4** |
| Any within 1500 ft? | **No** |
| Distance from Site (feet) | N/A |
| **Earthquake Fault/Trace** | **See Table 5** |
| Site in Alquist-Priolo Zone? | **No** |
| Faults or traces near Site? | N/A |
| Identify Faults, direction, distance to Site | None |
| **Flood** | **See Table 2** |
| Site subject to flooding? | **Yes** |
| Site within 100 year plain? | Yes (Western Portion of the Site) |
| **Dam Inundation** | **See Table 3** |
| Site in area of inundation? | **Yes** |
| | The Site is located within the inundation zones associated with five dams, located in the mountains and foothills to the east and northeast. Most other parts of western Yuba County are also located within one or more dam inundation zones. In addition, dam failures could affect the Site indirectly, if they led to failures of the local levees. However, the potential for dam failure has been characterized as “very unlikely” by the County of Yuba. |
| Distance from reservoir? | See Dam Inundation Maps |
| **Water/Fuel Storage Tank** | **On-Site: No; Off-Site: Yes** |
| Water/Fuel Storage Tank near Site? | One approximately 240,000 gallon water AST is located approximately 500 feet north of the northeastern site boundary. The AST is a back wash tank associated with the LCWD water supply well. |
| **On-Site hazardous pipelines?** | **No** |
| Hazardous pipelines with 80+psi within 1500 feet of Site? | No |
| Distance of hazardous pipelines | N/A |
| High volume water pipelines? (+12") | **Yes** |
| Distance of water pipelines | On-Site - located on the western portion of the Site. |
| **Geological Hazard** | Potential Lead-Based Paint and Termiticides in shallow soil around on-site structures |
| **Naturally Occurring Asbestos** | Naturally occurring asbestos in California is most often related to the occurrence of ultramafic rocks. There are exposures of ultramafic rocks in the Sierra foothills to the east of the Site, in the general up gradient direction (Saucedo and Wagner 1992; CDMG 2000). However, these exposures occur at distances of more than 10 miles from the Site. The exposures therefore do not represent a significant concern, based on California Department of Toxic Substances Control (DTSC; 2004) guidance for school sites. |
| **Traffic Corridor** | **No** |
| Traffic Corridor within 500 ft? | Hammonton-Smartville Rd, Simpson-Dantoni Road, & North Beale Road do not average more than 50,000 vehicles per day in rural areas or 100,000 vehicles per day in urban areas. |
| **Air/Hazardous Facilities within 1/4 Mile** | Linda County Water District Well #15 - Diesel Generator |
| **Airport** | **No** |
| Airport within 2 nautical miles? | |
| **CEQA** | **CEQA Document Being Completed By Rincon Consultants, Inc.** |
| Mitigations | **N/A** |
| Agricultural General Plan/Zone | **N/A** |
| Noise Study | **N/A** |
| **NOTES** | None |

**Table 2: FEMA Flood Hazards, Hammonton Smartville Property, Marysville Joint Unified School District, Yuba County, California**

| School | FEMA Map | Distance to the 100-Year Floodplain (miles) | Comments |
|---|---|---|---|
| Hammonton Smartville Property | 060427 0360 B May 17, 1982 | N/A | A portion of the western half of the site is within the 100 year floodplain |

**Table 3: Dam Inundation Hazards, Hammonton Smartville Property, Marysville Joint Unified School District, Yuba County, California**

| School | Jackson Meadows Dam | Bowman Dam | Scotts Flat Dam | Oroville Dam | New Bullards Bar Dam | Englebright Dam |
|---|---|---|---|---|---|---|
| Hammonton Smartville Property | Yes | Yes | Yes | No | Yes | Yes |

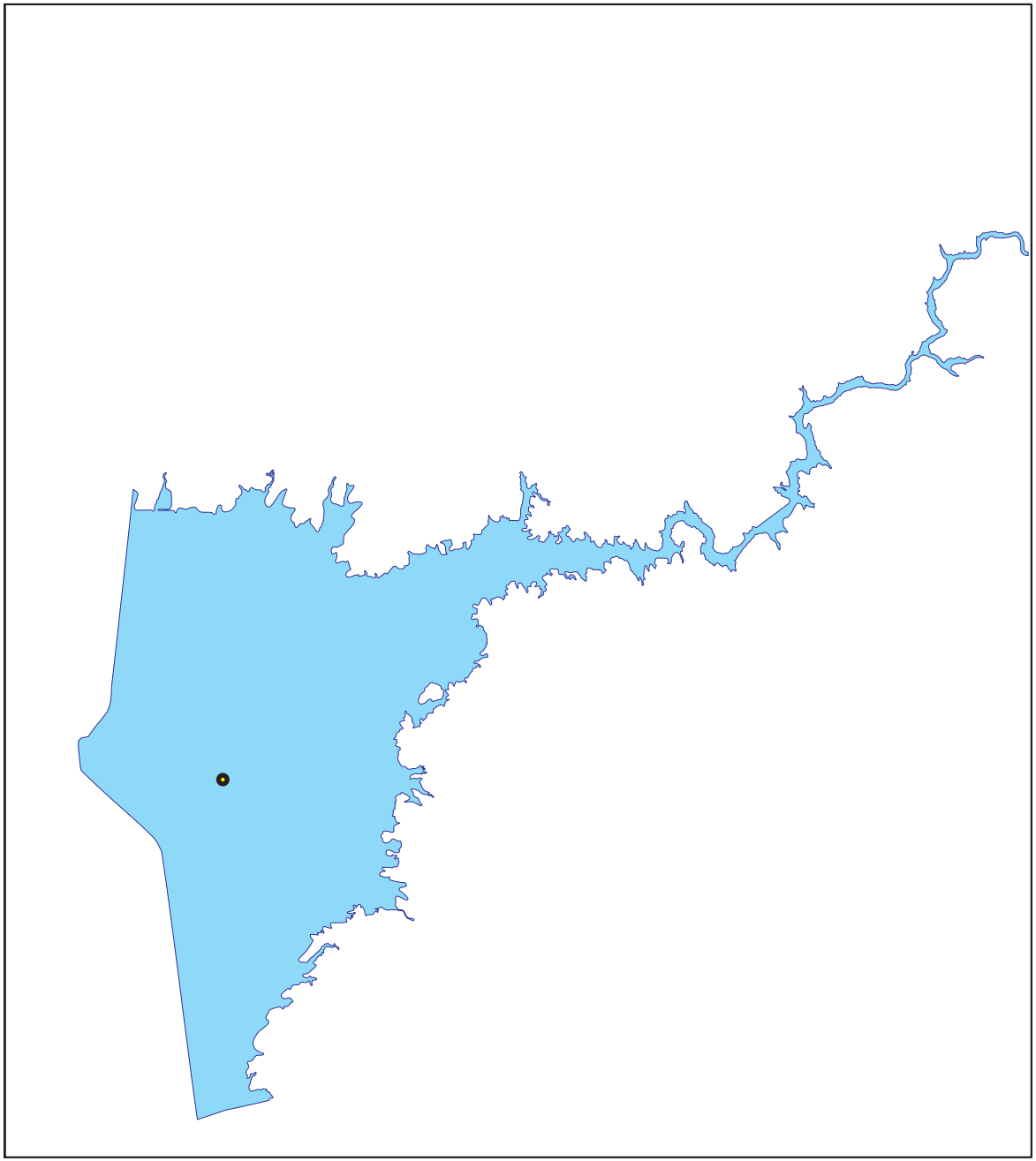
Note: Other dams considered, but which did not produce inundation at the school sites include: Lake Francis Dam, Camp Far West Dam, Folsom Dam, Thermalito Dam (forebay, afterbay and diversion), Whiskeytown Dam, and Shasta Dam.

**Table 4: Railroad Tracks within 1,500 Feet, Hammonton Smartville Property, Marysville Joint Unified School District, Yuba County, California**

| School | Railroad | Closest Distance | Comments |
|---|---|---|---|
| Hammonton Smartville Property | None | N/A | N/A |

**Table 5: Alquist Priolo Earthquake Fault Zones, Hammonton Smartville Property, Marysville Joint Unified School District, Yuba County, California**

| School | Fault | Closest Distance | Comments |
|---|---|---|---|
| Hammonton Smartville Property | None | 20 miles north of the Site. | The nearest Alquist-Priolo fault zone is associated with the Cleveland Hill Fault in southern Butte County, approximately 20 miles north of the Site.<br><br>In addition, the nearest active fault (not classified as Alquist-Priolo) is Foothills Fault System 1, approximately 8.9 miles northeast of the Site. |



**EXPLANATION**

Hammonton Smartsville Property

2 0 1 2 4 8

(IN MILES)

GRAPHIC SCALE

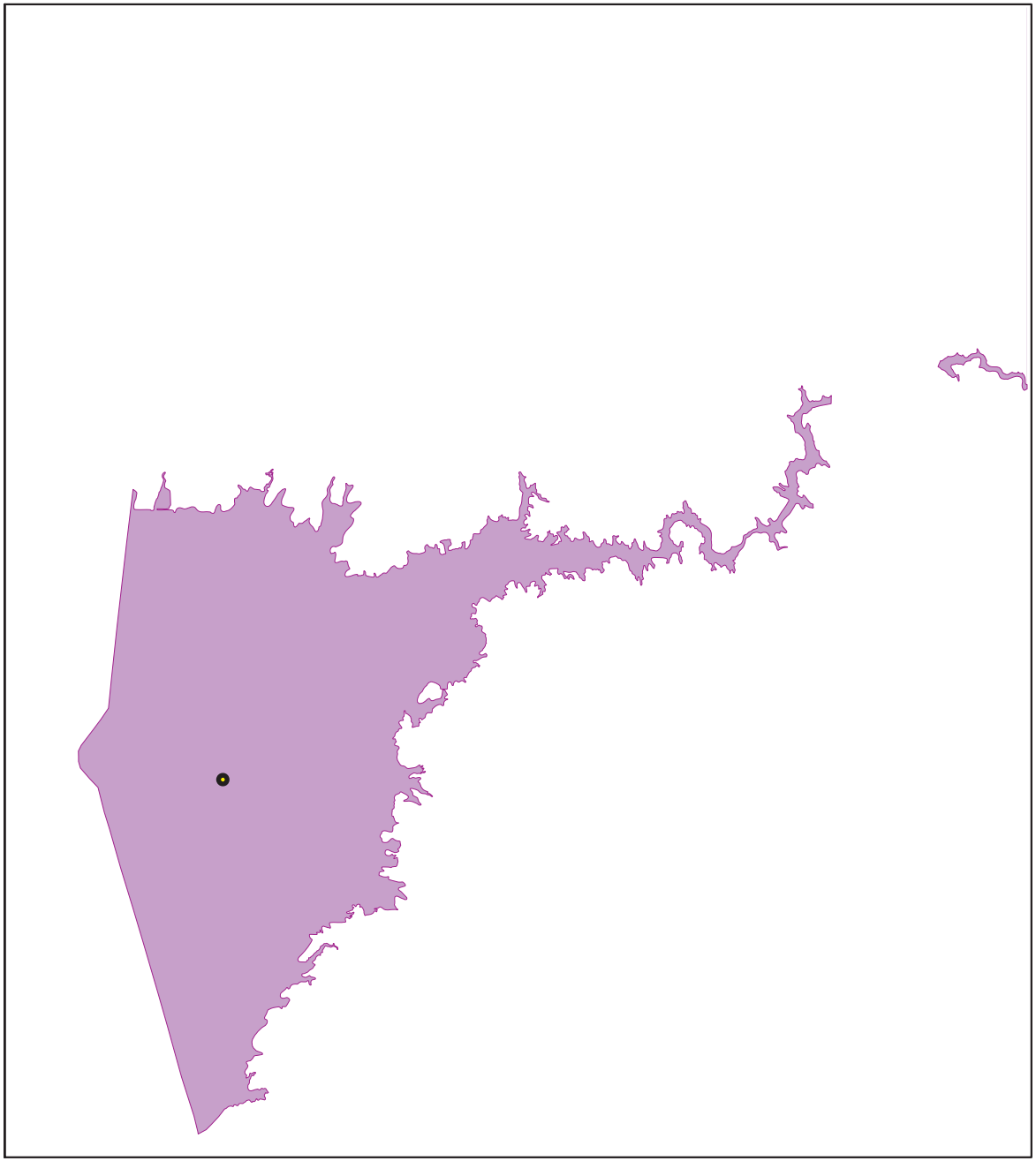
# Jackson Meadows Dam Inundation Map

Hammonton Smartsville Property

**Figure 1**

LFR an ARCADIS company

Design\0030936306\0001\Hammonton Smartville Property.cdr



**EXPLANATION**

Hammonton Smartsville Property

2 0 1 2 4 8

(IN MILES)

GRAPHIC SCALE

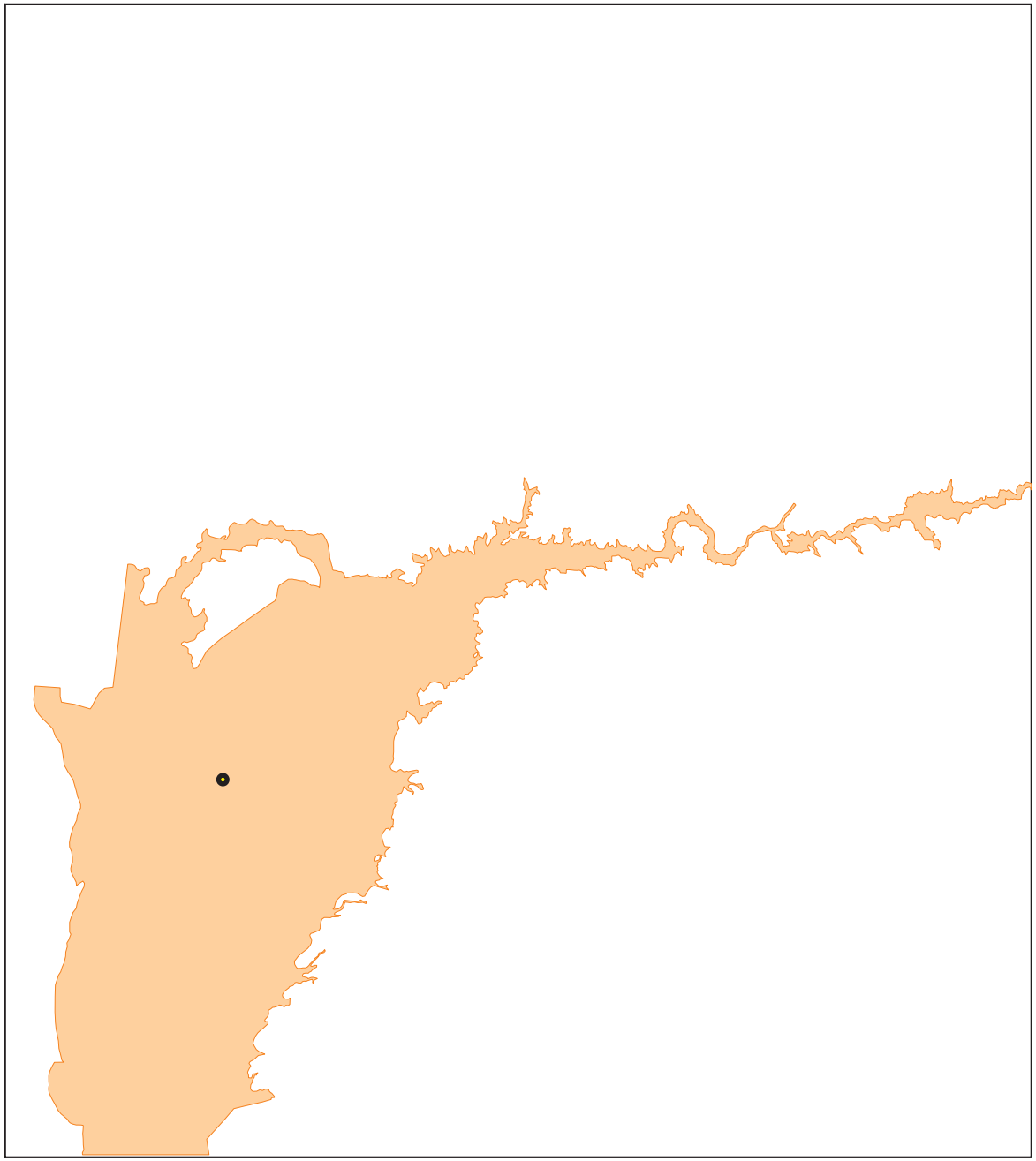
# Bowman Dam
# Inundation Map

Hammonton Smartsville Property

**Figure 2**

LFR an ARCADIS company

Design\0030936\061\0001\Hammonton Smartville Property.cdr



**EXPLANATION**

Hammonton Smartsville Property

2 0 1 2 4 8

(IN MILES)

GRAPHIC SCALE

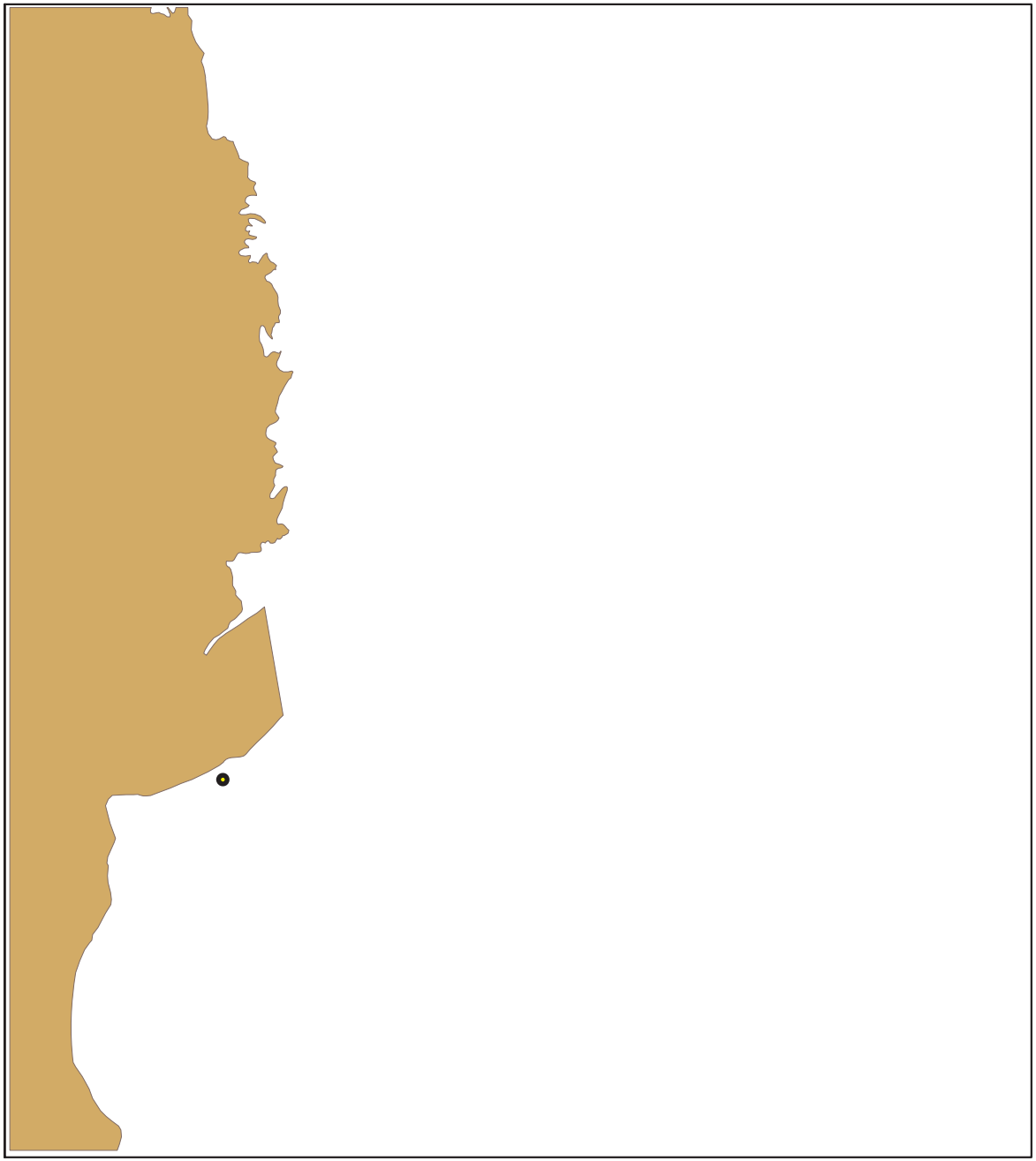
# Scotts Flat Dam
# Inundation Map

Hammonton Smartsville Property

**Figure 3**

LFR an ARCADIS company

Design\00309363\061001\Hammonton Smartville Property.cdr



**EXPLANATION**

Hammonton Smartsville Property

2 0 1 2 4 8

(IN MILES)

GRAPHIC SCALE

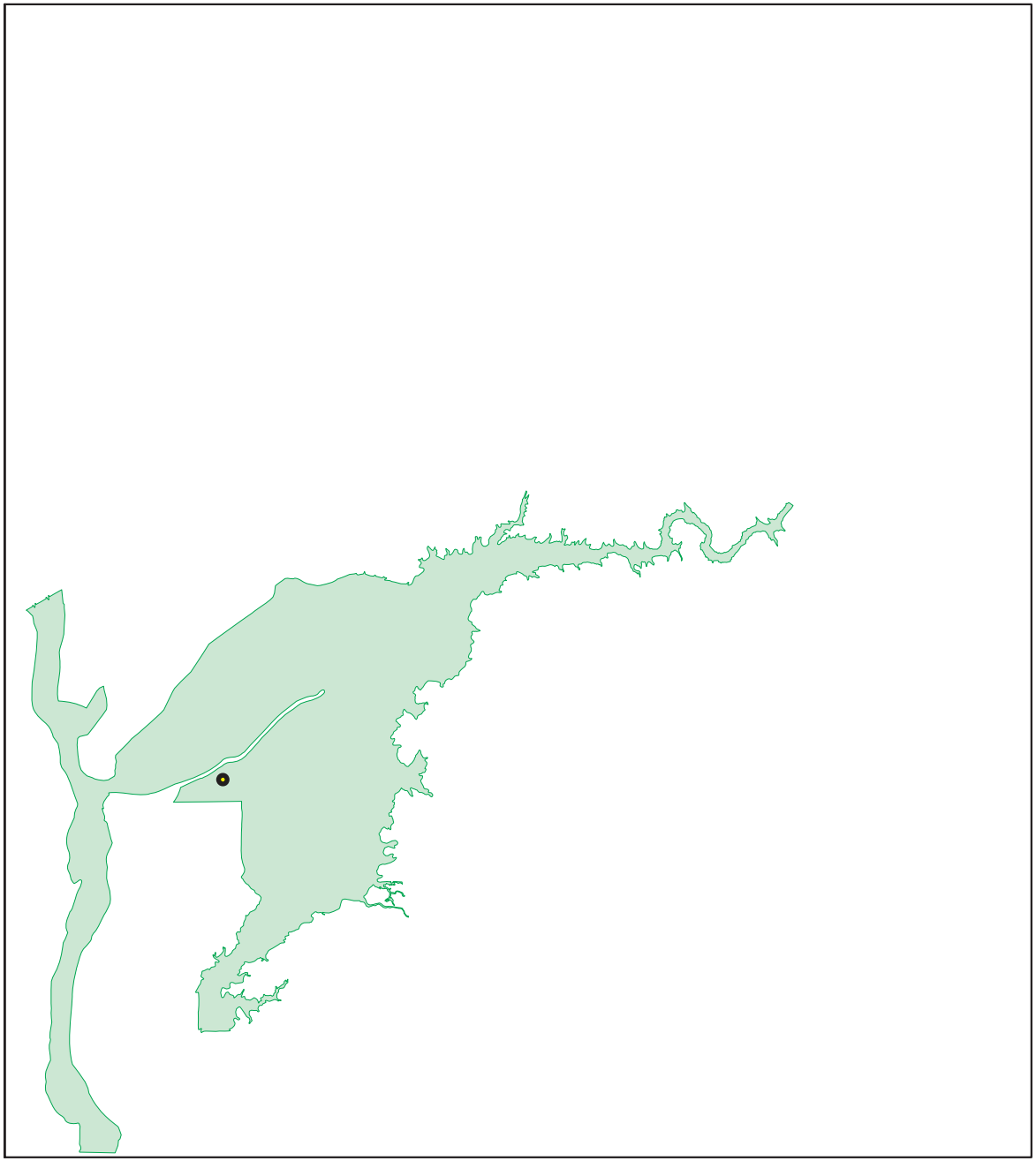
# Oroville Dam
# Inundation Map

Hammonton Smartsville Property

**Figure 4**

LFR an ARCADIS company

Design\00309363\06\001\Hammonton Smartville Property.cdr



**EXPLANATION**

Hammonton Smartsville Property

2 0 1 2 4 8

(IN MILES)

GRAPHIC SCALE

# Englebright Dam
# Inundation Map

Hammonton Smartsville Property

**Figure 5**

LFR an ARCADIS company

Design\00309363\061001\Hammonton Smartville Property.cdr

ne Flood Insurance Study report for this jurisdiction.

nce is available in this community, contact your insurance
d Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'

0 300 600 METERS

PANEL 0345D

# FIRM

## FLOOD INSURANCE RATE MAP

## YUBA COUNTY, CALIFORNIA AND INCORPORATED AREAS

**PANEL 345 OF 510**

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY | NUMBER | PANEL | SUFFIX |
|---|---|---|---|
| YUBA COUNTY | 060427 | 0345 | D |
| MARYSVILLE, CITY OF | 060428 | 0345 | D |

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

**MAP NUMBER**
**06115C0345D**

**EFFECTIVE DATE**
**FEBRUARY 18, 2011**

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

ZONE AE

NOTE: THIS AREA IS SHOWN AS BEING PROTECTED FROM THE 1-PERCENT-ANNUAL-CHANCE OR GREATER FLOOD HAZARD BY A LEVEE SYSTEM. OVERTOPPING OR FAILURE OF ANY LEVEE SYSTEM IS POSSIBLE. FOR ADDITIONAL INFORMATION, SEE THE "ACCREDITED LEVEE NOTE" IN NOTES TO USERS.

ZONE X

ZONE A

ZONE AE

ZONE X

ZONE AO
(DEPTH 2')

1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT

Upper Linda Drain

Yuba River South Levee

LIMIT OF STUDY

LIMIT OF DETAILED STUDY

NOTE: THIS AREA IS SHO
FROM THE 1-PERCENT-A
FLOOD HAZARD BY A LE
PROVISIONALLY ACCRED
OF ANY LEVEE SYSTEM I
INFORMATION, SEE THE "
LEVEE NOTE" IN NOTES T

SPECKERT ROAD
SIMPSON-DANTONI ROAD
LANE
HAMMONTON-SMARTVILLE ROAD
HORMAN DRIVE
WALLEN DRIVE
JILLIAN DRIVE
JANA WAY
JORDON DR.
BISHOP LANE
RICK DRIVE
FARRELL WAY
MAPES WAY
MCLAUGHLIN WAY
AVENUE
HAPPY WAY
SUNSHINE AVE
DUNNING
HILE AVENUE
TIPTOE LANE
GRIFFITH AVENUE
ALBERTA AVENUE
ROBERTA AVENUE
BRENT DRIVE
BUTLER DRIVE
CECILIA WAY
SUTTER STREET
LINDA AVENUE
TYLER AVE
VIERRA LN.
INEZ WAY
N BEALE ROAD
WOOD LANE
REDBURN AVE.
GROVE AVE.
ASH WAY
ALBRECHT AVE.
PARK CIRCLE
LAGO ROAD
WAY

15
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68

JOINS PANEL 0410

6690000 FT
6695000 FT
6700

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

# Appendix D

*Traffic Study*

**DRAFT**

**Dowling Associates, Inc.**
Transportation Engineering • Planning • Research • Education

February 1, 2012

DRAFT

Ms. Michal Healy & Mr. Mark Allgire
Marysville Joint Unified School District
1919 B Street
Marysville, CA 95901

**Subject:** **Traffic Impact Study for Marysville Joint Unified School District Middle School, Alternative Education High School, Adult Education School and Educational Support Services Center Project** [P11-029]

Dear Ms. Healy & Mr. Allgire:

We are pleased to submit our revised draft traffic study for the proposed MJUSD project in the community of Linda.

If you have any questions or comments regarding this report, please do not hesitate to contact me at 510/ 839 1742 x 126.

Sincerely,

**Dowling Associates, Inc.**

<Sent via Email>

Debbie Yueh
Senior Transportation Planner

**Traffic Impact Study for:**

# Marysville Joint Unified School District Middle School, Alternative Education High School, Adult Education School & Educational Support Services Center Project

**Prepared for:**
**Marysville Joint Unified School District**

Submitted by:


Dowling Associates, Inc.
Transportation Engineering • Planning • Research • Education

428 J Street Suite 500
Sacramento, CA 95814
Phone: (916) 266-2190
www.dowlinginc.com
Contact: Debbie Yueh


October 20, 2011

# Table of Contents

**Introduction** ..... **1**
Project Description ..... 1
**Existing No Project Conditions** ..... **3**
Existing Roadway Network ..... 3
Existing Traffic Volumes ..... 4
Level of Service Methodology ..... 7
Signal Warrant Status ..... 9
Impact Significance Criteria ..... 10
Existing No Project Conditions ..... 11
Existing Pedestrian and Bicycle Facilities ..... 12
Existing Transit Service ..... 12
**Existing Plus Project Conditions** ..... **13**
Trip Generation ..... 13
Trip Distribution ..... 17
Trip Assignment ..... 17
Existing Plus Project Intersection Operations ..... 17
**Year 2030 Cumulative Conditions** ..... **20**
Cumulative No Project - Intersection Operations ..... 20
Recommended Improvements - Cumulative No Project ..... 23
Cumulative Plus Project – Intersection Operations ..... 23
**Impacts and Mitigation Measures** ..... **26**
Existing with Project Conditions ..... 26
Cumulative with Project Conditions ..... 26
**Conclusion** ..... **28**

**Appendix A: Intersection Signal Warrant and Level of Service Worksheets**

# List of Figures

Figure 1 Project Vicinity Map ..... 2
Figure 2 Study Intersections ..... 5
Figure 3 Existing Lanes & Controls and Peak Hour Traffic Volumes ..... 6
Figure 4 Project Only Peak Hour Traffic Volumes ..... 16
Figure 5 Existing Plus Proposed Project Peak Hour Volumes ..... 18
Figure 6 Cumulative No Project Peak Hour Volumes ..... 21
Figure 7 Cumulative Plus Proposed Project Peak Hour Volumes ..... 24

# List of Tables

Table 1 Level of Service Criteria for Unsignalized Intersections ..... 8
Table 2 Level of Service Criteria for Signalized Intersections ..... 8
Table 3 Existing No Project Conditions - Level of Service ..... 11
Table 4 Trip Generation Estimates ..... 15
Table 5 Project Trip Distribution ..... 17
Table 6 Existing Plus Proposed Project – Level of Service ..... 19
Table 7 Cumulative No Project - Levels of Service ..... 22
Table 8 Recommended Improvements - Cumulative No Project Conditions ..... 23
Table 9 Cumulative Plus Project – Level of Service ..... 25
Table 10 Cumulative Plus Project - Mitigated Level of Service ..... 32

# Introduction

This study assesses the potential transportation-related effects of the proposed Marysville Joint Unified School District (MJUSD) Middle School, Alternative Education High School, Adult Education School and Educational Support Services Center project on weekday morning and mid-afternoon peak hour traffic conditions at nearby key intersections under existing and cumulative conditions. This report presents a description of the assumptions and methods used to conduct the study, the findings of the analysis and mitigation measures to lessen the potential impacts of project traffic.

## Project Description

The proposed master planned project is located on a 50 acre site at 2176 Hammonton Smartville Road in the community of Linda in unincorporated Yuba County. The project is comprised of an approximately 1,168-student Middle School, a 460-student Alternative Education High School, a 100-student Adult Education School, and the Educational Support Services Center for the MJUSD.

Vehicular access to the proposed project would primarily be provided via two access points on Hammonton Smartville Road; one at Trevor Drive and another at a new limited-access driveway to the east of Trevor Drive. The Trevor Drive intersection would provide full movement access; while only right-in-right-out turning movements would be allowed from the Project Driveway East. Another limited access driveway allowing only right-in-right-out turning movements may be considered by the School District to further enhance on-site circulation. This analysis assumes only two access points, which reflects a more conservative approach.

An area map showing the project location is provided in Figure 1.

## Figure 1 Project Vicinity Map



# Existing No Project Conditions

This section describes the existing conditions in the vicinity of the proposed project, including the existing roadway network, lane configurations and geometries, and existing peak hour traffic volumes

## Existing Roadway Network

Local roads that provide circulation and access to the project site are describe below**.**

**Hammonton Smartville Road** is an east-west rural road that spans between the communities of Linda and Smartville. It terminates at Highway 20 in Smartville, east of the project site. To the west, Hammonton Smartville Road turns southwestward at its junction with Simpson Lane, passes N. Beale Road and ends shortly beyond Avondale Avenue.

**Simpson Lane** is a short two-lane rural road that links Hammonton Smartville Road with Ramirez Street in Marysville to the west where it connects with Highway 20.

**Dunning Avenue** is a north-south local street that serves Linda Elementary School and the residential neighborhood to the west of the project site. It extends north from Linda Avenue, past Hammonton Smartville Road and terminates in the residential area to the north.

**Trevor Drive** is a discontinuous local street that serves a small residential area on the north of Hammonton Smartville Road across from the project site. Its intersection with Hammonton Smartville Road would provide one of the two vehicular access points for the proposed project.

**Dantoni Road** connects Hammonton Smartville Road to Simpson Dantoni Road, where it turns northeastward to continue through fields and farmlands. The two-lane road's intersection with Hammonton Smartville Road represents the northeast corner of the project site.

**Alberta Avenue** is a two-lane local street that operates between Hammonton Smartville Road and N. Beale Road, serving rural residential land uses.

**Sutter Street** is a discontinuous local street that serves a small residential area on the north of N. Beale Road. It also provides access the Yuba Community College to the south.

**N. Beale Road** provides access to Highway 70 via Hammonton Smartville Road. The east-west road has four travel lanes and spans between Highway 70 and Beale Air Force Base.

# Existing Traffic Volumes

Eight intersections most likely to be impacted by the proposed project were selected for analysis. These intersections are listed below and shown in Figure 2.

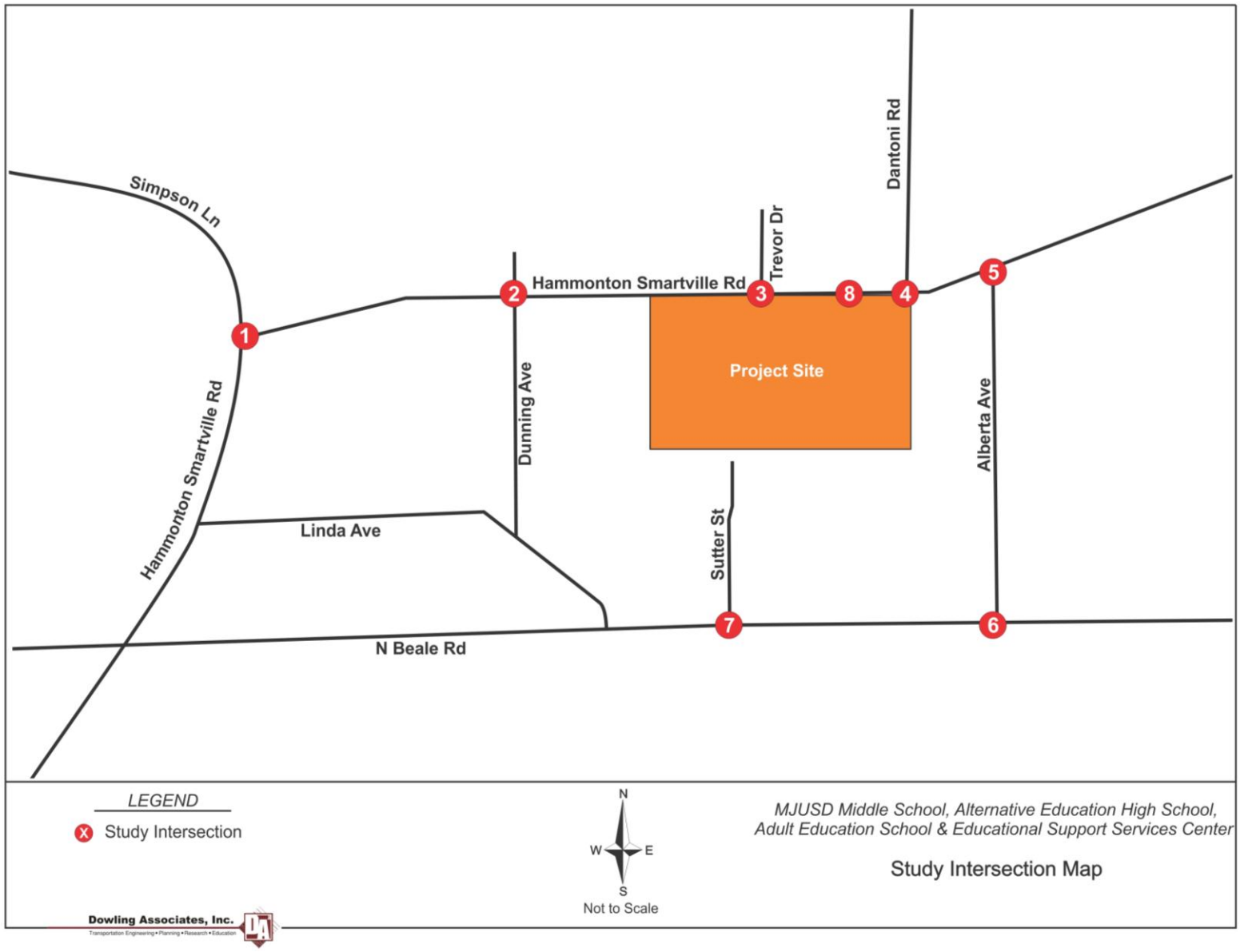
1. Hammonton Smartville Road / Simpson Lane
2. Hammonton Smartville Road / Dunning Avenue
3. Hammonton Smartville Road / Trevor Drive
4. Hammonton Smartville Road / Dantoni Road
5. Hammonton Smartville Road / Alberta Avenue
6. N. Beale Road / Alberta Avenue
7. N. Beale Road / Sutter Street
8. Hammonton Smartville Road / Project Access East (future intersection - part of project)

Peak hour turning movement volumes at the existing intersections were collected on September 13, 2011. Counts were conducted between 7 a.m. and 9 a.m., which represents the normal peak morning commuter period as well as the start of school, and between 2 p.m. and 4 p.m. to coincide with the peak after school pickup period. Due to the ongoing Yuba Levee Project, the northern portion of Dantoni Road was closed to non-construction traffic on the day of count collection and the connection to Simpson-Dantoni Road is obstructed. However, a comparison to count data collected at the intersection of Hammonton Smartville Road and Dantoni Road indicated that the closure does not appear to affect traffic volume at this location.

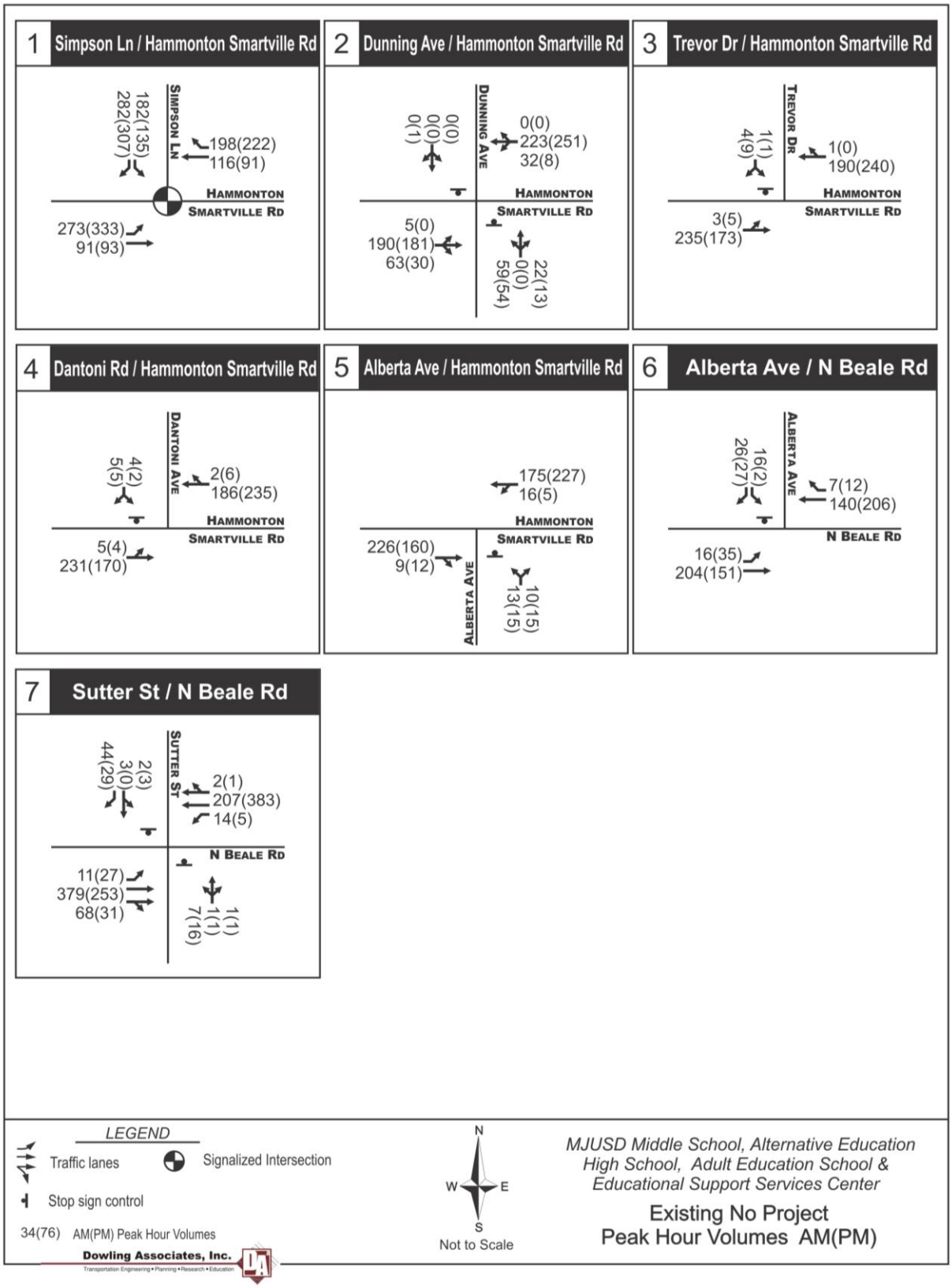
24-hour vehicle volume and classification counts were also conducted between 7 a.m. on September 12, 2011 and 7 a.m. on September 13, 2011 to determine the amount of heavy vehicles (with 3 axles or more) on Hammonton Smartville Road. The results indicated high level of truck traffic on this road. Based on the count results, an average of 17 percent heavy vehicles in the morning peak period and ten percent in the afternoon peak period were projected for traffic on Hammonton Smartville Road; while four percent heavy vehicles are projected on N. Beale Road and two percent heavy vehicles are projected on all minor streets for both peak periods in the analysis.

Figure 3 presents the existing turning movement volumes for the AM and PM peak hours, lane configurations and traffic control at the study intersections. In general, the peak morning hour occurred early in the peak period. The peak hour at four of the seven existing intersections occurred between 7 a.m. and 8 a.m.; while two occurred between 7:15 a.m. and 8:15 a.m. In the mid-afternoon, the peak hour occurred later in the count period. At three of the intersections, the peak hour occurred between 2:45 p.m. and 3:45 p.m. and at another three intersections, the peak hour was between 3 p.m. and 4 p.m. These results are consistent with results from the 24-hour count which indicate high volume of traffic between 6 a.m. and 8 a.m. and between 3 p.m. and 5 p.m.

## Figure 2 Study Intersections



## Figure 3 Existing Lanes & Controls and Peak Hour Traffic Volumes



# Level of Service Methodology

The methodology used herein to analyze intersection level of service is outlined in the Transportation Research Board's *Highway Capacity Manual, 2000*. Level of service (LOS) is a concept used by traffic engineers to describe the peak hour traffic conditions at a given intersection. There are six levels of service, Level A through Level F, with A being the least congested and F being the most congested.

At intersections with minor street stop control, most of the major street traffic does not experience delays, and by definition have acceptable conditions. The major street left-turn movements and the minor street movements are all susceptible to delay of varying degrees. Generally, the higher the major street traffic volumes, the higher the delay for the minor movements. For analysis of unsignalized intersections, an average total delay per vehicle for each minor street movement and for the major street left-turn movements is calculated, based on the availability of adequate gaps in the major street through traffic. A level of service designation is assigned to individual movements or to combinations of movements (in the case of shared lanes) based upon delay. Levels of service are reported herein for each movement (or group of movements) based upon the respective average delay per vehicle. Table 1 presents the average delay criteria used to determine the LOS at unsignalized intersections.

It is not unusual for some of the minor street movements at unsignalized intersections to have LOS D, E or F conditions while the major street movements have LOS A, B or C conditions. In such a case, the minor street traffic experiences delays that can be substantial for individual minor street vehicles, but the majority of vehicles using the intersection have very little delay. Usually in such cases the minor street traffic volumes are relatively low. If the minor street volume is large enough, improvements to reduce the minor street delay may be justified, such as channelization, widening, or signalization.

At all-way stop intersections and at signalized intersections, the LOS is determined by the weighted-average delay for all vehicles entering the intersection. The methodologies for these types of intersections calculate a single weighted-average delay and LOS for the intersection as a whole. The average delay criteria used to determine the LOS at all-way stop intersections is the same as that presented in Table 1. Table 2 presents the average delay criteria used to determine the LOS at signalized intersections.

## Table 1 Level of Service Criteria for Unsignalized Intersections

| Unsignalized Intersections | |
|---|---|
| **Level of Service** | **Average Delay[1] (seconds/veh)** |
| A | 0.0 - 10.0 |
| B | 10.1 - 15.0 |
| C | 15.1 - 25.0 |
| D | 25.1 - 35.0 |
| E | 35.1 - 50.0 |
| F | >50.0 |

[1] Weighted average delay

Source: *Highway Capacity Manual 2000*, Transportation Research Board, Washington DC

## Table 2 Level of Service Criteria for Signalized Intersections

| Level of Service (LOS) | Average Delay[1] (secs/veh) | Description |
|---|---|---|
| A | ≤ 10.0 | **Very Low Delay:** This level of service occurs when progression is extremely favorable and most vehicles arrive during a green phase. Most vehicles do not stop at all. |
| B | 10.1-20.0 | **Minimal Delays:** This level of service generally occurs with good progression, short cycle lengths, or both. More vehicles stop than at LOS A, causing higher levels of average delay. |
| C | 20.1-35.0 | **Acceptable Delay:** Delay increases due to only fair progression, longer cycle lengths, or both. Individual cycle failures (*to service all waiting vehicles*) may begin to appear at this level of service. The number of vehicles stopping is significant, though many still pass through the intersection without stopping. |
| D | 35.1-55.0 | **Approaching Unstable/Tolerable Delays:** The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable. |
| E | 55.1-80.0 | **Unstable Operation/Significant Delays:** This is considered by many agencies the upper limit of acceptable delays. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences. |
| F | > 80.0 | **Excessive Delays:** Describes operations with average delay in excess of 60 seconds per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation (i.e., when arrival flow rates exceed the capacity of the intersection). It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels. |

[1] Weighted average of delay on all approaches. This is the measure used by the *Highway Capacity Manual* to determine level of service.

Source: *Highway Capacity Manual 2000*, Transportation Research Board, Washington DC

# Signal Warrant Status

The potential need for traffic signals at the unsignalized intersections was evaluated. The results are presented in the respective sections below, along with the intersection LOS .

As stated in the 2003 edition of the Manual on Uniform Traffic Control Devices (MUTCD), "*An engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic control signal is justified at a particular location. The investigation of the need for a traffic control signal shall include an analysis of the applicable factors contained in the following traffic signal warrants and other factors related to existing operation and safety at the study location:*

*Warrant 1: Eight-Hour Vehicular Volume*
*Warrant 2: Four-Hour Vehicular Volume*
*Warrant 3: Peak Hour*
*Warrant 4: Pedestrian Volume*
*Warrant 5: School Crossing*
*Warrant 6: Coordinated Signal System*
*Warrant 7: Crash Experience*
*Warrant 8: Roadway Network*

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal."

This traffic impact analysis did not evaluate all of the warrants for traffic signals, but instead focused on the peak hour warrant (Warrant 3). The MUTCD states that, "This [peak hour] signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time." So the peak hour warrant is being used in this impact analysis study as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that fail to exceed the peak hour warrant are considered for the purposes of this impact analysis to be unlikely to meet one or more of the other signal warrants (such as the 4-hour or 8-hour warrants). However, this does not mean that a signal is definitely unwarranted. A signal may be warranted by other criteria, some of which cannot be known until the intersection is constructed and operational. This peak hour analysis is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction.

Traffic signals tend to reduce the potential for right-angle type collisions but also tend to increase the potential for less severe rear-end collisions. The signal warrant volumes represent the threshold point at which the potential for more rear-end collisions is offset by the potential for fewer more severe right-angle collisions. When the signal warrant volumes are exceeded, an intersection should be considered for signalization; however,

the decision to install a traffic signal should not be based solely upon the warrants. Delay, congestion, approach conditions, driver confusion, future land (this is general information pertaining to signal warrant analysis….does not need discussion on County Regional Park) use or other evidence of the need for right of way assignment beyond that provided by stop signs must be demonstrated.

# Impact Significance Criteria

All the study intersections are located in the community of Linda in Yuba County. Linda is a part of the County's Valley Growth Boundary as defined in the Yuba County General Plan, which was adopted in June 2011. The General Plan established the following relevant policies:

Policy CD16.2 On County roads in the Valley Growth Boundary, Level of Service "D" shall be maintained during the PM Peak Hour at signalized intersections, as feasible.

Policy CD16.5 Where a new development would exceed the County's Level of Service policies, applicants shall first consider feasible revisions to the proposed development that would increase connectivity, enhance bicycle/pedestrian/transit access, provide additional travel demand management measures, and/or provide other revisions that would help to meet LOS standards by reducing vehicle miles traveled on roads exceeding the target LOS, prior to consideration of adding capacity to roadways and intersections.

Policy CD16.10 The County would not use traffic level of service policies to analyze and mitigate CEQA impacts of new developments, but instead would use its level of service policies to assess fair-share funding of transportation facilities necessary to serve new projects

Policy CD16.11 The County would analyze and mitigate transportation impacts in CEQA document according to their relative increase in vehicular travel demand.

Policy CD5.1 Valley Neighborhoods should provide for most daily and weekly destinations, including a mix of commercial retail and services, schools, parks and other civic uses.

Policy CD14.6 The County would coordinate its land use planning with local school districts to ensure adequate educational facilities with safe and convenient pedestrian and bicycle access to and from surrounding neighborhoods.

The General Plan has not established quantifiable thresholds to determine impacts at unsignalized intersections and at signalized intersections outside the traditional PM peak

hour, which generally falls between 4 p.m. and 6 p.m. For the purpose of this study, LOS D operations at both signalized and unsignalized intersections are considered acceptable.

# Existing No Project Conditions

The intersection level of service at the study intersections under Existing Conditions is presented in Table 3. All study intersections are operating at LOS C or better during both morning and afternoon peak hours. Furthermore, none of the unsignalized intersections meet the MUTCD peak hour signal warrant. Detailed LOS worksheets and signal warrant sheets are provided in Appendix A.

**Table 3 Existing No Project Conditions - Level of Service**

| | | | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|
| ID# | Intersection Name | Control | Delay (sec) | LOS | Delay (sec) | LOS |
| 1 | Hammonton Smartville Rd/Simpson Ln | Signalized | 13.9 | B | 12.5 | B |
| 2 | Hammonton Smartville Rd/Dunning Av | Unsignalized | | | | |
| | | NB Approach | 13.9 | B | 12.7 | B |
| | | SB Approach | --- | --- | 9.6 | A |
| | | EB Left | 8 | A | --- | --- |
| | | WB Left | 8.2 | A | 7.8 | A |
| 3 | Hammonton Smartville Rd/Trevor Dr | Unsignalized | | | | |
| | | SB Approach | 9.8 | A | 9.9 | A |
| | | EB Left | 7.8 | A | 7.9 | A |
| 4 | Hammonton Smartville Rd/Dantoni Av | Unsignalized | | | | |
| | | SB Approach | 10.4 | B | 10.2 | B |
| | | EB Left | 7.8 | A | 7.9 | A |
| 5 | Hammonton Smartville Rd/Alberta Av | Unsignalized | | | | |
| | | NB Approach | 11 | B | 10.5 | B |
| | | WB Left | 8 | A | 7.7 | A |
| 6 | N. Beale Rd / Alberta Av | Unsignalized | | | | |
| | | SB Approach | 10.1 | B | 9.8 | A |
| | | EB Left | 7.6 | A | 7.8 | A |
| 7 | N. Beale Rd / Sutter St | Unsignalized | | | | |
| | | NB Approach | 20.6 | C | 15 | C |
| | | SB Approach | 10.6 | B | 10.3 | B |
| | | EB Left | 8 | A | 8.3 | A |
| | | WB Left | 9.1 | A | 7.9 | A |

**Source: Dowling Associates, Inc. 2011**

# Existing Pedestrian and Bicycle Facilities

While sidewalks are found in the newer residential developments such as the one off Trevor Drive to the north of the project site and the one off College View Drive to the south of the project site, they are generally not provided in the project vicinity. Wide shoulders are provided on both sides of Hammonton Smartville Road that function as bikeways and pedestrian ways. Yuba County is currently preparing a bikeway master plan update to guide the development of bikeways in Yuba County (This is just for informational purpose)

# Existing Transit Service

Yuba-Sutter Transit provides local bus service in Yuba and Sutter counties. It also offers commuter routes to Sacramento and a number of routes to serve rural communities. Route 6 operates between Erie Road and Yuba College with stops along Hammonton Smartville Road. It offers transfers to other local routes at Yuba College and at the N. Beale Transit Center. The nearest bus stops to the project site are located at the Hammonton Smartville Road intersections of Dunning Avenue and Alberta Avenue.

# Existing Plus Project Conditions

To develop the Existing Plus Project (EPP) traffic conditions, the peak hour traffic to be generated by the proposed project was estimated. The EPP traffic volumes were based on the existing traffic volumes plus traffic expected from the proposed project. The following section describes the project trip generation estimates, distribution and assignment. The EPP conditions are compared relative to existing conditions to determine the potential impacts due to the proposed project.

## Trip Generation

The project is primarily made up of grade 6-12 schools. This traffic analysis focused on the periods when the highest amount of trips would be generated by the project: Morning (AM) peak hour and Mid-Afternoon (PM) peak hour. A trip generation analysis was performed based on the Institute of Transportation Engineers (ITE) *Trip Generation* 8th edition[1] as well as information furnished by the Marysville Joint Unified School District. The trip generation details for the proposed land uses are summarized in Table 4. The results indicate that the proposed project would generate 740 trips in the AM peak hour and 605 trips in the PM peak hour.

Middle School. ITE data (Code 522) serve as the basis for trip generation calculation for this category with alternative mode adjustment based on District information. The District has projected that 35 percent of the students would travel to school by school bus and 25 percent on foot. While the ITE data have already included some alternative mode usage, the exact percentages are not provided in the manual. Data from a 2010 national survey conducted by National Center for Safe Routes to School[2] were used as a proxy for ITE results, which are also based on national data. The 2010 survey indicated that on average 14 percent of middle school students walk to school and 44 percent ride a school bus. The national school bus mode usage is significantly higher than the project; while the national walk trip is much lower than the project. Based on this information, an alternative mode adjustment of two percent was included to arrive at the Middle School's trip generation.

Alternative Education High School. ITE's "High School" category (Code 530) serves as the basis for trip generation calculation for the alternative high school. No alternative mode adjustment was made. The alternative high school consists of two programs including classroom and independent study.

> Classroom Program. Half of the 200-classroom students would attend the morning class session that lasts between 7:30 a.m. and 11:30 a.m. and half would

[1] Institute of Transportation Engineers, *Trip Generation,* 8th edition, 2008.
[2] National Center for Safe Routes to School, *Safe Routes to School Travel Data: A Look at Baseline Results from Parents Surveys and Student Travel Tallies,* January 2010.

attend the afternoon session that lasts between 12 noon and 4:00 p.m. Only the arrivals of the morning session and the departures of the afternoon session are captured in the analysis as the departure period of the morning session and the arrival period of the afternoon session fall outside the study periods.

Independent Study. The 260-students in the independent study program are on campus only once a week for one hour between 3:00 p.m. and 9:00 p.m. For the purpose of analysis, it was conservatively assumed that all 260 students would be on campus on the same day of the week. Their attendance is evenly distributed during the six hour period with 44 students arriving and departing during each hour.

Adult Education School. The adult education school is projected to have an enrollment of up to 100 students, who would arrive on campus between 3:00 p.m. and 7:00 p.m. and depart around 9:00 p.m. It was assumed that 25 students arrive on campus during the PM peak hour.

Educational Support Services Center. The Educational Support Services Center would house 92 office staff and 96 operations, maintenance and transportation staff. It would also serve as a storage facility for 90 school buses. Because ITE does not have information for school district staff and operations personnel, the trip generation estimates for the Educational Support Service Center is calculated based on information provided by the School District. It is projected that one-third of the office employees would arrive during the morning peak hour and depart during the afternoon peak hour; while about 23 of the operations and operations staff would arrive and depart during the same periods. All other personnel would arrive or depart outside of the peak hours.

Based on information provided by the District, it is assumed that all school buses would depart the project site prior to the start of the morning and mid-afternoon peak hours and 50 percent of them would return during the peak hours.

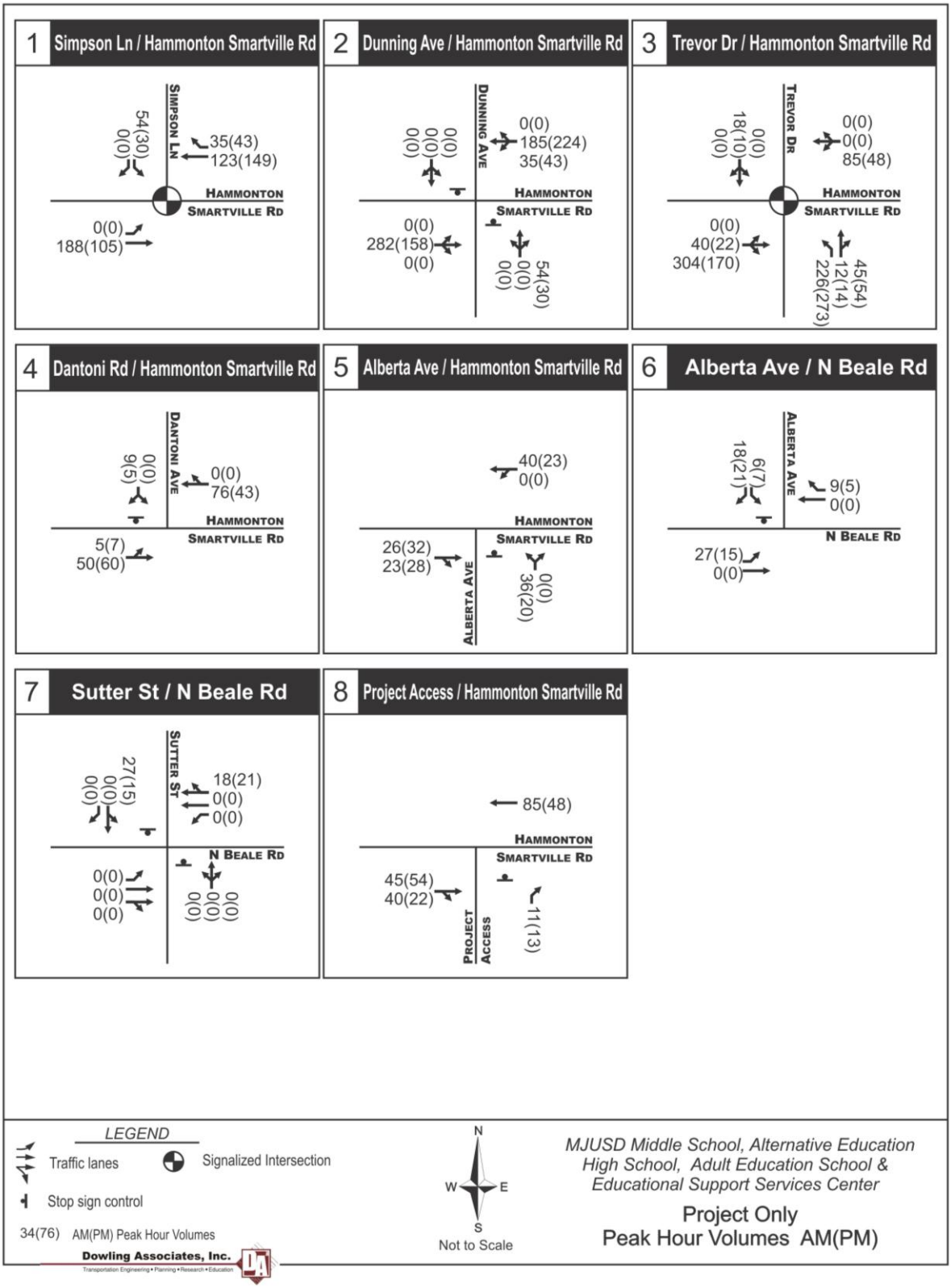
Figure 4 presents the project-generated trips at the study intersections.

## Table 4 Trip Generation Estimates

| Land Use | ITE Land Use | Quantity | Units | Morning Peak Hour | | | Mid Afternoon Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | IN | OUT | Total | IN | OUT | Total |
| **Middle School** | 522 | 1,168 | Students | 350 | 281 | 631 | 164 | 198 | 362 |
| Alternative Mode Adjustment (-2%) | | | | -7 | -6 | -13 | -3 | -4 | -7 |
| ***Total Middle School*** | | | | ***343*** | ***275*** | ***618*** | ***161*** | ***194*** | ***355*** |
| | | | | | | | | | |
| **Alternative High School** | 530 | | | | | | | | |
| Morning Sessions (7:30 - 11:30 AM) | | 100 | Students | 29 | 13 | 42 | *Sessions end at 11:30 AM* | | |
| Afternoon Sessions (12:00 - 4:00 PM) | | 100 | Students | *Sessions start at 12:00 PM* | | | 10 | 19 | 29 |
| Independent Study Sessions | | 260 | Students | *Sessions start at 3:00 PM* | | | 44 | 44 | 88 |
| Adult School Sessions | | 100 | | *Sessions start at 3:00 PM* | | | 25 | 0 | 25 |
| ***Total Alternative High School*** | | | | ***29*** | ***13*** | ***42*** | ***79*** | ***63*** | ***142*** |
| | | | | | | | | | |
| **Non-Academic** | | | | | | | | | |
| Office Employees | | 92 | Employees | 31 | 4 | 35 | 6 | 31 | 37 |
| Other Non-Academic Employees | | 96 | Employees | *All arrive before 7:00 AM* | | | 3 | 23 | 26 |
| Buses | | 90 | Buses | 44 | 1 | 45 | 1 | 44 | 45 |
| ***Total Non-Academic*** | | | | ***75*** | ***5*** | ***80*** | ***10*** | ***98*** | ***108*** |
| **Total Net Trips** | | | | **447** | **293** | **740** | **250** | **355** | **605** |

Source: Dowling Associates, Inc., 2011

## Figure 4 Project Only Peak Hour Traffic Volumes



# Trip Distribution

Ten gateways were established to which project trips are distributed as shown in Figure 1. The trip distribution percentages to each gateway in the peak period were calculated based on weighted average of the project uses' distribution percentages. The ten gateways and the trip distribution are shown in Table 5.

**Table 5 Project Trip Distribution**

| Gateway | Percentage |
|---|---|
| Simpson Lane - North | 12% |
| Farrell Way/Mapes Way/McLaughlin Way - South | 9% |
| Dunning Avenue - South | 13% |
| Hammonton Smartville Road - East | 9% |
| Hammonton Smartville Road - West | 41% |
| Dantoni Road - North | 2% |
| North Beale Road - East | 2% |
| Sutter Street - South | 6% |
| Trevor Drive - North | 4% |
| Between Trevor Drive and Dunning Avenue - North | 2% |

Source: Dowling Associates, Inc. 2011

# Trip Assignment

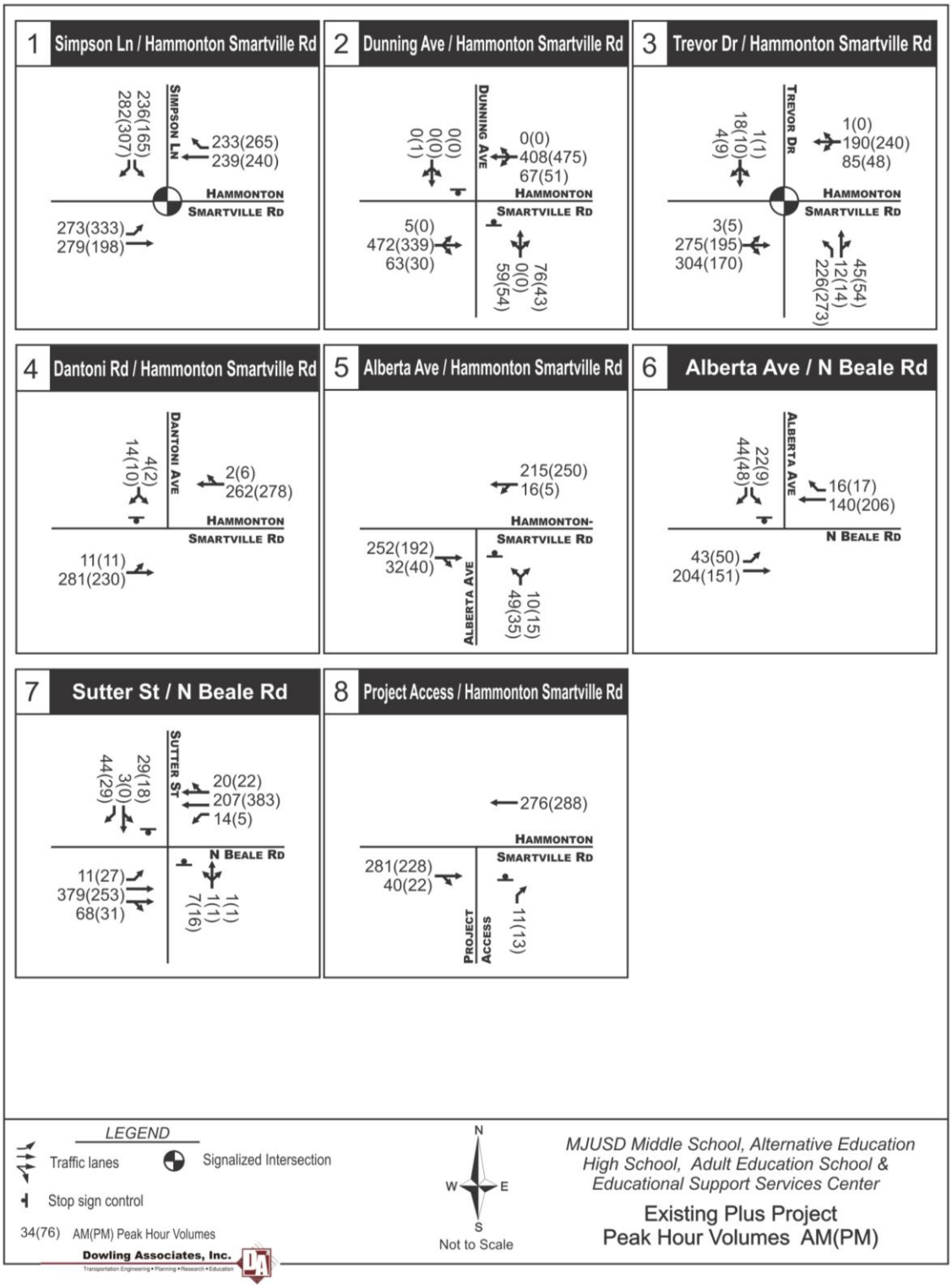
Trips are generally assigned to the roadway based on the shortest distance between the project site and the gateways.

Project trips to and from the proposed project were assigned through the study intersections and added to existing turning movement volumes. The resulting AM and PM peak hour intersection turning movement volumes under Existing Plus Project conditions are presented in Figure 5.

# Existing Plus Project Intersection Operations

Levels of service for the Existing Plus Project conditions are summarized in Table 6. The results indicate that all study intersections with the exception of Hammonton Smartville Road/Trevor Dr would operate within acceptable range with the addition of project traffic onto the existing roadway network. The intersection of Hammonton Smartville Road/Trevor Dr intersection is forecast to operate at LOS F, with the addition of proposed project. Furthermore, this intersection would meet MUTCD peak hour signal warrant. Detailed LOS worksheets and peak hour signal warrant sheets are provided in Appendix A.

## Figure 5 Existing Plus Proposed Project Peak Hour Volumes



## Table 6 Existing Plus Proposed Project – Level of Service

| ID# | Intersection Name | Control | AM Peak Hour Delay (sec) | AM Peak Hour LOS | PM Peak Hour Delay (sec) | PM Peak Hour LOS |
|---|---|---|---|---|---|---|
| 1 | Hammonton Smartville Rd/Simpson Ln | Signalized | 17.1 | B | 14.5 | B |
| 2 | Hammonton Smartville Rd/Dunning Av | Unsignalized | | | | |
| | | NB Approach | 34.8 | D | 21.1 | C |
| | | SB Approach | --- | --- | --- | --- |
| | | EB Left | 8.6 | A | 11.2 | B |
| | | WB Left | 9.5 | A | 8.3 | A |
| 3 | Hammonton Smartville Rd/Trevor Dr | Unsignalized | | | | |
| | | NB Approach | **113.6** | **F** | **65.9** | **F** |
| | | SB Approach | 22.1 | C | 14 | B |
| | | EB Left | 7.8 | A | 7.9 | A |
| | | WB Left | 9.6 | A | 8.4 | A |
| 4 | Hammonton Smartville Rd/Dantoni Av | Unsignalized | | | | |
| | | SB Approach | 10.7 | B | 10.4 | B |
| | | EB Left | 8 | A | 8 | A |
| 5 | Hammonton Smartville Rd/Alberta Av | Unsignalized | | | | |
| | | NB Approach | 13 | B | 11.8 | B |
| | | WB Left | 8.1 | A | 7.8 | A |
| 6 | N. Beale Rd / Alberta Av | Unsignalized | | | | |
| | | SB Approach | 10.3 | B | 10.2 | B |
| | | EB Left | 7.7 | A | 7.9 | A |
| 7 | N. Beale Rd / Sutter St | Unsignalized | | | | |
| | | NB Approach | 20.7 | C | 15.1 | C |
| | | SB Approach | 13.5 | B | 12.2 | B |
| | | EB Left | 8 | A | 8.4 | A |
| | | WB Left | 9.1 | A | 7.9 | A |

Note 1: Movement does not exist under no project scenario.

**Source: Dowling Associates, Inc. 2011**

# Year 2030 Cumulative Conditions

Cumulative conditions present traffic conditions expected in 2030, without the proposed project. The Cumulative condition is used as a future baseline to compare against the Cumulative with Project condition. This comparison identifies long-term project-related impacts. The traffic generated by the project was added to the future conditions to determine the level of service at the study intersections. The future baseline traffic volumes were derived from the Countywide Travel Demand Model that was used to develop the recently adopted Yuba County General Plan. Per instruction from County staff, the General Plan's Growth Scenario 1 (Alternative 2) was used.

For the purposes of the traffic analysis, the lane geometries and traffic controls were assumed to remain the same as under the existing condition. The cumulative no project intersection turning movement volumes are shown in Figure 6.

## Cumulative No Project - Intersection Operations

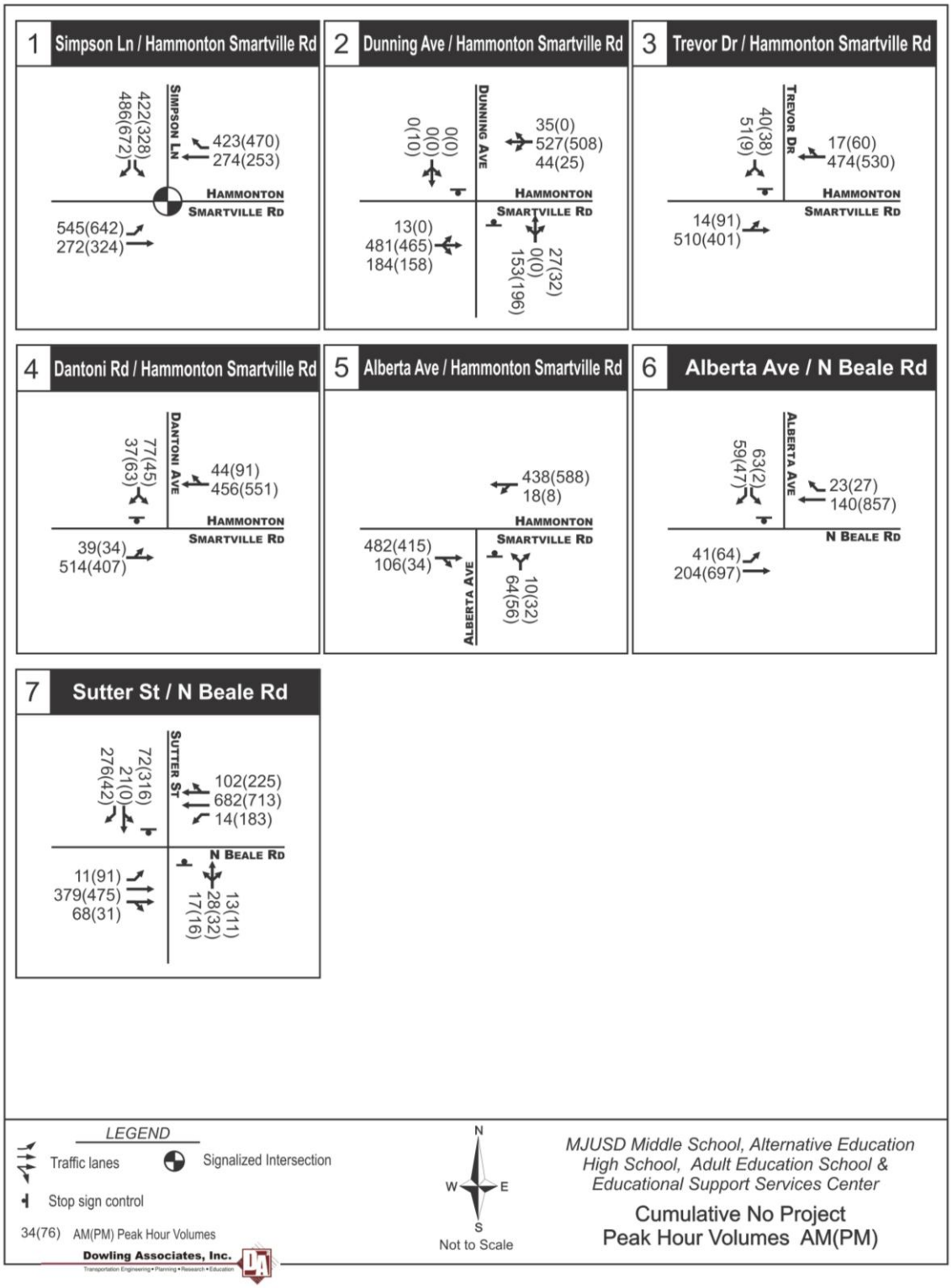
Table 7 presents the intersection level of service at the study intersections under the Cumulative No Project conditions. The intersection of Hammonton Smartville Road/Dunning Avenue and N. Beale Road/Stutter Street are forecast to operate at unacceptable LOS F. All other intersections are forecast to operate at acceptable LOS D or better

At the **Hammonton Smartville Road/Dunning Avenue intersection (#2),** the minor street traffic would experience major delays during both AM and PM peak hours. Analysis results have also shown that the MUTCD peak hour signal warrant would be met at this intersection under Cumulative No Project conditions even before the addition of project generated traffic.

Similarly, the minor street traffic at the intersection of **N. Beale Road and Sutter Street (#7)** would also experience LOS F conditions during the PM peak hour. The intersection would also meet MUTCD peak hour signal warrant under Cumulative No Project conditions before the addition of project generated traffic.

Detailed LOS worksheets and peak hour signal warrant sheets are provided in Appendix A.

## Figure 6 Cumulative No Project Peak Hour Volumes



## Table 7 Cumulative No Project - Levels of Service

| ID# | Intersection Name (Jurisdiction) | Control | Cumulative No Project | | | |
|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | PM Peak Hour | |
| | | | Delay (sec) | LOS | Delay (sec) | LOS |
| 1 | Hammonton Smartville Rd/Simpson Ln | Signalized | 32.4 | C | 27.2 | C |
| 2 | Hammonton Smartville Rd/Dunning Av | Unsignalized | 10.5 | B | 26.1 | **D** |
| | | NB Approach | **82.1** | **F** | **158** | **F** |
| | | SB Approach | --- | --- | 11.5 | B |
| | | EB Left | 8.9 | A | --- | --- |
| | | WB Left | 9.4 | A | 9 | A |
| 3 | Hammonton Smartville Rd/Trevor Dr | Unsignalized | 1.6 | A | 1.8 | A |
| | | NB Approach | ---[2] | ---[2] | ---[2] | ---[2] |
| | | SB Approach | 17.6 | C | 24.5 | C |
| | | EB Left | 8.7 | A | 9.2 | A |
| | | WB Left | ---[2] | ---[2] | ---[2] | ---[2] |
| 4 | Hammonton Smartville Rd/Dantoni Av | Unsignalized | 2.7 | A | 2.1 | A |
| | | SB Approach | 24.8 | C | 20.3 | C |
| | | EB Left | 8.8 | A | 9.1 | A |
| 5 | Hammonton Smartville Rd/Alberta Av | Unsignalized | 1.6 | A | 1.6 | A |
| | | NB Approach | 22.4 | C | 20.3 | C |
| | | WB Left | 9 | A | 8.4 | A |
| 6 | N. Beale Rd / Alberta Av | Unsignalized | 3.1 | A | 0.9 | A |
| | | SB Approach | 10.7 | B | 17.8 | C |
| | | EB Left | 7.6 | A | 10.2 | B |
| 7 | N. Beale Rd / Sutter St | Unsignalized | 6.6 | A | **OVF**[1] | **F** |
| | | NB Approach | 33.1 | D | **214.3** | **F** |
| | | SB Approach | 24.2 | C | **OVF**[1] | **F** |
| | | EB Left | 9.5 | A | 10.8 | B |
| | | WB Left | 8.3 | A | 9.2 | A |
| 8 | Hammonton Smartville Rd /Project Access | Unsignalized | | | | |
| | | NB Approach | Project Intersection | | | |

Note 1: Overflowing conditions, delay greater than 120 seconds.

Note 2: Movement does not exist under no project conditions.

Source: Dowling Associates, Inc., 2011

# Recommended Improvements - Cumulative No Project

The intersection of Hammonton Smartville Road/Dunning Avenue and N. Beale Road/Stutter Street are forecast to operate at unacceptable LOS F without the addition of proposed project. The signal warrant volume levels would be met and the delay levels on the minor street approaches would foster potentially hazardous behavior as impatient motorists might be tempted to enter the intersection before sufficient traffic gaps are available. This section presents the recommended mitigation measure to mitigate the future baseline deficiency under the no project conditions.

1. **Hammonton Smartville Road/Dunning Avenue –** This intersection meets the peak hour signal warrant. Installation of signal at this intersection will significantly reduce delay and mitigate the level of service from LOS F from LOS A.

2. **N. Beale Road/Stutter Street -** This intersection meets the peak hour signal warrant. Installation of signal at this intersection will mitigate the level of service from LOS F from LOS C or better.

   Table 8 below presents the level of service at the above mentioned intersections with the implementation of recommended improvements.

**Table 8 Recommended Improvements - Cumulative No Project Conditions**

| ID# | Intersection Name (Jurisdiction) | Recommended Improvements - Cumulative No Project Conditions | | | | | Signal Warrants Met? |
|---|---|---|---|---|---|---|---|
| | | Control | AM Peak Hour Delay (sec) | LOS | PM Peak Hour Delay (sec) | LOS | |
| 2 | Hammonton Smartville Rd/Dunning Av | Signalized | 5.7 | A | 11.9 | B | Yes |
| 7 | N. Beale Rd / Sutter St | Signalized | 18.5 | B | 20.6 | C | Yes |

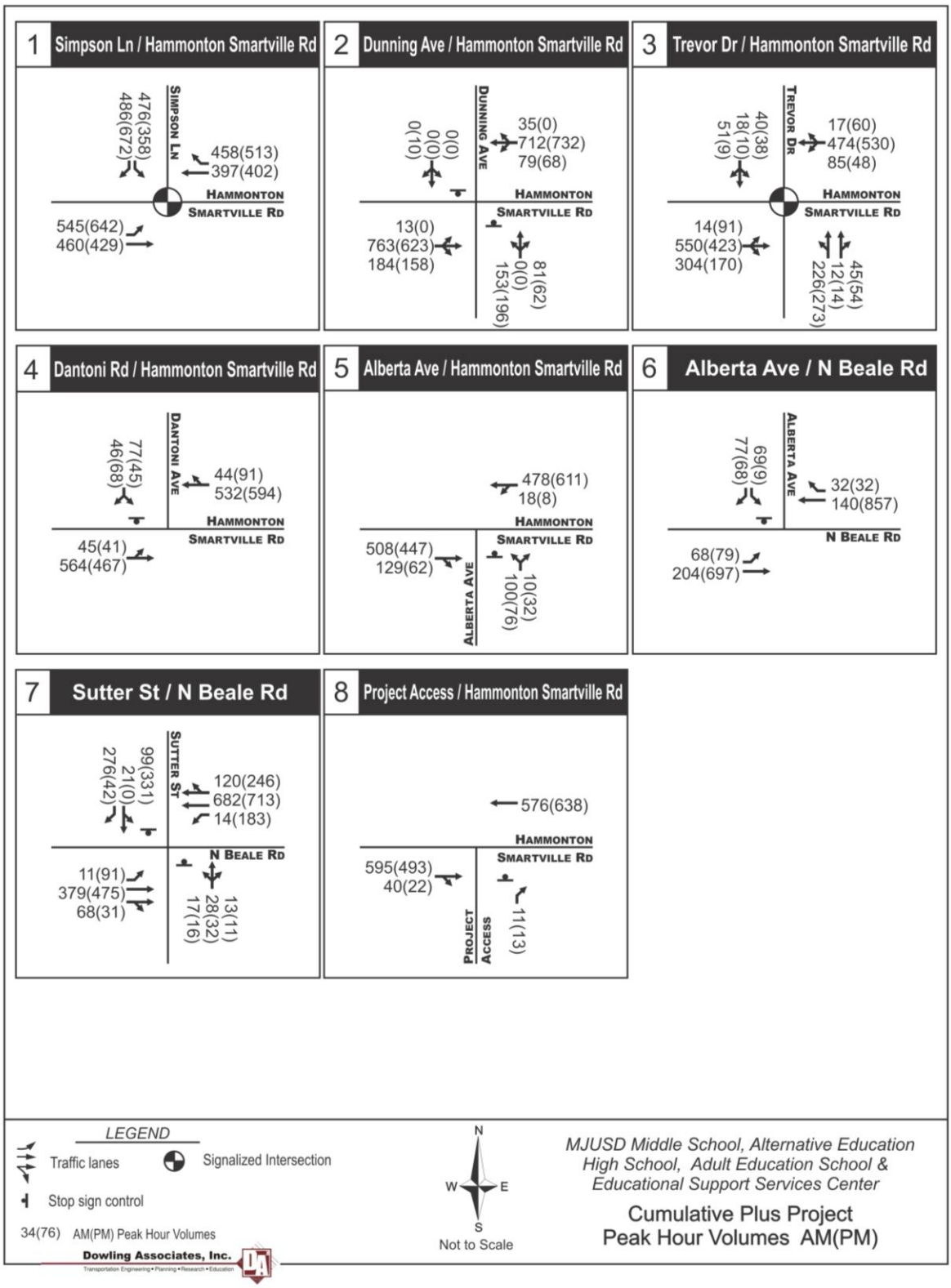
Source: Dowling Associates, Inc., 2011

# Cumulative Plus Project – Intersection Operations

Figure 7 presents the cumulative plus project volumes and Table 9 presents the Intersection operations under the cumulative plus project conditions. As shown in this table, the following three intersections are forecast to operate at unacceptable LOS.

1. Hammonton Smartville Rd/Dunning Av
2. Hammonton Smartville Rd/Trevor Dr
3. N. Beale Rd / Sutter St

## Figure 7 Cumulative Plus Proposed Project Peak Hour Volumes



## Table 9 Cumulative Plus Project – Level of Service

| | | | Cumulative with Project | | | |
|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | PM Peak Hour | |
| ID# | Intersection Name (Jurisdiction) | Control | Delay (sec) | LOS | Delay (sec) | LOS |
| 1 | Hammonton Smartville Rd/Simpson Ln | Signalized | 51.4 | D | 42.2 | D |
| 2 | Hammonton Smartville Rd/Dunning Av | Unsignalized | 68.4 | **F** | 111.7 | **F** |
| | | NB Approach | **OVF** [1] | **F** | **OVF** | **F** |
| | | SB Approach | --- | --- | 13.8 | B |
| | | EB Left | 9.6 | A | --- | --- |
| | | WB Left | 11.1 | B | 9.9 | A |
| 3 | Hammonton Smartville Rd/Trevor Dr | Unsignalized | **OVF** [1] | **F** | **OVF** | **F** |
| | | NB Approach | **OVF** [2] | **F** | **OVF** | **F** |
| | | SB Approach | **76.1** | **F** | **71.4** | **F** |
| | | EB Left | 8.7 | A | 9.2 | A |
| | | WB Left | 10.6 | A | 9 | A |
| 4 | Hammonton Smartville Rd/Dantoni Av | Unsignalized | 3.3 | A | 2.3 | A |
| | | SB Approach | 31.6 | D | 23.4 | C |
| | | EB Left | 9.1 | A | 9.3 | A |
| 5 | Hammonton Smartville Rd/Alberta Av | Unsignalized | 2.9 | A | 2.3 | A |
| | | NB Approach | 31 | D | 25.7 | D |
| | | WB Left | 9.2 | A | 8.6 | A |
| 6 | N. Beale Rd / Alberta Av | Unsignalized | 3.6 | A | 1.4 | A |
| | | SB Approach | 11.1 | B | 21.3 | C |
| | | EB Left | 7.7 | A | 10.3 | B |
| 7 | N. Beale Rd / Sutter St | Unsignalized | 8.5 | A | **OVF** [1] | **F** |
| | | NB Approach | 33.9 | D | **225.4** | **F** |
| | | SB Approach | 31.8 | D | **OVF** [1] | **F** |
| | | EB Left | 9.5 | A | 10.9 | B |
| | | WB Left | 8.3 | A | 9.2 | A |
| 8 | Hammonton Smartville Rd /Project Access | Unsignalized | 0.1 | A | 0.1 | A |
| | | NB Approach | 12.4 | B | 11.4 | B |

Note 1: Overflowing conditions, delay greater than 120 seconds.

Note 2: Movement does not exist under no project conditions.

Source: Dowling Associates, Inc., 2011

# Impacts and Mitigation Measures

Impact criteria as described in the existing conditions section were applied to study intersections in accordance with Yuba County Guidelines.

## Existing with Project Conditions

The intersection of Hammonton Smartville Rd/Trevor Dr is forecast to operate at unacceptable LOS under the existing plus project conditions. Installation of signal at this intersection will mitigate the LOS from LOS F to LOS B. All other study intersections would operate within acceptable range.

## Cumulative with Project Conditions

The analysis has found that the intersection of Hammonton Smartville Road and Dunning Avenue (#2), Hammonton Smartville Road and Trevor Dr and N. Beale Road and Sutter Street (#7) would operate at unacceptable levels under Cumulative Plus Project conditions. Mitigation measures for these three intersections are discussed below and mitigated intersection level of service is presented in Table 10

1. **Hammonton Smartville Road and Dunning Avenue** – This intersection operates at unacceptable LOS with or without the proposed project. implementation of the improvement measures as described earlier under the section "Recommended Improvements – Cumulative No Project Conditions" will mitigate the intersection to acceptable LOS B or better.

2. **Hammonton Smartville Road and Trevor Dr –** This intersection is forecast to operate at unacceptable LOS with the addition of proposed project. Implementation of the below described mitigation measure will improve the intersection LOS to LOS D or better.

   ***Mitigation Measure*** – Install a traffic signal. Provide separate left and a shared through-right turn lane on the EB and WB approaches. Provided protected left-turn phase on the EB-WB approach and split phase on the NB-SB approach.

3. **N. Beale Road and Sutter Street** – This intersection operates at unacceptable LOS with or without the proposed project. implementation of the improvement measures as described earlier under the section "Recommended Improvements – Cumulative No Project Conditions" will mitigate the intersection to acceptable LOS C or better.

**Table 10 Mitigated Level of Service – Cumulative Plus Project Conditions**

| ID# | Intersection Name (Jurisdiction) | Recommended Improvements - Cumulative No Project Conditions | | | | | Signal Warrants Met? |
|---|---|---|---|---|---|---|---|
| | | Control | AM Peak Hour | | PM Peak Hour | | |
| | | | Delay (sec) | LOS | Delay (sec) | LOS | |
| 2 | Hammonton Smartville Rd/Dunning Av | Signalized | 17 | B | 17.5 | B | Yes |
| 3 | Hammonton Smartville Rd/Trevor Dr | Signalized | 41.7 | D | 27.9 | C | Yes |
| 7 | N. Beale Rd / Sutter St | Signalized | 18.6 | B | 21.3 | C | Yes |

Source: Dowling Associates, Inc., 2011

While the project's added traffic would further exacerbate these conditions, the provision of a neighborhood school complex is consistent with the County's General Plan policies. The project would draw students from the surrounding neighborhoods that would otherwise travel farther afield to attend other middle schools. As such, the project would alleviate traffic on other roadways and would likely reduce the overall vehicle miles traveled in the county.

Because the school would be attended mostly by students from residential areas that are within walking and bicycling distance from the site, the District may consider the following recommendations that would encourage additional walk and bike trips by providing a safer and more convenient environment; thereby reducing the number of private vehicle pickups and drop-offs during the peak periods and lessening the project's contributions to the two affected intersections. Further, the District may also foster transit trips, as Hammonton Smartville Road is currently served a Yuba-Sutter Transit bus route.

- Provide pedestrian and bicycle access on the southern edge of the project site via Sutter Street to increase connectivity and reduce travel time between the school and the southern neighborhoods.
- Provide school crosswalks and pedestrian signals according to guidance from the latest MUTCD at the proposed signalized intersection at Hammonton Smartville Road and Trevor Drive. The Trevor Drive residential development already has sidewalks. The District may extend the sidewalks to the crosswalks to provide full connectivity to the school.
- Provide high visibility crosswalks, advanced stop bars and flashing warning light at one of the two mobile park access road intersections between Dunning Avenue and Trevor Drive on Hammonton Smartville Road to provide a safe and convenient crossing for students and to alert motorists of potential pedestrian crossing.

- Provide sidewalks along the frontage of the school site on Hammonton Smartville Road to provide more distinct separation between pedestrians and vehicles on this roadway that is heavily traveled by trucks.
- Work with the County to apply for funding through safe-routes-to-school grants or other funding opportunities to extend the sidewalks on Hammonton Smartville Road to Farrell Way to the west and to Griffith Avenue to the east.
- Discuss with Yuba-Sutter Transit the feasibility of providing additional bus stops/bus shelters along the frontage of the school site, preferably at the Trevor Drive intersection, in order to minimize distance to transit.
- Provide right-of-way along the school frontage for future bikeway or wide shoulder, as applicable, on Hammonton Smartville Road in accordance to the Yuba County Bikeway Master Plan that is currently being developed.
- Provide adequate and safe bicycle storage on campus.

# Conclusion

Implementation of the MJUSD Middle School, Alternative Education High School, Adult Education School and Educational Support Services Center would not cause the operations at any of the study intersections to deteriorate below acceptable levels under Existing with Project conditions. All intersections would operate at LOS D or better.

Under Cumulative conditions, traffic on the minor street approaches at two unsignalized intersections would experience long delays. Furthermore, analysis has found that the intersection of Hammonton Smartville Road and Dunning Avenue and the intersection of N. Beale Road and Sutter Street would meet the MUTCD peak hour traffic signal warrant even without the addition of project traffic. Therefore, signal installation at these two intersections should be considered by the County. The District may consider various recommended measures to encourage alternative mode use in order to reduce vehicular trips and to provide a safe and attractive environment for pedestrians and bicyclists.



# Appendix A: Intersection Signal Warrant and Level of Service Worksheets

# Appendix E

*Noise Data*

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 463.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 26.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 26.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

N. Beal - Sutter to Alberta

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 64.8

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 499.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 28.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 28.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

N. Beale Sutter to Alberta Existing + Project

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 65.1

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 1191.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 66.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 66.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

N. Beale Sutter to Alberta Cum

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 68.8

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 1228.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 68.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 68.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

N. Beale Sutter to Alberta Cum + project

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 69.0

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 378.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 21.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 21.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Hamm-Smart - Trevor to Albert - Existing

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 63.9

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 495.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 28.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 28.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Hamm Start, Trevor to Alberta - Existing + Project

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 65.1

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 936.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 52.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 52.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Hamm Start, Trevor to Alberta - Cum

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 67.8

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 1074.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 60.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 60.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Hamm Start, Trevor to Alberta - Cum + Project

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 68.4

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 844.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 47.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 47.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Hamm Smart Simpson to Trevor Existing + Project

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 67.3

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 844.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 47.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 47.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Hamm Smart Simpson to Trevor At School Receptor Existing Plus Project

Distance from center of 12-ft wide, single lane roadway (ft): 100.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 65.1

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 436.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 24.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 24.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Hamm-Smart, Simpson to Trevor - Existing

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 64.5

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 1223.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 68.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 68.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Hamm Start, Simpson to Trevor - Cum

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 69.0

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 1487.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 83.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 83.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Hamm Start, Simpson to Trevor - Cum + Project

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 69.8

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 53.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 3.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 3.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Alberta - Hamm Start to N. Beale

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 55.4

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 147.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 8.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 8.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Alberta - Hamm to N. Beale - Cum

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 59.7

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 196.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 11.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 11.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Alberta - Hamm to N. Beale - Cum + Proj

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 61.0

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h): 101.0
Average automobile speed (mph): 40.0
Medium truck volume (v/h): 6.0
Average medium truck speed (mph): 40.0
Heavy truck volume (v/h): 6.0
Average heavy truck speed (mph): 40.0
Bus volume (v/h): 0.0
Average bus speed (mph): 0.0
Motorcycle volume (v/h): 0.0
Average Motorcycle speed (mph): 0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Alberta - Hamm to N. Beale - Existing + Proj

Distance from center of 12-ft wide, single lane roadway (ft): 60.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA): 58.3

# Appendix F

*Geotechnical Evaluation*



**Geologic Hazards Evaluation Report**
**Hammonton Smartville Property**
**APN 021-150-032 and a**
**Portion of APN 021-150-060**
**Yuba County, California**

**November 13, 2009**
**003-09363-06-003**

*Prepared for*
Marysville Joint Unified School District
1919 B Street
Marysville, California 95901

*Prepared by*
LFR an ARCADIS Company
1410 Rocky Ridge Drive, Suite 330
Roseville, California 95661

LFR an ARCADIS company

LFR an ARCADIS company

November 13, 2009 003-09363-06-003

Mr. Mark Allgire
Assistant Superintendent, Business Services
Marysville Joint Unified School District
1919 B Street
Marysville, California 95901

Subject: Geologic Hazards Evaluation Report, Hammonton Smartville Property, APN 021-150-032 and A Portion of APN 021-150-060, Yuba County, California

Dear Mr. Allgire:

LFR an ARCADIS company (LFR) is pleased to present the attached Geologic Hazards Evaluation Report for the Hammonton Smartville property, located near the southwestern corner of the intersection of Dantoni and Hammonton Smartville Roads in Yuba County, California ("the Site"). LFR understands that the Marysville Joint Unified School District (MJUSD) plans to develop the majority of the approximately 70-acre Site for use as MJUSD offices and for multiple school facilities.

LFR appreciates this opportunity to provide consulting services to MJUSD, and looks forward to being of further assistance as the project proceeds.

If you have any questions concerning this report, please contact Alan Gibbs at (916) 786-8129, or either of the undersigned. Steve Beadle can be reached at (805) 349-7180, and Jeff Raines can be reached at (510) 596-9580.

Sincerely,

PROFESSIONAL GEOLOGIST
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# CONTENTS

1.0 INTRODUCTION ..... 1

2.0 SITE DESCRIPTION ..... 1
2.1 Site Location ..... 1
2.2 Site History ..... 2

3.0 PURPOSE AND SCOPE OF SERVICES ..... 2

4.0 SITE CONDITIONS ..... 3
4.1 Geology and Soils ..... 3
4.1.1 General Geology ..... 3
4.1.2 Soils ..... 3
4.2 Hydrology and Hydrogeology ..... 4
4.2.1 Surface Water ..... 4
4.2.2 Ground Water ..... 4
4.3 Faulting and Seismicity ..... 5
4.3.1 Regional Active Faults ..... 5
4.3.2 Ground Shaking Potential ..... 6
4.3.3 Ground Rupture Potential ..... 7
4.4 Liquefaction Potential ..... 7
4.5 Landslide Potential ..... 8
4.6 Subsidence Potential ..... 8
4.7 Flooding Potential ..... 8
4.7.1 100-Year Flood ..... 8
4.7.2 Dam Inundation ..... 9
4.7.3 Levee Failures ..... 10
4.7.4 Tsunamis and Seiches ..... 10
4.8 Other Potential Hazards ..... 10

5.0 CONCLUSIONS ..... 11

6.0 REFERENCES ..... 13

TABLES

1 Known Active Earthquake Faults within 75 Miles of the Site
2 Applicable Portions of Modified Mercalli Intensity Scale
3 Historical Earthquakes in Site Vicinity, Estimated Site PGA $\geq$ 0.025 g

FIGURES

1 Vicinity Map
2 Site Plan
3 Topographic Map
4 Geologic Map
5 Fault Location Map
6 Historical Groundwater Elevation Map
7 Flood Zone Map

# 1.0 INTRODUCTION

This report presents the results of the geologic hazards evaluation conducted by LFR Inc. (LFR) for a potential School Site located at 2176 Hammonton Smartville Road in Marysville, California ("the Site"; Figures 1 and 2).

This report includes our opinions concerning potential geologic hazards which may have an impact on site development and which could potentially impede the performance of the proposed project. This report was prepared in general accordance with California Educational Code Section 17212.5. Conclusions presented in this report are based in part on the published data discussed in this report, and in part on our experience with the types of geologic hazards applicable to the Sacramento Valley. These conclusions should not be extrapolated to other areas outside the Site without our prior review.

This report addresses the geological hazards included on the California Geological Survey's "Note 48: Checklist for the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals, and Essential Services Buildings" (CGS 2007). However, this report does not address the geotechnical issues included on the CGS (2007) checklist. This report, as a stand-alone document, is therefore not sufficient to meet the combined geological/geotechnical study requirements for schools, as required by the Division of the State Architect.

# 2.0 SITE DESCRIPTION

A Preliminary Environmental Assessment Workplan, which addressed current and historical Site conditions and potential environmental concerns, was prepared separately for the Site (LFR 2009).

## 2.1 Site Location

The Site (Figures 1 and 2) is located in an unincorporated part of Yuba County, California, to the northeast of the unincorporated community of Linda. The Site uses a Marysville postal address, since it is located within the Marysville zip code (95901). However, the nearest parts of the incorporated City of Marysville are approximately 2.2 miles to the northwest.

The Site is currently associated with the 2176 Hammonton-Smartville Road address in Marysville. It is located near the southwest corner of the intersection of Hammonton-Smartville and Dantoni Roads. It represents Assessor's Parcel Number (APN) 021-150-032 and a portion of APN 021-150-060, with a total area of approximately 70 acres (LFR 2009).

The approximate center of the Site is located at a latitude of 39.1343° North, and a longitude of 121.5373° West. According to published topographic maps (Figure 3), the Site lies at an elevation of approximately 70 feet above mean sea level (msl); the local

topography slopes gently towards the southwest. A channel, known as the "Upper Linda Drain," runs across the property, in the general northeast to southwest direction.

The Site was visited in August 2009 (LFR 2009). At that time, there were five one-story buildings, of wood-frame or concrete construction, in the northeastern part of the Site (Figure 1). Some of the buildings had concrete slab or cinderblock foundations. Two other foundations, without associated structures, were also evident near the buildings. Agricultural equipment and debris were present at the Site. A buried 12-inch water line crossed the Site from north to south (Figure 2). The undeveloped portions of the site were covered by tall grass.

The neighboring properties are developed for residential or agricultural uses. Public schools are currently operating on other properties near the Site. Linda Elementary School is located at 6180 Dunning Avenue, approximately 0.20 miles west of the western Site boundary. The main campus of Yuba College (a public community college) is located at 2088 North Beale Road, approximately 0.25 miles south of the southern Site boundary.

## 2.2 Site History

The available Site historical data was described by LFR (2009). According to this report, structures have existed onsite since 1912. The Site was historically used for cattle grazing and other farming activities.

# 3.0 PURPOSE AND SCOPE OF SERVICES

The purpose of this evaluation was to identify major geological and seismic hazards that could potentially preclude the proposed school or make the proposed construction economically unfeasible. LFR performed the following scope of services for this geologic hazard evaluation:

- conducted a review of geologic hazards data
- prepared a report of pertinent findings with respect to seismic, geologic, and preliminary geotechnical engineering issues, including:
    - pertinent site maps showing the approximate project location
    - local geologic setting, faulting, and seismicity
    - site liquefaction potential, ground rupture potential, and other geologic and seismic hazards
    - flood inundation potential.

# 4.0 SITE CONDITIONS

## 4.1 Geology and Soils

### 4.1.1 General Geology

The Site is located on the eastern side of the Sacramento River Valley, which forms the northern part of the Great Valley Geomorphic Province (California Geological Survey [CGS] 2002). The Sacramento Valley generally trends north-south; it is bordered by the Coast Ranges to the west and by the Sierra Nevada and Cascade Ranges to the east. The valley is filled with a thick sedimentary sequence of continental and marine origin.

The Site area is located near the northeastern edge of the Sacramento Valley. The surficial sediments include unconsolidated alluvial deposits of Holocene to Pliocene age; these are underlain by the consolidated Mehrten Formation, which contains volcanic and volcaniclastic rocks of Mio-Pliocene age. These units form the principal aquifers in the Site area, and are collectively about 1,000 feet thick (Bertoldi et al. 1991, fig. 8; CDWR 2006). The water-bearing units are underlain at depth by older Tertiary and Mesozoic sedimentary rocks, and ultimately by Mesozoic Sierran bedrock.

The Site is located near the confluence of the Yuba and Feather Rivers (Section 4.2.1). The surficial sediments at the Site have been mapped as unconsolidated Quaternary alluvial deposits (Figure 4). The Yuba Goldfields, an extensive area of tailings associated with 19$^{th}$ Century hydraulic mining and dredging, are located about 3 miles northeast of the Site, upstream along the Yuba River.

The nearest exposures of consolidated rock are in the Sierra foothills, about 6 miles to the northeast. The base of the foothills marks the boundary between the Great Valley and Sierra Nevada Geomorphic Provinces.

The Site is located approximately 12 miles southeast of the Sutter Buttes, an isolated volcanic landform in the Sacramento Valley that was active during Quaternary time. The most recent eruptive activity was approximately 1.3 million years ago (Hausback and Nilsen 1999).

### 4.1.2 Soils

The National Resource Conservation Service (NRCS; 2009) has mapped the Site soils predominantly as “San Joaquin Loam, 0 to 1 percent slopes”. A small portion of the northwestern corner of the Site was mapped as “San Joaquin Loam – Urban land complex, 0 to 1 percent slopes.”

San Joaquin soils consist of a mixture of sand, silt, and clay; they typically form on alluvial deposits derived from predominantly granitic sources (NRCS 1999. “Urban land” is a variable category.

San Joaquin soils may include clayey horizons with high shrink-swell potential, particularly at depths of approximately 16 to 25 inches (NRCS 2009). The Site area, and most other parts of western Yuba County, were mapped as areas of moderate to high shrink-swell potential by the County of Yuba (1994, fig. 2-9).

Other potential construction limitations associated with San Joaquin soils include cemented layers at depths of approximately 20 to 40 inches; moderate risk of corrosion to concrete, moderate risk of corrosion to steel; and rare flooding. San Joaquin soils may have limitations for the construction of septic systems, due to the presence of cemented layers and low-permeability clayey layers (NRCS 2009).

LFR (2009) concluded that there was a potential for methane in shallow soil, due to historic cattle grazing at the Site. Soil vapor sampling for methane was proposed beneath the footprints of future buildings.

## 4.2 Hydrology and Hydrogeology

### 4.2.1 Surface Water

The Site is located about 1.7 miles southeast of the Yuba River (Figure 3). The Yuba River joins the Feather River about 3.2 miles west of the Site. Local drainage is predominantly to the southwest, towards the Feather River.

The Site is separated from both rivers by levees. The nearest levee, which lies between the Site and the Yuba River, is located approximately 1,000 feet northwest from the northwest corner of the Site. The local levees are maintained by Reclamation District 784. However, the Site is located outside of the Reclamation District boundaries; the closest parts of the district are approximately 0.6 miles to the west (County of Yuba 2009b, fig. 1-1).

A channel, mapped by the Federal Emergency Management Agency (FEMA; 2007) as the "Upper Linda Drain," runs across the Site, in a general northeast-to-southwest direction.

### 4.2.2 Ground Water

The Site is located within the South Yuba Subbasin of the Sacramento Valley Groundwater Basin (CDWR 2006). The aquifer system in the South Yuba Subbasin is associated with unconsolidated alluvial deposits, and with the underlying Mehrten Formation. In the Site area, these water-bearing units are collectively about 1,000 ft thick (Section 4.1).

Historic water-table elevations in the Sacramento Valley, as measured during Fall 1912 and Fall 1913, were mapped by Bryan (1923, pl. IV). In the Site area, the 1912-1913 water table elevation was estimated at approximately 50 to 60 feet msl (Figure 6), or approximately 10 to 20 feet below ground surface (bgs). The general direction of groundwater flow at that time was southwest, in accordance with the local topography.

Local groundwater elevations subsequently declined, due to pumping for domestic and agricultural use. In March 1976, the water table elevation in the Site area was estimated at about 15 feet msl (Page 1980, pl. 3), or about 55 feet bgs. The general direction of groundwater flow in the Site area in 1976 was towards a pumping depression located about 5 miles to the southeast.

Groundwater elevations subsequently began rising in the South Yuba Subbasin, due to the increased availability of surface water supplies and a reduced need for groundwater pumping (CDWR 2006). This pattern is evident in the historical records for well 15N04E28D001M, located on the Yuba College campus, approximately 0.3 miles south of the southern boundary of the Site (CDWR 2009, USGS 2009e). This well is reportedly 114 feet deep, and is used for irrigation.

The groundwater elevations in well 15N04E28D001M were approximately 45 feet msl circa 1950, decreased steadily to approximately -5 feet msl circa 1980, and then began rising steadily. The 2006-2009 groundwater elevations in this well have ranged from approximately 45 to 55 feet msl (CDWR 2009). The current groundwater elevations at the Site are probably comparable, in which case groundwater would occur at depths of approximately 15 to 25 feet bgs.

## 4.3 Faulting and Seismicity

### 4.3.1 Regional Active Faults

Active faults within 50 miles of the Site that are capable of producing significant ground shaking at the Site are shown in Table 1 and on Figure 5. These results are based on the current California Probabilistic Seismic Hazard Assessment (PSHA) model (Cao et al. 2003). Activity was determined by slip rates, as per the California Geological Survey (CGS; Petersen et al. 1996).

The closest active faults, as per the current PSHA model, are associated with Foothills Fault System 1, located approximately 8.9 miles (or 14.3 km) to the northeast (Table 1). The highest potential ground accelerations at the Site are associated with Foothills Fault System 1. However, many other regional faults (Figure 5) also have the potential to generate significant ground accelerations at the Site (Table 1).

Table 1 includes an estimate of the Modified Mercalli Intensity likely to be felt at the Site due to earthquakes on the individual faults. The Modified Mercalli Intensity (MMI) scale is described in Table 2. The calculated MMIs should be considered as rough estimates; they are presented here because they are easier to interpret than peak ground accelerations.

MMIs were evaluated using EQFAULT software (Blake 2000a). EQFAULT uses the inverse of the Murphy and O'Brian (1978) acceleration – intensity equation to calculate the MMI:

$$I_{mm} = [\log_{10}(980.7 * a_{Hg}) - 0.29] / 0.24$$

$$a_{Hg} = horizontal\ acceleration\ (g)$$

A list of historical earthquakes that have significantly affected the Site area was generated using EQSEARCH software (Blake 2000b), and is included as Table 3. The results suggest that the maximum estimated ground acceleration experienced at the Site since 1800 was approximately 0.085 g, with an estimated MMI of VII.

### 4.3.2 Ground Shaking Potential

The 2007 California Building Code requires that site ground motions be based on the "Maximum Considered Earthquake," which corresponds to the ground motions with a 2% chance of exceedance over a 50-year interval, or a return period of approximately 2,475 years. Based on the site coordinates (Section 2.0) and the 2002 National Seismic Hazard Maps, the horizontal peak ground acceleration (PGA) with a 2% chance of exceedance over 50 years is 0.202 g (U.S. Geological Survey [USGS] 2009a).

The more recent 2008 National Seismic Hazard Maps yield a comparable PGA value of 0.197 g for the Site coordinates (USGS 2009b). However, the 2008 National Seismic Hazard Maps have not been incorporated into the current California Building Code, and may be subject to future modification (USGS 2009c).

Seismic ground motion parameters for the Site were calculated as per ASCE (2005, sec. 11.4), using site-specific data for latitude and longitude (Section 2.0) and geology (Section 4.1). Ground motion parameters were obtained using the USGS (2008a) "Earthquake Ground Motion Tool," set to the following options:

- Geographic Region = 48 Conterminous States
- Data Edition= 2005 ASCE 7 Standard
- Latitude (Degrees) = 39.1343
- Longitude (Degrees) = -121.5373
- Site Class: D (stiff soil)

The resulting ground motion parameters may be summarized as follows:

- $\mathbf{S_S} = 0.476$
- $\mathbf{S_1} = 0.216$
- $\mathbf{F_a} = 1.419$
- $\mathbf{F_v} = 1.968$
- $\mathbf{S_{MS}} = F_a \times S_S = 1.419 \times 0.476 = 0.676$
- $\mathbf{S_{M1}} = F_v \times S_1 = 1.968 \times 0.216 = 0.425$
- $\mathbf{S_{DS}} = (2/3) \times S_{MS} = (2/3) \times 0.676 = 0.450$

- $S_{D1} = (2/3) \times S_{M1} = (2/3) \times 0.425 = 0.283$

The seismic design category was not evaluated, since $S_1$ was less than 0.75 (CGS 2007). A site-specific ground motion analysis was not conducted, since the Site is not located within 10 km of an active fault. The nearest active fault is approximately 14.3 km to the northeast (Section 4.3.1).

### 4.3.3 Ground Rupture Potential

The Site is not located within an Alquist-Priolo Special Studies Earthquake Fault Zone, as mapped by CDMG (2000a). The closest such zone is associated with the Cleveland Hill Fault in southern Butte County, approximately 20 miles north of the Site.

The closest active faults are associated with Foothills Fault System 1, about 9 miles northeast of the Site (Figure 5). However, no Holocene surface displacement has been documented for this fault system, and so it is not associated with a Special Studies Zone.

Based on the available data, there does not appear to be a significant risk of surface rupture during the expected service life of the proposed school buildings.

## 4.4 Liquefaction Potential

Liquefaction can be induced by cyclic loading (shaking) from an earthquake; such shaking can increase the pore water pressures in granular materials, which in turn can reduce their inherent shear strength. Some of the factors that typically contribute to liquefaction risk include a shallow water table, low relative density of granular materials below the groundwater table, low soil cohesion or plasticity, low percentage of fine-grained material in soil, relatively long seismic shaking duration, and high horizontal ground acceleration during earthquakes.

The surficial sediments in the Site area are composed of unconsolidated Quaternary alluvial deposits (Section 4.1.1). Shallow groundwater historically occurred at approximately 15 feet bgs, and probably occurs today at less than 50 feet bgs (Section 4.2.2). Since the Site area is characterized by both unconsolidated surficial deposits and shallow groundwater, a liquefaction risk may exist.

These findings are consistent with those of the County of Yuba (1994, p. 2-11), which previously concluded that:

> "the valley area of Yuba County is underlain by saturated post-Eocene unconsolidated sands and fine-grained material with a potential for liquefaction … Geotechnical studies conducted for buildings should address the potential for liquefaction in the upper 50 feet in the areas of Yuba County prone to liquefaction."

The California Geological Survey maps areas of potential liquefaction risk, as part of the Seismic Hazards Zonation Program. However, this program has not addressed the Site area.

If the unconsolidated surficial sediments at the Site are very loose, then some seismic settlement (or "shakedown") could occur during a future earthquake, even if these sediments are above the water table. However, the extent of such settlement is unlikely to be significant, and it could be mitigated if necessary by appropriate compaction procedures during future construction.

## 4.5 Landslide Potential

The Site area in located in a valley area and has little relief (Figure 3), so landslides do not appear to pose a significant risk. The Site area was mapped as an area of "low" landslide risk (the lowest category) by the County of Yuba (2009a, p. 4-64).

The California Geological Survey maps areas of potential landslide risk, as part of the Seismic Hazards Zonation Program. However, this program has not addressed the Site area.

## 4.6 Subsidence Potential

Many parts of the Central Valley have been affected by land subsidence. The most significant cause of land subsidence is groundwater extraction; other causes include oil and gas extraction, oxidation and compaction of peat, and hydrocompaction. Areas of the Central Valley affected by land subsidence were mapped by Bertoldi et al. (1991, fig. 19).

The Yuba County area has been relatively unaffected by these issues, and so it lies outside the mapped subsidence zones. Historical groundwater pumping in the South Yuba Subbasin was relatively limited; in fact, local groundwater elevations have been rising in recent years (Section 4.2.2). No oil or gas fields (Section 4.8), peat deposits, or sediments vulnerable to hydrocompaction have been reported in the Site vicinity.

## 4.7 Flooding Potential

### 4.7.1 100-Year Flood

The most recent flood zone mapping for the Site area was a Letter of Map Revision (LOMR) prepared by FEMA with an effective date of January 27, 2007. According to FEMA (2007), much of the Site is located within the 100-year flood zone (Zone A), with base flood elevations between 67 and 70 feet (Figure 7). These base flood elevations appear to be comparable to the existing ground surface elevations at the Site (Figure 3). The flood zone affects the areas proposed for school building development (Figure 2).

The 100-year flood zone (Zone A), as mapped by FEMA (2007), affects most of the western part of the Site, as well as portions of the eastern part of the Site adjacent to the Upper Linda Drain (Figure 7). The northeastern and southeastern parts of the Site are outside of the 100-year flood zone (Zone C); however, these areas are separated by the Upper Linda Drain.

LFR understands that the proposed development of the Site may include rerouting of the Upper Linda Drain. Such rerouting would likely change the configuration of the 100-year flood zone, and could remove affected parts of the Site from this zone. Since the base flood elevations and surface elevations at the Site appear to be comparable, it might also be feasible to raise the Site topography above the 100-year base flood elevation through grading. Various permits would be required to reroute the Linda Drain or fill the Site.

### 4.7.2 Dam Inundation

There are numerous dams located in the mountains and foothills to the east of the Site area. Most parts of western Yuba County, including all of Linda, Marysville, and Olivehurst, are located within one or more dam inundation areas (County of Yuba 2009a, fig. 4-25).

The Site lies within the inundation zones associated with the following dams:

- **Englebright Dam**, located along the border between Yuba and Nevada Counties, about 16 miles northeast of the Site (County of Yuba 2009b, fig. 4-14);
- **New Bullards Bar Dam**, located in northeastern Yuba County, about 27 miles northeast of the Site (County of Yuba, 2009b fig. 4-12);
- **Scotts Flat Dam**, located in Nevada County, about 34 miles east of the Site (County of Yuba 2009b, fig. 4-18);
- **Bowman Dam**, located in Nevada County, about 52 miles northeast of the Site (County of Yuba 2009b fig. 4-13); and
- **Jackson Meadows Dam**, located along the border between Nevada and Sierra Counties, about 58 miles northeast of the Site (County of Yuba 2009b, fig. 4-15).

In addition, other upgradient dams have the potential to affect the Site indirectly, through levee failure. For example, the Site is separated by levees from the inundation zones associated with Almanor Dam in Plumas County (County of Yuba 2009, fig. 4-16) and Oroville Dam in Butte County (County of Yuba 2009b, fig. 4-17). However, the failure of these dams would cause increased flow in the Feather or Yuba Rivers, which in turn would increase the pressure on local levees (County of Yuba 2009, p. 120). If a levee breach occurred as the result of a dam failure, the Site area could be flooded (Section 4.7.3).

### 4.7.3 Levee Failures

The Site is located in the Linda area, which is separated from the Yuba and Feather Rivers by levees (Section 4.2.1). Levee failures have historically resulted in local flooding; for example, flooding occurred near the Site after a 1986 levee break on the Yuba River, and after a 1997 levee break on the Feather River (County of Yuba 2009b, fig. 4-1).

The Site is located in the higher, northeastern part of the Linda area, and was not affected by the 1986 or 1997 events (County of Yuba 2009b, fig. 4-1). The closest flooded areas were approximately 0.7 miles west of the Site, during the 1986 event.

However, the Site could be affected by flooding if a levee break occurred in relatively close proximity. For example, the County of Yuba (2009b, fig. 4-7) found that the Site area would be affected by a hypothetical modeled breach of the South Yuba Levee at Simpson Road, approximately 0.6 miles west of the Site.

Based on the FEMA (2007) mapping, the South Yuba Levee is considered adequate to protect the Site from a 100-year flood event on the Yuba River (Figure 7). In recent years, several phases of levee improvements have been conducted by Reclamation District 784 and the Three Rivers Levee Improvement Authority (TRLIA). The South Yuba Levee near the Site is being addressed as part of Phase 4 of these improvements. According to TRLIA (2009, p. 1), design and construction work on those parts of the levee nearest the Site (between Simpson Lane and the Yuba Goldfields) is scheduled to begin in 2010.

### 4.7.4 Tsunamis and Seiches

Tsunamis do not pose an appreciable risk at this inland location. Seiches do not pose an appreciable risk, given the absence of nearby surface water bodies.

## 4.8 Other Potential Hazards

Certain other potential geologic hazards, including volcanic eruption, naturally occurring asbestos, naturally occurring radon, and oil and gas fields, do not appear to pose significant risks at the Site, for the reasons discussed briefly below.

- **Volcanic Eruption.** The Site is located approximately 12 miles southeast of the Sutter Buttes, an isolated volcanic landform (Section 4.1.1). The Sutter Buttes have not been active during Late Pleistocene or Holocene time, within the past 100,000 years, and are therefore not regarded as a potential volcanic hazard area (Miller 1989).

- **Naturally Occurring Asbestos.** Naturally occurring asbestos in California is most often related to the occurrence of ultramafic rocks. There are exposures of ultramafic rocks in the Sierra foothills to the east of the Site, in the general upgradient direction (Saucedo and Wagner 1992; CDMG 2000b). However, these exposures occur at distances of more than 10 miles from the Site. The exposures

therefore do not represent a significant concern, based on California Department of Toxic Substances Control (DTSC; 2004) guidance for school sites.

- **Naturally Occurring Radon.** Radon in California is most commonly associated with certain rock types, such granitic rocks or Miocene marine sedimentary rocks (CDMG 1991). These rock types are not present near the Site (Figure 4).

  The California Department of Public Health (CDPH; 2009) maintains a database of radon measurements in California, based on zip code. A total of 20 measurements have been collected from the 95901 (Marysville) zip code, which includes the Site. None of these measurements showed elevated radon results (greater than or equal to 4.0 pCi/L).

- **Oil and Gas Fields.** The Site is not located within an oil or gas field, as recognized by the California Division of Oil, Gas, and Geothermal Resources (CDOGGR). A few plugged and abandoned dry holes have been drilled in the Site area; the nearest is approximately 2 miles northeast of the Site. The closest recognized oil or gas field is the Sutter City Gas Field, located approximately 10 miles west of the Site (CDOGGR 2007).

- **Mineral Resources and Producers.** The Site is not located near a mineral resource or producer, as listed by the Mineral Resources Data System (MRDS) of the US Geological Survey (USGS 2009d). The nearest MRDS locality is the former "Speckert Pit," located approximately 0.6 miles southwest of the Site, which is listed as a past producer of sand and gravel for construction.

## 5.0 CONCLUSIONS

The conclusions reached by LFR are based on the published data reviewed for this geologic hazards evaluation. Our findings are summarized below.

- The Site is located more than 10 km from the nearest active faults. However, local faults still have the potential to cause significant ground shaking at the Site.

- The Site is not located within an Alquist-Priolo Special Studies Earthquake Fault Zone. Based on the available data, there does not appear to be a significant risk of surface rupture during the expected service life of the proposed school buildings.

- There is a potential liquefaction risk at the Site, since it appears to be characterized by both unconsolidated alluvial sediments and shallow groundwater. The potential for liquefaction should be evaluated during future geotechnical studies at the Site.

- There does not appear to be a significant risk of landslides at the Site, due to the lack of relief.

- The shallow soils at the Site may have significant shrink-swell potential, particularly at depths of approximately 16 to 25 inches. This condition should be evaluated during future geotechnical studies at the Site.

- Many parts of the Site, including areas proposed for school buildings, lie within a 100-year flood zone. This zone is associated with the Upper Linda Drain, which crosses the Site. LFR understands that the proposed development of the Site may include rerouting of the Upper Linda Drain; such rerouting could remove the affected parts of the Site from the 100-year flood zone. It might also be feasible to raise the Site topography above the 100-year base flood elevation through grading. Various permits would be required to reroute the Linda Drain or fill the Site.

- The Site is located within the inundation zones associated with five dams, located in the mountains and foothills to the east and northeast. Most other parts of western Yuba County, including all of Linda, Marysville, and Olivehurst, are also located within one or more dam inundation zones. In addition, dam failures could affect the Site indirectly, if they led to failures of the local levees.

- The Site area is protected by levees from floods associated with the adjacent rivers. The Site could be flooded if a levee breach occurred nearby. However, the local levees are currently considered adequate to protect the Site from a 100-year flood event. Several phases of levee improvement have been conducted in the Linda area in recent years. Construction work on the levee nearest the Site is currently scheduled to begin in 2010.

**Based on the above findings, it is LFR's opinion that the parts of the Site outside of the 100-year flood zone are suitable for the proposed school development.** The parts of the Site within the 100-year flood zone are not currently suitable. However, it may be possible to develop those parts of the Site within the 100-year flood zone in the future, if the Upper Linda Drain can be rerouted or if the local topography can be elevated by grading; these approaches could remove affected parts of the Site from the 100-year flood zone.

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**Table 1**
**Known Active Earthquake Faults within 75 Miles**
**Potential School Site, APN 021-150-032 and a**
**Portion of APN 021-150-060, Yuba County, California**

| Abbreviated Fault Name | Approx. Distance, mi. (km) | Maximum Earthquake Mag. (Mw) | Peak Ground Accel. (g) | Est. Site Intensity, MMI Scale |
|---|---|---|---|---|
| FOOTHILLS FAULT SYSTEM 1 | 8.9 (14.3) | 6.5 | 0.257 | IX |
| FOOTHILLS FAULT SYSTEM 2 | 19.3 (31.0) | 6.5 | 0.134 | VIII |
| FOOTHILLS FAULT SYSTEM 3 | 29.6 (47.6) | 6.5 | 0.091 | VII |
| GREAT VALLEY 3 | 36.5 (58.8) | 6.9 | 0.09 | VII |
| FOOTHILLS FAULT SYSTEM 4 | 39.5 (63.6) | 6.5 | 0.069 | VI |
| GREAT VALLEY 2 | 40.5 (65.2) | 6.4 | 0.065 | VI |
| GREAT VALLEY 1 | 41.4 (66.7) | 6.7 | 0.073 | VII |
| GREAT VALLEY 4 | 43.4 (69.9) | 6.6 | 0.067 | VI |
| MOHWAK-HONEY LAKE ZONE 5 | 49.0 (78.9) | 7.3 | 0.068 | VI |
| HUNTING CREEK - BERRYESSA | 52.6 (84.6) | 7.1 | 0.058 | VI |
| BARTLETT SPRINGS FAULT SYSTEM | 53.6 (86.3) | 7.6 | 0.074 | VII |
| GREAT VALLEY 5 | 60.8 (97.8) | 6.5 | 0.046 | VI |
| WESTERN NEVADA ZONE 1 | 61.1 (98.3) | 7.3 | 0.057 | VI |
| CONCORD/GV (GVN) | 62.3 (100.3) | 6 | 0.021 | IV |
| CONCORD/GV (FLOATING) | 62.3 (100.3) | 6.2 | 0.027 | V |
| CONCORD/GV (CON+GVS+GVN) | 62.3 (100.3) | 6.7 | 0.04 | V |
| CONCORD/GV (GVS+GVN) | 62.3 (100.3) | 6.5 | 0.035 | V |
| MOHWAK-HONEY LAKE ZONE 4 | 65.7 (105.7) | 7.3 | 0.053 | VI |
| COLLAYOMI | 66.1 (106.3) | 6.5 | 0.034 | V |
| WEST NAPA | 66.9 (107.7) | 6.5 | 0.033 | V |
| CONCORD/GV (CON+GVS) | 68.7 (110.6) | 6.6 | 0.034 | V |
| CONCORD/GV (GVS) | 68.7 (110.6) | 6.2 | 0.025 | V |
| MAACAMA - GERBERVILLE | 73.0 (117.5) | 7.5 | 0.055 | VI |
| WESTERN NEVADA ZONE 2 | 74.2 (119.4) | 7.3 | 0.048 | VI |

**Note:** The expected peak ground acceleration (PGA) is the mean value as calculated using the Abrahmson & Silva (1997) earthquake attenuation formula.
Refer to Table 2 for MMI scale

**Table 2**
**Applicable Portions of Modified Mercalli Intensity Scale**
**Potential School Site, APN 021-150-032 and a**
**Portion of APN 021-150-060, Yuba County, California**

| Intensity | Shaking | Summary | Description |
|---|---|---|---|
| V | Light | Pictures Move | Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate. |
| VI | Moderate | Objects Fall | Felt by all. Many persons frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry cracked. Small bells ring (church, school). Trees, bushes shaken (visibly, or heard to rustle). |
| VII | Strong | Nonstructural Damage | Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments). Some cracks in masonry. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged. |
| VIII | Very Strong | Moderate Damage | Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes. |
| IX | Violent | Heavy Damage | General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. (General damage to foundations.) Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluvial areas sand and mud ejected, earthquake fountains, sand craters. |

**Masonry A:** Good workmanship, mortar, and design; reinforced, especially laterally, and bound together by using steel, concrete, etc.; designed to resist lateral forces.

**Masonry B:** Good workmanship and mortar; reinforced, but not designed in detail to resist lateral forces.

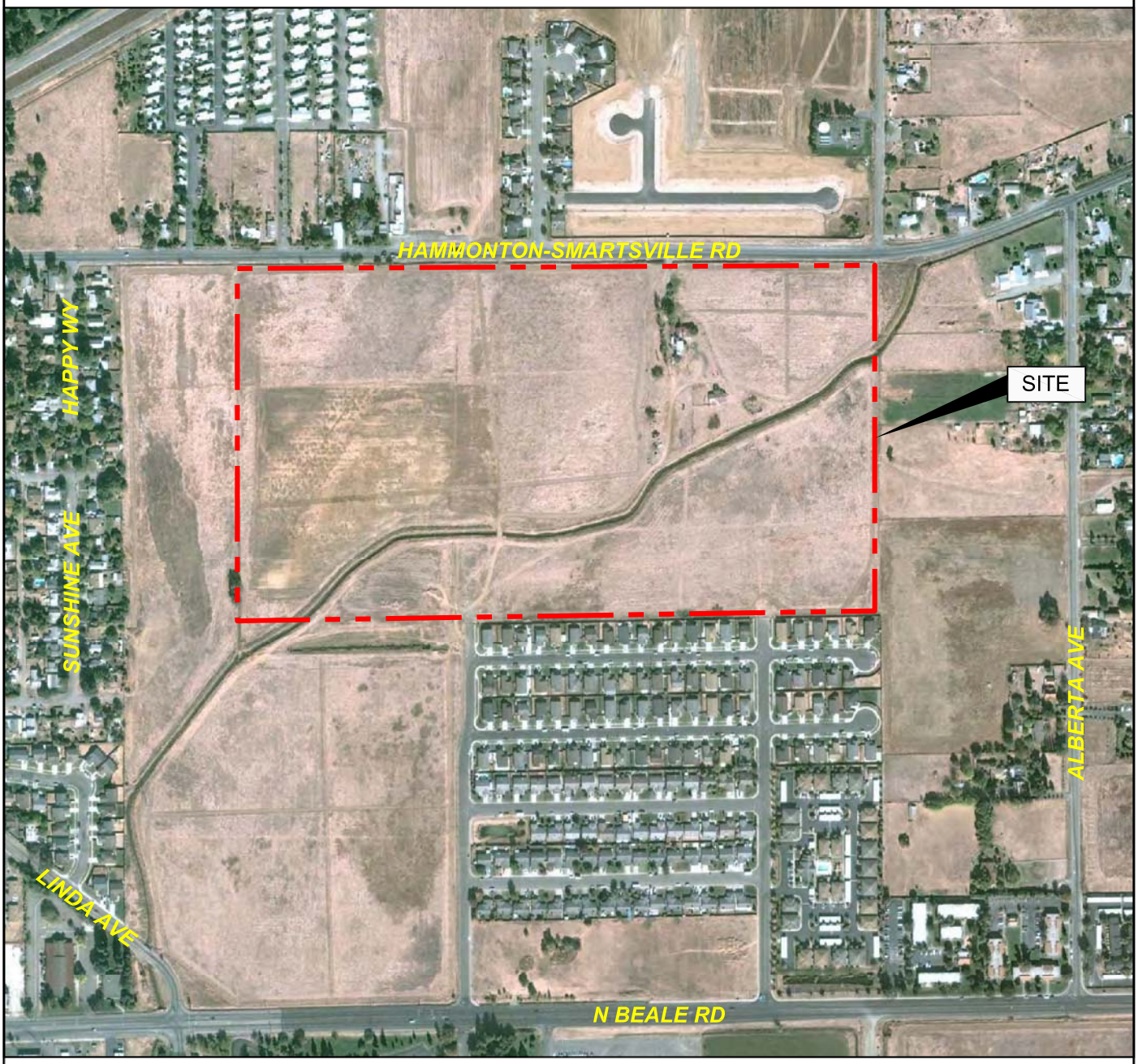
**Masonry C:** Ordinary workmanship and mortar; no extreme weaknesses like failing to tie in at corners, but neither reinforced nor designed against horizontal forces.

**Masonry D:** Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.

**Table 3**
**Historical Earthquakes in Site Vicinity, Estimated Site PGA ≥ 0.025 g**
**Potential School Site, APN 021-150-032 and a**
**Portion of APN 021-150-060, Yuba County, California**

| Latitude (°N) | Longitude (°W) | Date | Magnitude | Peak Ground Accel. (g) | Est. Site Intensity, MMI Scale | Approx. Distance, mi. (km) |
|---|---|---|---|---|---|---|
| 39.436 | 121.523 | 8/1/1975 | 5.7 | 0.085 | VII | 20.8 (33.5) |
| 39.433 | 121.475 | 8/2/1975 | 5.2 | 0.053 | VI | 20.9 (33.6) |
| 39.449 | 121.473 | 8/2/1975 | 5.2 | 0.05 | VI | 22.0 (35.4) |
| 38.500 | 121.900 | 04/21/1892 | 6.2 | 0.049 | VI | 47.9 (77.1) |
| 38.400 | 122.000 | 04/19/1892 | 6.4 | 0.047 | VI | 56.5 (90.9) |
| 39.580 | 120.830 | 3/12/1918 | 5.7 | 0.034 | V | 48.7 (78.4) |
| 39.700 | 120.700 | 04/29/1888 | 5.9 | 0.033 | V | 59.3 (95.5) |
| 39.436 | 121.523 | 8/1/1975 | 4.7 | 0.032 | V | 20.8 (33.5) |
| 39.400 | 120.800 | 6/23/1909 | 5.5 | 0.031 | V | 43.5 (70.0) |
| 39.436 | 121.523 | 8/1/1975 | 4.6 | 0.029 | V | 20.8 (33.5) |
| 38.200 | 122.400 | 03/31/1898 | 6.2 | 0.029 | V | 79.5 (128.0) |
| 39.497 | 121.511 | 8/8/1975 | 4.8 | 0.028 | V | 25.1 (40.4) |
| 39.250 | 121.000 | 12/01/1867 | 5 | 0.028 | V | 29.8 (48.0) |
| 39.436 | 121.523 | 8/1/1975 | 4.5 | 0.027 | V | 20.8 (33.5) |
| 40.000 | 121.600 | 2/8/1940 | 5.7 | 0.027 | V | 59.9 (96.3) |
| 39.443 | 121.522 | 8/1/1975 | 4.5 | 0.026 | V | 21.3 (34.3) |
| 39.496 | 121.530 | 8/6/1975 | 4.7 | 0.026 | V | 25.0 (40.2) |
| 39.420 | 120.150 | 9/12/1966 | 6 | 0.026 | V | 76.7 (123.5) |
| 39.200 | 121.100 | 5/15/1906 | 4.6 | 0.025 | V | 23.8 (38.4) |
| 38.400 | 121.800 | 04/30/1892 | 5.5 | 0.025 | V | 52.6 (84.7) |
| 38.000 | 121.900 | 05/19/1889 | 6 | 0.025 | V | 80.7 (129.9) |

**Notes:** Source = Blake 2000b
Latitude and longitude represent the locations of the assumed epicenters
Refer to Table 2 for MMI scale
The estimated peak ground acceleration (PGA) is the mean value due to the historical earthquake, as calculated using the Abrahmson & Silva (1997) earthquake attenuation formula.




MAP SOURCE: Google Earth Pro™ 2009, 39°07'59.50"N, 121°32'17.55"W

N

0 550 1,100 feet

## Vicinity Map

MJUSD/Hammonton-Smartsville Property
Marysville, California

**Figure 1**

LFR an ARCADIS company

K:\Data\Graphics\003-Santa Maria\003-09363-06-003\003-09363-06-003 GeoHazard.dwg [Vicinity] 9/16/09 10:08am JDLoving XREFS:

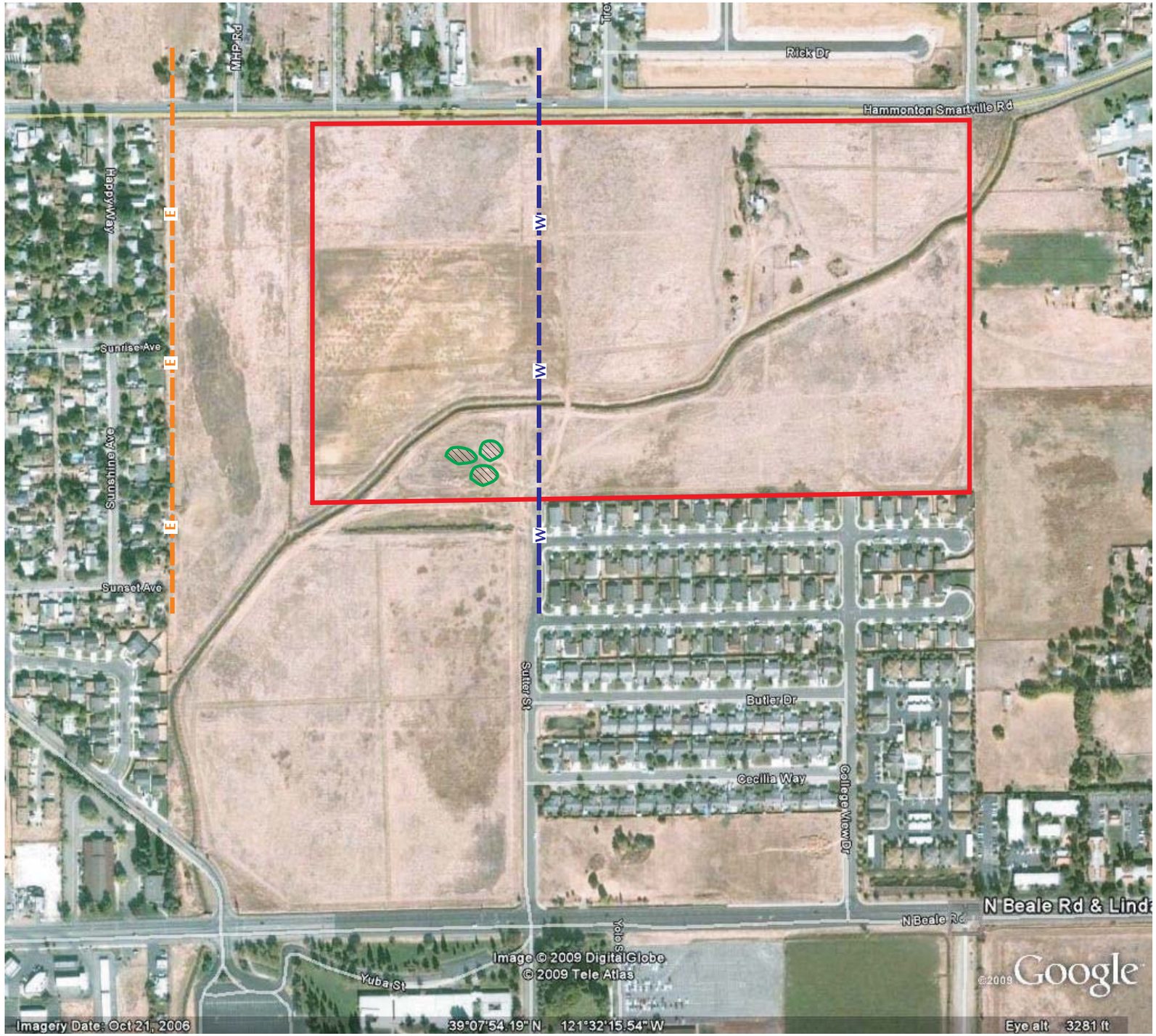



Image Source: Google Earth Pro©

**EXPLANATION**

- SITE BOUNDARY (APPROXIMATE)
- FILL MATERIAL
- E — PG&E 115kV POWER LINE
- W — 12-INCH DIAMETER WATER PIPELINE

N

0 360 feet

GRAPHIC SCALE

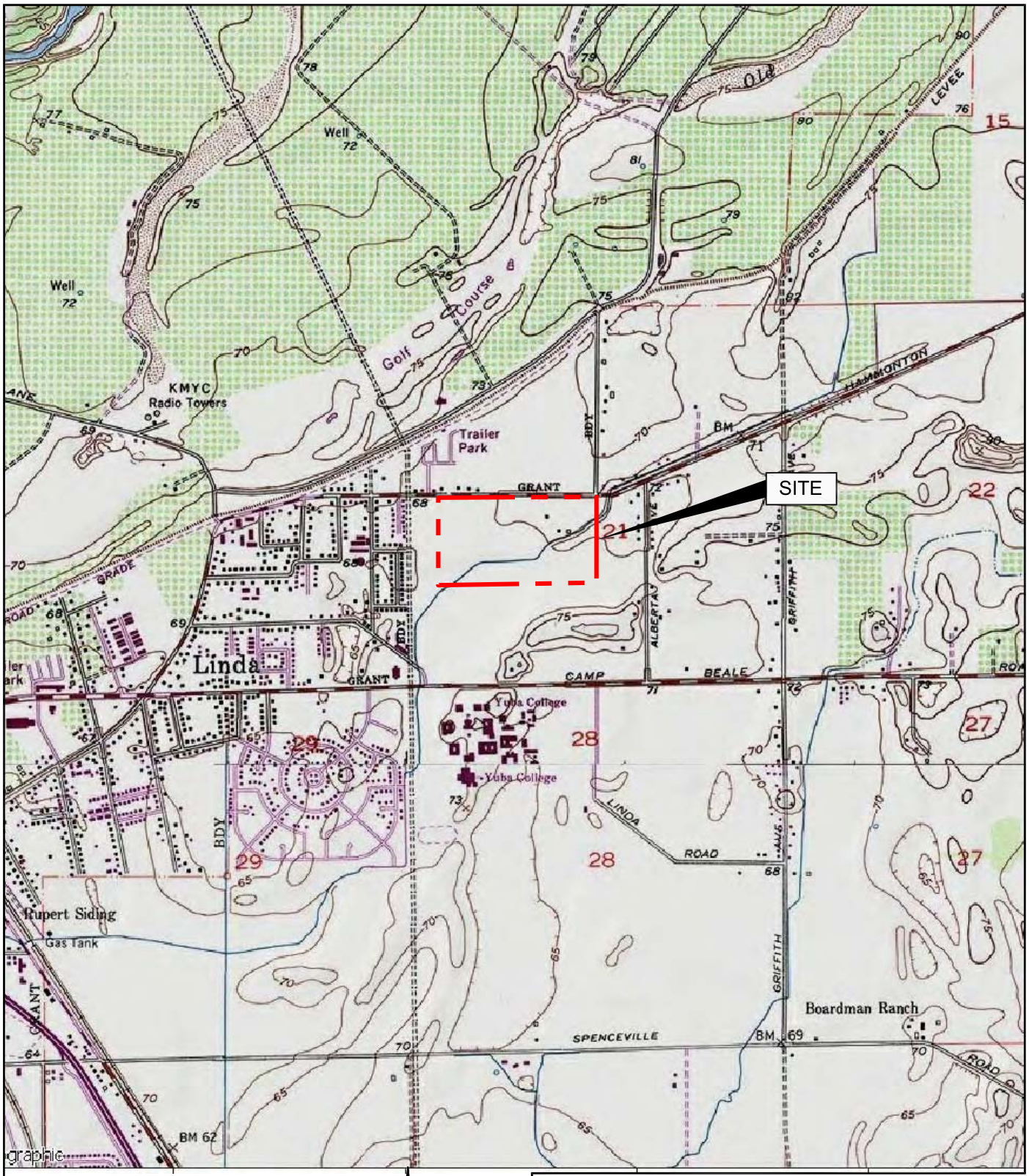
## Site Plan

Hammonton Smartville Property
A Portion of APNs 021-150-032 and 021-150-060
Yuba County, California

**Figure 2**

LFR an ARCADIS company

DESIGN\003\09363\06\001\Site Plan - Hammonton Smartville Property.cdr




Base Map: (USGS 1973a, 1973b)
Source: National Geographic Holdings (2008)

**EXPLANATION**

Property Boundary

N

0 2,000 FEET

NOTE: Site boundaries are approximate

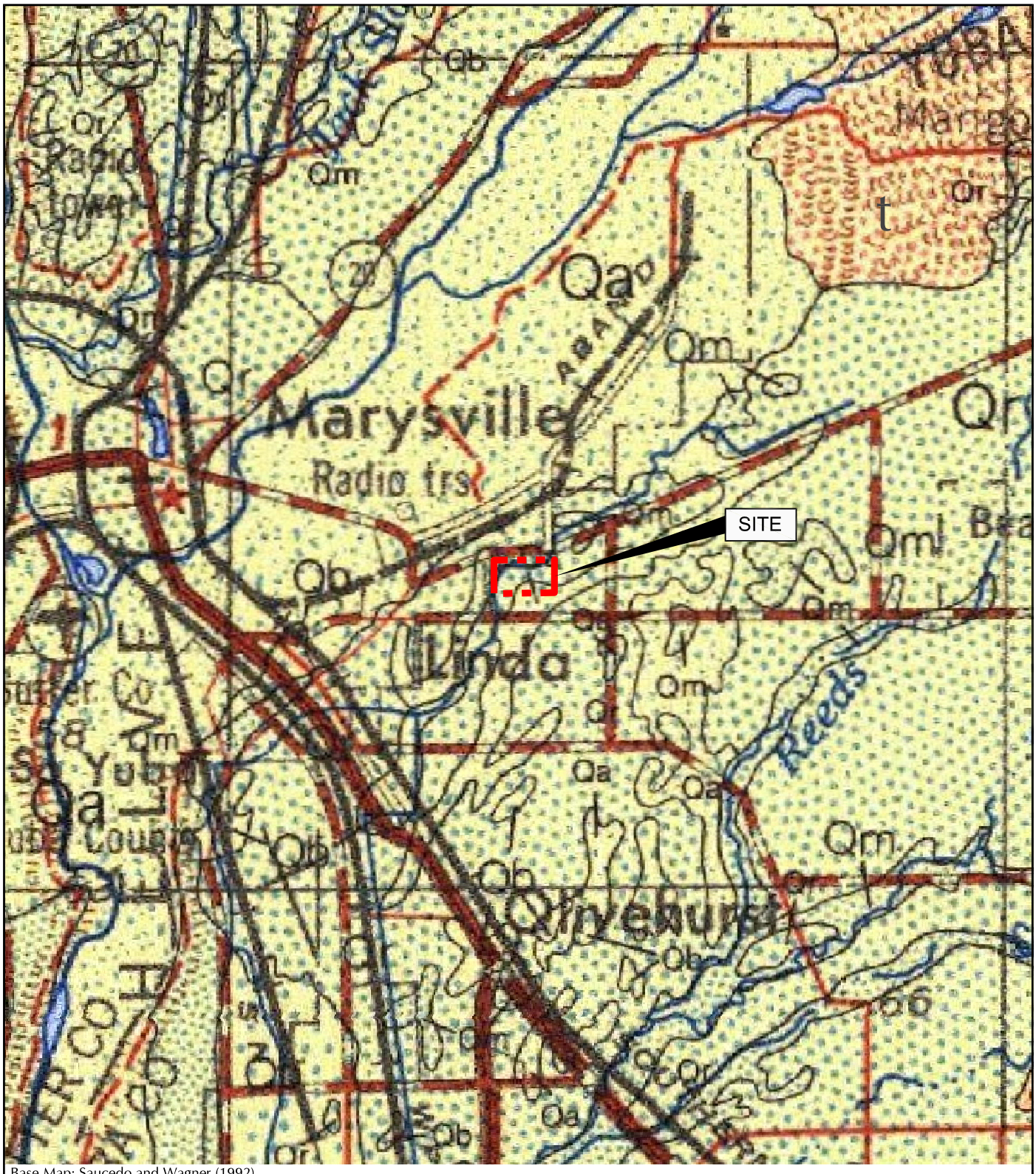
## Topographic Map

MJUSD/Hammonton-Smartsville Property
Marysville, California

**Figure 3**

LFR an ARCADIS company

K:\Data\Graphics\003-Santa Maria\003-09363-06-003\003-09363-06-003 GeoHazard.dwg [Topo] 9/16/09 10:10am JDLoving XREFS:




Base Map: Saucedo and Wagner (1992)

**EXPLANATION**

Property Boundary

**Qa** - Holocene levee and channel deposits
**Qb** - Holocene to Pleistocene basin deposits (Alluvium)
**Qm** - Pleistocene Modesto Formation (Alluvium)
**Qr** - Pleistocene Riverbank Formation (Alluvium)
**t** - Dredge or mine tailings

N

0 1 MILE

NOTE: Site boundaries are approximate

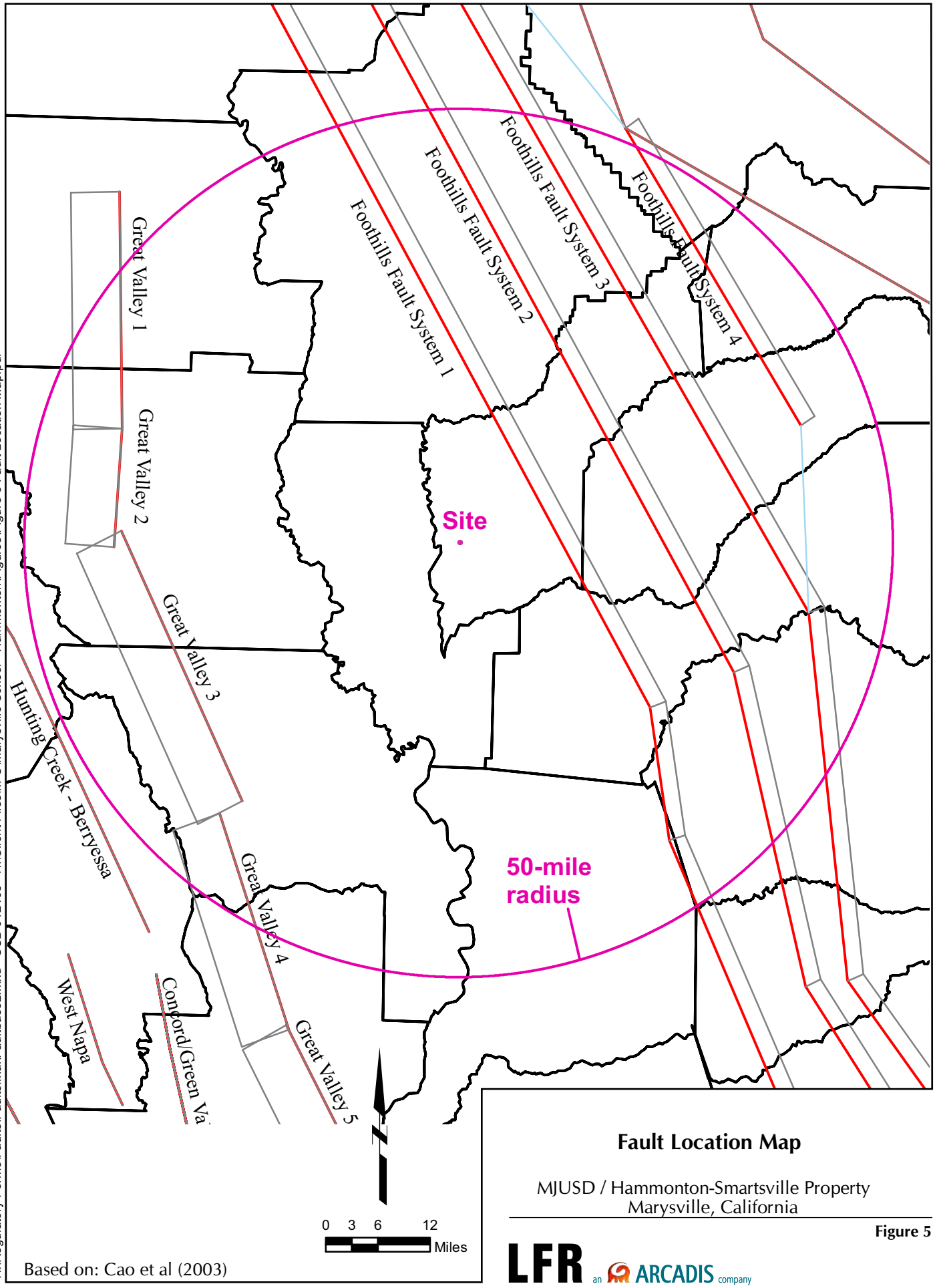
## Geologic Map

MJUSD/Hammonton-Smartsville Property
Marysville, California

**Figure 4**

LFR an ARCADIS company

K:\Data\Graphics\003-Santa Maria\003-09363-06-003\003-09363-06-003 GeoHazard.dwg [Geo] 11/4/09 3:57pm JDLoving XREFS:



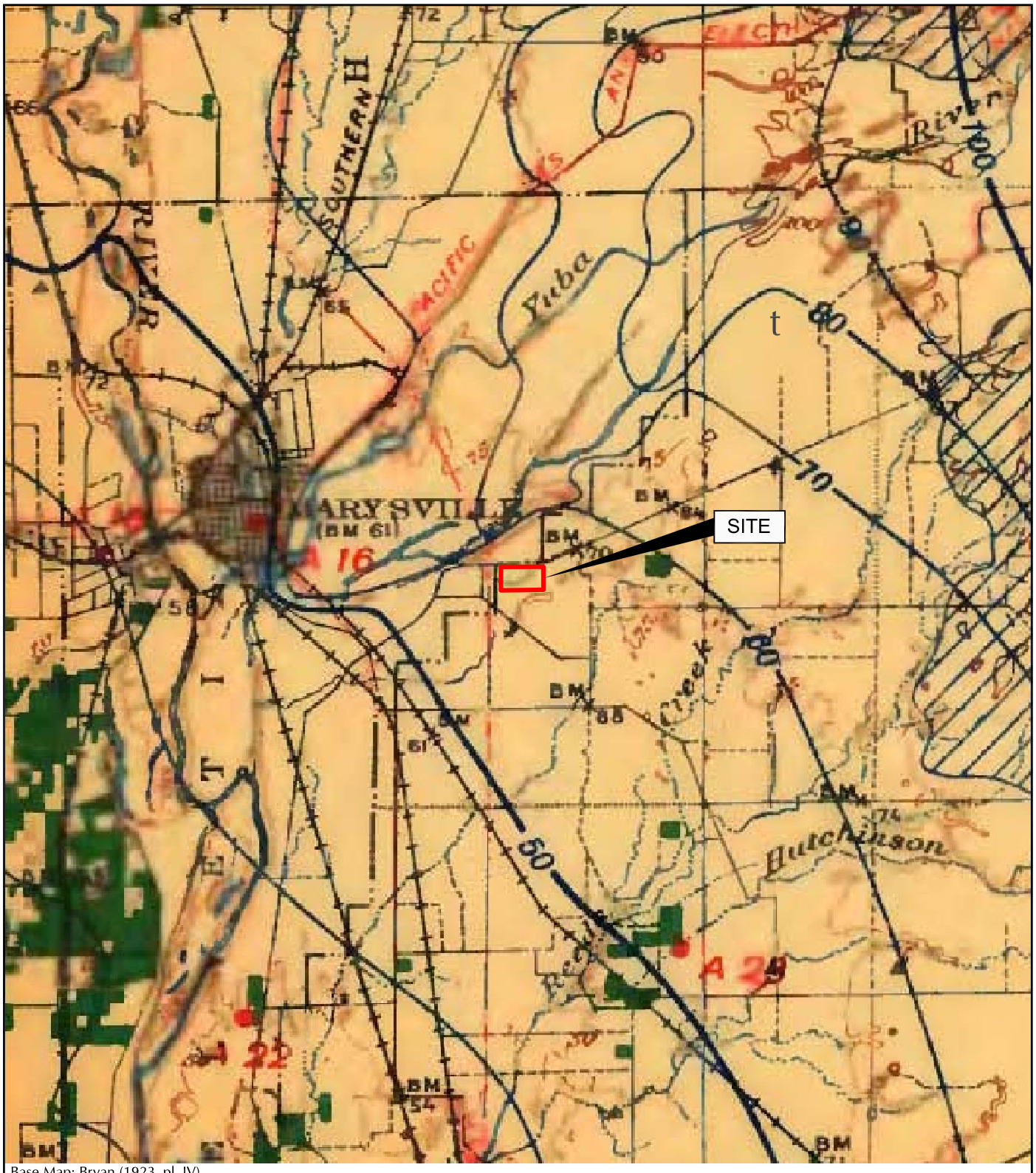

H:\Regulatory Forms\Faults\Faultsfinal\Faultbase2.mxd SCB 012408 H:\Client Files\M-O\Marysville School - Hammonton\Figures\Figure 5 Fault Location Map.pdf

## Fault Location Map

MJUSD / Hammonton-Smartsville Property
Marysville, California

**Figure 5**

LFR an ARCADIS company




Base Map: Bryan (1923, pl. IV)

**EXPLANATION**

Property Boundary

60 Elevation of 1912-1913 Water Table, in Feet Above Sea Level

N

0 7,500 FEET

NOTE: Site boundaries are approximate

# Historical Groundwater Elevation Map

MJUSD/Hammonton-Smartsville Property
Marysville, California

**Figure 6**

LFR an ARCADIS company

K:\Data\Graphics\003-Santa Maria\003-09363-06-003\003-09363-06-003 GeoHazard.dwg [GW] 9/16/09 10:12am JDLoving XREFS:

# Appendix G

*Biological Assessment*



# Biological Resources Assessment

## Hammonton-Smartville School Study Area
## Yuba County, California

*Prepared for:*

**Marysville Joint Unified School District**
1919 B Street
Marysville, CA 95901

*Prepared by:*

**Rincon Consultants, Inc.**
1530 Monterey Street, Suite D
San Luis Obispo, California 93401

*September 2011*

# TABLE OF CONTENTS

Page

1.0 INTRODUCTION ..... 1
2.0 STUDY AREA ..... 1
3.1 Background Research ..... 3
3.2 Special Status Resource Definitions ..... 3
3.3 Field Visits ..... 4
4.0 RESULTS AND DISCUSSION ..... 4
4.1 Plant Communities ..... 4
4.2 Drainages and Wetlands ..... 6
4.3 Soils ..... 7
4.4 Special Status Species ..... 7
*4.4.1 Sensitive Plant Communities* ..... 7
*4.4.2 Special Status Plants* ..... 7
5.0 CONCLUSION AND RECOMMENDATIONS ..... 9
5.1 Drainage and Wetland Issues ..... 9
5.2 Special Status Plants ..... 10
5.3 Special Status Animals ..... 10
5.4 Nesting Birds ..... 11
6.0 REFERENCES ..... 12

**FIGURES**

Figure 1 Regional Location Map ..... 2
Figure 2 Plant Communities Map ..... 5
Figure 3 Sensitive Elements Reported Within 10 Miles of the Site ..... 8

**APPENDICIES**

Appendix A Photo Plate
Appendix B Plants and Animals Observed Onsite
Appendix C Special Status Species Known To Occur Within the Vicinity of the Site

## 1.0 INTRODUCTION

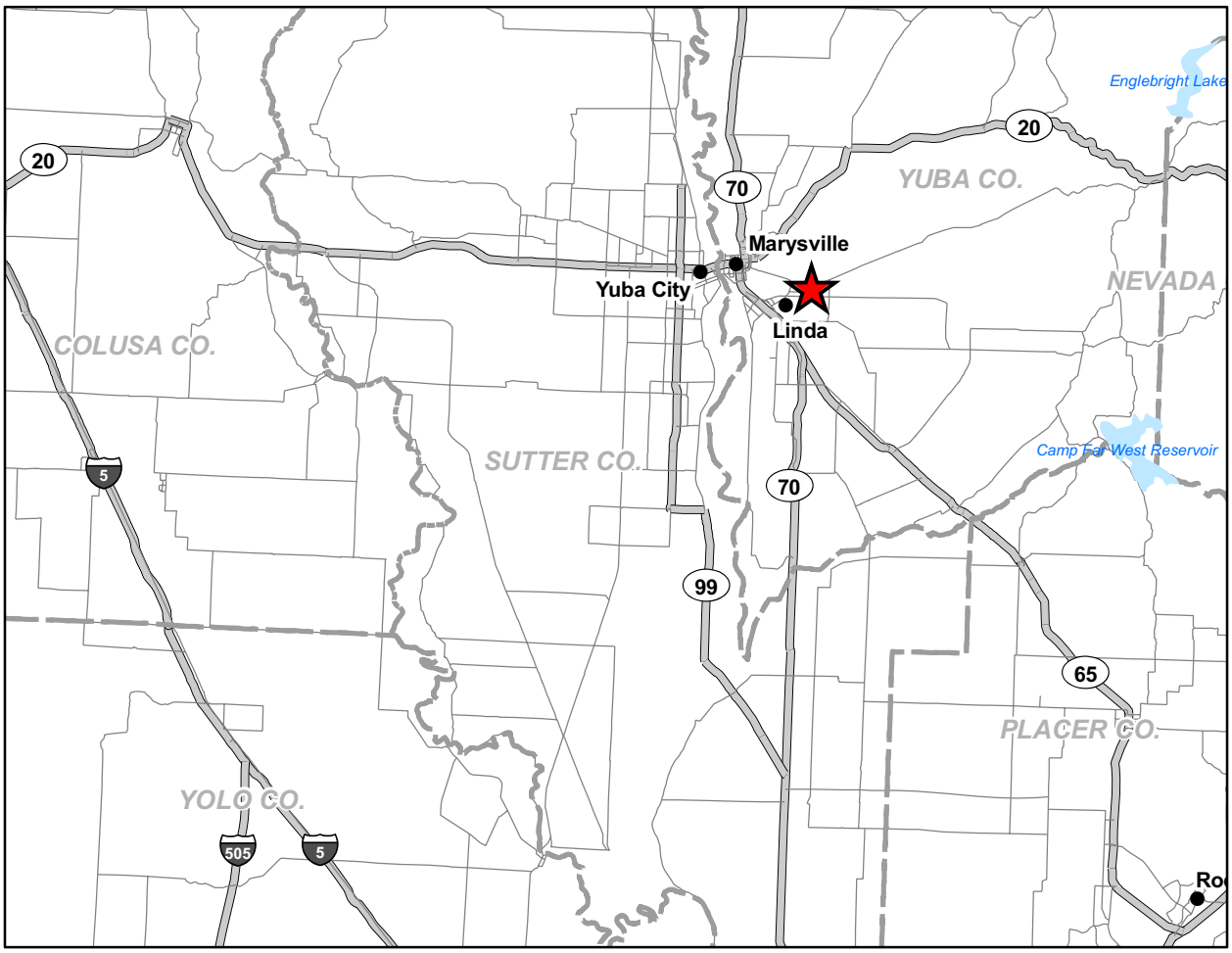
Rincon Consultants, Inc. (Rincon) completed an assessment of the existing biological resources for the Marysville Joint Unified School District site on Hammonton-Smartville Road for the purpose of environmental documentation in an Initial Study/Mitigated Negative Declaration. The purpose of this assessment is to generally characterize the existing biological resources on-site and to identify plant communities that could potentially support special status species or otherwise be of concern to the California Department of Fish and Game (CDFG) and/or the United States Fish and Wildlife Service (USFWS). No specific development plans have been provided for this site and, therefore, it is not possible to determine precise quantities of biological resources that could be impacted by future development. Therefore, this analysis assumes complete use of the property. While no specific surveys for special status species were conducted during this site visit, suitable habitat on-site was identified to direct future survey efforts. The potential need for subsequent, more intensive surveys for sensitive biological resources was assessed and is discussed in the Conclusion and Recommendations section of this report.

## 2.0 STUDY AREA

The approximately 70-acre study area is located at 2176 Hammonton-Smartville Road (Assessor's Parcel Numbers 021150032000 and 021150060000), approximately 2.5 miles southeast of the City of Marysville in Yuba County, California (Figure 1). The study area is located on the floor of the Central Valley at approximately 70 feet elevation above mean sea level and the topography on-site is flat. The study area is located in Township 15 North, Range 4 East, and Section 21; it is centered at approximately 39.133605° latitude and -121.537052° longitude and is depicted on the *Yuba City, California*, United State Geological Survey (USGS) 7.5-minute topographic quadrangle. Immediately to the north of the property is Hammonton-Smartville Road, to the east is rural residential development, to the south are a residential development and an undeveloped parcel, and to the west is an undeveloped parcel. The nearest water body is the Yuba River, approximately two miles to the northeast.

The region is characterized by a Mediterranean climate, with mild winters and hot summers. Average annual precipitation is approximately 20 inches, most of which falls in the form of rainfall from October through May (Western Regional Climate Center 2009). The natural landscape of the region, which historically consisted of grasslands and scattered shrublands, has been converted for irrigated agricultural use and rural and suburban development. No natural drainage features occur within or adjacent to the study area.

The Marysville Joint Unified School District is proposing to construct a new intermediate school, an alternative education school, an adult education center, and an educational and operational services center within the study area. The proposed intermediate school would be designed to accommodate students in grades 6 through 8. The proposed alternative education school would accommodate students in grades 7 through 8. Several classrooms in separate buildings, as well as one multi-purpose building, a library, a gym, driveways and bus access areas, parking areas, concrete flatwork, and hard-court and turf playfields would be constructed. Access to the site would be from Hammonton-Smartville Road.




*Base map source: U.S. Bureau of the Census TIGER Data, 2000, ESRI 2006.*

Regional Location Figure 1

# 3.0 METHODOLOGY

## 3.1 Background Research

Prior to field work, a search and review of records for special status species and sensitive natural plant communities contained within the California Natural Diversity Database (CNDDB) (California Department of Fish and Game 2003; Accessed July 30, 2011) was conducted for nine USGS 7.5-minute quadrangles centered on the study area including *Sutter, Yuba City, Browns Valley, Gilsizer Slough, Olivehurst, Loma Rica, Gridley, Honcut,* and *Wheatland*. A search range of this extent was used to encompass a sufficient distance to accommodate for regional habitat diversity and to overcome the limitations of the CNDDB. The CNDDB is based on actual recorded occurrences and does not constitute an exhaustive inventory of biological resources for any particular locality. Species lists were also obtained for the nine quads including the study area from the *California Native Plant Society's Inventory of Rare and Endangered Plants of California* (California Native Plant Society 2011) and the Sacramento Field Office of the USFWS (United States Department of Interior, Fish and Wildlife Service 2009a). The Natural Resources Conservation Service (NRCS) Web Soil Survey (United States Department of Agriculture, Natural Resources Conservation Service 2009a) was reviewed to determine the soil map units present within the study area. The USFWS Critical Habitat Portal (United States Department of the Interior, Fish and Wildlife Service 2009b: accessed August 15, 2011), National Wetlands Inventory (NWI) Wetlands Mapper (United States Department of the Interior, Fish and Wildlife Service 2009c), and topographic maps (National Geographic Holdings 2003) were also reviewed.

## 3.2 Special Status Resource Definitions

For the purpose of this report, special status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the Federal Endangered Species Act (FESA); those listed or proposed for listing as rare, threatened, or endangered by the CDFG under the California Endangered Species Act (CESA); animals designated as "Species of Special Concern," "Fully Protected," or "Watch List" by the CDFG; and plants occurring on the *Special Vascular Plants, Bryophytes, and Lichens List* (CDFG 2011b) per the California Native Plant Society (CNPS) code definitions:

- *List 1A = Plants presumed extinct in California;*
- *List 1B.1 = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);*
- *List 1B.2 = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened);*
- *List 1B.3 = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened or no current threats known);*
- *List 2 = Rare, threatened or endangered in California, but more common elsewhere;*
- *List 3 = Plants needing more information (most are species that are taxonomically unresolved; some species on this list meet the definitions of rarity under CNPS and CESA);*
- *List 4.1 = Plants of limited distribution (watch list), seriously endangered in California;*
- *List 4.2 = Plants of limited distribution (watch list), fairly endangered in California (20-80% occurrences threatened); and*

- *List 4.3= Plants of limited distribution (watch list), not very endangered in California.*

A list of special status plant communities, plants, and animals that could potentially occur on-site was obtained from the CNDDB search, from other studies conducted in the vicinity of the project area, and from Rincon's general knowledge of the region in which the project is proposed. Listing status was cross-referenced with special status species lists prepared by the CDFG (California Department of Fish and Game 2011a, 2011b). For plant species, habitat requirements and flowering periods were obtained from the CNPS (2011), Jepson Manual (Hickman 1993), and Calflora (2011). Using this information, Rincon conducted an evaluation of the likelihood of occurrence of each species within the study area based upon species' local distribution and habitat requirements (plant community type, soil type, and elevation above sea level).

### 3.3 Field Visits

Site visits were conducted in August and December, 2009. Rincon Senior Ecologist Colby J. Boggs visited the site on December 3, 2009 from 1:00 p.m. to 5:30 p.m. Weather during the site visit was clear and sunny, with temperatures reaching the mid-50 degrees Fahrenheit and variable light winds (~ 2-3 miles per hour). The study area was first visited on August 26 and 27, 2009 by Rincon biologist Carie Wingert during which information was collected specifically for a jurisdictional delineation (Rincon 2011). The project area was surveyed on foot and observed habitat types were recorded on a site-specific aerial photograph. Classification of the on-site plant communities is based generally on Holland's (1986) classification of terrestrial vegetation communities and was compared to Sawyer et al. (2009) vegetation classification system for consistency. Photos of notable features of the study area were taken and plants observed during the site visit were recorded.

## 4.0 RESULTS AND DISCUSSION

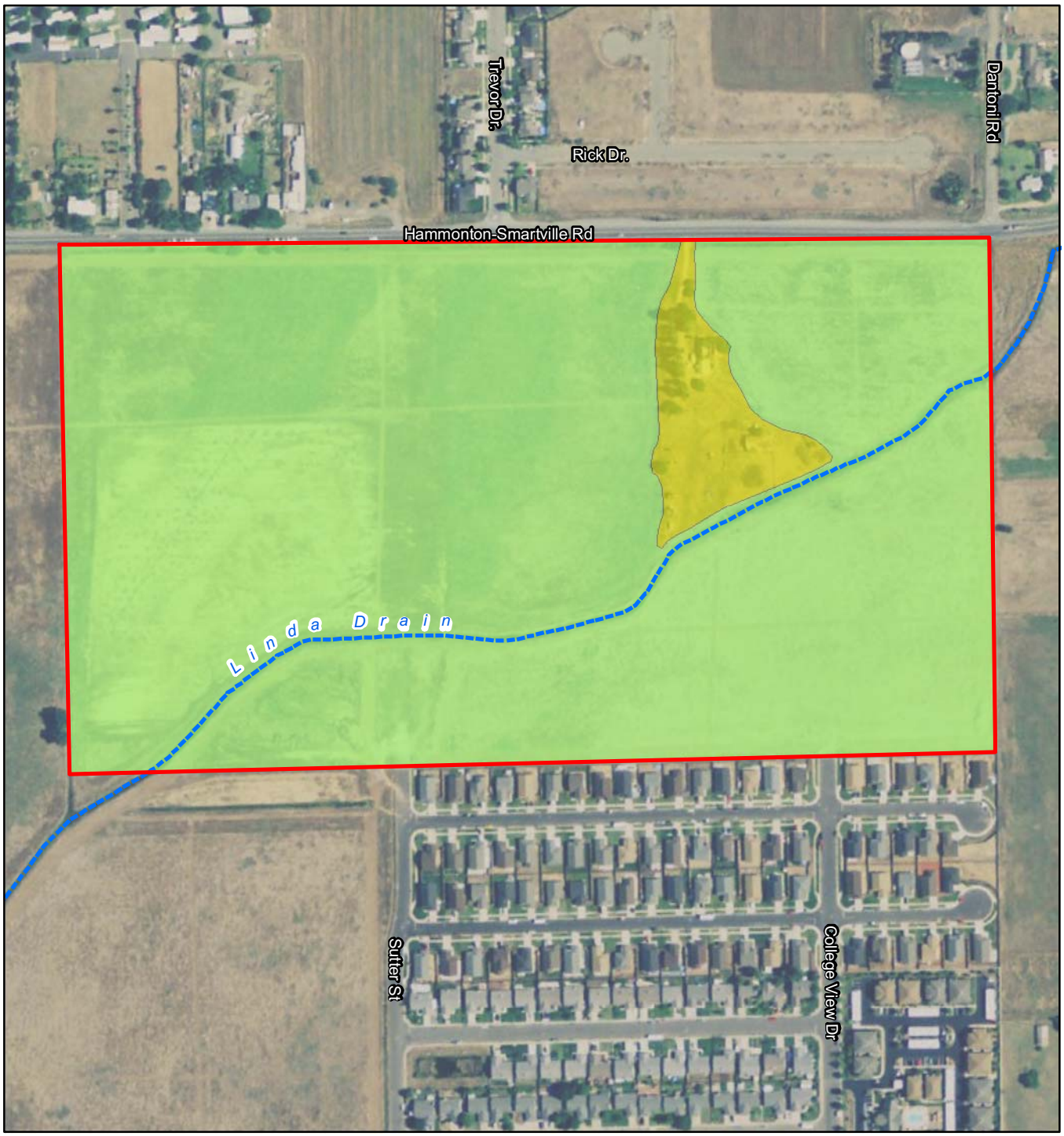
Photos documenting the existing biological conditions and a list of plant and animal species observed on-site are included in Appendix A and Table B-1 (Appendix B) of this report, respectively.

### 4.1 Plant Communities

Elements of three plant communities were observed within the study area (Figure 2). These plant communities included California Annual Grassland Series, Coastal and Valley Freshwater Marsh, and Ruderal/Developed. The following discussion focuses on these plant communities and briefly describes the existing conditions and potential for special status species to occur within the study area boundaries.

<u>California Annual Grassland</u>

The California Annual Grassland plant community on-site corresponds to the non-native grassland plant community described by Holland (1986) and to the Annual Brome Grassland described by Sawyer et al. (2009). This plant community occupies approximately 63.1 acres within the study area and, as a result of historical agricultural use, was characterized by predominantly introduced herbaceous plant species. Dominant species in this plant community included ripgut grass (*Bromus diandrus*), soft chess (*B. hordeaceus*), Mediterranean barley




*Aerial source: Map images copyright © 2009 ESRI and its licensors.*
*All rights reserved. Used by permission.*

Approximate Site Boundary

**Community Type**

California Annual Grassland

Ruderal / Disturbed

0 250 500 Feet

N

Plant Communities

Figure 2

(*Hordeum murinum* ssp. *gussoneanum*), and spikeweed (*Hemizonia fitchii*). Other species observed included slender wild oats (*Avena barbata*), Italian ryegrass (*Lolium perenne* ssp. *multiflorum*) and wheat (*Triticum aestivum*), along with non-native herbs such as radish (*Raphanus raphanistrum*), yellow star thistle (*Centaurea solstitialis*), bindweed (*Convolvulus arvensis*), curly dock (*Rumex crispus*), and prickly lettuce (*Lactuca serriola*). Two native herbs were observed: dove weed (*Croton setigerus*) and horseweed (*Conyza canadensis*).

Coastal and Valley Freshwater Marsh

The Coastal and Valley Freshwater Marsh on-site, as described by Holland (1986), corresponds most closely with the Soft Rush Marshes described by Sawyer et al. (2009). This plant community occupied portions of the approximately 0.3-acre area associated exclusively with the Linda Drain, which traverses the property in a northeast to southwest trend. The wetland areas were dominated by common rush (*Juncus effuses*), broad-leaved cattail (*Typha latifolia*), and chufa flatsedge (*Cyperus esculentus*), all of which were growing directly out of the water. Other species observed included creeping bentgrass (*Agrostis stolonifera*), tall flatsedge (*C. eragrostis*), dallis grass (*Paspalum dilatatum*), and western vervain (*Verbena lasiostachys*). This plant community has not been mapped on Figure 2 as it is located exclusively within the Linda Drain.

Ruderal/Developed

The Ruderal/Developed plant community on-site is not described by either Sawyer et al. (2009) or Holland (1986) because it is a human-created habitat. This plant community occupied 3.1 acres and was associated with the unoccupied residence in the northeast portion of the property and included a house and several accessory buildings. Vegetation was similar to that of the California annual grassland described above, but included other ornamental species such as rose bushes (*Rosa* sp.) and gum trees (*Eucalyptus* sp.).

### 4.2 Drainages and Wetlands

A preliminary jurisdictional delineation of wetlands and other waters has been completed for the study area (Rincon 2011). Three man-made linear features are present on-site, including one permanent-intermittent ditch known as the Linda Drain, and two unnamed ephemeral ditches. Each ditch was constructed for the purpose of transporting storm water and irrigation runoff from surrounding upland areas. The jurisdictional delineation determined that all three features on-site are potentially subject to the jurisdiction of the CDFG, and that only the Linda Drain is potentially subject to the jurisdiction of the Regional Water Quality Control Board (RWQCB) and United States Army Corps of Engineers (USACE). The jurisdictional delineation also identified patches of freshwater emergent wetland (described as Coastal and Valley Freshwater Marsh above) occurring within the ordinary high water mark of the Linda Drain. However, while hydrophytic vegetation is present in some wetted areas of Linda Drain, the majority of the canal does not support hydrophytic vegetation and is not functioning as a wetland. This is consistent with the ongoing vegetation management performed by Yuba County within the canal that serves to keep the channel clear of vegetation and debris to allow for adequate flows and reduce the potential for flooding. Therefore, the Linda Drain was classified as "other waters" or non-wetland waters.

### 4.3 Soils

The NRCS Web Soil Survey is a compilation of published soil surveys and in this instance refers to the information contained in *Soil Survey of Yuba County, California* (United States Department of Agriculture, Soil Conservation Service 2009). The following two soil map units were identified within the study area (Figure 3):

**San Joaquin loam, 0 to 1 percent slopes.** This soil is a moderately deep to a duripan, well- to moderately well-drained soil formed from alluvium derived from mixed but predominantly granitic sources. It is a loam soil underlain by clay. It is typically found on terraces, often in depressions, with medium to very high runoff and very slow permeability. It is typically associated with cropland and livestock grazing. This soil map unit is considered hydric when found in depressions (United States Department of Agriculture Natural Resources Conservation Service 2009).

**San Joaquin-Urban land complex 0 to 1 percent slopes**. This soil complex is made up of approximately 45 percent San Joaquin, 45 percent Urban land, and 10 percent minor components. San Joaquin soil is described above. There is no soil description for Urban land. This soil map unit is also considered hydric when found in depressions (United States Department of Agriculture Natural Resources Conservation Service 2009).

Hydric soil analysis for the jurisdictional delineation determined that while these soil map units are considered hydric in certain circumstances, they were not hydric on-site.

### 4.4 Special Status Species

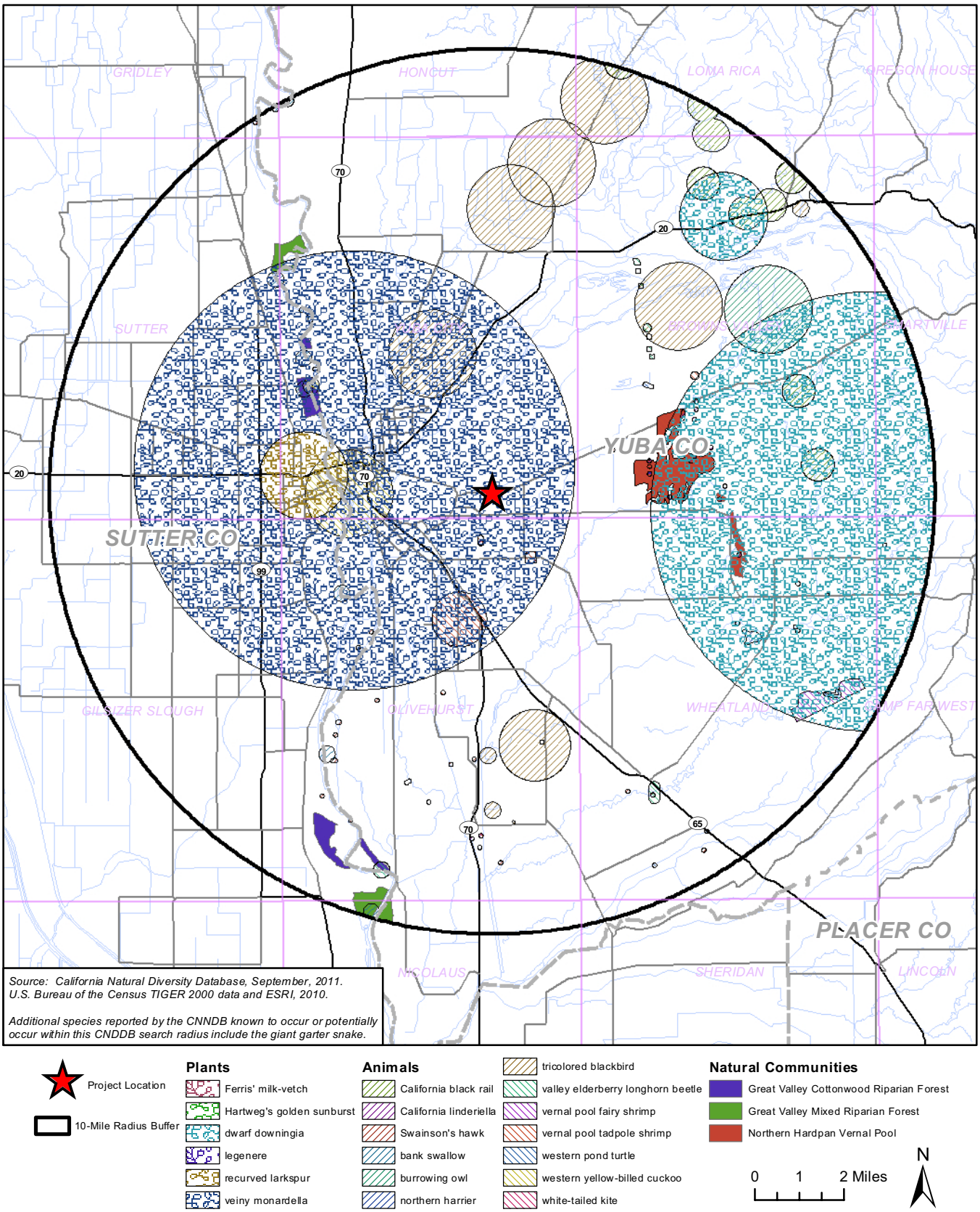
#### *4.4.1 Sensitive Plant Communities*

The CNDDB search identified occurrences of three sensitive plant communities known to occur within the vicinity of study area: Coastal and Valley Freshwater Marsh, Great Valley Cottonwood Riparian Forest, and Great Valley Mixed Riparian Forest (Figure 3). Patches of Coastal and Valley Freshwater Marsh were observed within the Linda Drain. No other sensitive plant community was observed on-site.

#### *4.4.2 Special Status Plants*

The background research determined that thirteen (13) special status plant species are known to occur within the vicinity of the study area. Several of the special status plant species that occur in the region have highly specialized habitat requirements (e.g., adobe or alkaline soils, vernal pools) that do not occur in the study area. Ecological and status information and a complete assessment of the potential for each of these special status plant species can be found in Table C-1 (Appendix C).

Of the thirteen (13) special status plant species that are known to occur in the general project vicinity, two (2) species were identified as potentially occurring within the study area: woolly rose-mallow (*Hibiscus lasiocarpos*) and Sanford's arrowhead (*Sagittaria sanfordii*). Both of these species have the potential to occur within the Coastal and Valley Freshwater Marsh habitat located within the Linda Drain. As previously noted, no focused surveys for special status




Sensitive Elements Reported by the California Natural Diversity Database

Figure 3

plant species were conducted in the study area. The potential for occurrence is based on a habitat suitability analysis level only.

*4.4.3 Special Status Animals*

Background research of the study area has identified twenty-six (26) special status animal species occurring in the vicinity of the study area (see Table C-2 in Appendix C). Please refer to Table C-2 for ecological and status information for each species. Of these, three (3) were determined to have the potential to occur on-site: northern harrier (*Circus cyaneus*), Swainson's hawk (*Buteo swainsoni*), and white-tailed kite (*Elanus leucurus*). No focused surveys for special status animal species have been conducted on the study area. The potential for occurrence is based on a habitat suitability analysis level only.

## 5.0 CONCLUSION AND RECOMMENDATIONS

The potential for occurrence of special status plant and animal species and the presence of Coastal and Valley Freshwater Marsh habitat on-site will require strategic planning in order to ensure that future development impacts to these resources are avoided, minimized, and/or mitigated. The goal of these efforts would be to plan a project that results in impacts to biological resources that are beneficial and/or less than significant pursuant to the California Environmental Quality Act (CEQA).

Three (3) plant communities typical of the general area were found within the study area: California Annual Grassland series, Coastal and Valley Freshwater Marsh, and Ruderal/Developed. The study area also contains three (3) drainage ditches. The Linda Drain is expected to fall under the jurisdiction of the USACE, RWQCB, and CDFG, and the two ephemeral ditches are expected to fall only under the jurisdiction of the CDFG. Furthermore, the study area has the potential to support special status plant and animal species. The following identifies potentially significant impacts to biological resources that co ld result from project implementation. Mitigation measures described below are developed with in the expectation that the entire property will be developed.

### 5.1 Drainage and Wetland Issues

The preliminary jurisdictional delineation identified one intermittent to perennial ditch (Linda Drain) and two ephemeral ditches on-site (Rincon 2011). The Linda Drain is expected to fall under the jurisdiction of the USACE, RWQCB, and CDFG, and the two ephemeral ditches are expected to fall only under the jurisdiction of the CDFG. Mitigation for impacts to these features will likely be required. Each agency will require a permit for impacts to these features, and each agency will require mitigation for unavoidable impacts. Types and quantities of mitigation will be determined by the responsible agencies and will vary from purchase of credits at an agency-approved mitigation bank to restoration and preservation of habitat. Mitigation for impacts to USACE jurisdictional areas typically includes on-site and/or off-site restoration of similar features at a minimum ratio of 2:1 (area restored to area impacted). The RWQCB typically does not require mitigation in addition to that required by the USACE. The CDFG 's typically requires restoration of drainages and riparian habitat at a mitigation range of 3:1 to 5:1. Alternatively, and pending approval from each agency, mitigation can be achieved through purchase of credits at an approved jurisdictional drainage mitigation bank. All final mitigation requirements are subject to the discretion of each regulatory agency. o avoid costly

mitigation, it is recommended that future development of the study area be designed to avoid these jurisdictional features to the greatest extent feasible.

### 5.2 Special Status Plants

Two (2) special status plant species were determined to have the potential to occur on-site: woolly rose-mallow and Sanford's arrowhead. Both of these species could occur within the Coastal and Valley Freshwater Marsh within the Linda Drain. Because the timing of the site visit for this biological assessment did not coincide with the bloom period for theses species, a seasonally-timed, focused rare plant survey is recommended to determine the presence or absence of these species prior to disturbance of this habitat. Surveys can be limited to the Coastal and Valley Freshwater Marsh habitat on-site, and specifically to those portions of the habitat that are expected to be disturbed by future development activities. The CDFG and CNPS recommend that rare plant surveys be conducted to capture the bloom periods for all rare plant species that have the potential to occur on a given site. Therefore, rare plant surveys on the site should be conducted on a monthly schedule from May until June, possibly extending to October if determined necessary by a qualified biologist, to ensure the blooming periods of the various rare plant species are adequately covered. If any special status plant species are found to occur within the study area, their locations should be mapped and any proposed development should be designed to avoid the areas where special status plant species occur. If any special status plant species cannot be avoided, consultation with the CDFG may be necessary prior to the removal of any of these species.

### 5.3 Special Status Animals

The northern harrier, Swainson's hawk, and white-tailed kite each has the potential to occur on-site based upon the presence of suitable habitat. The northern harrier is not expected to nest on-site but could potentially forage on-site. Given the abundance of foraging habitat within the vicinity of the site, the loss of foraging habitat on-site for northern harriers is expected to minimally impact this species.

Both the Swainson's hawk and white-tailed kit may nest and forage on-site. The Swainson's hawk is listed as "Threatened" under the California Endangered Species Act and they are well documented within the vicinity of the study area. Swainson's hawks could potentially nest within the trees on-site, particularly the valley oaks (*Quercus lobata*) located along the western property boundary. To ensure that impacts to nesting Swainson's hawks are avoided during construction of the project, protocol-level surveys specific to Swainson's hawks are recommended (Swainson's Hawk Technical Advisory Committee 2000).

While the project may avoid impacts to Swainson's hawk nests, impacts to foraging habitat will be unavoidable. The CDFG has provided mitigation recommendations aimed at reducing the loss of foraging habitat available to nesting Swainson's hawks. Mitigation varies depending upon if the project falls within one (1) mile, five (5) miles, or ten (10) miles of a known active (used during one or more of the last five years) Swainson's hawk nest. The CNDDB identified three (3) nest locations within five (5) miles of the project from 2004. The mitigation recommendation for loss of foraging habitat within five (5) miles of an active nest is protection of 0.75 acre of land for each acre developed. The CDFG recommends that lands be purchased through fee title acquisition or conservation easement on agricultural or otherwise suitable foraging habitat for Swainson's hawk. In addition, a management endowment would be



required to provide the CDFG with funding to management these preserved lands. Alternatively, credits for foraging habitat may be purchased at an agency-approved mitigation bank. The CDFG typically enforces mitigation for impacts to Swainson's hawk foraging habitat through the CEQA process. Therefore, any mitigation implemented for Swainson's hawks should be approved by the CDFG.

While no specific survey protocol or recommended mitigation exists for the white-tailed kite, this species is designated as "Fully Protected" under the California Fish and Game Code (Section 3511) and, thus, no take of this species is permitted. This protection covers white-tailed kite individuals and nests, but does not extend to foraging habitat. If construction activities occur during the white-tailed kite nesting season (March 1 to September 15), a pre-construction survey for white-tailed kite nests should be conducted no more than 30 days prior to initiation of construction activities. The survey should include all potential nest sites on-site as well as a 200 foot buffer around the study area. If a white-tailed kite nest is observed within the survey area, no construction activities should occur within 500 feet of the nest and CDFG should be notified immediately.

### 5.4 Nesting Birds

In addition to the bird species discussed above, other bird species protected by the USFWS through the Migratory Bird Treaty Act and/or the CDFG through the Fish and Game Code may be found nesting in the trees and grassland on-site. Surveys of the entire study area for all nesting birds should be conducted prior to vegetation removal and/or initiation of construction activities, if such activities occur during the nesting season (February 1 or March 1 to August 15). If nesting birds are found, a buffer should be established around the nest site(s) for the duration of the nesting activity based on the species present, typically 250-500 feet for raptors and 50-200 feet for other bird species.

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# Appendix A

*Photo Plate*



# APPENDIX A: HAMMONTON-SMARTVILLE IS/MND BIOLOGICAL RESOURCES ASSESSMENT PHOTO PLATE



**Photo 1.** View of the driveway leading to the unoccupied residence in the northeastern portion of the site. Driveway access to the residence is from Hammonton-Smartville Road.



**Photo 2**. View of project site looking northeast from the Linda Drain towards the unoccupied residence. Non-native grassland was the dominant habitat type on-site.



**Photo 3.** As shown in this picture taken on August 26, 2009, areas adjacent to the canal (visible to the left) as well as along the property boundary are frequently plowed.



**Photo 4.** View of Linda Drain from eastern boundary of the property, looking southwest. Emergent vegetation was present at varying densities along the length of the channel within the property boundaries. The Linda Drain is mapped on USGS topographic maps as a blue-line stream. The Linda Drain contained water in August 2009, but had dried considerably by December and only contained scattered ponds.



**Photo 5.** View of the east-west man-made, ephemeral ditch located along Hammonton-Smartville Road.



**Photo 6.** View of the north-south man-made, ephemeral ditch located along the western boundary of the property, looking north from the Linda Drain. This ditch connects an east-west trending ditch along Hammonton-Smartville Road to the Linda Drain.

# Appendix B

*Plants and Animals Observed Onsite*



## Table B-1. Plant Species Observed on the Hammonton-Smartville Project Site on August 26 and 27 and December 3, 2009.

| PLANTS | |
|---|---|
| **Scientific Name** | **Common Name** |
| *Agrostis exarata* | spike bentgrass |
| *Agrostis stolonifera* | creeping bentgrass |
| *Amsinckia menziesii* | fiddleneck |
| *Asclepias fascicularis* | narrow-leaf milkweed |
| *Asparagus officinalis* | garden asparagus |
| *Avena barbata* | slender wild oats |
| *Avena fatua* | wild oat |
| *Baccharis pilularis* | coyote brush |
| *Bromus diandrus* | ripgut grass |
| *Bromus hordeaceus* | soft brome |
| *Centaurea solstitialis* | yellow star-thistle |
| *Centromadia* [=*Hemizonia*] *fitchii* | Fitch's tarweed |
| *Cichorium intybus* | chicory |
| *Convolvulus arvensis* | bindweed |
| *Conyza canadensis* | horseweed |
| *Croton setigerus* | dove weed |
| *Cynodon dactylon* | Bermuda grass |
| *Cyperus eragrostis* | tall flatsedge |
| *Cyperus esculentus* | chufa flatsedge |
| *Echinochloa crus-galli* | barnyardgrass |
| *Erodium cicutarium* | redstem filaree |
| *Eriogonum wrightii* | bastardsage |
| *Gnaphalium palustre* | western marsh cudweed |
| *Hemizonia fitchii* | spikeweed |
| *Hordeum murinum* ssp. *gussoneanum* | Mediterranean barley |
| *Hordeum murinum* ssp. *leporinum* | foxtail barley |
| *Juncus effusus* | common rush |
| *Lactuca serriola* | prickly lettuce |
| *Leontodon taraxacoides* | hawkbit |
| *Lolium perenne* ssp. *multiflorum* | Italian ryegrass |
| *Lythrum hyssopifolium* | hyssop loosestrife |
| *Paspalum dilatatum* | dallis grass |
| *Persicaria lapathifolia* | willow weed |
| *Pesicaria* [=*Polygonum*] *lapathifolium* | willow weed |
| *Phalaris aquatica* | harding grass |
| *Polypogon monspeliensis* | rabbitsfoot grass |
| *Populus fremontii ssp. fremontii* | Fremont cottonwood |
| *Raphanus raphanistrum* | wild radish |
| *Raphanus sativus* | radish |
| *Rumex crispus* | curly dock |
| *Silybum marianum* | milk thistle |
| *Sorghum halepense* | Johnsongrass |

| | |
|---|---|
| *Trichostemma lanceolatum* | vinegarweed |
| *Trifolium hirtum* | rose clover |
| *Triticum aestivum* | wheat |
| *Typha latifolia* | broad-leaved cattail |
| *Verbena lasiostachys* | western vervain |
| *Vicia Americana* | American vetch |

## Table B-2. Animal Species Observed on the Hammonton-Smartville Project Site on August 26 and 27 and December 3, 2009.

| ANIMALS | |
|---|---|
| **Scientific Name** | **Common Name** |
| *Spizella pusilla* | field sparrow |
| *Procyon lotor* | raccoon |
| Order Descapoda | crayfish |
| *Lepus californicus* | black-tailed jackrabbit |
| *Sturnella neglecta* | western meadowlark |
| Family Phasianidae | pheasant |

# Appendix C

*Special Status Species Occurring Within the Vicinity of the Site*

## Table C-1. Special Status Plant Species in the Project Vicinity

| Species | Status* Fed/CA/CNPS | Habitat Requirements | Project Site Suitability/Observations |
|---|---|---|---|
| **PLANTS** | | | |
| *Astragalus tener* var. *ferrisiae*<br><br>Ferris' milk-vetch | --/--/1B.1 | Annual herb; blooms April and May; meadows and seeps (vernally mesic), valley and foothill grassland in subalkaline flats; 6 to 247 feet. | Neither subalkaline soils nor meadows and seeps present on-site. **Not expected to occur**. |
| *Delphinium recurvatum*<br><br>recurved larkspur | --/--/1B.2 | Perennial herb; blooms March to June; chenopod scrub, cismontane woodland, valley and foothill grassland (alkaline); 10-2460 feet. | No alkaline soils present. No chenopod scrub or woodland present. **Not expected to occur.** |
| *Downingia pusilla*<br><br>dwarf downingia | --/--/2.2 | Annual herb; blooms March through May; valley and foothill grassland (mesic sites); vernal pools; vernal lake and pool margins with variety of associates; 3 to 1,460 feet. | No vernal pools present on-site. **Not expected to occur.** |
| *Hibiscus lasiocarpos* var. *occidentalis*<br><br>woolly rose-mallow | --/--/1B.2 | Rhizomatous herb emergent; bloom June through September; freshwater marshes and swamps; moist, freshwater-soaked river banks and low peat islands in sloughs; 0 to 410 feet; known from the delta watershed. | Suitable habitat is present on-site within the Linda Drain. **Could occur**. |
| *Juncus leiospermus* var. *ahartii*<br><br>Ahart's dwarf rush | --/--/1B.2 | Annual herb; blooms March through May; restricted to edges of vernal pools in valley and foothill grassland; 98 to 751 feet. | No vernal pools present. **Not expected to occur.** |
| *Juncus leiospermus* var. *leiospermus*<br><br>Red Bluff dwarf rush | --/--/1B.1 | Annual herb; blooms March through May; chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools; 35-1020 meters. | Suitable vernal pool habitat absent. **Not expected to occur.** |
| *Legenere limosa*<br><br>legenere | --/--/1B.1 | Annual herb; blooms April through June; in beds of vernal pools; 3 to 2887 feet. | No vernal pools present. **Not expected to occur.** |
| *Mondardella douglasii* ssp. *venosa*<br><br>veiny monardella | --/--/1B.1 | Annual herb; blooms May through July; valley and foothill grassland and cismontane woodland; in heavy clay, mostly with grassland associates; 197 to 1350 feet. | Grassland habitat present on-site; however, soil would not be considered a heavy clay and the grassland habitat has been heavily disturbed due to agricultural practices. **Unlikely to occur**. |
| *Navarretia leucocephala* ssp. *bakeri*<br><br>Baker's navarretia | --/--/1B.1 | Annual herb; blooms April through July; cismontane woodland, meadows and seeps, vernal pools, valley and foothill grasslands, and lower montane coniferous forest; vernal pools and swales; adobe or alkaline soils; 16 to 5700 feet. | No vernal pools or swales present. No adobe or alkaline soils present. **Not expected to occur.** |
| *Paronychia ahartii*<br><br>Ahart's paronychia | --/--/1B.1 | Annual herb; blooms March through June; cismontane woodland, vernal pools, valley and foothill grassland; stony, near barren clay of swales and higher ground around vernal pools; 30 to 510 meters. | Suitable vernal pool habitat absent. **Not expected to occur.** |

## Table C-1. Special Status Plant Species in the Project Vicinity

| Species | Status* Fed/CA/CNPS | Habitat Requirements | Project Site Suitability/Observations |
|---|---|---|---|
| *Pseudobahia bahiifolia*<br><br>Hartweg's golden sunburst | E/E/1B.1 | Annual shrub; blooms March and April; cismontane woodland and valley and foothill grassland; clay soils, predominantly on the northern slopes of knolls, but also along shady creeks or near vernal pools; 49 to 492 feet. | Vernal pools and suitable microhabitats (knolls, shady creeks) absent. **Not expected to occur.** |
| *Sagittaria sanfordii*<br><br>Sanford's arrowhead | --/--/1B.2 | Rhizomatous emergent herb; blooms May through October; marshes and swamps; in standing or slow-moving freshwater ponds, marshes and ditches; 0 to 2133 feet. | **Could occur** within the marsh habitat located within the Linda Drain. |
| Trichocoronis wrightii var. wrightii<br><br>*Wright's trichocoronis* | --/--/2.1 | Annual herb; blooms May through September; meadows and seeps, marshes and swamps, riparian forests, vernal pools (alkaline); 16 to 1427 feet. | Suitable habitat absent. **Not expected to occur.** |

**E = Endangered; T = Threatened; D = Delisted; R = Rare CE = Candidate for Endangered Status; SSC = California Species of Special Concern; FP = Fully Protected; '—' = no status; List 1B – Rare, threatened, or endangered in California and elsewhere; List 2 – Rare, threatened or endangered in California, but more common elsewhere; List 4 – Limited distribution (Watch List). Source: California Natural Diversity Database (RareFind3, 2003), accessed August 2011; California Native Plant Society Online Inventory of Rare Plants, accessed October 2009 (online at www.cnps.org); Special Vascular Plants, Bryophytes, and Lichens List July 2011.*

## Table C-2. Special Status Animal Species in the Project Vicinity

| | | | |
|---|---|---|---|
| **INVERTEBRATES** | | | |
| *Branchinecta conservatio*<br>Conservancy fairy shrimp | E/--/-- | Vernal pools, swales, and ephemeral freshwater habitats. Not known to occur in riverine waters or marine waters. | No vernal pool habitat present. **Not expected to occur.** |
| *Branchinecta lynchi*<br>vernal pool fairy shrimp | T/--/-- | Endemic to grasslands of central valley, central coast mountains and south coast mountains, in astatic rain-filled pools; inhabits small clear-water sandstone depression pools and grassland swales, earth slump, or basalt-flow depression pools. | No vernal pool habitat present. **Not expected to occur.** |
| *Desmocerus californicus dimorphus*<br>valley elderberry longhorn beetle | T/--/-- | Occurs only in the Central Valley, in association with blue elderberry | No blue elderberry plants present. **Not expected to occur.** |
| *Lepidurus packardi*<br>vernal pool tadpole shrimp | E/--/-- | Vernal pools and swales in the Sacramento Valley containing clear to highly turbid water; commonly found in grassland bottomed swales of unplowed grassland; some pools mud-bottomed. | No vernal pool habitat present. **Not expected to occur.** |
| *Linderiella occidentalis*<br>California linderiella | --/--/-- | Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions; water in pools has very low alkalinity and conductivity. | No vernal pool habitat present. **Not expected to occur.** |
| **FISH** | | | |
| *Acipenser medirostris*<br>green sturgeon | T/SSC/--<br>(southern DPS) | Spawn in the Sacramento and Feather rivers; juveniles are thought to rear mainly in the estuary. | Neither spawning nor rearing habitat present on-site. **Not expected to occur**. |
| *Hypomesus transpacificus*<br>delta smelt | T/E/-- | Estuarine systems in the Sacramento-San Joaquin Delta. | Suitable estuarine habitat absent. **Not expected to occur.** |
| *Oncorhynchus mykiss*<br>Steelhead – Central Valley DPS | T/--/-- | Fresh water, fast flowing, highly oxygenated, clear, cool stream where riffles tend to predominate pools. | The ditches on-site do not contain suitable aquatic habitat for this species. **Not expected to occur.** |
| *Oncorhynchus tshawytscha*<br>chinook salmon, Central Valley spring run ESU | T/T/-- | Sacramento River and its tributaries. | No suitable spawning or rearing habitat present on-site or upstream of drainage. **Not expected to occur**. |
| **AMPHIBIANS/REPTILES** | | | |
| *Actinemys marmorata*<br>western pond turtle | --/SSC/-- | Thoroughly aquatic; ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation; basking sites such as partially submerged logs, vegetation mats, or open mud banks; need upland habitat for egg laying. | Banks along ditches are very steep and likely preclude this species from utilizing adjacent upland habitat. Marginal basking sites present. **Unlikely to occur**. |

## Table C-2. Special Status Animal Species in the Project Vicinity

| | | | |
|---|---|---|---|
| *Ambystoma californiense*<br>California tiger salamander | T/T,CE,SSC/-- | Vernal pools or other seasonal water sources for breeding; grasslands, foothill and oak woodlands located within 2000 feet of seasonal breeding pools; dry-season refuge sites contain small mammal burrows for shelter. | Suitable breeding habitat absent on-site and within the vicinity. **Not expected to occur.** |
| *Rana draytonii*<br>California red-legged frog | T/SSC/-- | Lowland and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. | Suitable aquatic habitat absent and upland habitat is marginal due to repeated disturbance. **Not expected to occur**. |
| *Thamnophis gigas*<br>giant garter snake | T/T/-- | Freshwater marsh and low gradient streams; occurs in drainage canals and irrigation ditches usually with perennial water. | No burrows observed. Adjacent upland habitat is frequently plowed resulting in a lack of aestivation habitat. **Not expected to occur.** |
| **BIRDS** | | | |
| *Agelaius tricolor*<br>tricolored blackbird | --/SSC/--<br>(nesting colony) | Found near freshwater habitats where it nests in emergent freshwater or riparian vegetation. This species prefers nesting in dense thickets of cattails and tules. Due to their highly colonial nature, nesting areas must be large enough to support a colony of about 50 pairs. | Cattails within the on-site marsh are not dense or abundant enough to support a colony. **Unlikely to occur**. |
| *Athene cunicularia*<br>burrowing owl | --/SSC/--<br>(burrow sites and wintering sites) | Grasslands; nests in burrows. They prefer areas with low vegetation on small hills that provide a vantage point of the surrounding areas. | No burrows observed. Vegetation is dense and the site is frequently plowed. **Not expected to occur.** |
| *Branta hutchinsii leucopareia*<br>cackling (=Aleutian Canada) goose | D/--/--<br>(nonbreeding /wintering) | Winters in lakes and inland prairies; forages in natural pasture or cultivated grain fields; loafs on lakes, reservoirs, ponds. | No suitable aquatic habitat present. **Not expected to occur.** |
| *Buteo swainsoni*<br>Swainson's hawk | --/T/--<br>(nesting) | Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural areas; requires adjacent suitable foraging areas such as grassland and grain fields supporting rodent populations. | Could nest in trees on-site or adjacent to the site. Suitable foraging habitat present. **Could occur**. |
| *Circus cyaneus*<br>northern harrier | --/SSC/--<br>(nesting) | Forages and nests in grasslands and marshes. Requires large expanses of habitat for foraging. | No suitable nesting habitat, but foraging habitat is present. **Could occur**. |
| *Coccyzus americanus occidentalis*<br>western yellow-billed cuckoo | C/E/--<br>(nesting) | Nests and forages in dense lowland riparian vegetation during summer. | Suitable lowland riparian vegetation absent. **Not expected to occur**. |
| *Elanus leucurus*<br>white-tailed kite | --/FP/--<br>(nesting) | Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland; open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting. | Suitable foraging habitat present. Could nest in trees on-site or in oak trees immediately adjacent to the project site. **Could occur**. |

## Table C-2. Special Status Animal Species in the Project Vicinity

| | | | |
|---|---|---|---|
| *Grus canadensis tabida*<br>greater sandhill crane | --/T, FP/--<br>(nesting & nonbreeding/ wintering) | Nests in wetland habitats in northeastern California; winters in Central Valley; prefers grain fields within 4 miles of shallow body of water used as a communal roost site. | No suitable aquatic habitat present. **Not expected to occur.** |
| *Haliaeetus leucocephalus*<br>bald eagle | D/E, FP/--<br>(nesting & wintering) | Ocean shore, lake margins, and rivers for both nesting and wintering; most nests within 1 mile of water; nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine; roosts communally in winter. | No suitable aquatic habitat present. **Not expected to occur.** |
| *Laterallus jamaicensis coturniculus*<br>California black rail | --/T, FP/-- | Freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that does not fluctuate and dense vegetation for nesting. | No suitable habitat present. Water levels within the freshwater marsh fluctuate greatly over the course of the year, with water nearly absent during the winter months. **Not expected to occur**. |
| *Riparia riparia*<br>bank swallow | --/T/--<br>(nesting) | Nests in riparian and other lowland habitats west of the desert; requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean; colonial nester | Suitable banks/cliffs absent. **Not expected to occur.** |
| **MAMMALS** | | | |
| *Lasionycteris noctivagans*<br>silver-haired bat | --/--/-- | Coastal and montane forest; feeds over streams, ponds, and open brushy areas; roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, under rocks; needs drinking water. | Suitable forest habitat absent. **Not expected to occur.** |

**E = Endangered; T = Threatened; D = Delisted; R = Rare CE = Candidate for Endangered Status; SSC = California Species of Special Concern; FP = Fully Protected; '—' = no status; Source: California Natural Diversity Database (RareFind3, 2003), accessed August 2011; Special Animals List January 2011*

# Appendix H

*Preliminary Drainage Calculations*

**Preliminary Drainage Calculations**
For

**East Linda Master Plan**
Linda, California

May 8, 2012

By

**Warren Consulting Engineers, Inc.**
1117 Windfield Way, Suite 100
El Dorado Hills, California 95762

(916) 985-1870

The East Linda Master Plan is located on approximately 48 acres south of Hammonton-Smartville Road between Happy Way to the west and Alberta Avenue to the east. The land is currently open space with a single residence near the center of the site off of Hammonton-Smartville Road. An approximate 5 foot wide by 5 foot deep drainage channel runs through the site from north east to south west.

The East Linda Master Plan is proposing the construction of a new middle school, an alternative education center and educational support services over the next several years. This project will utilize surface drainage, piped drainage systems, grass lined swales and detention ponds. All run-off from hardscape features such as parking lots, sidewalks and roof tops, will be treated to improve water quality prior to being discharged into the drainage channel running through the site.

These improvements are estimated to increase the peak flows leaving the site as follows;

| Storm Event | Pre-Construction | Post-Construction | Increase |
|---|---|---|---|
| 10 | 8 cfs | 20 cfs | 12 cfs |
| 25 | 17 cfs | 42 cfs | 25 cfs |
| 100 | 30 cfs | 60 cfs | 30 cfs |

Flows entering the drainage channel will be limited to pre-development flow levels. Excess flows will be detained on site and will be released as the on-site run-off decreases.

The calculations were prepared per the Yuba County Improvement Standards Section 8 and Appendix A. Calculations were prepared for the 10 year, 25 year and 100 year event.

**PRELIMINARY STORM DRAIN COMPUTATION SHEET - 10 YEAR EVENT**

**WARREN CONSULTING ENGINEERS**
**1117 WINDFIELD WAY, SUITE 100**
**EL DORADO HILLS, CALIFORNIA 95762**
**(916) 985-1870**

JOB NAME: East Linda Master Plan
JOB NO.: 2705.1
FILE NO.: 2705.1.draincalcs.dc1
USED BY: JimS
Date: 7-May-12

| Design Parameters | |
|---|---|
| Pervious C= | 0.30 |
| Impervious C= | 0.80 |

Shaded areas to be filled in by user.

| Shed Node | Shed Area acres | Pervious Area acres | Imperv. Area acres | Total Area acres | Tot. Perv. Area acres | Total Imp. Area acres | Response Time, tr min. | Runoff Coeff, C | Intensity i in/hr | Peak Flow, Q cfs |
|---|---|---|---|---|---|---|---|---|---|---|
| (E) NS1 | 28.9 | 28.4 | 0.5 | 28.9 | 28.4 | 0.5 | 30 | 0.31 | 0.70 | 6.24 |
| (E) SS1 | 19.5 | 19.5 | 0.0 | 19.5 | 19.5 | 0.0 | 40 | 0.30 | 0.55 | 3.22 |
| **(E) TOT** | **48.4** | **47.9** | **0.5** | **48.4** | **47.9** | **0.5** | **40** | **0.31** | **0.55** | **8.12** |
| (P) NS1 | 2.0 | 0.7 | 1.3 | 2.0 | 0.7 | 1.3 | 15 | 0.63 | 1.60 | 2.00 |
| (P) NS2 | 7.6 | 2.1 | 5.5 | 7.6 | 2.1 | 5.5 | 15 | 0.66 | 1.60 | 8.05 |
| (P) NS3 | 16.1 | 4.6 | 11.5 | 16.1 | 4.6 | 11.5 | 30 | 0.66 | 0.70 | 7.41 |
| (P) NS4 | 2.3 | 0.8 | 1.5 | 2.3 | 0.8 | 1.5 | 15 | 0.63 | 1.60 | 2.30 |
| (P) NS5 | 0.9 | 0.8 | 0.1 | 0.9 | 0.8 | 0.1 | 15 | 0.36 | 1.60 | 0.51 |
| (P) SS1 | 12.2 | 2.6 | 9.6 | 12.2 | 2.6 | 9.6 | 15 | 0.69 | 1.60 | 13.54 |
| (P) SS2 | 7.3 | 6.7 | 0.6 | 7.3 | 6.7 | 0.6 | 15 | 0.34 | 1.60 | 3.98 |
| **(P) TOT** | **48.4** | **18.3** | **30.1** | **48.4** | **18.3** | **30.1** | **30** | **0.61** | **0.70** | **20.70** |

**PRELIMINARY STORM DRAIN COMPUTATION SHEET - 25 YEAR EVENT**

**WARREN CONSULTING ENGINEERS**
**1117 WINDFIELD WAY, SUITE 100**
**EL DORADO HILLS, CALIFORNIA 95762**
**(916) 985-1870**

JOB NAME: East Linda Master Plan
JOB NO.: 2705.1
FILE NO.: 2705.1.draincalcs.dc1
USED BY: JimS
Date: 7-May-12

| Design Parameters | |
|---|---|
| Pervious C= | 0.35 |
| Impervious C= | 0.86 |

Shaded areas to be filled in by user.

| Shed Node | Shed Area acres | Pervious Area acres | Imperv. Area acres | Total Area acres | Tot. Perv. Area acres | Total Imp. Area acres | Response Time, tr min. | Runoff Coeff, C | Intensity i in/hr | Peak Flow, Q cfs |
|---|---|---|---|---|---|---|---|---|---|---|
| (E) NS1 | 28.9 | 28.4 | 0.5 | 28.9 | 28.4 | 0.5 | 30 | 0.36 | 1.30 | 13.48 |
| (E) SS1 | 19.5 | 19.5 | 0.0 | 19.5 | 19.5 | 0.0 | 40 | 0.35 | 1.00 | 6.83 |
| **(E) TOT** | **48.4** | **47.9** | **0.5** | **48.4** | **47.9** | **0.5** | **40** | **0.36** | **1.00** | **17.20** |
| (P) NS1 | 2.0 | 0.7 | 1.3 | 2.0 | 0.7 | 1.3 | 15 | 0.68 | 1.90 | 2.59 |
| (P) NS2 | 7.6 | 2.1 | 5.5 | 7.6 | 2.1 | 5.5 | 15 | 0.72 | 1.90 | 10.38 |
| (P) NS3 | 16.1 | 4.6 | 11.5 | 16.1 | 4.6 | 11.5 | 30 | 0.71 | 1.30 | 14.95 |
| (P) NS4 | 2.3 | 0.8 | 1.5 | 2.3 | 0.8 | 1.5 | 15 | 0.68 | 1.90 | 2.98 |
| (P) NS5 | 0.9 | 0.8 | 0.1 | 0.9 | 0.8 | 0.1 | 15 | 0.41 | 1.90 | 0.70 |
| (P) SS1 | 12.2 | 2.6 | 9.6 | 12.2 | 2.6 | 9.6 | 15 | 0.75 | 1.90 | 17.42 |
| (P) SS2 | 7.3 | 6.7 | 0.6 | 7.3 | 6.7 | 0.6 | 15 | 0.39 | 1.90 | 5.44 |
| **(P) TOT** | **48.4** | **18.3** | **30.1** | **48.4** | **18.3** | **30.1** | **30** | **0.67** | **1.30** | **41.98** |

**PRELIMINARY STORM DRAIN COMPUTATION SHEET - 100 YEAR EVENT**

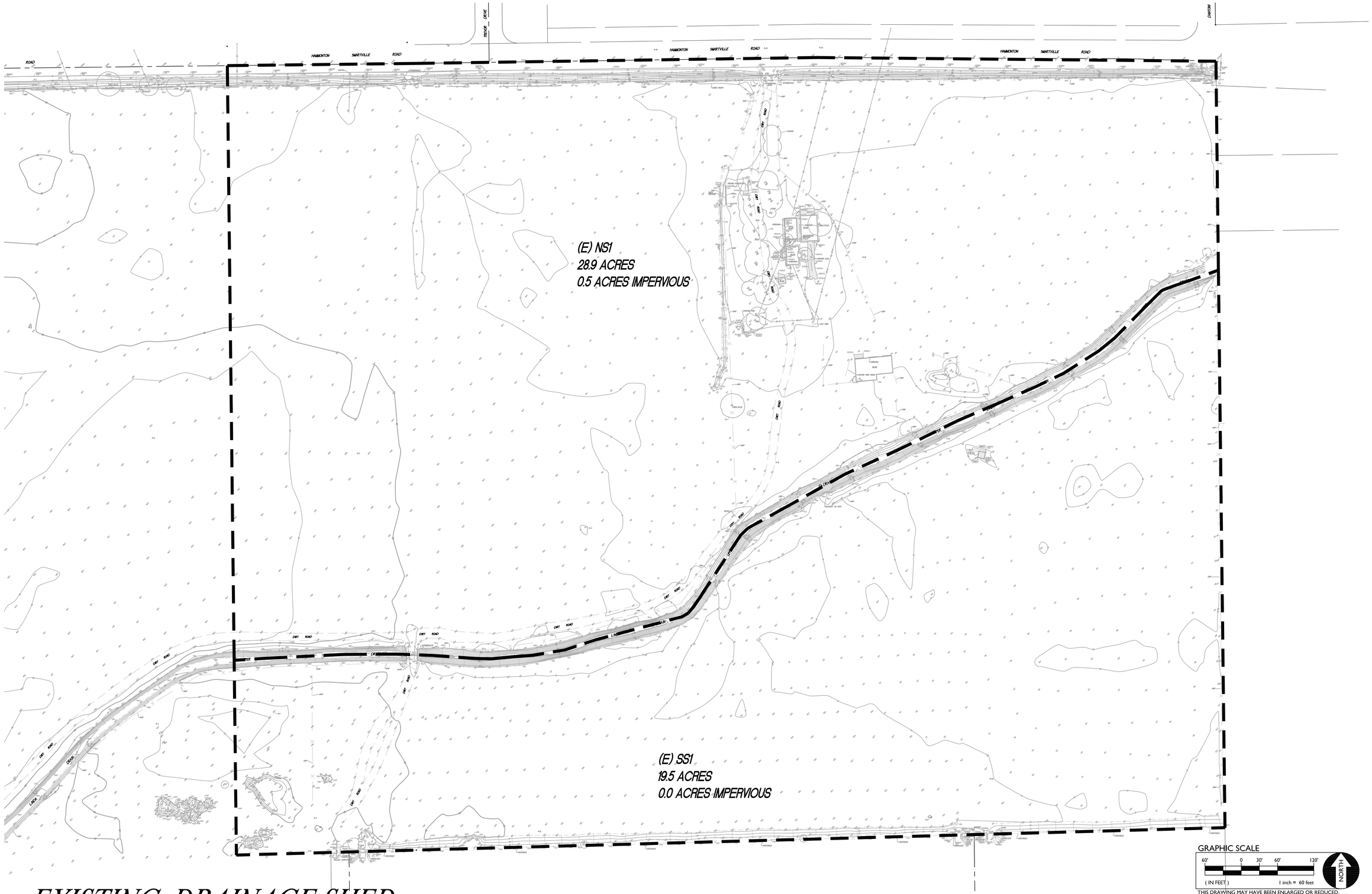
**WARREN CONSULTING ENGINEERS**
**1117 WINDFIELD WAY, SUITE 100**
**EL DORADO HILLS, CALIFORNIA 95762**
**(916) 985-1870**

JOB NAME: East Linda Master Plan
JOB NO.: 2705.1
FILE NO.: 2705.1.draincalcs.dc1
USED BY: JimS
Date: 7-May-12

| Design Parameters |
|---|
| Pervious C= 0.40 |
| Impervious C= 1.00 |

Shaded areas to be filled in by user.

| Shed Node | Shed Area acres | Pervious Area acres | Imperv. Area acres | Total Area acres | Tot. Perv. Area acres | Total Imp. Area acres | Response Time, tr min. | Runoff Coeff, C | Intensity i in/hr | Peak Flow, Q cfs |
|---|---|---|---|---|---|---|---|---|---|---|
| (E) NS1 | 28.9 | 28.4 | 0.5 | 28.9 | 28.4 | 0.5 | 30 | 0.41 | 1.60 | 18.98 |
| (E) SS1 | 19.5 | 19.5 | 0.0 | 19.5 | 19.5 | 0.0 | 40 | 0.40 | 1.50 | 11.70 |
| **(E) TOT** | **48.4** | **47.9** | **0.5** | **48.4** | **47.9** | **0.5** | **40** | **0.41** | **1.50** | **29.49** |
| (P) NS1 | 2.0 | 0.7 | 1.3 | 2.0 | 0.7 | 1.3 | 15 | 0.79 | 2.50 | 3.95 |
| (P) NS2 | 7.6 | 2.1 | 5.5 | 7.6 | 2.1 | 5.5 | 15 | 0.83 | 2.50 | 15.85 |
| (P) NS3 | 16.1 | 4.6 | 11.5 | 16.1 | 4.6 | 11.5 | 30 | 0.83 | 1.60 | 21.34 |
| (P) NS4 | 2.3 | 0.8 | 1.5 | 2.3 | 0.8 | 1.5 | 15 | 0.79 | 2.50 | 4.55 |
| (P) NS5 | 0.9 | 0.8 | 0.1 | 0.9 | 0.8 | 0.1 | 15 | 0.47 | 2.50 | 1.05 |
| (P) SS1 | 12.2 | 2.6 | 9.6 | 12.2 | 2.6 | 9.6 | 15 | 0.87 | 2.50 | 26.60 |
| (P) SS2 | 7.3 | 6.7 | 0.6 | 7.3 | 6.7 | 0.6 | 15 | 0.45 | 2.50 | 8.20 |
| **(P) TOT** | **48.4** | **18.3** | **30.1** | **48.4** | **18.3** | **30.1** | **30** | **0.77** | **1.60** | **59.87** |




# EXISTING DRAINAGE SHED

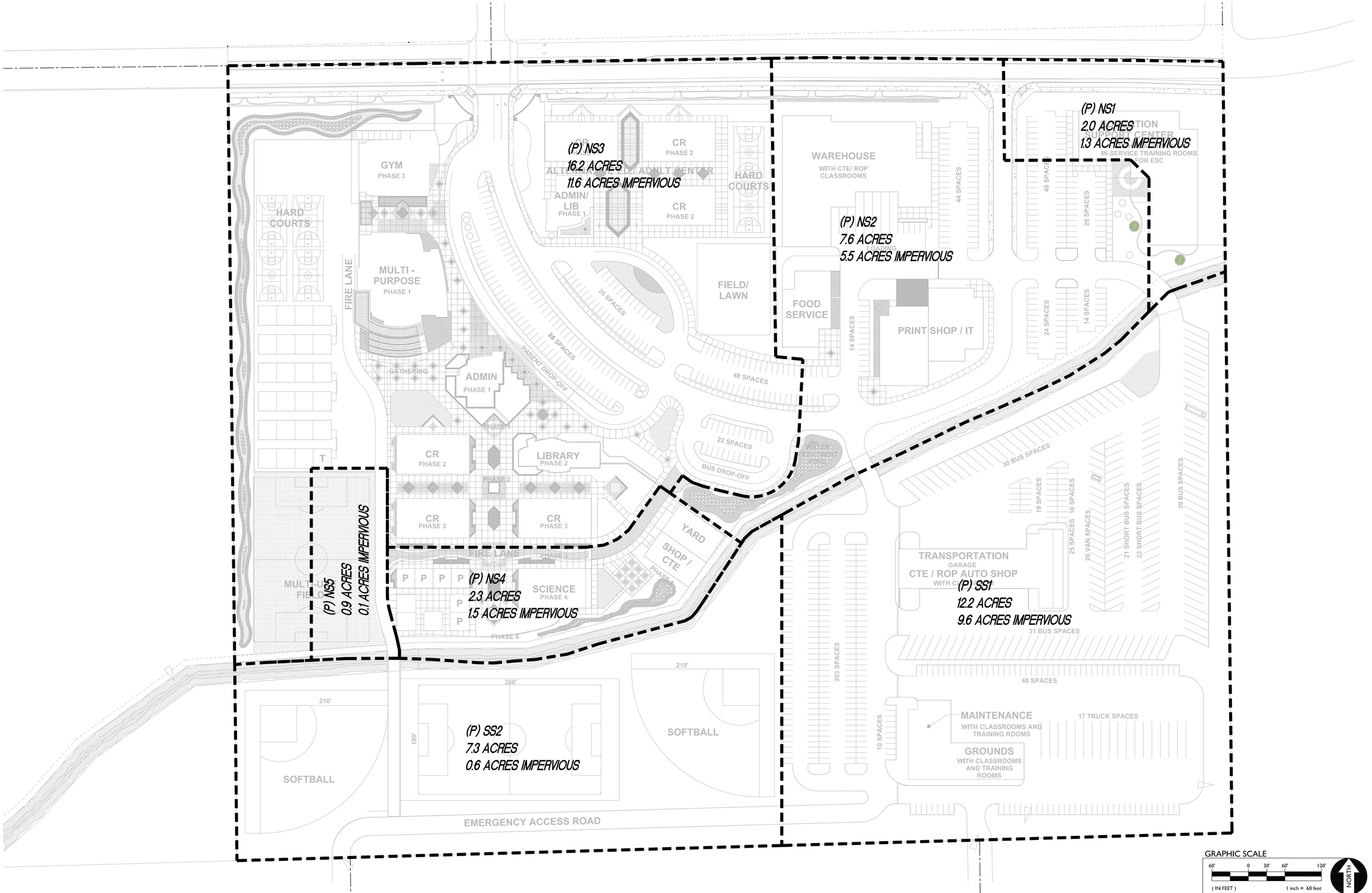
## NEW MIDDLE SCHOOL/ ALTERNATIVE EDUCATION/ EDUCATIONAL SUPPORT SERVICES

*Marysville Joint Unified School District*

*MAY 2011*

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WARREN CONSULTING ENGINEERS, INC.
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ARCHITECTS
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GRAPHIC SCALE
60' 0 30' 60' 120'
( IN FEET ) 1 inch = 60 feet
NORTH
THIS DRAWING MAY HAVE BEEN ENLARGED OR REDUCED.

# PROPOSED DRAINAGE SHED

## NEW MIDDLE SCHOOL/ ALTERNATIVE EDUCATION/ EDUCATIONAL SUPPORT SERVICES

*Marysville Joint Unified School District*

*MAY 2011*


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