PUBLIC REVIEW DRAFT

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

FOR

ALMOND BLOSSOM ELEMENTARY SCHOOL

Patterson, CA

August 2025

Prepared for:

Patterson Joint Unified School District
510 Keystone Blvd.
Patterson, CA 95363

Prepared by:

BaseCamp Environmental, Inc.
802 W. Lodi Avenue
Lodi, CA 95240

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LIST OF ACRONYMS AND ABBREVIATIONS USED IN THIS DOCUMENT

AB	Assembly Bill
ARB	California Air Resources Board
BMP	Best Management Practice
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
dB	decibel
dBA	decibel, A-weighted
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
EPAP	Existing plus Previously Approved and Pending Projects
ESA	Endangered Species Act (federal)
FEMA	Federal Emergency Management Agency
GAMAQI	Guide for Assessing and Mitigating Air Quality Impacts
GHG	greenhouse gas
IS/MND	Initial Study/Mitigated Negative Declaration
L_{dn}	Day-Night Average Level
L_{eq}	equivalent continuous sound level
LOS	Level of Service
NPDES	National Pollutant Discharge Elimination System
NO_x	nitrogen oxide
PJUSD	Patterson Joint Unified School District
PEA	Preliminary Endangerment Assessment
PM_{10}	particulate matter 10 micrometers or less in diameter
$PM_{2.5}$	particulate matter 2.5 micrometers or less in diameter
ROG	reactive organic gas
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SJVAPCD	San Joaquin Valley Air Pollution Control District
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TK	transitional kindergarten
VMT	vehicle miles traveled

NEGATIVE DECLARATION

A. General Project Information

Project Title:	Almond Blossom Elementary School
Lead Agency and Project Sponsor Name and Address:	Patterson Joint Unified School District 510 Keystone Blvd. Patterson, CA 95363
Contact Person and Phone Number:	Kristi Ventura, Coordinator of Facilities Construction (209) 895-7700, extension 2026
Project Location:	1000 Calvinson Parkway, Patterson, CA
General Plan Designation:	Public/Quasi-Public (City of Patterson)
Zoning:	Public/Quasi-Public (City of Patterson)
Description of Project:	The School District proposes development of a 12.11-acre site in southern Patterson for the Almond Blossom Elementary School. The school would accommodate 750 students from transitional kindergarten to 6th grade. The project would consist of 29 classrooms in two buildings, along with a multi-purpose room with kitchen, and an administrative building. Soccer fields, a play area, and a hard court area would be included. Access for parking and parent drop-off/pickup would be provided off Ward Avenue, and parking areas would be provided off Calvinson Parkway and Wolfpack Court.
Surrounding Land Uses and Setting:	Lands to the west and north have been developed with single-family residences. The nearby properties east across Ward Avenue are mostly agricultural with limited residential development. The adjoining property to the south is the T.W. Patterson Sports Complex.
Other Public Agencies Whose Approval is Required:	The Department of Toxic Substances Control requires a site assessment be conducted to

	determine the potential presence of hazardous materials. The California Department of Education reviews the site and building layout to determine if it adequately supports the educational program and provides a safe environment for students. The Division of the State Architect reviews the completed building plans and specifications for compliance with building codes, specifically Americans with Disabilities Act (ADA), Fire, Life, Safety and Structural code compliance.
Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?	No tribes have requested consultation.

B. Environmental Factors Potentially Affected

The environmental factors checked below may be significantly affected by this project, involving at least one impact that is a "Potentially Significant Impact" prior to mitigation. Mitigation measures that would avoid potential effects or reduce them to a less than significant level have been prescribed for each of these effects, as described in the checklist and narrative on the following pages, and in the Summary Table at the end of Chapter 1.0.

☐ Aesthetics	☐ Agriculture/Forestry Resources	☐ Air Quality
☑ Biological Resources	☑ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☑ Hazards/Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use	☐ Mineral Resources
☑ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☑ Transportation	☑ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☑ Mandatory Findings of Significance

C. Lead Agency 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 revisions in the project and/or mitigation measures that would reduce potential effects to a less than significant level have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

PATTERSON JOINT UNIFIED SCHOOL DISTRICT

Kristi Ventura
Coordinator of Facilities Construction

Date

1.0 INTRODUCTION

1.1 Project Brief

This document is an Initial Study/Mitigated Negative Declaration (IS/MND) for the Almond Blossom Elementary School project (project). The project site is located at 1000 Calvinson Parkway in southern Patterson (Figures 1-1 through 1-5). The IS/MND has been prepared in compliance with the requirements of the California Environmental Quality Act (CEQA). The Patterson Joint Unified School District (PJUSD) is the CEQA Lead Agency for the project.

The project proposes to construct a public elementary school on a 12.11-acre site. The elementary school would accommodate 750 students from transitional kindergarten to 6th grade (TK-6). The basic layout of the proposed school would be classroom buildings with 36 classrooms in the northern and central portions of the project site, along with associated buildings and play areas. Total square footage of the campus would be approximately 72,000 square feet. Outdoor sport fields would be located in the southern portion of the site. The project would require the approval of the PJUSD Board of Education, along with the Department of Education and the State Architect.

1.2 Purpose of Initial Study

CEQA requires that public agencies document and consider the potential environmental effects of the agency's actions that meet CEQA's definition of a "project." Briefly summarized, a "project" is an action that has the potential to result in direct or indirect physical changes in the environment. A project includes the agency's direct activities as well as activities that involve public agency approvals or funding. Guidelines for an agency's implementation of CEQA are found in the CEQA Guidelines (California Code of Regulations Title 14, Chapter 3).

Provided that a project is not exempt from CEQA, the first step in the agency's consideration of its potential environmental effects is the preparation of an Initial Study. The purpose of an Initial Study is to determine whether the project would involve "significant" environmental effects as defined by CEQA and to describe feasible mitigation measures that would avoid significant effects or reduce them to a level that is less than significant. If the Initial Study indicates that a project would not have significant effects, then the agency prepares a Negative Declaration. If the Initial Study indicates that a project would have significant effects, but these effects would be avoided or reduced to a level that is less than significant with identified mitigation measures, then the agency prepares a Mitigated Negative Declaration. If the project involves significant effects that cannot be readily mitigated, then the agency must prepare an Environmental Impact Report (EIR). The agency may also decide to proceed directly with the preparation of an EIR without preparation of an Initial Study.

The proposed project is a "project" as defined by CEQA and is not exempt from CEQA consideration. The PJUSD has determined that the project involves the potential for significant environmental effects and requires preparation of this Initial Study. The Initial Study describes the proposed project and its environmental setting, analyzes the potential environmental effects of the project, and identifies feasible mitigation measures for significant environmental effects. The Initial Study considers the project's potential for significant environmental effects in the following subject areas:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
  Wildlife
- Mandatory Findings of Significance

The Initial Study concluded that the project would have significant environmental effects, but all these effects would be avoided or reduced to a level that would be less than significant with recommended mitigation measures. The PJUSD has accepted all the recommended mitigation measures. As a result, the PJUSD has prepared a Mitigated Negative Declaration and is notifying the public of its intent to adopt the IS/MND. The Notice of Intent, and the time available for comment on the IS/MND, is shown immediately preceding the Negative Declaration.

1.3 Project Background

The PJUSD is a public school district that encompasses approximately 394 square miles of Stanislaus and Santa Clara Counties. Currently, the PJUSD operates nine schools at eight sites that serve a student population of approximately 6,300 in grades from TK to 12th. The nine schools include five elementary schools (one of which serves students TK-8), one middle school, one high school, one alternative high school, and one independent study program.

The PJUSD experienced rapid enrollment growth from 2000 through 2007, and the Facility Master Plan prepared in 2007-08 projected continued rapid growth due in large part to proposed new housing. The economic recession that began shortly after the release of that plan drastically changed the outlook of the housing development market, both locally and nationally. The majority of the development planned in 2007 has still not been constructed. Since the recession, PJUSD enrollment has still grown, but at a more moderate pace. In-migration of families from the San Francisco Bay Area has been mainly responsible for the more recent growth (PJUSD 2017).

PJUSD schools are experiencing capacity shortages. The PJUSD loads many of its classrooms at higher rates, allowing more students to be housed. By State loading factor standards, half of the PJUSD's schools currently have more enrolled students than their capacity value, and the remaining schools are all close to capacity as well. As of 2017, three elementary schools, the middle school, and the high school were determined to be over capacity in varying degrees. Over the years 2017-2026, every PJUSD school except for the alternative high school is projected to exceed its State capacity value at some point (PJUSD 2017).

The project site and adjacent properties were historically used as agricultural land from the early 20th century until the early 2000s. The project site is now mostly vacant, with no existing structures except for a cellular telecommunications tower enclosed by fencing in the northeast corner, adjacent to the intersection of Calvinson Parkway and Ward Avenue. The PJUSD currently owns the project site and has considered development of an elementary school there in the past (PJUSD 2017). The City of Patterson had designated the project site for Public/Quasi-Public use in its 1992 General Plan, and a future elementary school is identified on the site in the City's current General Plan, adopted in 2010 (City of Patterson 2010).

1.4 Environmental Evaluation Checklist Terminology

The project's potential environmental effects are evaluated in the Environmental Evaluation Checklist shown in Chapter 3.0 of this IS/MND. The checklist includes a list of environmental considerations against which the project is evaluated. For each question, the PJUSD determines whether the project would involve 1) a Potentially Significant Impact, 2) a Less Than Significant Impact, 3) a Less Than Significant Impact with Mitigation Incorporated, or 4) No Impact.

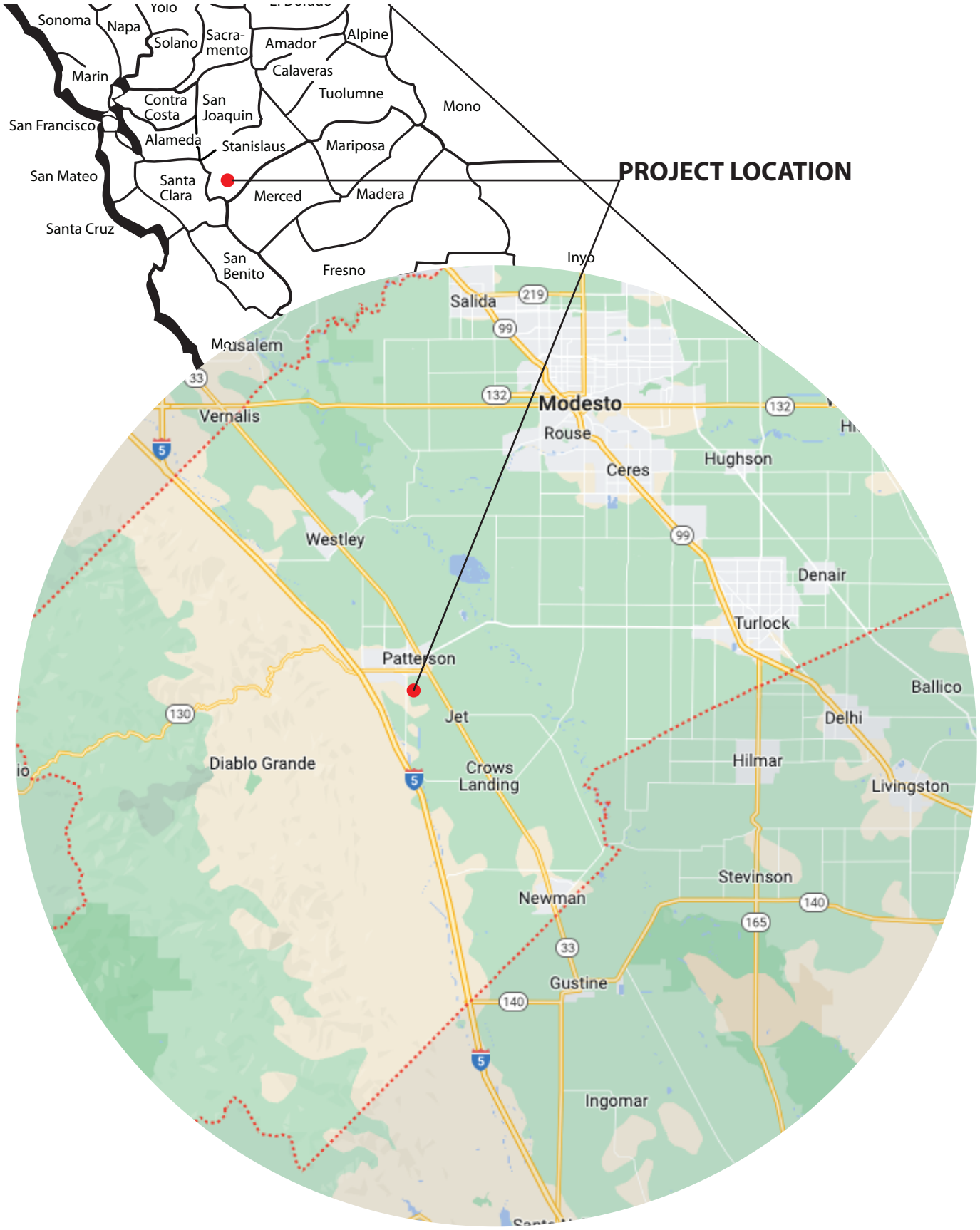
> A Potentially Significant Impact occurs when there is substantial evidence that the project would involve a substantial adverse change to the physical environment, i.e., that the environmental effect may be significant, and feasible mitigation measures have not been defined that would reduce the impact to a less than significant level. If there are one or more Potentially Significant Impact entries in the Initial Study, an EIR is required.
>
> A Less Than Significant Impact occurs when the project would involve effects on a resource, but the project would not involve a substantial adverse change to the physical environment, and no mitigation measures are required.
>
> An environmental effect that is Less Than Significant with Mitigation Incorporated is a Potentially Significant Impact that can be avoided or can be reduced to a Less Than Significant Impact with the application of mitigation measures.
>
> A determination of No Impact is self-explanatory.

This IS/MND identifies potentially significant environmental effects related to the project. Some effects are mitigated by the operation of existing law and standards of practice related to environmental protection. These provisions are considered in the environmental impact

analysis, and the degree to which they would reduce potential environmental effects is discussed. Where needed, additional mitigation measures are specifically identified to reduce potential environmental effects to a level that would be less than significant.

1.5 Summary of Environmental Effects and Mitigation Measures

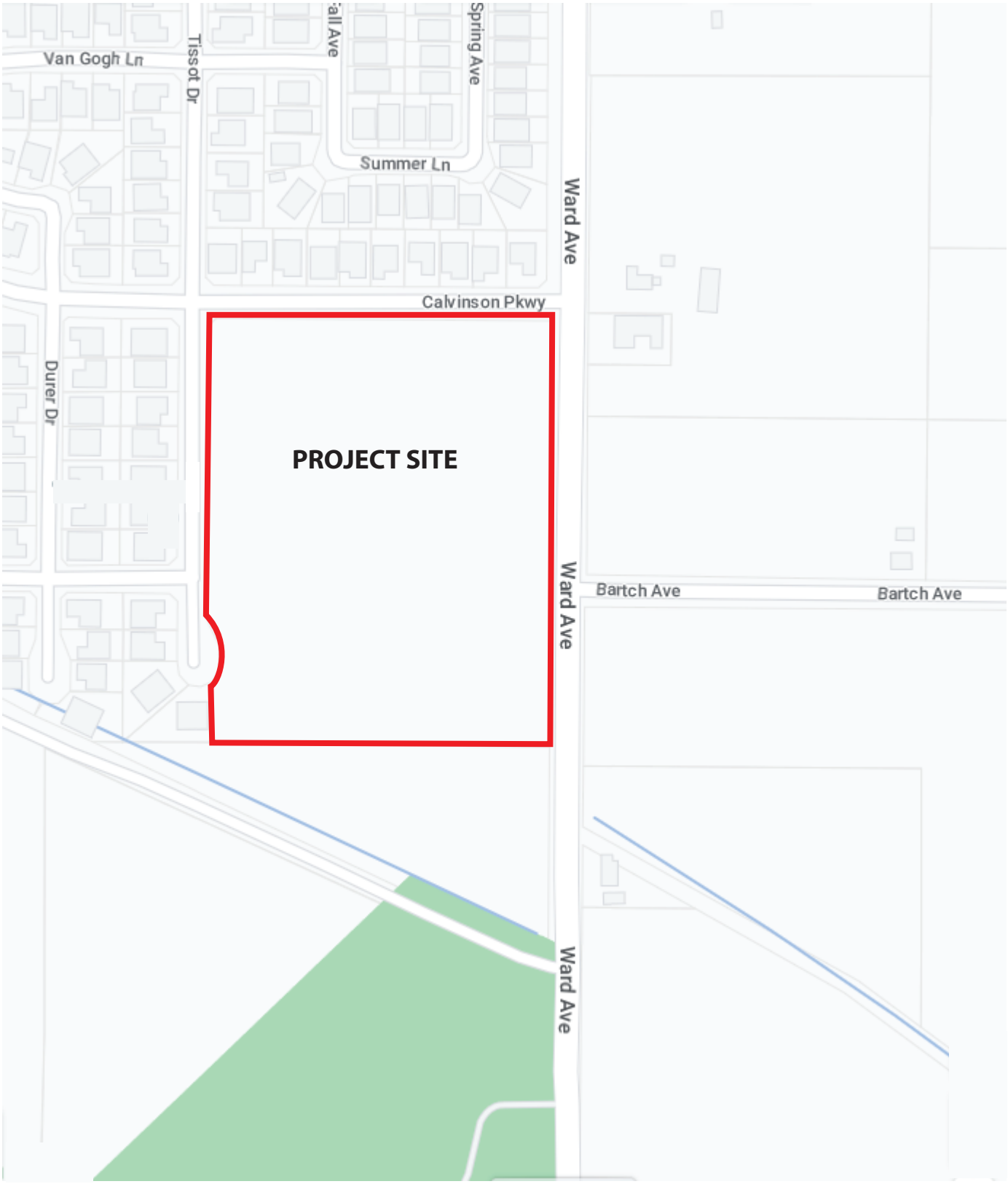
Table 1-1, which follows Figures 1-1 through 1-5, summarizes the results of the Environmental Checklist Form and associated narrative discussion in Chapter 3.0. The potential environmental impacts of the proposed project are summarized in the left-most column of this table. The level of significance of each impact is indicated in the second column. Mitigation measures proposed to avoid or minimize the impacts are shown in the third column, and the significance of the impact after mitigation measures are applied is shown in the fourth column.



SOURCE: Google Maps

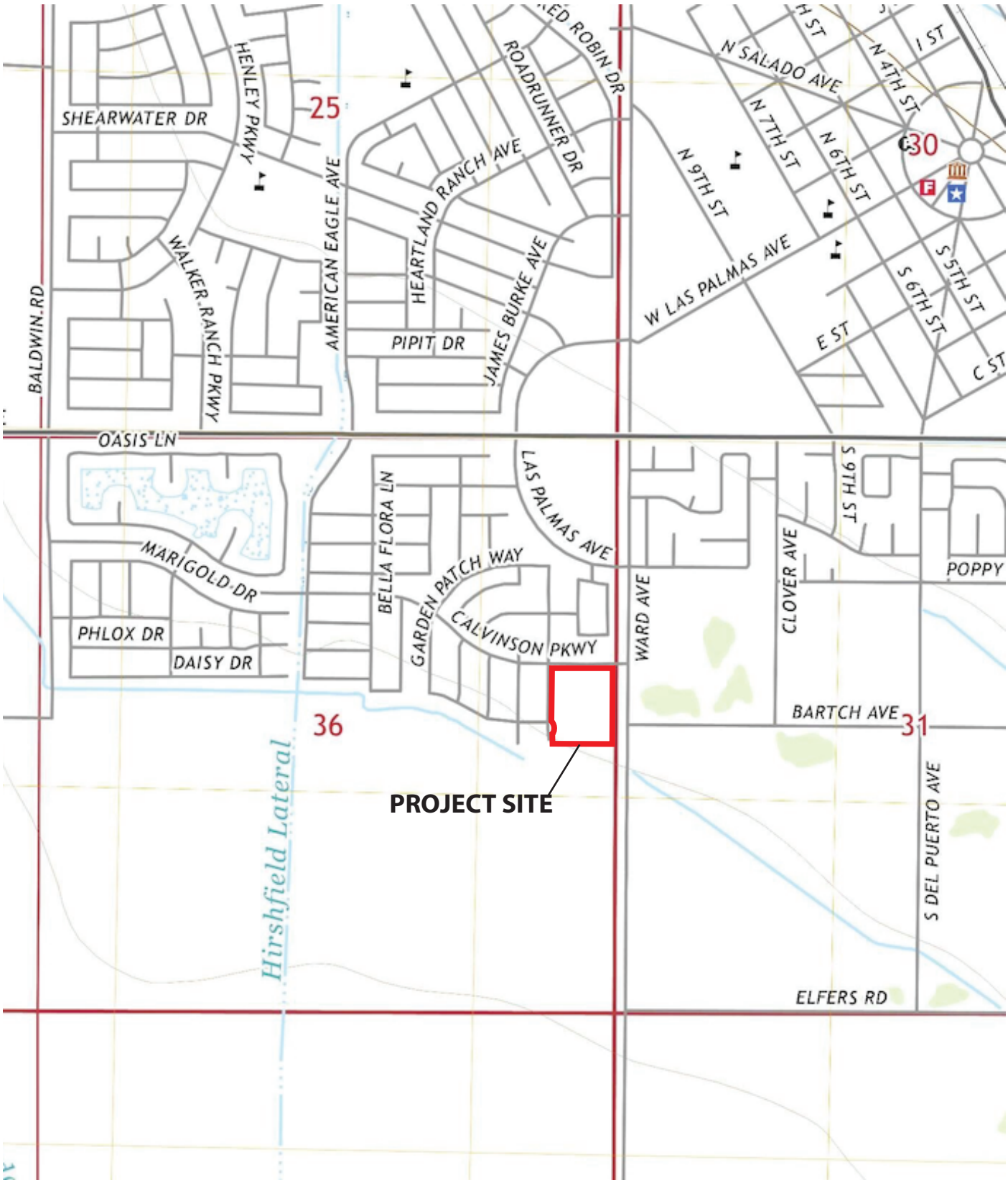
BaseCamp Environmental

Figure 1-1
REGIONAL LOCATION MAP



SOURCE: Google Maps

Figure 1-2
STREET MAP



SOURCE: USGS Quadrangle Map, Patterson CA, 2021.



SOURCE: Google Earth

BaseCamp Environmental

Figure 1-4
AERIAL PHOTO

Figure 1-5
ASSESSOR PARCEL MAP

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
3.1 AESTHETICS			
a) Scenic Vistas	NI	None required	-
b) Scenic Routes and Resources	NI	None required	-
c) Visual Character and Quality	LS	None required	-
d) Light and Glare	PS	AESTH-1: Lighting for the project shall conform to the requirements of Patterson Municipal Code Chapter 18.80. In accordance with this chapter, all outdoor lighting shall be directed downward or toward structures, shall be fully shielded, and shall be maintained to prevent glare, light trespass, and light pollution. Outdoor lighting shall be designed and installed such that illumination of adjoining residential properties shall not exceed 0.01 footcandles. The contractor shall confirm compliance with this standard by taking light measurements at the nearest residences after lighting is activated and making appropriate adjustment if the standard is not met at any location. The contractor shall file a report with the District confirming that the lighting standard has been met. AESTH-2: The school may be fully illuminated during hours of operation. However, after operating hours, lighting shall be dimmed or turned off, with only lighting essential to security or safety to be maintained.	LS
3.2 AGRICULTURE AND FORESTRY RESOURCES			
a) Agricultural Land Conversion	NI	None required	-
b) Agricultural Zoning and Williamson Act	NI	None required	-

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
c, d) Forest Land Conversion and Zoning	NI	None required	-
e) Indirect Conversion of Farmland and Forest Land	NI	None required	-
3.3 AIR QUALITY			
a) Air Quality Plan Consistency	LS	None required	-
c) Cumulative Emissions	LS	None required	-
d) Exposure of Sensitive Receptors	LS	None required	-
e) Odors and Other Emissions	LS	None required	-
3.4 BIOLOGICAL RESOURCES			
a) Special-Status Species	PS	BIO-1: If project construction commences during the time period from March 1 to August 31, then a pre-construction survey for nesting Swainson's hawk within one-quarter mile of the project site shall be conducted. The survey shall utilize methodologies set forth by the Swainson's Hawk Technical Advisory Committee in its 2000 report *Determining a Project's Potential for Impacting Swainson's Hawk*. If active nests are found, then a qualified biologist shall determine the need, if any, for temporal restrictions on construction. Any temporal restrictions advised by the biologist shall be implemented by the project.	LS
b) Riparian and Other Sensitive Habitats	NI	None required	-
c) Wetlands and Waters of the U.S.	NI	None required	-
d) Fish and Wildlife Movement	PS	BIO-2: If vegetation removal or project construction commences during the nesting season for raptors (January 1 through July 31), then a pre-construction	LS

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		survey shall be conducted by a qualified biologist. If vegetation removal or project construction commences during the general avian nesting season (March 1 through July 31), then a pre-construction survey shall be conducted by a qualified biologist. In both cases, if active nests are found, work in the vicinity of the nests shall be delayed until the young have fledged. The biologist shall recommend any temporal or other restrictions necessary to ensure no disturbance of the nests, which the project shall implement.	
e) Local Biological Requirements	NI	None required	-
f) Conflict with Habitat Conservation Plans	NI	None required	-
3.5 CULTURAL RESOURCES			
a) Historical Resources	NI	None required.	-
b) Archaeological Resources	PS	CULT-1: If any subsurface cultural resources are encountered during construction of the project, all construction activities within 50 feet of the encounter shall be halted until a qualified archaeologist can examine these materials, determine their significance, and if significant recommend further mitigation measures that would reduce potential effects to a level that is less than significant. Such measures could include 1) preservation in place or 2) excavation, recovery, and curation by qualified professionals. The PJUSD shall be responsible for retaining qualified professionals, implementing recommended mitigation measures, and documenting mitigation efforts in a written report, consistent with the requirements of the CEQA Guidelines.	LS
c) Human Burials	LS	None required	-

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
3.6 ENERGY			
a) Consumption of Energy Resources	LS	None required	-
b) Conflict with Energy Plans	LS	None required	-
3.7 GEOLOGY AND SOILS			
a-i) Fault Rupture Hazards	NI	None required	-
a-ii) Seismic Ground Shaking	LS	None required	-
a-iii) Other Seismic Hazards	PS	GEO-1: In accordance with the recommendations of the *Patterson Gardens Elementary School Geotechnical Engineering Report*, (project previously named "Patterson Gardens"), prepared by Terracon on May 15, 2024, the buildings on the project site may be supported by shallow foundations. Per the 2022 California Building Code, shallow foundations shall be interconnected by foundation ties designed to accommodate the differential settlements between adjacent footings due to the potential for liquefaction. As an alternative, the effects of the anticipated liquefaction settlement could be mitigated by supporting the proposed building on a mat slab or deep foundations that derive support below the potentially liquefiable soils or by ground improvement methods. The method to be used shall be identified on final site plans for the project.	LS
a-iv) Landslides	NI	None required	-
b) Soil Erosion	LS	None required	-
c) Geologic Instability	PS	Mitigation Measure GEO-1.	LS
d) Expansive Soils	PS	GEO-2: The project shall follow the recommendations of the *Patterson Gardens Elementary School Geotechnical*	LS

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		Engineering Report, (project previously named "Patterson Gardens"), prepared by Terracon on May 15, 2024, to minimize soil expansion impacts. These include completing effective drainage early in the construction sequence and maintaining drainage after construction, along with grading during the warmer and drier times of the year. In addition, the project shall follow the recommendations in the Earthwork section of the geotechnical report regarding site and subgrade preparation, fill materials, and fill placement and compaction, among others. The recommendations shall be incorporated within the final site plans of the project.	
e) Adequacy of Soils for Wastewater Disposal	NI	None required	-
f) Paleontological Resources	NI	None required	-
3.8 GREENHOUSE GAS EMISSIONS			
a, b) Project GHG Emissions and Consistency with GHG Reduction Plans	LS	None required	-
3.9 HAZARDS AND HAZARDOUS MATERIALS			
a) Hazardous Material Transport, Use and Storage	LS	None required	-
b) Release of Hazardous Materials	LS	None required	-
c) Emission of Hazardous Materials Near Schools	LS	None required	-
d) Hazardous Materials Sites	LS	None required	-
e) Airport Operations	LS	None required	-
f) Emergency Response and Evacuation	LS	None required	-

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
g) Wildland Fire Hazards	NI	None required	-
3.10 HYDROLOGY AND WATER QUALITY			
a) Surface Waters and Quality	LS	None required	-
b) Groundwater Supplies	LS	None required	-
c-i, -ii, -iii) Drainage Patterns and Runoff	LS	None required	-
c-iv) Flood Flows	NI	None required	-
d) Release of Pollutants in Flood, Seiche, and Tsunami Zones	NI	None required	-
e) Water Quality and Groundwater Plans	LS	None required	-
3.11 LAND USE AND PLANNING			
a) Division of Established Communities	NI	None required	-
b) Conflict with Applicable Plans, Policies and Regulations	LS	None required	-
3.12 MINERAL RESOURCES			
a, b) Loss of Mineral Resource Availability	NI	None required	-
3.13 NOISE			
a) Exposure to Noise Exceeding Local Standards	PS	NOISE-1: Project construction shall be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday. Construction activities shall not occur on Sundays or federal holidays. All equipment used on the construction site shall be fitted with mufflers in accordance with manufacturers' specifications. Mufflers	LS

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		shall be installed on the equipment at all times on the construction site.	
b) Groundborne Vibrations	LS	None required	-
c) Exposure to Airport/Airstrip Noise	NI	None required	-
3.14 POPULATION AND HOUSING			
a) Population Growth Inducement	NI	None required	-
b) Displacement of Housing and People	NI	None required	-
3.15 PUBLIC SERVICES			
a-i) Fire Protection	LS	None required	-
a-ii) Police Protection	LS	None required	-
a-iii) Schools	LS	None required	-
a-iv, -v) Parks and Other Public Facilities	LS	None required	-
3.16 RECREATION			
a, b) Recreational Facilities	LS	None required	-
3.17 TRANSPORTATION/TRAFFIC			
a) Conflict with Transportation Programs and Plans	LS	None required	-
b) Conflict with CEQA Guidelines Section 15064.3(b)	LS	None required	-
c) Traffic Hazards	PS	TRANS-1: The Patterson Joint Unified School District, in consultation with City of Patterson staff, shall implement the pedestrian safety improvements	LS

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
		recommended in Figure 10 of the *Traffic Impact Study for the Proposed Patterson JUSD New Elementary, Patterson, California*, prepared by Advanced Mobility Group August 9, 2024. The improvements shall be installed prior to the start of school operations.	
d) Emergency Access	NI	None required	-
3.18 TRIBAL CULTURAL RESOURCES			
a, b) Tribal Cultural Resources	PS	Mitigation Measure CULT-1	LS
3.19 UTILITIES AND SERVICE SYSTEMS			
a) Relocation or Construction of Utility Facilities	LS	None required	-
b) Water Supplies	LS	None required	-
c) Wastewater Treatment Capacity	LS	None required	-
d, e) Solid Waste Services	LS	None required	-
3.20 WILDFIRE			
a) Emergency Response Plans and Emergency Evacuation Plans	LS	None required	-
b) Exposure of Project Occupants to Wildfire Hazards	NI	None required	-
c) Installation and Maintenance of Infrastructure	NI	None required	-
d) Risks from Runoff, Post-Fire Slope Instability, or Drainage Changes	NI	None required	-

TABLE 1-1
SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation Measures
3.21 MANDATORY FINDINGS OF SIGNIFICANCE			
a) Findings on Biological and Cultural Resources	PS	Mitigation measures in Sections 3.4, 3.5 and 3.18	LS
b) Findings on Individually Limited but Cumulatively Considerable Impacts	LS	None required	-
c) Findings on Adverse Effects on Human Beings	PS	Mitigation measures in Section 3.17.	LS

Notes: NI = No Impact; LS = Less Than Significant; PS = Potentially Significant

2.0 PROJECT DESCRIPTION

2.1 Project Location

The project site is located at 1000 Calvinson Parkway, at the southwest corner of the intersection of Calvinson Parkway and Ward Avenue in southern Patterson (see Figures 1-1 through 1-5). The site, approximately 12.11 acres, is within a parcel designated as Assessor's Parcel Number (APN) 021-027-038. It is shown in the U.S. Geological Survey's Patterson 7.5-minute quadrangle map as within the eastern portion of Section 36, Township 5 South, Range 7 East, Mt. Diablo Base and Meridian. The approximate latitude of the project site is 37.4575 North, and the approximate longitude is -121.1422 West.

2.2 Project Details

Proposed School Facilities

The project proposes to construct Almond Blossom Elementary School, a new school that would accommodate 750 students from transitional kindergarten (TK) to 6th grade (Figure 2-1). While several conceptual designs are being considered by the PJUSD, the basic parameters of the school design have been established. Table 2-1 shows the proposed school buildings that would be constructed.

TABLE 2-1
PROPOSED PROJECT CONSTRUCTION

Facility	**Square Feet**
TK-Kindergarten classroom building (1 story)	6,000
Grades 1-6 classroom building with library (2 story)	35,000
Multipurpose building with kitchen (1 story)	14,214
Administration (1 story)	4,500
Total	**59,714**

The project proposes the construction of a two-story main building in the center of the project site that would contain 25 classrooms for students from 1st to 6th grade. There would be 12 classrooms that would accommodate up to 288 students from 1st to 3rd grades, and 9 classrooms that would accommodate up to 288 students from 4th to 6th grades. In addition, two classrooms are proposed for up to 24 special education students, and two classrooms would be used for music instruction that could accommodate up to 64 students. The main building also would have space for a library, a staff lounge, and a workroom.

A separate building would be constructed that would have four TK-kindergarten classrooms that would accommodate up to 80 students. This building would be in the northern portion of the project site. The total number of classrooms that would be provided by the project would be 29.

A multipurpose building, approximately 14,214 square feet in floor area, would be constructed in the western portion of the project site. This building would have an adjacent kitchen for food preparation. A separate building for school administration would be constructed in the northwest corner of the project site.

The project proposes to install outdoor play areas and courts in the campus area for physical activity and for organized sports. An outdoor play area would be installed adjacent to the TK-kindergarten classroom building. A hard court area for physical activities such as basketball would be installed south of the main classroom building. Two soccer fields are proposed in the southern portion of the project site.

Circulation and Parking

The project would include parking areas that would provide a total of 111 parking stalls. These would include staff and visitor spaces and spaces for disabled drivers. Of the total 111 stalls, 48 would be provided in a parking area in the northern portion of the project site. This parking area would be accessible from Calvinson Parkway. The other 63 stalls would be provided in a parking area in the western portion of the project site. This area would be accessible from Wolfpack Court.

A pickup/dropoff lane for students brought by parents would be provided off Ward Avenue in the eastern portion of the project site. A bus pickup/dropoff zone would be established off Wolfpack Court adjacent to the western parking area.

Utilities

The project would be served by water, sewer, and storm drainage facilities managed by the City of Patterson. Connections would be made to existing City facilities located in the streets adjacent to the project site. The project would connect to the existing Pacific Gas and Electric electrical system via distribution lines adjacent to the project site.

2.3 Permits and Approvals

The project would require the approval of the PJUSD Board of Education. As the CEQA lead agency, the PJUSD would be required to adopt the IS/MND prior to a final decision on the project, along with a Mitigation Monitoring and Reporting Program to ensure implementation of the mitigation measures specified in the IS/MND.

The project proposes to connect to sewer, water, and storm drainage facilities managed by the City of Patterson. The proposed connections would be reviewed and approved by the City's Public Works Department, subject to existing City ordinances and improvement standards.

Proposed school construction plans would require approval from the Department of Education as to the conformity of the proposed site with location and program support criteria. Proposed parking, safety and access requirements would be reviewed for compliance by the Division of the State Architect (State Architect). The Approval of Plans letter is the document that conveys official approval of the plans and specifications for a project based on site plans, structural, mechanical, plumbing, electrical, fire alarm, and fire sprinkler drawings of the project, together with supporting documents.

As part of the approval process for school site development, the California Department of Toxic Substances Control (DTSC) requires that a site assessment known as a Preliminary Endangerment Assessment (PEA) be conducted to determine the potential presence of hazardous materials. The PEA was completed and was submitted to the DTSC. The DTSC declared that No Further Action was required with respect to the project site, since the PEA investigation found no indication of impacts to soil due to historical land use activities at the project site that would pose a threat to human health or the environment (DTSC 2023a).

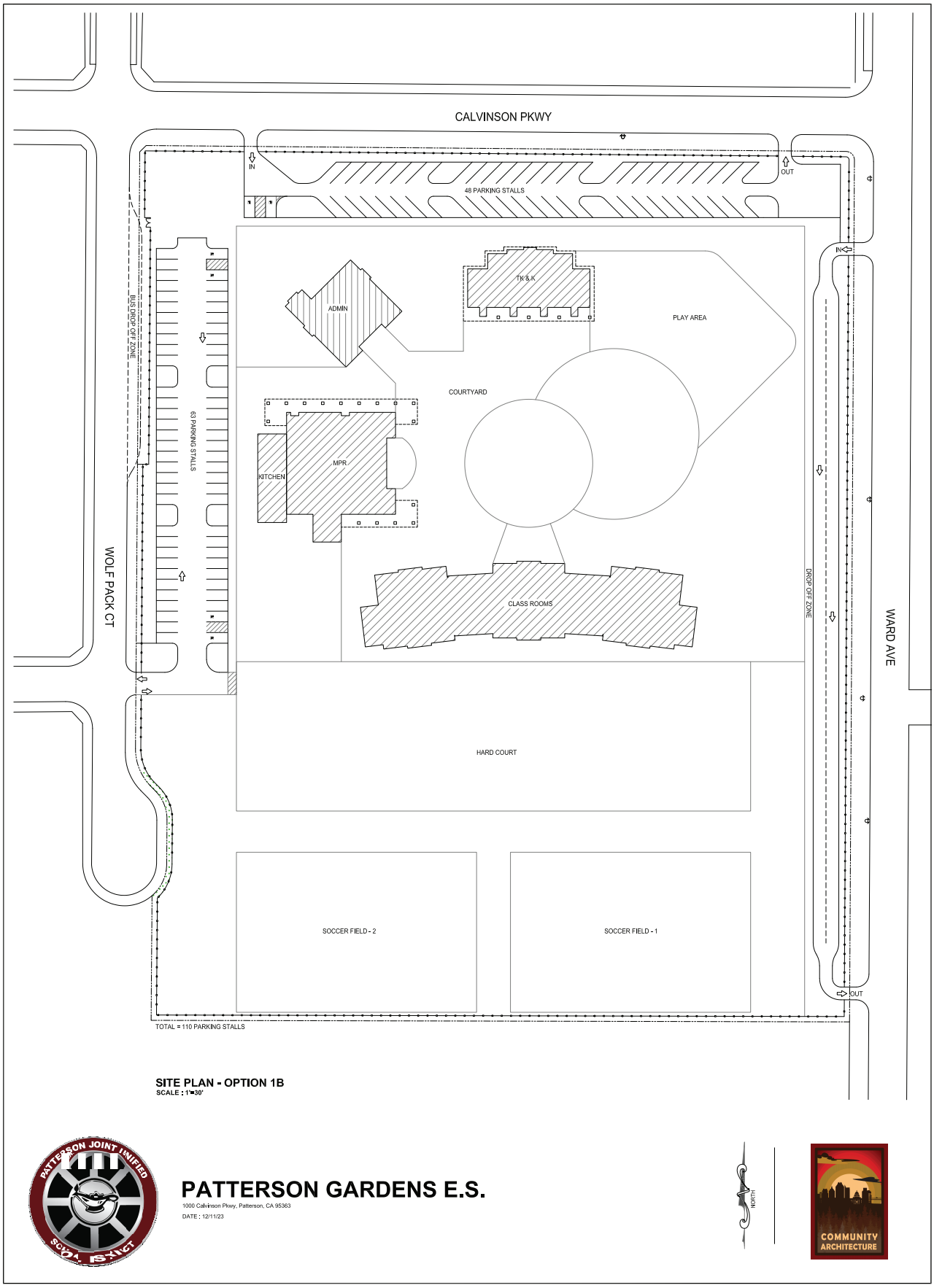


Figure 2-1
SITE PLAN

3.0 ENVIRONMENTAL CHECKLIST

The following environmental evaluation considers the potential environmental effects of PJUSD approval of the proposed project, as described in Chapter 2.0, Project Description. The format of this evaluation is based on the Environmental Checklist presented in CEQA Guidelines Appendix G.

3.1 AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	✓	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	✓	☐	☐

Environmental Setting

The project site is currently vacant and undeveloped except for a cellular telecommunications tower in the northeast corner. Existing night lighting in the project area consists primarily of street lighting along the adjoining streets and on-site security lighting on the residences to the north and west. The site is adjacent to urban residential development to the north and west, agricultural lands to the east, and a recreational facility to the south.

In the Patterson area, the Coast Ranges to the west provide the major scenic vista. Interstate 5 in Stanislaus County is a designated State Scenic Highway (Caltrans 2019). Neither Stanislaus County nor the City of Patterson have designated any scenic roadways.

Public Resources Code Section 21099 states that aesthetic impacts shall not be considered significant for residential, mixed-use residential, or employment center projects on an infill

site within a "transit priority area," defined as an area within one-half mile of an existing or planned major transit stop. While the project may be considered an infill project, it is not within a designated transit priority area, nor does it involve any of the land uses mentioned in Public Resources Code Section 21099. Therefore, the aesthetic impacts of the project are analyzed in this IS/MND.

Environmental Impacts and Mitigation Measures

a) Scenic Vistas.

As noted, potential scenic vistas are mainly views of the Coast Ranges to the west. Views from the project site are already partially obstructed by existing off-site development and trees. The project would not affect existing off-site conditions related to distance views. The project would have no impact on scenic vistas.

b) Scenic Routes and Resources.

The project site is a mostly vacant parcel previously used for agriculture. There are no outstanding scenic resources such as trees and rock outcroppings. As noted, Interstate 5 is a designated State Scenic Highway. The freeway is approximately 1.75 miles west of the project site, so the project would not affect views from Interstate 5. No other scenic routes have been identified in the project vicinity. The project would have no impact on scenic resources.

c) Visual Character and Quality.

As noted, the project site is vacant. Project construction would alter the visual landscape of the project site as visible from public view areas. The main public view areas are along Calvinson Parkway, Ward Avenue, and Wolfpack Court.

The project site is adjacent to existing residential development to the north and west along Calvinson Parkway and Wolfpack Court. As development of the site occurs, its appearance would be compatible with the existing residential development in the area. Only one of the proposed buildings would have more than one story. That building would have only two stories and would be constructed in the approximate center of the project site. Therefore, it would be set back from residential areas.

The soccer fields would be visually similar to the existing park development to the south as viewed from Ward Avenue. As noted, the two-story building would be in the approximate site center and therefore would be set back from Ward Avenue. Based on this, while the project would alter the visual landscape on the project site, the resultant views would not be substantially different from the nearby urban and park landscape. Project impacts related to visual character and quality are considered less than significant.

d) Light and Glare.

The project would involve the installation of lighting on a site that currently has none. Since the project is adjacent to or near existing residential areas to the west and north, some "spillover" lighting could reach these residential areas, potentially disturbing residents.

This would be a potentially significant impact without mitigation. Mitigation presented below would require the project to include controls on light and glare from new lighting facilities that would be the same as those required by the City of Patterson for new development. Additional mitigation would further reduce impacts of lighting at nighttime on nearby residences by limiting the amount of illumination after operating hours. Implementation of these mitigation measures would reduce light and glare impacts to a level that would be less than significant.

Mitigation Measures:

AESTH-1: Lighting for the project shall conform to the requirements of Patterson Municipal Code Chapter 18.80. In accordance with this chapter, all outdoor lighting shall be directed downward or toward structures, shall be fully shielded, and shall be maintained to prevent glare, light trespass, and light pollution. Outdoor lighting shall be designed and installed such that illumination of adjoining residential properties shall not exceed 0.01 footcandles. The contractor shall confirm compliance with this standard by taking light measurements at the nearest residences after lighting is activated and making appropriate adjustment if the standard is not met at any location. The contractor shall file a report with the District confirming that the lighting standard has been met.

AESTH-2: The school may be fully illuminated during hours of operation. However, after operating hours, lighting shall be dimmed or turned off, with only lighting essential to security or safety to be maintained.

3.2 AGRICULTURE AND FORESTRY RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	✓
b) 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 or conversion of forest land to non-forest use?	☐	☐	☐	✓

Environmental Setting

The project site and adjacent properties were historically used as agricultural land from the early 20th century until the early 2000s. Agricultural uses of the project site included orchards, irrigated row crops, and feed crops. The project site was used for agricultural production until 2006, when it became a vacant lot (Condor Earth 2022). Lands east of the project site are still used for agricultural production; however, adjacent lands to the north, west, and south have been developed with residential and recreational uses; a cellular telecommunications tower is on the project site itself.

The Important Farmland Maps, prepared by the California Department of Conservation as part of the Farmland Mapping and Monitoring Program, designate the viability of lands for farmland use, based on the physical and chemical properties of the soils. The maps categorize farmland, in decreasing order of soil quality, as "Prime Farmland," "Farmland of Statewide Importance," and "Unique Farmland." Collectively, these categories are referred to as “Farmland” in the Environmental Checklist in CEQA Guidelines Appendix G. According to the 2018 Important Farmland Map of Stanislaus County, the project site is designated as Vacant or Disturbed Land (FMMP 2018).

The Williamson Act is State legislation that seeks to preserve farmland by offering property tax breaks to farmers who sign a contract pledging to keep their land in agricultural use. The project site is not subject to a Williamson Act contract.

Environmental Impacts and Mitigation Measures

a) Agricultural Land Conversion.

The project site is designated as Vacant or Disturbed Land, which is not Farmland as defined by CEQA Guidelines Appendix G. No Farmland or any agricultural land would be converted because of the project. The project would have no impact on farmland conversion.

b) Agricultural Zoning and Williamson Act.

The project site is zoned for Public/Quasi-Public use, not for agricultural use. As noted, the project site is not under a Williamson Act contract. The project would have no impact on agricultural zoning or Williamson Act lands.

c, d) Forest Land Conversion and Zoning.

There is no forest land on the project site or in the vicinity, and none of the land in the area is zoned for forest land, timberland, or for timber production. The project would have no impact on forest lands or zoning.

e) Indirect Conversion of Farmland and Forest Land.

The Important Farmland map indicates the presence of Prime Farmland east of the project site, across Ward Avenue. The project would connect to existing infrastructure in the area; no new infrastructure would be extended to the area. Because of this, no indirect conversion of Farmland that might result from the project would occur. Since there is no forest land in the area, the project would have no impact on indirect conversion of forestland to non-forest use. The project would have no impact on indirect conversion of Farmland or forest land.

3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan?	☐	☐	✓	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	✓	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	✓	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	✓	☐

Environmental Setting

Air Quality Background

The project area is within the San Joaquin Valley Air Basin. The San Joaquin Valley Air Pollution Control District (SJVAPCD), which includes San Joaquin County, has jurisdiction over most air quality matters in the Air Basin. The SJVAPCD is tasked with implementing programs and regulations required by both the federal and California Clean Air Acts. Under their respective Clean Air Acts, both the State of California and the federal government have established ambient air quality standards for six criteria air pollutants: ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. California has four additional criteria pollutants under its Clean Air Act.

Table 3-1 shows the current attainment status of the Air Basin relative to the federal and State ambient air quality standards for criteria pollutants. Except for ozone and particulate matter, the Air Basin is in attainment of, or unclassified for, all federal and State ambient air quality standards.

TABLE 3-1
SAN JOAQUIN VALLEY AIR BASIN ATTAINMENT STATUS

	Designation/Classification	
Criteria Pollutant	**Federal Primary Standards[1]**	**State Standards**
Ozone - One hour	No Federal Standard	Nonattainment/Severe
Ozone - Eight hour	Nonattainment/Extreme	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide (NO_x)	Attainment/Unclassified	Attainment
Sulfur Dioxide (SO_x)	Attainment/Unclassified	Attainment
Lead	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	[2]

[1] Federal primary standards are designed to protect human health.

[2] Regulated by the State of California as part of its toxic air contaminant program.

Source: SJVAPCD 2023.

Air Pollutants of Concern

The San Joaquin Valley Air Basin is designated a nonattainment area for ozone. Ozone is not emitted directly into the air but is formed when reactive organic gases (ROG) and nitrogen oxides (NO_x) react in the atmosphere in the presence of sunlight. The major sources of ROG are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, drycleaning solutions, and paint

through evaporation. The major human sources of NO_x are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines (Stanislaus County 2016). The SJVAPCD currently has a 2022 Plan for the 2015 8-Hour Ozone Standard and the 2023 Maintenance Plan and Redesignation Request for the Revoked 1-Hour Ozone Standard to attain federal ambient air quality standards for ozone.

The Air Basin is also designated a nonattainment area for particulate matter, a mixture of solid and liquid particles suspended in air, including dust, pollen, soot, smoke, and liquid droplets. Two types of particulate matter are of concern: particulate matter 10 micrometers or less in diameter (PM_{10}), and particulate matter 2.5 micrometers or less in diameter ($PM_{2.5}$). Major sources of PM_{10} include motor vehicles; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. $PM_{2.5}$ results from fuel combustion generated by motor vehicles, power generation, and industrial facilities; residential fireplaces; and wood stoves (Stanislaus County 2016). The SJVAPCD currently has a 2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards to attain federal ambient air quality standards for $PM_{2.5}$ and the 2007 PM10 Maintenance Plan to maintain its current PM_{10} attainment status.

Carbon monoxide (CO) is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels and is emitted directly into the air, unlike ozone. The main source of CO in the San Joaquin Valley is on-road motor vehicles (SJVAPCD 2015). The San Joaquin Valley Air Basin is in attainment/unclassified status for CO; as such, the SJVAPCD has no CO attainment plans. High CO concentrations may occur in areas of limited geographic size, sometimes referred to as "hotspots," which are ordinarily associated with areas of heavy traffic volumes and congestion.

In addition to the criteria pollutants, the California Air Resources Board (ARB) has also identified other air pollutants as toxic air contaminants (TACs) - pollutants that are carcinogenic (i.e., cause cancer) or that may cause other adverse short-term or long-term health effects. Diesel particulate matter, considered a carcinogen, is the most common TAC, as it is a product of combustion in diesel engines. Other TACs are less common and are typically associated with industrial operations.

Air Quality Regulations

As noted, the SJVAPCD is tasked with implementing programs and regulations required by both the federal and California Clean Air Acts, except for mobile emissions which are regulated by the ARB. The SJVAPCD regulations that are potentially applicable to the project are summarized below.

Regulation VIII (Fugitive Dust PM_{10} Prohibitions)

Rules 8011-8081 are designed to reduce PM_{10} emissions, predominantly dust/dirt, generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, landfill operations, etc.

Rule 4101 (Visible Emissions)

This rule prohibits emissions of visible air contaminants to the atmosphere and applies to any source operation that emits or may emit air contaminants.

Rule 4601 (Architectural Coatings)

This rule sets limits on the volatile organic compounds, a component of ROG, allowed in various paints and other coatings.

Rule 9510 (Indirect Source Review)

Rule 9510, also known as the Indirect Source Rule, is intended to reduce or mitigate construction and operational emissions of NO_x and PM_{10} generated by new development, either directly and/or by payment of off-site mitigation fees. Construction emissions of NO_x and PM_{10} exhaust must be reduced by 20% and 45%, respectively. Operational emissions of NO_x and PM_{10} must be reduced by 33.3% and 50%, respectively. Rule 9510 applies to educational development projects of 9,000 square feet and larger; therefore, the proposed project would be subject to this rule.

Environmental Impacts and Mitigation Measures

In 2015, the SJVAPCD adopted a revised Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI). GAMAQI defines an analysis methodology, thresholds of significance, and mitigation measures for the assessment of air quality impacts for projects within SJVAPCD's jurisdiction (SJVAPCD 2015). Table 3-2 shows the CEQA thresholds for significance for pollutant emissions within the SJVAPCD. The significance thresholds apply to emissions from both project construction and project operations.

Based on these thresholds of significance, and using project type and size, the SJVAPCD has pre-quantified emissions and determined a size below which it is reasonable to conclude that a project would not exceed applicable thresholds of significance for criteria pollutants. The Small Project Analysis Level in GAMAQI includes the project sizes and vehicle trips below which projects are considered so small as to not exceed the SJVAPCD significance thresholds. For elementary schools, the threshold at which a project is not considered small is 1,875 students. For junior high schools, the threshold is 1,680 students, and for high schools 1,325 students (SJVAPCD 2017).

TABLE 3-2
SJVAPCD SIGNIFICANCE THRESHOLDS
AND ESTIMATED PROJECT EMISSIONS

Pollutant	SJVAPCD Significance Threshold	Maximum Construction Emissions (tons/year)	Annual Operational Emissions (tons/year)
ROG	10	0.15	0.97

NO_x	10	0.83	0.76
CO	100	0.93	4.78
PM_{10}	15	0.06	0.95
$PM_{2.5}$	15	0.04	0.26

Sources: CalEEMod v. 2022.4.0, SJVAPCD 2015.

a) Air Quality Plan Consistency.

Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) computer program, which is approved by the SJVAPCD. Results of the CalEEMod run, available in Appendix A of this IS/MND and shown in Table 3-2, indicate that project construction emissions would not be greater than 2.02 tons for any pollutant in any year in which project construction occurs. All construction emissions would be below the SJVAPCD significance thresholds. Compliance with SJVAPCD Regulation VIII, with its dust control provisions, would further minimize particulate matter emissions already determined to have an impact that would be less than significant.

The project proposes to accommodate an enrollment of no greater than 750 students at grade levels from kindergarten to 8th grade. This total is below the Small Project Analysis Level threshold for elementary schools, which is 1,875 students. This indicates that the project would not have a significant impact on air pollutant emissions. This is confirmed by the annual operational emissions estimated by the CalEEMod run for the project, the results of which are shown in Table 3-2. None of the pollutants generated by project operations would exceed the SJVAPCD significance thresholds.

Project emissions would be consistent with the pollutant reduction objectives of the ozone and particulate matter plans of the SJVAPCD. Moreover, the project would be subject to the ISR, which would further limit NO_x and PM_{10} emissions. Project impacts related to air quality plans and air quality standards would be less than significant.

b) Cumulative Emissions.

As described in a) above, the project would not generate pollutant emissions that exceed SJVAPCD significance thresholds, and the project is below the Small Project Analysis Level threshold for elementary schools. Future attainment of federal and State ambient air quality standards is a function of successful implementation of the SJVAPCD's attainment plans. Consequently, the application of significance thresholds for criteria pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. Pursuant to the SJVAPCD's guidance, if project-specific emissions would be less than the thresholds of significance for criteria pollutants, the project would not be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the SJVAPCD is in nonattainment under applicable federal or State ambient air quality standards. Therefore, the project contribution to cumulative air quality impacts would be less than significant.

c) Exposure of Sensitive Receptors.

"Sensitive receptors" refer to those segments of the population most susceptible to poor air quality - children, the elderly, and those with pre-existing serious health problems affected by air quality. Land uses where sensitive individuals are most likely to spend time also may be called sensitive receptors; these include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (SJVAPCD 2015). Land uses that may be considered sensitive receptors include the proposed school on the project site and the residences to the north and west.

CO hotspots have the potential to expose nearby sensitive receptors to emissions that violate state and/or federal CO standards, even if the Air Basin is in attainment for federal and state levels. The GAMAQI indicates that a project would create no violations of the carbon monoxide standards if neither of the following criteria are met (SJVAPCD 2015):

- A traffic study for the project indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F; or

- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at one or more intersections in the project vicinity (See Section 3.17, Transportation/Traffic, for an explanation of LOS).

As described in more detail in Section 3.17, Transportation/Traffic, the Patterson General Plan EIR indicates that roads in the project vicinity would not have a LOS of E or F with development in accordance with the adopted Land Use Map. Therefore, the project would not generate CO hotspots. Project impacts on sensitive receptors would be less than significant.

e) Odors and Other Emissions.

In accordance with CEQA Guidelines Appendix G, the GAMAQI states that a project should be evaluated to determine the likelihood that it would result in nuisance odors (SJVAPCD 2015). The project does not have any features that would generate noticeable odors during either construction or operation. As previously noted, the project would not generate any operational air emissions that would exceed SJVAPCD significance thresholds, and therefore would have the potential to affect sensitive receptors. Emissions from traffic would occur only at certain times of the day and would dissipate after peak hours, thereby limiting the exposure of off-site residences.

Construction equipment using diesel fuel could generate diesel particulate matter, which is classified as a TAC. However, such emissions would be temporary and would be readily dispersed before reaching any sensitive receptors. Also, diesel particulate matter would have adverse impacts only with long-term exposure by sensitive receptors, and construction emissions would cease when work is completed. Long-term emissions of diesel particulate matter would be generated by passenger vehicles and delivery trucks. However, based on the results of the CalEEMod run, the total diesel particulate matter emissions, which are in the "PM10 Exhaust" category in CalEEMod, would be only 16.2 pounds in a school year. The emissions would readily dissipate before reaching any

sensitive receptors. Overall, project impacts related to odors or other emissions would be less than significant.

3.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Wildlife or US 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 Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	✓

Environmental Setting

The analysis in this section is based upon a biological resource assessment conducted by Moore Biological Consultants. The assessment involved a search of the California Natural Diversity Database (CNDDB) maintained by the California Department of Fish and Wildlife (CDFW), the IPaC Trust Resource Report maintained by the U.S. Fish and Wildlife Service (USFWS), and other databases; a review of pertinent literature; and a visit to the project site. The site visit involved making observations of plant and wildlife species

and habitat conditions, and an assessment for potentially jurisdictional federal and State waters. Appendix B of this IS/MND contains the biological resource assessment.

General Setting

The project site is essentially level and is approximately 135 feet above mean sea level. Surrounding land uses in this portion of Stanislaus County are primarily residential and agricultural. Aerial photographs confirm the project site has been fallow for decades and subject to routine mowing and/or disking, presumably for weed abatement and fire suppression.

Vegetation on the project site consists of grassland that is comprised of mostly non-native species. Oats, foxtail barley, and ripgut brome are the dominant grasses on the site. These grasses are intermixed with other grassland species such as wild radish, prickly lettuce, field bindweed, yellow starthistle, and broad-leaf filaree. No trees are on the project site, but there is a row of redwood trees in the T.W. Patterson Sports Complex to the south.

Several birds were observed at the project site during the field survey. Representative species include turkey vulture, red-tailed hawk, mourning dove, American crow, northern mockingbird, and Brewer's blackbird. California ground squirrel was the only mammal observed on the site, along with several ground squirrel burrows. While the project site provides suitable habitat for several larger mammal species, its small size and location reduces the likelihood that larger mammals would occur there. Small rodents, including mice and voles, may occur on or adjacent to the site. Due to lack of suitable habitat, few amphibians and reptiles are expected to use habitats in the site, and none were observed.

Waters of the U.S. and Wetlands

Waters of the U.S., including wetlands, are defined under 33 Code of Federal Regulations 328 to include navigable waterways, their tributaries, and adjacent wetlands. State and federal agencies regulate these habitats, and Section 404 of the federal Clean Water Act requires that a permit be secured prior to the discharge of dredged or fill materials into any Waters of the U.S. Pursuant to a May 2023 U.S. Supreme Court decision, adjacent wetlands must have a continuous surface connection with a jurisdictional Water of the U.S. to be subject to Clean Water Act regulation. However, wetlands not regulated under the federal Clean Water Act, including isolated wetlands, may be subject to State regulation as a Water of the State.

Special-Status Species

Special-status species are plants and animals that are legally protected under the federal Endangered Species Act, the California Endangered Species Act, or other regulations. Special-status wildlife species also includes species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts and other essential habitat.

Special-status plants include species designated rare, threatened, or endangered and candidate species for listing by the USFWS, and those considered rare or endangered under

the conditions of CEQA Guidelines Section 15380, such as plant species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California prepared by the California Native Plant Society. Special-status plants may include other species that are considered sensitive or of special concern due to limited distribution or to lack of adequate information to determine listing status, such as those included on List 3 of the California Native Plant Society inventory.

Table 3-3 provides a summary of the listing status and habitat requirements of special-status species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the greater project vicinity. This table also includes an assessment of the likelihood of occurrence of each of these species in the site, based on the distribution of regional occurrences, habitat suitability, and field observations.

TABLE 3-3
SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING
IN THE PROJECT VICINITY

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
Plants						
Big tarplant	*Blepharizoni plumosa ssp. plumosa*	None	None	1B	Valley and foothill grassland, usually on clay soils.	Unlikely: the site does not provide suitable habitat for this species.
Lemmon's jewelflower	*Caulanthus lemmonii*	None	None	1B	Pinyon-juniper woodland, valley and foothill grassland.	Unlikely: the site does not provide suitable habitat for this species and is below the elevation range of this species.
Spiny-sepaled button-celery	*Eryngium spinosepalum*	None	None	1B	Vernal pools within foothill and valley grasslands.	Unlikely: there are no vernal pools on the site.
Diamond-petaled California poppy	*Eschscholzia rhombipetala*	None	None	1B	Valley and foothill grasslands, in alkaline and clay soils.	Unlikely: the site does not provide suitable habitat for this species.
Shining navarretia	*Navarretia nigelliformis ssp. radians*	None	None	1B	Cismontane woodland, valley and foothill grassland, vernal pools, usually in clay soils.	Unlikely: the site does not provide suitable habitat for this species and is below the

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
						elevation range of this species.
Birds						
California condor	*Gymnogyps californianus*	E	E	N/A	Rocky shrubland, coniferous forests and oak savannas; found near cliffs or large trees, which they use as nesting sites.	Unlikely: the site does not provide suitable habitat for this species.
Least Bell's vireo	*Vireo bellii pusillus*	E	E	N/A	Nests in willow thickets and other shrubs, primarily in southern California riparian forests.	Unlikely: there is no suitable habitat for this species on or near the site.
Swainson's hawk	*Buteo swainsoni*	None	T	N/A	Nests in large trees, usually within riparian corridors. Forages in agricultural fields and annual grassland.	Low: the ruderal grassland in the site provides low-quality foraging habitat, and there are some large trees that are suitable for nesting in close proximity to the site.
Tricolored blackbird	*Agelaius tricolor*	None	T	N/A	Open water and protected nesting substrate, usually cattails and riparian scrub.	Unlikely: this species may fly over or forage on the site, but there is no nesting habitat on or adjacent to the site.
Burrowing owl	*Athene cunicularia*	None	SC	N/A	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Unlikely: the grassland in the site is highly disturbed and routinely mowed and/or disked, providing poor-

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
						quality habitat for this species.
Loggerhead shrike	*Lanius ludovicianus*	None	SC	N/A	Annual grasslands and agricultural areas; nests in trees and shrubs.	Unlikely: the grassland in the site is disturbed but provides suitable foraging habitat for this species. There are a few suitable nest trees and shrubs near the site that may be used for nesting by this species.
Mammals						
San Joaquin kit fox	*Vulpes macrotis mutica*	E	T	N/A	Open, dry annual or perennial grasslands and scrublands with loose textured soils for denning.	Unlikely: the site does not provide suitable habitat and no dens were observed during the field surveys.
American badger	*Taxidea taxus*	None	SC	N/A	Drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Unlikely: the site does not provide suitable habitat and no dens were observed during the field surveys.
Reptiles and Amphibians						
California tiger salamander	*Ambystoma californiense*	T	T	N/A	Seasonal water bodies without fish (i.e., vernal pools and stock ponds) and grassland or woodland habitats containing burrows.	Unlikely: there is no potentially suitable breeding habitat for this species on or near the site.
Western pond turtle	*Emys marmorata*	PT	SC	N/A	Ponds, marshes, streams, and ditches with emergent aquatic vegetation and basking areas.	Unlikely: there is no suitable habitat on or adjacent to the site for this species.

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
Western spadefoot	*Spea hammondii*	PT	SC	N/A	Breeds and lays eggs in seasonal water bodies such as deep vernal pools or stock ponds.	Unlikely: there is no suitable breeding habitat on or adjacent to the site for this species.
San Joaquin coachwhip	*Masticophis flagellum ruddocki*	None	SC	N/A	Open, dry habitats with little or no tree cover; valley grassland.	Unlikely: the site does not provide suitable habitat for this species; the grassland on the site is highly disturbed.
Fish						
Steelhead - Central Valley DPS	*Oncorhynchus mykiss irideus pop. 11*	T	None	N/A	Riffle and pool complexes with adequate spawning substrates within Central Valley drainages.	None: there is no aquatic habitat on the site.
Green sturgeon - southern DPS	*Acipenser medirostris pop. 1*	T	None	N/A	Non-spawning adults occupy marine/estuarine waters; Delta estuary important for rearing juveniles. Spawning occurs in cool sections of mainstem rivers in deep pools.	None: there is no aquatic habitat on the site.
Invertebrates						
Vernal pool tadpole shrimp	*Lepidurus packardi*	E	None	N/A	Vernal pools.	Unlikely: there are no vernal pools on the site.
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	None	N/A	Vernal pools and seasonally inundated depressions within the Central Valley.	Unlikely: there are no vernal pools or seasonal wetlands on the site.
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T	None	N/A	Elderberry shrubs in the Central Valley and surrounding foothills.	Unlikely: no blue elderberry shrubs were observed on or adjacent to the site.

Common Name	Scientific Name	Fed. Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence
Monarch butterfly	*Danaus plexippus*	C	None	N/A	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	Unlikely: although this species may fly over the site during its migration, the site has a lack of floristic resources.
Crotch bumble bee	*Bombus crotchii*	None	CE	N/A	Open grassland and scrub habitats throughout California; rarely found in the Central Valley.	Unlikely: the site does not provide suitable habitat for this species.

[1] T = Threatened; E = Endangered; PT = Proposed for Threatened listing; C = Candidate.

[2] T = Threatened; E = Endangered; SC=State of California Species of Special Concern, R = Rare.

[3] 1B = Rare, threatened, or endangered in California and elsewhere; N/A = not applicable.

Environmental Impacts and Mitigation Measures

a) Special-Status Species.

As indicated in Table 3-3, the likelihood of occurrence of listed, candidate, and other special-status species on the project site is extremely low. Only five special-status plant species are documented in the CNDDB within five miles of the project site. The site does not provide suitable habitat for any of these five special-status plant species, and none of them are expected to occur on the site.

A CNDDB query found 12 special-status wildlife species within five miles of the project site. The IPaC report identified eight other special-status wildlife species. While the project site may have provided habitat for one or more special-status wildlife species at some time in the past, agriculture and development have substantially modified natural habitats in the greater project vicinity, including those within the site. Due to a lack of suitable habitat, most of the wildlife species listed in Table 3-3 have essentially no potential to occur in or near the site on more than a transitory basis, with one exception.

Swainson's hawk is listed as a threatened species under the California Endangered Species Act. A migratory bird, Swainson's hawk is found in the Central Valley primarily during its breeding season, although a population is known to winter in the San Joaquin Valley. Swainson's hawks prefer nesting sites that provide sweeping views of nearby foraging grounds consisting of grasslands, irrigated pasture, hay, and wheat crops. The Migratory Bird Treaty Act and the California Fish and Game Code protect Swainson's hawks year-round and their nests during the nesting season (March 1 through September 15).

The conversion of approximately 13 acres of potential low-quality Swainson's hawk foraging habitat to developed uses is viewed as less than significant. The grasslands in the site are not irrigated and are routinely mowed and/or disked; the foraging habitat qualities

of the dry grassland are substantially lower than those of nearby fields of alfalfa and row crops. The potential use of the grasslands in the site by foraging Swainson's hawk is also reduced by the small size of the field and surrounding development.

However, Swainson's hawk may nest in adjacent or nearby trees. Construction activities could disturb any Swainson's hawk nests established in these trees, which would be a potentially significant impact. The biological assessment recommended a pre-construction survey for Swainson's hawk. The recommendation is incorporated as a mitigation measure presented below. Implementation of this mitigation measure would reduce project impacts on Swainson's hawk to a level that would be less than significant.

Mitigation Measure:

BIO-1: If project construction commences during the time period from March 1 to August 31, then a pre-construction survey for nesting Swainson's hawk within one-quarter mile of the project site shall be conducted. The survey shall utilize methodologies set forth by the Swainson's Hawk Technical Advisory Committee in its 2000 report *Determining a Project's Potential for Impacting Swainson's Hawk*. If active nests are found, then a qualified biologist shall determine the need, if any, for temporal restrictions on construction. Any temporal restrictions advised by the biologist shall be implemented by the project.

b) Riparian and Other Sensitive Habitats.

The project site is not located on, adjacent to, or near a stream. No riparian habitat exists on the site. The biological assessment did not identify any sensitive natural communities on the project site. The project would have no impact on riparian and sensitive habitats.

c) Wetlands.

The biological assessment noted that the project site is upland grassland and has soils that appear to be well draining. No potentially jurisdictional Waters of the U.S. or wetlands were observed on the site. No blue-line streams are reflected on the USGS topographic map (see Figure 1-3), and no aquatic features were recorded in the National Wetlands Inventory maintained by the USFWS. There are also no areas on the site meeting the criteria of Waters of the State, including wetlands. The project would have no impact on wetlands.

d) Fish and Wildlife Movement and Nesting.

As noted, there are no streams on or near the project site that could provide a fish or wildlife migration corridor. The biological assessment found no wildlife movement corridors on or near the site.

Due to the presence of relatively large trees and suitable foraging habitat (i.e., open fields) near the site, it is possible that raptors could nest near the project site. Ground-nesting songbirds such as killdeer may nest on the ground on and near the site, and the grassland vegetation in parts of the site may be suitable for grassland-nesting species, such as red-

winged blackbird. The Migratory Bird Treaty Act and provisions of the California Fish and Game Code protect raptors, as well as other bird species.

The biological assessment recommended mitigation that is presented below, which would reduce impacts on any nesting birds on the project site, some of which may be protected species. Implementation of this mitigation measure would reduce impacts on nesting birds to a level that would be less than significant.

Mitigation Measures:

BIO-2: If vegetation removal or project construction commences during the nesting season for raptors (January 1 through July 31), then a pre-construction survey shall be conducted by a qualified biologist. If vegetation removal or project construction commences during the general avian nesting season (March 1 through July 31), then a pre-construction survey shall be conducted by a qualified biologist. In both cases, if active nests are found, work in the vicinity of the nests shall be delayed until the young have fledged. The biologist shall recommend any temporal or other restrictions necessary to ensure no disturbance of the nests, which the project shall implement.

e) Local Biological Requirements.

Neither the City of Patterson nor the PJUSD have enacted any ordinances or other requirements that protect biological resources. The project would have no impact related to compliance with local biological resource policies and ordinances.

f) Conflict with Habitat Conservation Plans.

No habitat conservation plans or similar plans have been adopted by, or apply to, the PJUSD, the City of Patterson, or Stanislaus County. Therefore, the project would not conflict with the provisions of any habitat conservation plan or other approved conservation plan. The project would have no impact on this issue.

3.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	✓
b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	☐	✓	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	✓	☐

The analysis in this section is based upon a cultural resources assessment conducted by Natural Investigations Company. The assessment involved a records search by the Central California Information Center and other databases, a review of pertinent literature, and a visit to the project site. Appendix C of this IS/MND contains the cultural resources assessment.

Environmental Setting

At the time of European contact, most of the San Joaquin Valley, including the project site, was occupied by the Northern Valley Yokuts. Section 3.18, Tribal Cultural Resources, discusses the Yokuts in more detail.

The city of Patterson is located within the boundaries of the Rancho Del Puerto that was a land grant to Mariano and Pedro Hernandez. The rancho was granted to the Hernandez brothers on January 30, 1844, by the Governor of California, Manuel Micheltoreno. Subsequently, and after several changes of ownership, a total of 18,462 acres were possessed by Thomas W. Patterson and William W. Patterson. The land was later sold to the Patterson Ranch Company on May 16, 1908.

Thomas W. Patterson subdivided the land into ranches of various sizes and planned the design of the town of Patterson. The town was laid out in the shape of a wagon wheel with the streets converging on a plaza where the Hotel Del Puerto was built in 1910. The office of the Patterson Ranch Company was also built in the plaza and is still in use as the Patterson City Museum. In addition, major streets were planted with palm, eucalyptus, and sycamore trees, and an irrigation project was built to bring water to Patterson from the San Joaquin River. The Patterson Colony map was filed with the Stanislaus County Recorder's Office on December 13, 1909, and Patterson was incorporated as a city on December 22, 1919.

Patterson became, and remains, a principal city on the west side of the San Joaquin Valley. The city maintains agriculture as its primary economic base. With the completion of Interstate 5 in the late 1960s, and the subsequent development of Interstate 580, waves of exurban settlers have flocked to the area, with the population more than doubling between 1998 and 2008; many new residents commute to the nearby San Francisco Bay Area.

Environmental Impacts and Mitigation Measures

a) Historical Resources.

Natural Investigations Company requested a records search of the California Historical Resources Information System by the CCIC at California State University, Stanislaus to identify any previously recorded prehistoric or historic cultural resources and previously conducted surveys on and within one-quarter mile of the project site. The records search did not identify any previous surveys or previously recorded cultural resources on the project site. Four previous surveys within the one-quarter mile radius were recorded, but none of them identified any previously recorded cultural resources.

The field survey conducted on the project site did not identify any new prehistoric or historic sites or isolated artifacts. The cellular communications tower on the site is not considered a historical resource. The project would have no impact on historical resources.

b) Archaeological Resources.

As noted in a) above, a CCIC records search did not identify any cultural resources on or within one-quarter mile of the project site, including archaeological resources. The project site consists of alluvial fan deposits and Vernalis series soils that typically date to the Late Pleistocene period, which typically predates human occupation of the area. The project site is considered to exhibit a very low sensitivity for the presence of buried deposits of cultural resources. In addition, the project site has been previously disturbed by agricultural activity; consequently, it is not likely that buried deposits of cultural resources are present on the project. Archival research and the pedestrian surface survey did not identify any evidence to suggest that subsurface deposits of cultural resources are likely to be present.

Although unlikely, it is possible that previously unknown cultural resources could be unearthed during ground-disturbing construction activity. The establishment of procedures to address encountered resources would reduce potential impacts on these resources to a level that would be less than significant. These procedures are set forth in the following mitigation measure.

Mitigation Measures:

CULT-1: If any subsurface cultural resources are encountered during construction of the project, all construction activities within 50 feet of the encounter shall be halted until a qualified archaeologist can examine these materials, determine their significance, and if significant recommend further mitigation measures that would reduce potential effects to a level that is less than significant. Such measures could include 1) preservation in place or 2) excavation, recovery, and curation by qualified professionals. The PJUSD shall be responsible for retaining qualified professionals, implementing recommended mitigation measures, and documenting mitigation efforts in a written report, consistent with the requirements of the CEQA Guidelines.

c) Human Burials.

Given the results of the records search and past disturbance of the project site, it is unlikely that any human burials, particularly Native American burials, would be uncovered during project construction work. CEQA Guidelines Section 15064.5(e) describes the procedure to be followed when human remains are uncovered in a location outside a dedicated cemetery, in accordance with California Health and Safety Code Section 7050.5 and Public Resource Code Section 5097.98. All work in the vicinity of the find shall be halted, and the County Coroner shall be notified to determine if an investigation of the death is required. If the remains are determined to be Native American in origin, more procedures shall be followed. Section 3.18, Tribal Cultural Resources, discusses the treatment of Native American burials.

Compliance with the applicable State codes, as outlined in CEQA Guidelines Section 15064.5(e), would ensure that any human remains encountered during project construction would be treated with appropriate dignity. Project impacts on human remains would be less than significant.

3.6 ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	☐	☐	✓	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	✓	☐

Environmental Setting

Electricity and natural gas are major energy sources for residences and businesses in California. In Stanislaus County, electricity consumption in 2022 totaled approximately 5,245 million kilowatt-hours, of which approximately 2,026 million kilowatt-hours were consumed by residential uses and the remainder by non-residential uses (CEC 2024a). Natural gas is another major energy source. In Stanislaus County, natural gas consumption in 2022 totaled approximately 203 million therms, of which approximately 62 million therms were consumed by residential uses and the remainder by non-residential uses (CEC 2024b).

Motor vehicle use also accounts for substantial energy usage. Approximately 236 million gallons of fuel were consumed annually in Stanislaus County, of which approximately 197 million gallons were gasoline and 39 million gallons were diesel fuel (StanCOG 2022).

The State of California has adopted comprehensive energy efficiency standards as part of its Building Standards Code, California Code of Regulations, Title 24. Part 6 of Title 24 is referred to as the California Energy Code. In 2009, the California Building Standards Commission adopted a voluntary Green Building Standards Code, also known as CALGreen, which became mandatory in 2011. CALGreen sets forth mandatory measures, applicable to new residential and nonresidential structures as well as additions and alterations, on water efficiency and conservation, building material conservation, and interior environmental quality. It also mentions energy efficiency, although CALGreen defers to the Energy Code for actions.

California also has adopted a Renewables Portfolio Standard, the intent of which in part is to reduce the use of fossil fuels, a main source of greenhouse gas (GHG) emissions. The Renewables Portfolio Standard requires electricity retailers in the state to generate 33% of electricity sold in California from renewable energy sources (i.e., solar, wind, geothermal, hydroelectric from small generators, etc.) by the end of 2020. Almost all the electricity retail sellers reported meeting the 2020 compliance target (CPUC 2022). In 2018, Senate Bill (SB) 100 was signed into law, which increased the electricity generation requirement from renewable sources to 60% by 2030 and requires all the state's electricity to come from carbon-free resources by 2045. In 2022, SB 1020 was enacted, which sets additional goals for electricity generation from renewable sources - 90% by the end of 2035 and 95% by the end of 2040.

Environmental Impacts and Mitigation Measures

a) Project Energy Consumption.

Project construction would involve fuel consumption and use of other non-renewable resources. Construction equipment used for such improvements typically runs on diesel fuel or gasoline. The same fuels typically are used for vehicles that transport equipment and workers to and from a construction site. The ARB is actively working to reduce emissions from construction equipment by requiring such equipment to meet zero and near-zero emission standards. However, construction-related fuel consumption would be finite, short-term, and consistent with construction activities of a similar character. This energy use would not be considered wasteful, inefficient, or unnecessary.

Electricity may be used for equipment operation during construction activities. It is expected that more electrical construction equipment would be used in the future, as it would generate fewer air pollutant emissions. This electrical consumption would be consistent with construction activities of a similar character; therefore, the use of electricity in construction activities would not be considered wasteful, inefficient, or unnecessary, especially since fossil fuel consumption would be reduced. Moreover, under California’s Renewables Portfolio Standard, a greater share of electricity would be provided from renewable energy sources over time, so less fossil fuel consumption to generate electricity would occur.

According to the 2018 Commercial Buildings Energy Consumption Survey by the U.S. Energy Information Administration, the most recent such survey conducted, elementary school facilities consumed on average 8.4 kWh of electricity per square foot annually and 27.8 cubic feet of natural gas per square foot annually (EIA 2018). Based upon these factors, it is estimated that proposed development would consume 604,800 kWh of electricity and 2,001,600 cubic feet of natural gas annually.

As indicated in the CalEEMod run (see Appendix A), the vehicle miles traveled (VMT) generated by project traffic would be 3,018,603 annually, or approximately 11,578 miles per weekday. Based on estimates by StanCOG, such vehicle traffic would consume approximately 1,486 gallons of gasoline and diesel fuel per weekday.

The project would be required to comply with the adopted California Energy Code and CALGreen in effect at the time of project approval. Compliance with these standards would reduce energy consumption associated with project operations, although reductions from compliance cannot be readily quantified. Overall, project construction and operations would not consume energy resources in a manner considered wasteful, inefficient, or unnecessary. Project impacts related to energy consumption are considered less than significant.

b) Consistency with Energy Plans.

The PJUSD does not have adopted plans for renewable energy or energy efficiency. However, the PJUSD would be required to comply with the requirements of the California Energy Code and CALGreen, which are designed to further State energy conservation goals. Project impacts related to energy plans would be less than significant.

3.7 GEOLOGY AND SOILS

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☐	✓
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, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	✓	☐	☐

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect 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) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	✓

Environmental Setting

Topography and Soils

The project area lies in the San Joaquin Valley, which is in the southern portion of the Great Valley Geomorphic Province. The San Joaquin Valley is filled with thick sedimentary rock sequences that were deposited as much as 130 million years ago. Large alluvial fans have developed on each side of the Valley, with the smaller and more sloping deposits along the Coast Range side to the west. The Geologic Map of the San Francisco-San Jose Quadrangle designates the underlying geology of the project area as Quaternary alluvial fan deposits (Wagner et al. 1991, Condor Earth 2022).

According to a custom soil resource report prepared for the project, there are two soil types underlying the project site (USDA NRCS 2002, 2023):

- Vernalis loam, 0 to 2 percent slopes, rarely flooded. Vernalis loam is the predominant soil type on the project site. Vernalis soils are very deep, well-drained, nearly level soils. Vernalis loam was formed in alluvium from mixed rock sources. Permeability is moderate, and runoff is negligible to low. The water erosion hazard is slight. The highest shrink-swell potential of the soil is moderate.
- Elsalado loam, 0 to 2 percent slopes Elsalado. loam is found in the southwestern corner of the project site. Elsalado soils are very deep, well-drained soils. Elsalado loam was formed in alluvium from sandstone and shale. Permeability is moderate, and runoff is negligible to low. The water erosion hazard is slight. The shrink-swell potential of the soil is low.

Seismic Hazards

The nearest fault to the project site is the San Joaquin Fault, which marks the approximate boundary between the Coast Ranges and the San Joaquin Valley. The fault, located approximately one mile west of the project site, has shown no evidence of movement

within the last 15,000 years (Condor Earth 2022). However, the Ortigalita Fault, which is classified as an active fault, is approximately 15 miles southwest of the project site. It is the only active fault within Stanislaus County (Stanislaus County 2016).

Potential seismic hazards include ground shaking, liquefaction, and lateral spreading. Soil compaction and settlement can result from seismic ground shaking. Liquefaction occurs when saturated soil loses shear strength and deforms from increased pore water pressure induced by strong ground shaking during an earthquake. As the excess pore pressure dissipates, volume changes are produced within the liquefied soil layer that can manifest at the ground surface as settlement of structures, floating of buried structures, and failure of retaining walls. Soil types most susceptible to liquefaction are saturated, loose, sandy soils. Lateral spreading is lateral ground movement, with some vertical component, caused by liquefaction (City of Patterson 2012).

Paleontological Resources

Natural Investigation Company conducted a search of the database of the University of California Museum of Paleontology. The results of the search found 237 fossil localities and 998 paleontological specimens in Stanislaus County. As noted, the underlying geology of the project site is Quaternary alluvial fan deposits. These deposits have no known fossils, and the upper portion of these deposits is likely too young to contain fossils. However, the depositional environment and the age of the lower portion indicate these deposits have the potential to contain fossils, especially if they overlie paleontologically sensitive units such as the Modesto Formation (Stanislaus County 2016).

Environmental Impacts and Mitigation Measures

a-i) Fault Rupture Hazards.

As noted, there are no recently active faults within or near the project site. The California Geological Survey does not include the project site or the Patterson area in an Alquist-Priolo Earthquake Fault Zone (California Geological Survey 2024). The project would have no impact related to fault rupture.

a-ii) Seismic Ground Shaking.

The project site, along with the rest of the County, is subject to seismic shaking from fault features east and west of the County. It is expected that building construction would follow applicable building codes, which include seismic safety requirements. Project impacts related to ground shaking would be less than significant.

a-iii) Other Seismic Hazards.

As noted above, soil types most susceptible to liquefaction are saturated, loose, sandy soils. The soils on the project site are loams. As part of a geotechnical report for the project, a liquefaction hazard screening analysis was conducted, assuming a 24-foot depth to groundwater and an earthquake magnitude of 6.38. The analysis concluded that, under these conditions, there is a potential for liquefaction at the site, with seismically-induced settlements of up to one inch expected. However, due to the cohesive nature and thickness

of non-liquefiable soils across the surface of the site as well as the lithology consisting predominantly of clayey soils, the probability for liquefaction to manifest at the surface is minor (Terracon 2024). This geotechnical report is available in Appendix D of this document.

If the proposed buildings can tolerate the estimated total and differential settlements noted, the building may be supported by shallow foundations, in accordance with the provisions of the 2022 California Building Code. As an alternative, the effects of the anticipated liquefaction settlement could be mitigated by supporting the proposed building on a mat slab or deep foundations that derive support below the potentially liquefiable soils or by ground improvement methods (Terracon 2024). These recommendations are incorporated within a mitigation measure presented below.

The geotechnical report also evaluated the likelihood of lateral spreading. The site is situated in a relatively planar area of low relief. As with liquefaction potential, the nature of the on-site soil and the predominance of clayey soils make the potential for lateral spreading very low (Terracon 2024). Project impacts related to other seismic hazards, such as liquefaction and lateral spreading, are considered less than significant.

Mitigation Measures:

GEO-1: In accordance with the recommendations of the *Patterson Gardens Elementary School Geotechnical Engineering Report*, (project previously named "Patterson Gardens"), by Terracon on May 15, 2024, the buildings on the project site may be supported by shallow foundations. Per the 2022 California Building Code, shallow foundations shall be interconnected by foundation ties designed to accommodate the differential settlements between adjacent footings due to the potential for liquefaction. As an alternative, the effects of the anticipated liquefaction settlement could be mitigated by supporting the proposed building on a mat slab or deep foundations that derive support below the potentially liquefiable soils or by ground improvement methods. The method to be used shall be identified on final site plans for the project.

a-iv) Landslides.

The project site is in a topographically flat area, so there would be no landslide hazard. The project would have no impact related to landslides.

b) Soil Erosion.

Both soils on the project site have a low potential for erosion. However, project construction may loosen soils, leaving them exposed to potential water and wind erosion.

Measures associated with SJVAPCD Regulation VIII, which is discussed in Chapter 6.0, Air Quality, would reduce potential wind erosion impacts. Also, development projects that disturb one or more acres of soil are required to obtain the Construction General Permit, administered by the State Water Resources Control Board (SWRCB). The Construction

General Permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) to address potential water quality issues associated with construction discharges. The SWPPP includes a site map and description of construction activities and identifies the Best Management Practices (BMPs) that will be employed to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources. A monitoring program is generally required to ensure that BMPs are implemented according to the SWPPP and are effective at controlling discharges of stormwater-related pollutants.

Compliance with the requirements of SJVAPCD Regulation VIII and the Construction General Permit would minimize the amount of erosion that may occur because of soil disturbance associated with project construction. Once construction work is completed, no soil erosion is expected to occur as the development and landscaping mature. Project impacts related to soil erosion would be less than significant.

c) Geologic Instability.

As noted, the project geotechnical report evaluated the potential for liquefaction and for lateral spreading. The analysis and conclusion are in a-iii) above, along with recommended mitigation. No other issues associated with geologic instability were identified in the geotechnical report. With implementation of Mitigation Measure GEO-1, project impacts related to soil instability would be less than significant.

Mitigation Measures: Implementation of Mitigation Measure GEO-1.

d) Expansive Soils.

Expansive soils can lead to damage of building foundations and pipelines if not addressed. The shrink-swell potential of the Elsalado loam has been classified as low. Vernalis loam, the predominant soil on the project site, has a shrink-swell potential that is moderate at depths greater than 20 inches below ground surface (USDA NRCS 2002). The project geotechnical report confirmed that medium plasticity soils that are slightly expansive are present on the project site. The near-surface, medium stiff to very stiff, medium plasticity lean clay could become unstable with typical earthwork and construction traffic, especially after precipitation events. (Terracon 2024).

As noted, it is expected that building construction would follow applicable building codes, which include requirements related to soils. Project impacts related to expansive soils would be less than significant.

Mitigation Measures:

GEO-2: The project shall follow the recommendations of the *Patterson Gardens Elementary School Geotechnical Engineering Report*, (project previously named "Patterson Gardens"), prepared by Terracon on May 15, 2024, to minimize soil expansion impacts. These include completing effective drainage early in the construction sequence and maintaining drainage after construction, along with grading during the warmer and drier times of the year. In addition, the project shall follow the

recommendations in the Earthwork section of the geotechnical report regarding site and subgrade preparation, fill materials, and fill placement and compaction, among others. The recommendations shall be incorporated within the final site plans of the project.

e) Adequacy of Soils for Wastewater Disposal.

The proposed new school on the project site would connect to the wastewater system of the City of Patterson. It would not use, and does not propose to install, any septic systems. The project would have no impact related to this issue.

f) Paleontological Resources.

As noted, Natural Investigations Company conducted a search of the University of California Museum of Paleontology database. While numerous fossil localities and paleontological specimens in Stanislaus County were recorded, none were recorded on the project site. Archival research and the pedestrian surface survey conducted for the project did not identify any previously recorded or new paleontological resources. As noted, the project site has been disturbed by past agricultural activities, so it is unlikely that any intact paleontological resources would be encountered. The project would have no impact on paleontological resources.

3.8 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	✓	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	✓	☐

Environmental Setting

Greenhouse gases (GHGs) are gases that absorb and emit radiation within the thermal infrared range, trapping heat in the earth's atmosphere. GHGs are both naturally occurring and are emitted by human activity. GHGs include carbon dioxide, the most abundant GHG, as well as methane, nitrous oxide and other gases. Increased atmospheric concentrations of GHGs are considered a primary contributor to global climate change, which is a subject of concern for the State of California. Potential climate change impacts occurring in the San Joaquin Valley include higher temperatures, longer and more severe droughts, more intense precipitation events, and more frequent and extensive wildfires (Fernandez-Bou et al. 2021).

GHG emissions in California in 2021, the most recent year for which data are available, were estimated at approximately 381.3 million metric tons carbon dioxide equivalent (CO_2e). Transportation was the largest contributor to GHG emissions in California, with 38.2% of total emissions. Other significant sources include industrial activities, with 19.4% of total emissions, and electric power generation, both in-state and imported, with 16.4% of total emissions (ARB 2023). According to the most recent information available, Patterson generated 287,003 metric tons CO_2e of GHG emissions in 2009. Transportation accounted for 62.7% of these emissions (City of Patterson 2010c).

The State of California has implemented GHG emission reduction strategies through Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, which requires total statewide GHG emissions to reach 1990 levels by 2020, or an approximately 29% reduction from 2004 levels. The 2020 state GHG emissions were 61.8 million metric tons CO2e below the AB 52 target (ARB 2022a). In 2016, Senate Bill (SB) 32 became law. SB 32 extends the GHG reduction objectives of AB 32 by mandating statewide reductions in GHG emissions to levels that are 40% below 1990 levels by the year 2030. To achieve the SB 32 reduction target, the State adopted an updated Scoping Plan that continues many of the programs that were part of the previous Scoping Plans, including the cap-and-trade program, low-carbon fuel standards, renewable energy, and methane reduction strategies. It also addressed for the first time GHG emissions from the natural and working lands of California, including the agriculture and forestry sectors (ARB 2017).

In 2022, ARB adopted an update to the Scoping Plan. The 2022 Scoping Plan assesses progress towards achieving the SB 32 2030 reduction target and lays out a path to achieve carbon neutrality no later than 2045. Proposed strategies to achieve these reductions include rapid movement to zero-emission transportation, phasing out fossil fuel use for heating homes and buildings, restricting use of chemicals and refrigerants that are thousands of times more powerful at trapping heat than carbon dioxide, expanded development of renewable energy sources, increased use of natural and working lands for incorporating and storing carbon, and greater employment of carbon removal technology (ARB 2022b).

Environmental Impacts and Mitigation Measures

a, b) Project GHG Emissions and Consistency with GHG Reduction Plans.

CalEEMod was used to estimate the total GHG construction and operational emissions associated with the project (see Appendix A of this IS/MND). Based on results from the CalEEMod run, total project construction GHG emissions would be approximately 805 metric tons CO_2e. Project operational GHG emissions would be approximately 1,214 metric tons CO_2e annually under "unmitigated" conditions (i.e., without implementation of any project features or regulations that would reduce GHG emissions). The CalEEMod run incorporated the following project features and regulations that would reduce GHG emissions:

- Building exceeds 2019 Title 24 energy efficiency standards.

- In accordance with SBX7-7, new development would implement water conservation measures that lead to a 20% reduction in indoor and outdoor water use.

- In accordance with AB 341, new development would divert 75% of its solid waste stream through recycling and other measures.

With incorporation of these measures, estimated operational GHG emissions would be reduced to approximately 1,173 metric tons CO_2e annually, a 3% reduction in GHG emissions from unmitigated levels.

Neither the State, SJVAPCD, nor PJUSD has established significance thresholds for GHG construction or operational emissions. However, construction emissions would be limited to a relatively short time period and would cease once work is completed. In addition, implementation of SJVAPCD Regulation VIII, noted in Section 3.3, Air Quality, is expected to reduce incrementally the amount of GHGs generated by project construction.

In addition to the reductions that would occur with the project features described above, the school would relieve potential overcrowding at other elementary schools in the PJUSD; the project by itself would not generate new students. Therefore, overall GHG emissions generated by PJUSD facilities would not change with project implementation. Given this and the implementation of GHG reduction measures, the project is expected to be consistent with the objectives of the State's GHG reduction plans. Project impacts related to GHG emissions would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 one-quarter mile of an existing or proposed school?	☐	☐	✓	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	✓	☐

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) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	✓	☐
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	✓

Environmental Setting

This section focuses on hazards associated with hazardous materials, proximity to airports, and wildfires. Geologic and soil hazards are discussed in Section 3.6, Geology and Soils, and flooding hazards are discussed in Section 3.9, Hydrology and Water Quality.

Data on hazardous material sites are kept in the GeoTracker database, maintained by the SWRCB, and in the EnviroStor database, maintained by the DTSC. Both GeoTracker and EnviroStor provide the names and addresses of hazardous material sites, along with their cleanup status. A search of the GeoTracker database indicated no record of active or closed hazardous material sites (i.e., sites not cleaned up) at or in the vicinity of the project site (SWRCB 2023). However, the EnviroStor database had a record of a "school investigation" on the project site (DTSC 2023b). This investigation was connected with the proposed project, as described below.

An Environmental Hazards Assessment was conducted on the project site by Condor Earth. This assessment is available in Appendix E of this document. The report on the assessment stated that, based on review of publicly available information, none of the properties listed in the environmental database search appear to pose a risk to the project site, and no nearby or onsite sources of contamination were identified that would pose a subsurface vapor intrusion risk to future occupants of the project site. However, the report recommended that a PEA be conducted under DTSC oversight to evaluate the project site for residual chemicals potentially left over from past agricultural operations, particularly organochlorine pesticides and arsenic (Condor Earth 2022).

A PEA of the project site was subsequently conducted, as noted in Chapter 2.0, Project Description. This PEA is also included in Appendix E. The PEA concluded that there was no indication of impacts to soil due to historical land use activities that would pose a threat to human health or the environment from organochlorine pesticides and arsenic when compared to screening levels published by DTSC and the EPA. The DTSC concurred with the finding of No Further Action and that the project site is suitable for school development (DTSC 2023a).

A list of solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit did not show any locations within the project area (CalEPA 2016a). Likewise, a list by SWRCB containing sites under

Cease and Desist Orders and Cleanup and Abatement Orders showed no locations (CalEPA 2016b).

There are no existing or proposed airports within two nautical miles of the project site. The nearest airport is the NASA Crows Landing Airport and Test Facility, which is approximately 2.6 nautical miles southeast of the project site (Condor Earth 2022). However, the Stanislaus County Airport Land Use Compatibility Plan indicates that the project site is within the Airport Influence Area of the Crows Landing airport. A "major land use action" within an Airport Influence Area is subject to review by the Stanislaus County Airport Land Use Commission. Major land use actions include any discretionary development proposal for projects having a building floor area of 20,000 square feet or greater unless only ministerial approval is required. (Stanislaus County ALUC 2016).

Environmental Impacts and Mitigation Measures

a) Hazardous Materials Transportation, Use and Disposal.

Construction activities on the project site may involve the use of hazardous materials such as fuels and solvents. Construction vehicles would transport and use fuels in ordinary quantities. Other substances used in the construction process would be stored in approved containers and used in relatively small quantities, in accordance with the manufacturers' recommendations and/or applicable regulations.

Schools do not require large quantities of hazardous materials in their operations. The only potentially hazardous materials typically used by schools are consumer and cleaning products, which are used in small amounts and do not present a hazard when properly used and stored. Project impacts related to transport, use, and disposal of hazardous materials would be less than significant.

b) Release of Hazardous Materials

Construction activities on the project site may involve the potential for fuel spills. Fuel spills, if any occur, would be minimal and would not typically have significant adverse effects. Potential hazardous materials spills during construction are addressed in the required SWPPP, described in Section 3.6, Geology and Soils. In accordance with SWPPP requirements, contractors have absorbent materials at construction sites to clean up minor spills. As noted in a) above, the school would involve minimal use of hazardous materials. No hazardous materials would be used that would present a general health hazard to students and staff if released into the environment. Project impacts related to release of hazardous materials would be less than significant.

c) Emission of Hazardous Materials Near Schools.

As noted in a) above, the school would involve minimal use of hazardous materials. No hazardous materials would be used that would present a general health hazard to students and staff if released into the environment. The Environmental Hazards Assessment noted the presence of 115-kilovolt single-phase electrical transmission lines, operated by Pacific Gas and Electric Company, (PG&E) along Ward Avenue adjacent to the southeastern portion of the project site. However, the assessment did not explicitly identify these lines

as potential hazards (Condor Earth 2022). Project impacts related to emissions of hazardous materials near schools would be less than significant.

d) Hazardous Materials Sites.

None of the lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5 contains sites within the project area. As noted in the Environmental Setting, a search of the GeoTracker and EnviroStor databases did not identify any active hazardous material sites on or near the project site, except for a "school investigation" on record in the EnviroStor database. However, as noted above, this PEA concluded that the project site had no significant levels of soil contamination and therefore is suitable for school development.

Naturally occurring asbestos is an issue of concern in and near foothill areas. It is typically associated with ultramafic rocks; i.e., dark-colored rocks with a high magnesium and iron content. According to published geologic maps, the nearest ultramafic rocks are approximately nine miles west of the project site in Del Puerto Canyon. The project site is located 3.5 miles south of the drainage watershed and alluvial fan of Del Puerto Canyon and is not hydraulically connected to that drainage. The drainage and watershed that is hydraulically connected to the project site does not have ultramafic rock units within it. Therefore, naturally occurring asbestos is not likely present and does not appear to pose a risk to the project site (Condor Earth 2022).

In summary, no project site contamination has been identified, either from historical land uses or from naturally occurring asbestos. Project impacts related to hazardous materials sites are less than significant.

e) Airport Operations.

A review of Google Earth revealed no public use airports or private airstrips within two miles of the project site. The project site is within the Airport Influence Area of the Crows Landing Airport, which would require the project to be reviewed by the County Airport Land Use Commission. However, the project site is outside the designated safety zones of the airport (Stanislaus County ALUC 2016). There are no structures proposed on the project site that would be higher than two stories. Therefore, it is anticipated that the project would not affect Crows Landing Airport operations. Project impacts related to airport operations are considered less than significant.

f) Emergency Response and Evacuation.

Project construction work such as vehicle access and utility connections could extend into adjacent streets. These streets are used by emergency vehicles to access nearby residential areas and likely would be used in evacuations. Project work in the adjacent streets is not expected to require closure or any major restriction on public use of the roads, so project construction is not expected to substantially obstruct emergency vehicles or any evacuation activity that may be required in the area. Project operations would not obstruct any roadways. Project impacts on emergency response or emergency evacuation plans would be less than significant.

g) Wildland Fire Hazards.

Wildland fires are an annual hazard in Stanislaus County. Wildland fires, which include rangeland, brush, and grass fires, burn natural vegetation on undeveloped lands. High hazard areas for wildland fires are generally limited to the foothills on the east and west sides of the County (Stanislaus County 2016). The project site is within an area mixed with urban development and agricultural fields. This area does not have any wildlands; therefore, the project would have no impact related to wildland fire hazards. Refer to Section 3.20, Wildfire, for further discussion of potential wildfire hazards.

3.10 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	✓	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	✓	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river runoff or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site?	☐	☐	✓	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	✓	☐
iii) 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?	☐	☐	✓	☐
iv) Impede or redirect flood flows?	☐	☐	☐	✓
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	✓
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	✓	☐

Environmental Setting

Surface Waters

The project site is in an essentially flat, urbanizing area. The nearest natural surface stream is Salado Creek, less than one-half mile west of the project site. Salado Creek, an intermittent stream, originates in the Diablo Mountains south of Patterson, flows south to north across the City, and discharges into the San Joaquin River northeast of the City. Between SR 33 and the San Joaquin River, Salado Creek runs underground through 36-inch and 96-inch diameter pipelines (City of Patterson 2010b) and is channelized through the City. The Delta-Mendota Canal and the California Aqueduct, two constructed water channels, are approximately 1.5 miles to the west.

Surface water quality in the Valley and Delta regions is managed by the Central Valley Regional Water Quality Control Board (RWQCB) by means of The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, revised in June 2015. The beneficial uses of surface waters in the region include municipal and domestic water supply; industrial service and process supply; agricultural irrigation; groundwater recharge; navigation; contact and non-contact recreation; commercial and sport fishing; migration of aquatic organisms; wildlife habitat; and habitat for rare, threatened, and endangered species (RWQCB 2015).

The SWRCB has prepared a list under the federal Clean Water Act Section 303(d) that identifies surface waters in California considered impaired in water quality, along with the pollutants responsible for the impairment. Salado Creek is listed as having impaired water quality from fecal indicator bacteria and salinity (SWRCB 2022).

The Clean Water Act was amended in 1972 to prohibit the discharge of pollutants to Waters of the United States from any point source unless the discharge complies with a National Pollutant Discharge Elimination System (NPDES) permit. Section 402(p) was added to the Clean Water Act in 1987 to establish the framework for regulating municipal and industrial stormwater discharges under the NPDES program through a two-phase implementation plan. Phase II regulations, promulgated in 1999, require small municipalities to obtain coverage under the NPDES municipal program. The City of Patterson is subject to Phase II regulations and has prepared a Storm Water Management Program (SWMP) to comply with these regulations (General Permit Number CAS000004, Water Quality Order No. 2013-0001-DWQ, effective July 1, 2013). The intent of the SWMP is to implement BMPs to reduce the discharge of pollutants from the City to the maximum extent practicable.

In collaboration with the cities of Lathrop, Lodi, Manteca, and Tracy and with San Joaquin County, the City of Patterson adopted a Multi-Agency Post-Construction Stormwater Standards Manual to comply with the Post-Construction Storm Water Management requirements of the SWMP. The manual provides guidance for planning, implementing, and maintaining effective control measures with the intention of improving water quality and mitigating potential water quality impacts, including hydromodification, from stormwater and non-stormwater discharges. It includes examples of BMPs to be implemented on new development and redevelopment projects, including site design

measures, source control measures, Low Impact Development treatment control measures, and post-construction peak runoff control measures (City of Patterson 2018a).

Groundwater

The City of Patterson overlies the Delta-Mendota Groundwater Subbasin, which covers 1,170 square miles in western Fresno, Madera, Merced, and Stanislaus counties and is a subbasin of the San Joaquin Valley Groundwater Basin. The Delta-Mendota Subbasin near Patterson contains two primary aquifers separated by the Corcoran Clay confining unit: a lower, fully confined water-bearing zone ("lower aquifer") and an upper semi-confined zone ("upper aquifer"). The Corcoran Clay unit is present under the City of Patterson and thins out to the west as the Del Puerto Creek alluvial fan rises toward the base of the Coast Range near Interstate 5 and the Delta-Mendota Canal. The lower aquifer can range from below ground surface to about 2,000 feet deep. The upper aquifer extends to depths ranging from about 150 feet to greater than 350 feet below ground surface (City of Patterson 2021).

The lower aquifer is utilized as a source of groundwater for drinking water and other uses such as agricultural irrigation, whereas upper aquifer groundwater is of lower quality. Groundwater elevations typically increased or remained relatively stable during the period from the 1980s through the early 2000s. Wells in the lower aquifer generally exhibited fewer seasonal differences in groundwater elevations, with a general decline during the 2012-2016 drought years followed by recovery in 2017-2018 (City of Patterson 2021). Geotechnical borings conducted on the project site did not encounter any groundwater within the maximum drill depth of 51.5 feet. However, data from a nearby State well indicate a groundwater depth of 24 feet below ground surface in April 1978 (Terracon 2024).

In 2014, the State enacted the Sustainable Groundwater Management Act. This act requires the formation of local groundwater sustainability agencies that must assess conditions in their local water basins and adopt locally based Groundwater Sustainability Plans for sustainable use of groundwater and avoidance of overdraft. Plans for "critically overdrafted" basins must be completed and adopted by January 31, 2020, while plans for high- and medium-priority basins have an adoption deadline of January 31, 2022. A Groundwater Sustainability Plan for the Delta-Mendota Subbasin, identified as a critically overdrafted basin, was submitted to the California Department of Water Resources (DWR) in January 2020 and resubmitted in July 2022. DWR currently considers the Groundwater Sustainability Plan for the Delta-Mendota Subbasin inadequate.

Flooding Hazards

According to a Flood Insurance Rate Map prepared by the Federal Emergency Management Agency (FEMA), the project site lies within an area classified as Zone X (FEMA 2008). Zone X denotes areas outside the 100-year floodplain, which is the standard flood used in flooding evaluations, but within the 500-year floodplain. The project site is outside the one identified inundation area of potential dam failure - that of San Luis Reservoir (City of Patterson 2010a).

SB 5 and associated legislation requires protection for a 200-year flood for urban and urbanized areas in the Central Valley. Under SB 5, new development in moderate or special hazard areas within the Central Valley is permitted if the local agency can provide substantial evidence that the development would be subject to less than 3 feet of flooding during a 200-year flood event. Based on information provided by the California Department of Water Resources, the project site is not within a 200-year floodplain.

Environmental Impacts and Mitigation Measures

a) Surface Waters and Quality.

The project site does not have, and is not adjacent to, any streams or bodies of water. Potential discharges from project construction would not reach any surface waters, particularly with the implementation of the conditions of the Construction General Permit. Discharges from project operations would be subject to the requirements of the City of Patterson's SWMP, which would minimize the potential storm water quality impacts of the project on surface waters. Project impacts on surface waters and their quality would be less than significant.

b) Groundwater Supplies and Recharge.

The project would not directly draw upon groundwater supplies. As noted above, the City of Patterson would provide water service to the project, and the City relies on groundwater for its supplies. However, as discussed in Section 3.18, Utilities and Service Systems, the City would have adequate water supplies to serve the project and still be below what is considered a "safe yield" from local aquifers.

The additional impervious surfaces from buildings and pavement associated with the project would reduce the area on the project site where precipitation can percolate into the ground. This percolation is one source of groundwater recharge. However, the southern portion of the project site would be used for sports fields, the grass surfaces of which would continue to allow percolation. Given that Patterson is within a predominantly agricultural and open space area which provides for recharge, the reduction of the recharge area on the project site would have no substantial impact on groundwater recharge. Project impacts on groundwater supplies and recharge would be less than significant.

c-i, -ii, -iii) Drainage Patterns and Runoff.

The project would increase the coverage of the project site with impervious surfaces from buildings and pavement. Since the project site is mostly undeveloped, the project would alter existing drainage patterns on the project site. Since more impervious surfaces would be placed on the project site, less precipitation would percolate into the ground. Therefore, the project would increase the amount of runoff that would remain on the project site surface.

The project would be connected to the City of Patterson's storm water drainage system. Runoff generated by the project would be accommodated by the City's system; therefore, the change in drainage patterns and additional runoff would not lead to erosion or flooding. As noted in a) above, the project would be subject to the requirements of the City's SWMP,

which would include implementation of applicable BMPs from the Multi-Agency Post-Construction Stormwater Standards Manual. Compliance with the applicable BMPs is expected to lead to less runoff to be accommodated by the City's storm drainage system. Also, the project would be required to comply with other provisions of the City's SWMP that would reduce the pollutants in runoff from the project site. Based on this information, project impacts on drainage patterns and runoff would be less than significant.

c-iv) Flood Flows.

The project would not involve placement of any structures within identified flood hazard areas or floodways. As noted, the project site is not located within a 100-year floodplain as designated by FEMA; as such, no structures would impede or redirect flows from 100-year floods. The project site also is not within an area potentially subject to a 200-year flood. The project would have no impact related to flood flows.

d) Release of Pollutants in Flood, Seiche, and Tsunami Zones.

As noted in c-iv) above, the project site is not within a flood hazard area. It is also not within identified potential dam failure inundation zones. The project site is in a topographically flat area away from large bodies of water, so the project would not be subject to seiches or tsunamis. Because of this, the project would not present any hazard of releasing any pollutants in areas subject to floods, seiches, or tsunamis. The project would have no impact on this issue.

e) Conflicts with Water Quality or Groundwater Management Plans.

As discussed above, project storm drainage would be subject to the requirements of the City's NPDES permit and its SWMP, both of which are intended to maintain surface water quality. As noted, a Groundwater Sustainability Plan for the Delta-Mendota Subbasin has been submitted in accordance with the Sustainable Groundwater Management Act, but DWR currently deems it inadequate. The project is not, however, expected to interfere with implementation of projects and management actions associated with the Groundwater Sustainability Plan once DWR determines it adequate. Project impacts on water quality and sustainable groundwater plans would be less than significant.

3.11 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	✓
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	✓	☐

Environmental Setting

The project site is currently vacant, except for a cellular communications tower in its northeast corner. As discussed in Chapter 1.0, Introduction, the project site is owned by PJUSD and is designated as an elementary school site in the City of Patterson General Plan. The project site is on the edge of a residential area of southern Patterson, with existing residential development to the north and west. Adjacent to and south of the project site is the T.W. Patterson Sports Complex, a City recreational facility. As noted in Section 3.2, Agricultural Resources, agricultural land is located east of the project site across Ward Avenue, outside the Patterson city limits.

Environmental Impacts and Mitigation Measures

a) Division of Established Communities.

The project site is adjacent to an established residential community. The project would not substantially alter existing community character or divide the existing residential community. No impact related to division of an established community would occur.

b) Conflict with Applicable Plans, Policies and Regulations.

The proposed project would be consistent with existing City of Patterson General Plan designations and zoning. The General Plan designates the project site as Public/Quasi-Public, and zoning on the project site is Public/Quasi-Public. A public school is an allowed land use in the Public/Quasi-Public designation and zone.

This IS/MND analyzes the potential environmental effects of the project, and no significant effects have been identified that cannot be mitigated to a level that would be less than significant. As such, the project is not expected to conflict with General Plan policies or with City ordinances designed to avoid or mitigate environmental effects. Land use effects of the project would be less than significant.

3.12 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	✓

Environmental Setting

The California Division of Mines and Geology, now part of the California Geological Survey, has classified portions of the state into Mineral Resource Zones. The lands on and surrounding the project site are not classified within a Mineral Resource Zone, indicating that no significant mineral deposits have been identified. No oil or natural gas wells or fields have been identified in the Patterson area (DOGGR 2024).

Environmental Impacts and Mitigation Measures

a, b) Loss of Mineral Resource Availability.

There are no identified mineral resources areas in the project vicinity, nor are there any oil or gas fields. The project would have no impact on the availability of, or access to, known or locally designated mineral resources.

3.13 NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	✓	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	✓	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	✓

Environmental Setting

Sound is defined as any pressure variation in air that the human ear can detect. To provide a manageable way to measure sound, the decibel (dB) scale was devised. The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. Within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by the A-weighting network. There is a strong correlation between A-weighted decibels (dBA) and the way the human ear perceives noise.

Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state, A-weighted sound level containing the same total energy as a time-varying signal over a given time period, usually one hour. The L_{eq} shows very good correlation with community response to noise as is the basis for other noise descriptors such as the Day-Night Average Level (L_{dn}). The L_{dn} is based upon the average hourly L_{eq} over a 24-hour day, with a +10-dB weighting applied to noise during the hours between 10:00 p.m. and 7:00 a.m. to account for greater sensitivity during that period.

The project site is vacant and thus has no existing noise sources. Residential land uses are north and west of the project site, a recreational sport complex is to the south, and agricultural lands are to the east. The existing ambient noise environment is defined primarily by traffic on the adjacent local surface roadways, mainly Ward Avenue and Calvinson Parkway. Lesser traffic noise is generated at Wolfpack Court. Other potential noise sources in the project vicinity are agricultural equipment and outdoor activities at the sports complex.

The Health and Safety Element of the Patterson General Plan contains noise level performance standards for new projects that include non-transportation noise sources. Table 3-4 shows these standards for both daytime and nighttime hours. For transportation noise sources, the Health and Safety Element allows a maximum of 60 dB noise exposure on outdoor activity areas of residences.

TABLE 3-4
CITY OF PATTERSON NOISE PERFORMANCE STANDARDS

	Standards for Non-Transportation Sources	
Noise Level Descriptor	**Daytime (7:00 a.m. to 10:00 p.m.)**	**Nighttime (10:00 p.m. to 7:00 a.m.)**
Hourly Equivalent sound level (L_{eq}), dB	50	45
Maximum sound level, dB	70	65

Source: City of Patterson 2010a.

Patterson Municipal Code Chapter 6.44 prohibits operating equipment or performing any outside construction or repair work on buildings, structures, or projects from 10:00 p.m. to 7:00 a.m. in such a manner that a reasonable person of normal sensitivity residing in the area is caused discomfort or annoyance.

Groundborne vibration is not a common environmental problem. However, one source of groundborne vibration is construction activities such as blasting, pile driving, and operating heavy earth-moving equipment. Caltrans has prescribed a methodology for evaluating

groundborne vibration impacts from construction related to potential damage to structures, based on transient sources such as blasting and drop balls or continuous/frequent intermittent sources such as impact and vibratory pile drivers and vibratory compaction equipment (Caltrans 2013). Measurements of groundborne vibrations are presented in peak particle velocity, with the unit of measure being inches per second. Table 3-5 presents thresholds for impacts related to groundborne vibration, based on the Caltrans methodology.

TABLE 3-5
GROUNDBORNE VIBRATION THRESHOLDS

	Maximum Peak Particle Velocity (in/sec)	
Guidelines for:	**Transient Sources**	**Continuous/Frequent Intermittent Sources**
Structure and Condition		
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5
Human Response		
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.1
Severe	2.0	0.4

Source: Caltrans 2013.

Environmental Impacts and Mitigation Measures

a) Exposure to Noise Exceeding Local Standards.

Noises typically associated with a school include noise from play areas on the school site and vehicle traffic associated with picking up and dropping off students, as well as traffic associated with special events on the campus. Noise-sensitive land uses near the project site include existing residences to the north and west. The main sources of project noise that could affect these receptors would be vehicle traffic to and from the school and school activities. Temporary noise level increases would likely occur during project construction.

Traffic Noise

The potential increase in traffic noise exposure due to the project is a factor in determining the significance of project-related traffic noise impacts. Research into the human perception of changes in sound level indicates the following:

- A +3-dB change is barely perceptible,
- A +5-dB change is clearly perceptible, and
- A +10-dB change is perceived as being twice as loud as the baseline noise level.

The Patterson General Plan EIR evaluated potential noise impacts of development based on the designated land uses on the Land Use Map. Noise impacts evaluated include those generated by traffic. Under existing (2010) conditions, traffic on Ward Avenue south of Sperry Road was predicted to generate noise of 56.2 dB approximately 75 feet from the road centerline. At the same distance from centerline, projected traffic at 2030 on Ward Avenue would generate 62.2 dB – an increase of 6.0 dB (City of Patterson 2010b). Based on the above impact thresholds the traffic noise increase would be "clearly perceptible". The noise estimate assumes development in the vicinity of the project site consistent with the Land Use Map of the Patterson General Plan, which in turn designates most of the surrounding area for single-family residential development.

The proposed project is consistent with the existing General Plan designation for the site. As such, traffic generated by the project would be consistent with the noise analysis conducted as part of the preparation of the General Plan. While the project would contribute to the increase in traffic on Ward Avenue, it would not be the sole contributor. In fact, the school would make a relatively minor noise contribution compared with the potential residential development in the surrounding area. As noted, a school is typically constructed in response to population growth, and does not by itself cause population, and subsequently traffic, growth.

As noted, most vehicle traffic at schools occurs at the start and at the end of the school day. At other times, there would be relatively little traffic. As such, traffic noise levels would be confined mainly to around the times school starts in the mornings and the time school ends in the afternoons. Unless special events occur, there would be no traffic noise at night or on weekends. Because of this, project impacts on traffic noise levels are considered less than significant.

School Activities

Use of the play area by students would generate noise; however, ordinary use of these facilities would not cause noise standards to be exceeded. The play area is in the northeastern portion of the site and is set back approximately 135 feet from the nearest residences. The soccer fields are in the southern portion of the site, where the closest of the fields are approximately 75 feet from the nearest residence. Use of the play area and fields would be intermittent and would not occur at night, when residents would be especially sensitive to noise. No loudspeaker sound system, stadium development, or development of other facilities for intensive outdoor use would be developed in conjunction with school

construction. Project impacts regarding increases in ambient noise from school activities would be less than significant.

Project Construction

Noise from construction activities would temporarily increase ambient noise in the immediate project vicinity. Noise would also be generated by onsite use of heavy equipment as well as increased traffic associated with delivery of materials and equipment to the site, and construction worker trips. As indicated in Table 3-6, onsite equipment use involved in construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at 50 feet.

TABLE 3-6
CONSTRUCTION EQUIPMENT NOISE LEVELS

Type of Equipment	Maximum Noise Level (dBA at 50 feet)
Auger Drill Rig	84
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Paver	77
Pneumatic Tools	85

Source: FHWA 2006.

Most of the building construction would occur at distances of 50 feet or greater from the nearest residences. Moreover, noise levels decrease by 6 dBA with every doubling of distance from a source (Harris 1991). Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours. Nevertheless, some construction work may occur periodically in the vicinity of nearby residential areas. It is anticipated that some construction noise would occasionally exceed City standards for residential land uses. This is considered a potentially significant impact.

As noted, the Patterson Municipal Code includes restrictions on construction noise. Operating or causing the operation of tools or equipment on private property used in alteration, construction, demolition, drilling, or repair work between the hours of 10:00 p.m. and 7:00 a.m., so that the sound creates a noise disturbance across a residential property line, is prohibited, except for emergency work of public service utilities. However, daytime noise also could have an adverse impact on nearby residences, even if the noise would be temporary. Although the PJUSD is not subject to provisions of the Patterson Municipal Code, mitigation presented below would be consistent with Municipal Code noise provisions by reducing the time nearby residences would be exposed to construction noise and would require muffling of noise. Implementation of this mitigation measure would reduce impacts from construction noise to a level that would be less than significant.

Mitigation Measures:

NOISE-1: Project construction shall be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday. Construction activities shall not occur on Sundays or federal holidays. All equipment used on the construction site shall be fitted with mufflers in accordance with manufacturers' specifications. Mufflers shall be installed on the equipment at all times on the construction site.

b) Groundborne Vibration.

The only potential source of groundborne vibrations from the project would be from equipment used in construction activities. Using the methodology prescribed by Caltrans, the ground vibration produced by a large bulldozer - the most likely construction equipment listed in Table 3-6 that would be used - would have a peak particle velocity of approximately 0.0247 inches per second at the nearest residence, which is approximately 80 feet west of the project site. The predicted peak particle velocity is just below the "Distinctly Perceptible" threshold of 0.25 inches per second for transient sources (see Table 3-5). It is also below the threshold of potential damage to newer residential structures, which is 1.0 inches per second.

Potential vibration impacts would be intermittent and short-term, and they would cease after construction work is completed. School operations would not generate any noticeable vibrations, including from bus and truck traffic. Therefore, project impacts related to groundborne vibration would be less than significant.

c) Exposure to Airport/Airstrip Noise.

As noted in Section 3.8, Hazards and Hazardous Materials, there are no public airports or private airstrips in the vicinity. The project would have no impact related to this issue.

3.14 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned 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 people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	✓

Environmental Setting

According to the 2020 U.S. Census, the population of Patterson was 23,781, an increase of approximately 16.5% from its 2010 U.S. Census population of 20,413. By comparison, the population of California increased by 6.1% during the same period, and the population of Stanislaus County increased by 7.5% (U.S. Census Bureau 2020). The estimated population of Patterson as of January 1, 2024 is 24,790 (California Department of Finance 2024).

The California Department of Finance estimated a total of 7,231 housing units in Patterson in 2024. Of that total, 6,315 were single-family detached units - typical houses - approximately 87.3% of the total. Another 442 were multifamily units in buildings of five or more, which was approximately 6.1% of the total. By comparison, approximately 9.9% of all housing units in Stanislaus County were in multifamily units of five or more (California Department of Finance 2024).

Environmental Impacts and Mitigation Measures

a) Population Growth Inducement.

The project would not directly induce population growth, as no housing or employment centers would be constructed. The project is in a developed residential area, so no indirect inducement of population growth is expected. Many of the students would come from the nearby residential areas. The project would have no impact on this issue.

b) Displacement of Housing and People.

The project would not affect existing housing in the vicinity; consequently, it would not displace housing or people. The project would have no impact on this issue.

3.15 PUBLIC SERVICES

a) Result in substantial adverse physical impacts associated with the provision of, 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:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Fire protection?	☐	☐	✓	☐
ii) Police protection?	☐	☐	✓	☐
iii) Schools?	☐	☐	✓	☐
iv) Parks?	☐	☐	✓	☐
v) Other public facilities?	☐	☐	✓	☐

Environmental Setting

As noted, the PJUSD provides school services to K-12 students in an area covering portions of Stanislaus and Santa Clara Counties. The PJUSD consists of four K-6 elementary schools, one K-8 elementary school, one middle school, and two high schools. It also offers an independent study program, a preschool/TK learning center, and an adult education program. The PJUSD currently serves a student population of approximately 6,300.

Fire protection services in Patterson are provided by the Patterson Fire Department. The Fire Department operates from two fire stations; the nearest to the project site is Station 1 at 344 West Las Palmas Avenue. Law enforcement services are provided by the Patterson Police Department, with its station at 33 South Del Puerto Avenue. The Patterson Recreation and Community Services Department provides park and recreational services to City residents. The project site is adjacent to and north of the T.W. Patterson Sports Complex. Other public services include the Patterson branch of the Stanislaus County Library, located at 46 North Salado Avenue.

Environmental Impacts and Mitigation Measures

a-i) Fire Protection.

As the project site is within the Patterson city limits, it is currently served by the Patterson Fire Department. Since the project site is currently vacant, project development could increase demand for fire protection and emergency services. However, the proposed school would be required to comply with the requirements of the Fire and Life Safety Program of the State Architect. These requirements are related to fire-resistive building materials, fire alarms, fire suppression equipment, safe occupant egress, and firefighting equipment access. Compliance with these requirements would reduce the risk of fire potentially occurring on the project site, thereby reducing potential demand for fire protection services

and the need for new or expanded facilities to serve the potential demand. Project impacts on fire protection services would be less than significant.

a-ii) Police Protection.

The project site is currently served by the Patterson Police Department. Since the project site is currently vacant, project development could increase demand for police protection services. However, incidents on school campuses that would require police intervention are infrequent. It is expected that any potential demand for police services could be accommodated without the need for new or expanded facilities. Project impacts on police protection services would be less than significant.

a-iii) Schools.

As described in Chapter 1.0, Introduction, the intent of the project is to provide a new elementary school facility for students residing in the PJUSD. As noted in Chapter 1.0, Introduction, about half of the PJUSD schools currently have enrollment that exceeds school capacity, and more schools are expected to be in this situation in the future. The project would add capacity for elementary school students, thereby reducing capacity demands on other elementary schools. This would be considered a beneficial effect. Adverse project impacts related to schools and educational services would be less than significant.

a-iv, -v) Parks and Other Public Facilities.

The project site is currently served by parks and a library available in the City of Patterson. The project site is adjacent to the T.W. Patterson Sports Complex, which may experience increased usage, but this increased use can be accommodated without new or expanded park facilities. The project is not expected to increase demand for other public facilities such as the library, particularly since the students that would attend the school already reside in the Patterson area. Project impacts on parks and other public facilities would be less than significant.

3.16 RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	✓	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	✓	☐

Environmental Setting

As noted in Section 3.14, Public Services, the Patterson Recreation and Community Services Department provides park and recreational services to City residents. The City manages 28 parks, ranging in size from a tot lot of less than one acre to the T.W. Patterson Sports Complex (City of Patterson 2010c). The sports complex, approximately 25.5 acres in size, offers two baseball/softball fields and a soccer field, along with a playground, a gazebo, and picnic tables. It is adjacent to and south of the project site.

Environmental Impacts and Mitigation Measures

a, b) Recreational Facilities.

As discussed in Section 3.14, the project site is currently served by City of Patterson parks and recreational facilities. The sports complex may experience increased use because of the project, but this use can be accommodated without new or expanded park facilities. In addition, the project proposes its own onsite sport fields, which would reduce potential demands on the sports complex. The project is not expected to increase demand for parks and recreational facilities beyond the sports complex. Project impacts related to recreation would be less than significant.

3.17 TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	✓	☐
b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	✓	☐
c) Substantially increase hazards to a geometric design feature (e g., sharp curves or dangerous intersections) or incompatible uses (e g, farm equipment)?	☐	✓	☐	☐
d) Result in inadequate emergency access?	☐	☐	☐	✓

A transportation impact study was prepared for the project by Advanced Mobility Group (AMG) to evaluate potential effects of the proposed elementary school project on existing transportation facilities and services in the project area. The proposed school would accommodate approximately 744 students. A copy of the Traffic Study is shown in Appendix F of this document.

The AMG study did not identify any significant effects. AMG found that all the study intersections operate at acceptable LOS D or better under existing plus existing plus approved or pending conditions except the intersection of Calvinson Parkway/Ward Avenue which is estimated to operate of LOS E (LOS F under Cumulative Conditions) during the AM peak hour. However, the peak hour signal warrants are not met, so installation of a signal is not recommended. AMG made other relevant site circulation and school area roadway safety improvement recommendations which are discussed in the following analysis.

Environmental Setting

The AMG study assessed traffic conditions on the following regional and local streets (Figure 3-1). Additional detail on these facilities is provided in Appendix F:

Regional Roadways

Interstate 5 (I-5) is a major north-south freeway connecting San Diego to the south and Seattle to the north. Per the 2021 traffic counts obtained from the Caltrans website, I-5 carries between 45,000 to 52,000 vehicles per day (vpd) in the vicinity of Sperry Avenue. For regional travel, residents rely primarily on I-5, a major north-south freeway to the west of the city limits. I-5 and I-580 to the north provide access to regional employment centers. Primary access to the project site from I-5 is provided via interchange at Sperry Avenue.

State Route 33 (SR-33) is located approximately three miles to the east of I-5. SR-33 provides north-south access to Westley to the north and the City of Newman to the south. SR 33 is the is the main north-south roadway in Patterson; its ADT is approximately 6,000 vpd. .

Local Roadways

Sperry Avenue is a two to four-lane major arterial roadway that serves as the major route of travel between I-5 to the west and the City of Patterson to the east. Sperry Avenue terminates at SR-33, three miles east of I-5. Near the project site, Sperry Avenue is a three-lane divided roadway with no sidewalk adjacent to the project site. A recent count to the east of Rogers Road showed the ADT to be approximately 15,040 vpd

Ward Avenue is a bi-directional two-lane north-south collector in the City from State Route 33 in the north to the City limit in the south. The average daily traffic is approximately 2,200 vehicles per day (vpd). There are no bicycle facilities present near the study area. Continuous sidewalks are present in both directions along the north, west and east approaches. Sidewalks are present on the westside along Ward Avenue, south of the intersection of Ward Avenue/Mackilhaffy Drive.

Calvinson Parkway is a two-lane east-west residential collector to the south of Sperry Avenue that connects connect from Baldwin Road in the west to Ward Avenue to the east. There are three mini-roundabouts located along the roadway. Near the proposed school site, the Parkway is an approximately 34-feet wide two-lane road with an ADT

of approximately 1,750 vpd; residential homes are located on the northside of the street. .

Las Palmas Avenue is a two-lane east-west circular minor collector in the study area that connects from Ward Avenue in the east to Sperry Avenue to the north. The posted speed limit within the study area is 25 mph. The Walmart Shopping Center is located north of Las Palmas Avenue near the study intersection with an entrance and exit driveway on Las Palmas Avenue. There is no on-street parking on Las Palmas Avenue near the study intersection. There are no bicycle facilities present near the study area. Continuous sidewalks are present in both directions along Las Palmas Avenue.

Mackilhaffy Drive is a two-lane east-west local street from Ward Avenue to Moray Way in the east. There is on-street parking on Mackilhaffy Drive in both directions. There are no bicycle facilities present near the study area. Continuous sidewalks are present in both directions along Mackilhaffy Drive.

Existing Pedestrian and Bicycle Facilities

There are no existing bicycle facilities near the project site. The City of Patterson's Active Transportation Plan indicates a Class I Bike Path on Calvinson Parkway and Ward Avenue near the project site. Class I Bike Paths have been designated along Calvinson Parkway and Ward Avenue adjacent to the project site (City of Patterson 2022).

Pedestrian facilities in the study are include sidewalks that are 6 feet wide. Existing sidewalk exists on Calvinson Parkway and on the west side of Ward Avenue near the project site. Near the proposed school site, crosswalks do not exist at any of the cross-street intersections along Calvinson Parkway. Existing sidewalks have been installed along the project site frontage on all adjacent streets. However, not all pedestrian ramps at the intersections near the project site are compliant with the requirements of the Americans with Disabilities Act.

Although not described in the traffic impact study, another street of note is Wolfpack Court, a two-lane residential street adjacent to and west of the project site. Wolfpack Court extends south from Calvinson Parkway and ends in a cul-de-sac adjacent to the project site. It serves residential development along its western side.

The intersection of Ward Avenue and Calvinson Parkway, which is a three-way intersection, has a stop sign only on the Calvinson Parkway leg. The Calvinson Parkway/Wolfpack Court intersection is a four-way intersection with Tissot Drive extending north, with stop signs on the Wolfpack Court and Tissot Drive legs.



ID	Intersection	Existing Control
1	Ward Ave/Sperry Ave	Signal
2	Ward Ave/Las Palmas Ave/Mackihaffy Dr	TWSC
3	Ward Ave/Calvinson Pkwy	OWSC
4	Ward Ave/Bartch Ave	OWSC
5	Calvinson Pkwy/Tissot Dr	OWSC
6	Fountain Grass Dr/Wolfpack Ct	Free

Note:
OWSC: One-Way Stop Control
TWSC: Two-Way Stop Control

SOURCE: AMG

Figure 3-1
Study Intersections

Public transit service is provided by Stanislaus Regional Transit (StaRT). StaRT runs Routes 40, 45E, and 45W through Patterson, along with a commuter route between Turlock and the East Dublin/Pleasanton BART Station. No bus routes pass by the project site. StaRT also manages dial-a-ride services in Patterson. The PJUSD operates its own bus service, transporting its students to and from school based on their grade level and distance from the school.

The State of California has recently added Section 15064.3 to the CEQA Guidelines, which is meant to incorporate SB 743 into CEQA analysis. SB 743 was enacted in 2013 with the intent to balance congestion management needs and the mitigation of the environmental impacts of traffic with statewide GHG emission reduction goals, mainly by developing an alternative mechanism for evaluating transportation impacts. Section 15064.3 states that VMT is the preferred method for evaluating transportation impacts, rather than LOS. The VMT metric measures the total miles traveled as a result of a given project. Unlike LOS, VMT accounts for the total environmental impact of transportation associated with a project, including use of non-vehicle travel modes. The City of Patterson has not yet adopted a VMT policy.

Environmental Impacts and Mitigation Measures

Trip Generation and Distribution

a) Conflict with Transportation Plans, Ordinances and Policies.

The project would lead to an increase in traffic on adjacent and nearby streets. Traffic generally would peak in the morning when students are dropped off, and again around mid-afternoon when students are picked up at the end of the school day.

Traffic impacts were evaluated under existing plus previously approved and pending (EPAP) conditions without and with the project, which include existing traffic conditions plus traffic generated by the Baldwin Ranch and Sperry Commercial #2 projects. As discussed, the AMG study did not identify any significant effects. AMG found that all the study intersections operate at acceptable LOS D or better under existing plus existing plus approved or pending conditions except the intersection of Calvinson Parkway/Ward Avenue which is estimated to operate of LOS E (LOS F under Cumulative Conditions) during the AM peak hour. However, the peak hour signal warrants are not met, so installation of a signal is not recommended. Analysis details are available in Appendix F. AMG made other relevant site circulation and school area roadway safety improvement recommendations which are discussed in the following analysis.

Although neither LOS standards nor traffic signal warrants were triggered, the AMG study recommended reversing the proposed entry/exit driveways so that the entry is closer to the intersection. This would ensure exiting vehicles would not be blocked by vehicle queues at Ward Avenue that overflow on Calvinson Parkway. It is anticipated that the PJUSD will incorporate this recommendation in the plans and specifications for the project.

The project would not have a substantial effect on public transit service in the area. The PJUSD operates its own bus system, so impacts on StaRT bus use are expected to be

minimal. Implementation of the project would result in an increase in demand for bicycle and pedestrian facilities. Existing sidewalks and bicycle routes would remain, although some sidewalks may be temporarily affected by project site construction. Overall, impacts related to transportation plans and systems are considered less than significant.

b) Conflict with CEQA Guidelines Section 15064.3, subdivision (b).

CEQA Guidelines Section 15064.3(b) describes specific considerations for evaluating the transportation impacts of a project. For land use projects, Section 15064.3(b) states that a project exceeding an applicable significance threshold may indicate a significant impact. As noted, the City of Patterson has not established a VMT policy.

The passage of Senate Bill (SB) 743 requires jurisdictions to identify new Vehicle Miles Travelled (VMT) metrics for identifying and mitigating transportation impacts within CEQA. The City of Patterson has yet to adopt official VMT guidelines. So, the project has been evaluated based on the general guidelines contained in the technical advisory provided by the Governor's Office of Planning and Research (OPR).

The OPR indicated that "Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact."

In addition, some project types are presumed to have a less than significant transportation impact absent substantial evidence to the contrary as their uses are local serving in nature. Local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel.

Local-serving K-12 public schools can also be screened from project-level assessment as they are presumed to have a less than significant impact due to their local serving nature, unless there is evidence to the contrary. Therefore, the proposed project can be screened from project-level assessment as they are presumed to have a less than significant impact due to their local serving nature. The traffic impact study did not identify any contrary evidence regarding project VMT impacts. As such, the project is not expected to conflict with the objectives of CEQA Guidelines Section 15064.3, subdivision (b). Project impacts are considered less than significant.

c) Traffic Hazards.

Many students would be accessing the school from the neighborhoods immediately north and south of Calvinson Parkway using Calvinson Parkway. Additional students could be expected on Calvinson Parkway from future residential units as Baldwin Ranch which is currently under construction.

Two driveways which will serve a 45-parking stall lot adjacent to Calvinson Parkway, a one-way in and out lot with the inbound located approximately 100-feet to the east of

School zones can be unsafe for students, issues with erratic drivers and distractions such as driving while on the phone, double parking or not following the rules of the road. AMG recommends that these concerns be mitigated with clearly marked advance signing and striping of key access roadways, provisions of signing and striping based on the California Manual on Uniform Traffic Control Devices (MUTCD) and speed limits of 20 mph (within 1,320 feet of the school) on roadways adjacent to the school (Figure 3-2). These recommendations are incorporated in the mitigation measures below.

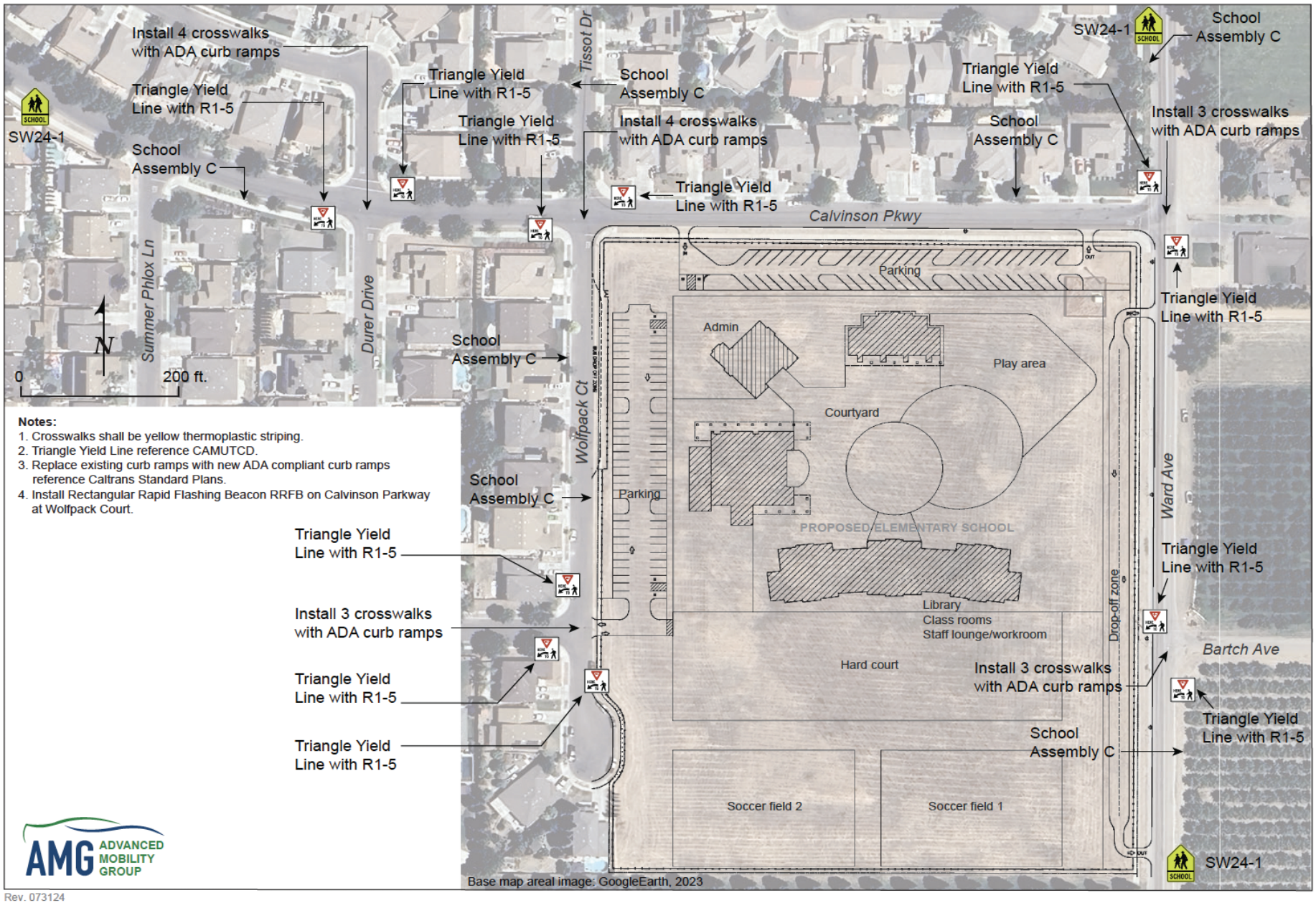
Implementation of the mitigation measure, which would include making pedestrian ramps compliant with the Americans with Disabilities Act, would enhance the safety of students and parents walking to and from the project site, thereby reducing potential safety impacts to a level that would be less than significant.

Mitigation Measures:

TRANS-1: The Patterson Joint Unified School District, in consultation with City of Patterson staff, shall implement the pedestrian safety improvements recommended in Figure 10 of the *Traffic Impact Study for the Proposed Patterson JUSD New Elementary, Patterson, California*, prepared by Advanced Mobility Group August 9, 2024. The improvements shall be installed prior to the start of school operations.

d) Emergency Access.

As indicated on Figure 2-1, the project site would be accessible from Calvinson Parkway and Wolfpack Court, as well as potentially from the pickup/dropoff zone along Ward Avenue. The project would provide adequate access for emergency vehicles. The project would have no impact related to emergency access.



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Figure 3-2
Traffic Recommendations

3.18 TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	✓	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	✓	☐	☐

Environmental Setting

As noted in Section 3.5, Cultural Resources, the project site is within the ethnographically reported territory of the Northern Valley Yokuts. The Northern Valley Yokuts inhabited the Central Valley from the area between the Calaveras and Mokelumne rivers in the north to Mendota in the south. The basic social and economic group of Northern Valley Yokuts is the family or household unit. These basic units were combined into distinct, named village or hamlet groups which functioned as headquarters of a localized patrilineage. Lineage groups were important political and economic units that combined to form tribelets numbering between 300 and 500 persons.

Subsistence activities of Northern Valley Yokuts included hunting, fishing, and collection of plant resources, particularly acorns. They built a variety of structures including residential dwellings, ceremonial structures, and semi-subterranean sweat lodges. The typical dwelling was a thatched house covered by brush, grass, or tules. A variety of flaked and ground stone tools (e.g., knives, arrow and spear points, and rough cobble and shaped pestles) were common among Northern Valley Yokuts. Obsidian was a highly valued material for tool manufacture and was generally imported. Northern Valley Yokuts also engaged in trading relationships with surrounding groups for commodities such as salt, marine shells, and basketry.

Euroamerican contact with Native American groups living in the Central Valley of California began during the last half of the eighteenth century. At this time, the attention of Spanish missionaries shifted away from the coast to the missionization of interior populations, including Northern Valley Yokuts. The efforts of the Spanish to missionize the Native American population began a history of destructive Euroamerican interactions

with Native Americans. Despite this, the Yokuts tribe continues to exist today; the Nototomne/North Valley Yokut Tribe, Inc., represents the Northern Valley Yokuts in the region.

AB 52

In 2015, the California Legislature enacted AB 52, which focuses on consultation with Native American tribes on land use issues potentially affecting the tribes. The intent of this consultation is to avoid or mitigate potential impacts on "tribal cultural resources," which are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe." More specifically, Public Resources Code Section 21074 defines tribal cultural resources as:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are included or determined to be eligible for inclusion in the California Register of Historical Resources, or included in a local register of historical resources; or

- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 [i.e., eligible for inclusion in the California Register of Historical Resources].

Under AB 52, when a tribe requests consultation with a CEQA lead agency on projects within its traditionally and culturally affiliated geographical area, the lead agency must provide the tribe with notice of a proposed project within 14 days of a project application being deemed complete or when the lead agency decides to undertake the project if it is the agency's own project. The tribe has up to 30 days to respond to the notice and request consultation; if consultation is requested, then the local agency has up to 30 days to initiate consultation.

Environmental Impacts and Mitigation Measures

a, b) Tribal Cultural Resources.

As noted in Section 3.5, Cultural Resources, Natural Investigations Company the Central California Information Center conducted a records search for historical and archaeological resources and other items of cultural significance. The report states that no discoveries of potential prehistoric resources within or near the project site have been reported.

Natural Investigations Company contacted the Native American Heritage Commission to request a search of their Sacred Lands File for sensitive Native American cultural resources in or near the project site. The results of the Sacred Lands File search were negative. Based on a contact list provided by the Native American Heritage Commissions, Natural Investigations Company sent out notification letters to representatives of five tribes inviting them to consult on the project per AB 52: Amah Mutsun Tribal Band, Northern Valley Yokut/Ohlone Tribe, Southern Sierra Miwuk Nation, Tule River Indian Tribe, and Wuksachi Indian Tribe/Eshom Valley Band. The only response received was from a representative of the Amah Mutsun tribe, who stated that the project site was outside the

traditional tribal territory. No other responses were received, so the PJUSD considers its obligations under AB 52 fulfilled.

As indicated in Section 3.5, there are no records of any human burials occurring on the project site, includes Native American burials. CEQA Guidelines Section 15064.5(e) describes the procedure to be followed when Native American remains are uncovered, in accordance with Public Resources Code Section 5097.98. If remains are determined to be Native American in origin, then the County Coroner must contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the most likely descendants of the deceased Native American, and the most likely descendants may make recommendations on the disposition of the remains and any associated grave goods with appropriate dignity. If a most likely descendant cannot be identified, the descendant fails to make a recommendation, or the landowner rejects the recommendations of the most likely descendant, then the landowner shall rebury the remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance.

As discussed in Section 3.5, Cultural Resources, it is unlikely that any intact cultural resources would be found on the project site due to past disturbance. However, it is possible that project development could involve activities that may disturb cultural resources, including tribal cultural resources. Mitigation Measure CULT-1 sets forth procedures for the treatment and disposition of any resources discovered inadvertently during construction. Implementation of Mitigation Measure CULT-1 would minimize impacts on tribal cultural resources to a level that would be less than significant.

Mitigation Measures: Implementation of Mitigation Measure CULT-1.

3.19 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	✓	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	✓	☐
c) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected	☐	☐	✓	☐

demand in addition to the provider's existing commitments?				
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	✓	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	✓	☐

Environmental Setting

Water service in the project area is provided by the City of Patterson. The City relies on groundwater for 100% of its water supply. The City operates seven potable water production wells with water storage tanks for potable water needs and three non-potable water production wells to serve public and commercial irrigation needs. In 2020, the City pumped approximately 4,454 acre-feet of groundwater (City of Patterson 2021). Existing City water lines are located beneath adjacent sections of Ward Avenue, Calvinson Parkway, and Wolfpack Court.

The City also provides services for the collection and treatment of wastewater in the area. Municipal wastewater treatment services are provided at the City's Water Quality Control Facility, located on Poplar Avenue northeast of Patterson. According to the City's website, the Water Quality Control Facility has a design capacity of 2.25 million gallons per day (mgd) and currently treats approximately 1.8 mgd of wastewater. Treated wastewater is discharged into the San Joaquin River in accordance with RWQCB WDR Order No. R5-2018-0070 (City of Patterson 2021). Existing wastewater collection lines are located in the project vicinity.

The City provides stormwater drainage collection services. Existing stormwater lines are located beneath Calvinson Parkway and Wolfpack Court. Most runoff collected in the City is discharged into Salado Creek, with lesser amounts discharged into Del Puerto Creek and Black Gulch Creek. The City of Patterson collects and discharges storm drainage in accordance with its Storm Water Management Program developed pursuant to RWQCB Order No. 2013-0001-DWQ (City of Patterson 2018a).

Solid waste generated in Patterson is collected by Bertolotti Disposal under a franchise agreement with the City. Solid waste is disposed of at the Fink Road Landfill in Crows Landing. The landfill, located at 4000 Fink Road, currently has a permitted capacity of 28.3 million cubic yards and has approximately 19 million cubic yards of remaining capacity, which is expected to allow the landfill to operate to 2050 (CalRecycle 2024).

a) Relocation or Construction of Utility Facilities.

The project site would connect to existing infrastructure in the vicinity. No new infrastructure lines or facilities would be installed, other than connections to existing lines. Since existing infrastructure is within already developed areas, connecting lines would have no offsite environmental impacts.

The project would not require the relocation of existing utility facilities. The existing cellular communications tower in the northeast corner of the project site would remain. Project impacts related to relocation or construction of utility facilities would be less than significant.

b) Water Supplies.

The project site would be connected to the City of Patterson water system, which relies exclusively on groundwater for its supply. The City's Urban Water Management Plan indicates that 12,000 acre-feet per year would be considered the maximum "safe yield" for groundwater pumping (City of Patterson 2021). As noted, the City's water system pumped approximately 4,454 acre-feet in 2020. According to the City's Water Master Plan, public/quasi-public land uses are estimated to generate a water demand of 1.1 acre-feet per year per acre (City of Patterson 2018b). Based on this factor, the project is estimated to generate a water demand of approximately 13.3 acre-feet per year. Therefore, it appears that the City would have an adequate water supply to support the project and would not need to obtain additional supplies. Project impacts related to water supplies would be less than significant.

c) Wastewater Treatment Capacity.

The project site would be connected to the City of Patterson wastewater system. As noted, the Water Quality Control Facility has approximately 2.25 mgd of treatment capacity and currently treats approximately 1.8 mgd of wastewater. According to the Wastewater Master Plan prepared for the City, a public/quasi-public land use such as a school would generate wastewater at a rate of 400 gallons per day per acre (City of Patterson 2016). Based on this rate, the project would generate approximately 4,844 gallons of wastewater per day. Therefore, the Water Quality Control Facility could accommodate the additional load from the project without requiring an expansion of existing capacity. Project impacts related to wastewater treatment capacity would be less than significant.

d, e) Solid Waste Services.

The project would likely generate a demand for solid waste services above current demand. CalRecycle posted a solid waste generation rate for educational facilities of 0.5 pounds per student per day (CalRecycle 2019). Using this factor, the project would generate an estimated 375 pounds per day. While the content of a ton of solid waste varies, it has been approximated that a cubic yard of solid waste weighs 300 pounds, so the project would generate approximately 1.25 cubic yards of solid waste per day.

The current solid waste collector, Bertolotti Disposal, would accommodate the additional demand. As indicated above, Fink Road Landfill would have adequate capacity to accommodate the amount of solid waste that would be generated by the project. The project would comply with applicable state and local statutes and regulations related to solid waste. Project impacts on solid waste are considered less than significant.

3.20 WILDFIRE

If located in or near State Responsibility Areas or lands classified as Very High Fire Hazard Severity Zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	✓	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	✓
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	✓
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	✓

Environmental Setting

As noted in Section 3.9, Hazards and Hazardous Materials, wildland fires are an annual hazard in Stanislaus County. Wildland fires, which include rangeland, brush, and grass fires, burn natural vegetation on undeveloped lands. High hazard areas for wildland fires are generally limited to the foothills on the east and west sides of the County (Stanislaus County 2016). The project site is approximately two miles east of the Coast Range foothills, which are considered an area prone to wildfires.

The California Department of Forestry and Fire Protection's Fire and Resource Assessment Program identifies fire threat based on a combination of two factors: 1) fire frequency, or the likelihood of a given area burning, and 2) potential fire behavior (hazard). These two factors are combined in determining the following Fire Hazard Severity Zones: Moderate, High, Very High, Extreme. These zones apply to areas designated as State Responsibility Areas – areas in which the State has primary firefighting responsibility. The project site is not within a State Responsibility Area; rather, it is within a Local Responsibility Area,

where local fire districts or departments have primary firefighting responsibility. The project site and vicinity are not in any designated fire hazard zones (Cal Fire 2024).

Environmental Impacts and Mitigation Measures

a) Emergency Response Plans and Emergency Evacuation Plans.

The project site is not part of a State Responsibility Area, and Cal Fire maps indicate the site is not designated within a Very High Fire Hazard Severity Zone or a zone of higher severity. As discussed in Section 3.9, Hazards, project construction is not expected to substantially obstruct emergency vehicles or any evacuations that may occur in the area, and project operations would not obstruct any roadways. Project impacts related to wildfire emergency response plans or emergency evacuation plans would be less than significant.

b) Exposure of Project Occupants to Wildfire Hazards.

As noted, the project site is in an area with a mix of urban and agricultural land uses, neither of which is susceptible to wildfires. The foothills west of Patterson are susceptible to wildfires, as described above. However, the project site is separated from the foothills by two miles, much of which is occupied by urban development or agricultural fields. Moreover, Interstate 5 and two aqueducts are between the project site and the foothills, and these features would act as firebreaks.

The project would reduce the existing fire hazard on the parcel by replacing existing grasses and weeds with industrial development. Cal Fire maps indicate that the project site is in a low-risk wildfire area. As with the approved project, impacts of the revised project related to wildland fire hazards would be less than significant. The project would have no impact related to exposure of project occupants to wildfire hazards.

c) Installation and Maintenance of Infrastructure.

The project proposes the installation of parking areas and the extension of utilities. The installation of these facilities is not expected to exacerbate the wildfire risk on the project site, as explained in b) above. The project would have no impact related to infrastructural exacerbation of wildfire hazards.

d) Risks from Runoff, Post-Fire Slope Instability, or Drainage Changes.

The project site is in a topographically flat area. There are no streams or other channels that cross the site. As such, it is not expected that people or structures would be exposed to significant risks from changes resulting from fires in steeper areas, including downslope or downstream flooding or landslides. The project would have no impact related to risks from runoff, post-fire slope instability, or drainage changes.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	✓	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	✓	☐
c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?	☐	✓	☐	☐

a) Findings on Biological and Cultural Resources.

The project's potential biological resource, cultural resource, and tribal cultural resource impacts were described in Sections 3.4, 3.5, and 3.18, respectively. The project could have potentially significant impacts on all three types of resources, but mitigation measures described in Sections 3.4, 3.5, and 3.18 would reduce impacts to levels that are less than significant.

b) Findings on Cumulatively Considerable Impacts.

The potentially significant environmental effects of the project identified in this IS/MND would be reduced to a level that is less than significant with proposed mitigation measures. With mitigation, none of these impacts would be considered cumulatively considerable, either in combination with other impacts associated with the project, or when considered in conjunction with the environmental impacts of other urban development.

The cumulative impacts of development within the City of Patterson have been addressed in the Patterson General Plan EIR (City of Patterson 2010b), which identified several cumulatively considerable impacts on land use, population and housing, fire and police protection, water supply, traffic, air quality and climate change, noise, biological resources, agricultural resources, water quality, flooding, and light and glare. The proposed project

would contribute to some of these cumulatively considerable impacts, such as air quality, traffic, and agricultural resources.

However, development of the project site for Public/Quasi Public use was considered in the General Plan EIR and was part of its cumulative impact analysis. As noted, the project site was designated in the current Patterson General Plan for a future elementary school. The proposed development would not introduce new or more severe impacts that would be inconsistent with the analysis and conclusions regarding cumulative impacts in the most recent General Plan EIR. Mitigation measures described in this IS/MND would avoid or minimize some of the project impacts that may contribute to cumulative effects.

Traffic

The traffic impact study for the project evaluated traffic impacts under Cumulative conditions without and with the project. As defined in the traffic impact study, Cumulative conditions are similar to existing conditions, but with a projected growth rate of one percent per year applied over 20 years to project traffic demands to approximately the year 2044 (Advanced Mobility Group 2024). Table 3-8 presents LOS at the study intersections under Cumulative No Project and Cumulative Plus Project conditions during AM and PM peak hours. More detailed information is available in the traffic impact study in Appendix F of this document.

TABLE 3-7
INTERSECTION LOS - CUMULATIVE CONDITIONS

No. [1]	Intersection	Cumulative No Project LOS		Cumulative Plus Project LOS	
		AM Peak	PM Peak	AM Peak	PM Peak
1	Ward Ave./Sperry Ave.	C	C	C	C
2	Ward Ave./Las Palmas Ave./Mackilhaffy Dr.	B	B	D	C
3	Ward Ave./Calvinson Parkway	B	B	**F**	C
4	Ward Ave./Bartch Ave.	A	B	B	B
5	Calvinson Parkway/Tissot Dr.	A	B	C	B
6	Fountain Grass Dr./Wolfpack Ct.	A	A	A	A

[1] See Figure 3-1 for locations.
Bold indicates unacceptable LOS.
Source: Advanced Mobility Group 2024.

As indicated in Table 3-8, LOS at the study intersections, without and with the project under Cumulative conditions, would be above the minimally acceptable LOS D except for the Ward Ave./Calvinson Parkway intersection, which would operate at LOS F during the AM peak hour. As noted in Section 3.17, Transportation, the eastbound AM peak hour volume at this intersection is quite high. Moreover, it is likely a vehicle queue that backs up from this intersection could block exiting traffic from the proposed northern parking area.

As discussed in Section 3.17, the peak hour signal warrant is not met for the Ward Ave./Calvinson Parkway intersection, so a traffic signal is not warranted there. However, the traffic impact study recommended reversing the proposed entry/exit driveways so that the entry is closer to the intersection. This would ensure exiting vehicles would not be blocked by vehicle queues at Ward Avenue that overflow on Calvinson Parkway. The PJUSD shall make this recommendation a condition of approval for the project. In any case, as noted, LOS is no longer used to determine the significance of the transportation environmental impacts of a project.

In summary, none of the environmental impacts described in this IS/MND would be considered significant at the project level or cumulatively considerable from a CEQA perspective, either in combination with other impacts associated with the project, or when considered in conjunction with the environmental impacts of other ongoing urban development in the City of Patterson.

c) Findings on Adverse Effects on Human Beings.

Potential adverse effects on human beings were discussed in Section 3.7, Geology and Soils (seismic hazards); Section 3.9, Hazards and Hazardous Materials; Section 3.10, Hydrology and Water Quality (flooding); and Section 3.17, Transportation/Traffic (traffic hazards). The project would have no adverse impacts on human beings, except for potential safety impacts related to traffic. Section 3.17 discusses the potential safety hazards for pedestrians and describes mitigation that would reduce these potential hazards to a level that would be less than significant.

4.0 REFERENCES

4.1 DOCUMENT PREPARERS

This IS/MND was prepared by BaseCamp Environmental, Inc. for use by and under the supervision of the PJUSD. The following persons were involved in preparation of the IS/MND:

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4.3 PERSONS CONSULTED

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Spragg, Michelle. Facilities Planner, Patterson Joint Unified School District.

5.0 NOTES RELATED TO EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers, except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration [CEQA Guidelines Section 15063(c)(3)(D)]. In this case, a brief discussion should identify the following:

    a) Earlier Analyses Used: Identify and state where they are available for review.

    b) Impacts Adequately Addressed: Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c) Mitigation Measures: For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures, which were

incorporated or refined from the earlier document, and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The checklist in CEQA Guidelines Appendix G is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

APPENDIX A
AIR QUALITY MODELING RESULTS

Patterson Gardens School Detailed Report

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1.1. Basic Project Information

Data Field	Value
Project Name	Patterson Gardens School
Construction Start Date	4/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.10
Precipitation (days)	23.6
Location	37.45796665185472, -121.14264556010448
County	Stanislaus
City	Patterson
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2278
EDFZ	14
Electric Utility	Turlock Irrigation District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.23

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Elementary School	750	Student	1.44	59,714	53,550	53,550	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-1-A	Use Electric or Hybrid Powered Equipment
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-6	Use Diesel Particulate Filters
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads
Transportation	T-34*	Provide Bike Parking
Energy	E-1	Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards
Water	W-7	Adopt a Water Conservation Strategy
Waste	S-1/S-2	Implement Waste Reduction Plan

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

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.87	38.3	18.0	0.16	0.97	13.0	14.0	0.93	5.02	5.94	24,453
Mit.	1.87	38.3	18.0	0.16	0.97	8.56	9.54	0.93	2.91	3.84	24,453
% Reduced	—	—	—	—	—	34%	32%	—	42%	35%	> -0.5%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	27.7	7.74	9.23	0.02	0.27	0.25	0.52	0.25	0.06	0.31	1,902
Mit.	27.7	7.74	9.23	0.02	0.17	0.25	0.42	0.16	0.06	0.22	1,891
% Reduced	—	—	—	—	35%	—	18%	35%	—	28%	1%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.80	4.52	5.09	0.01	0.15	0.30	0.46	0.14	0.10	0.24	1,275
Mit.	0.80	4.52	5.09	0.01	0.10	0.24	0.34	0.09	0.07	0.16	1,269
% Reduced	—	—	—	—	34%	23%	26%	34%	32%	33%	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.15	0.83	0.93	< 0.005	0.03	0.06	0.08	0.03	0.02	0.04	211
Mit.	0.15	0.83	0.93	< 0.005	0.02	0.04	0.06	0.02	0.01	0.03	210
% Reduced	—	—	—	—	34%	23%	26%	34%	32%	33%	< 0.5%

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	1.87	38.3	18.0	0.16	0.97	13.0	14.0	0.93	5.02	5.94	24,453
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	1.00	7.74	9.23	0.02	0.27	0.25	0.52	0.25	0.06	0.31	1,902
2026	27.7	7.39	9.06	0.02	0.24	0.25	0.49	0.22	0.06	0.28	1,896
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2025	0.55	4.52	5.09	0.01	0.15	0.30	0.46	0.14	0.10	0.24	1,275
2026	0.80	0.28	0.38	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	71.3
Annual	—	—	—	—	—	—	—	—	—	—	—

2025	0.10	0.83	0.93	< 0.005	0.03	0.06	0.08	0.03	0.02	0.04	211
2026	0.15	0.05	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	11.8

2.3. Construction Emissions by Year, Mitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	1.87	38.3	18.0	0.16	0.97	8.56	9.54	0.93	2.91	3.84	24,453
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2025	1.00	7.74	9.23	0.02	0.17	0.25	0.42	0.16	0.06	0.22	1,891
2026	27.7	7.39	9.06	0.02	0.15	0.25	0.40	0.14	0.06	0.20	1,886
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2025	0.55	4.52	5.09	0.01	0.10	0.24	0.34	0.09	0.07	0.16	1,269
2026	0.80	0.28	0.38	< 0.005	NaN	0.01	NaN	NaN	< 0.005	NaN	71.2
Annual	—	—	—	—	—	—	—	—	—	—	—
2025	0.10	0.83	0.93	< 0.005	0.02	0.04	0.06	0.02	0.01	0.03	210
2026	0.15	0.05	0.07	< 0.005	NaN	< 0.005	NaN	NaN	< 0.005	NaN	11.8

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.94	4.30	42.5	0.08	0.12	7.28	7.39	0.11	1.85	1.96	9,704
Mit.	6.94	4.27	42.5	0.08	0.11	7.28	7.39	0.11	1.85	1.96	9,455
% Reduced	< 0.5%	1%	< 0.5%	—	2%	—	< 0.5%	2%	—	< 0.5%	3%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.10	4.87	35.0	0.08	0.11	7.28	7.39	0.11	1.85	1.96	8,989
Mit.	6.10	4.84	35.0	0.08	0.11	7.28	7.39	0.10	1.85	1.95	8,740
% Reduced	< 0.5%	1%	< 0.5%	—	2%	—	< 0.5%	2%	—	< 0.5%	3%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.97	3.49	26.3	0.06	0.10	5.12	5.22	0.09	1.30	1.39	6,960
Mit.	4.97	3.46	26.3	0.06	0.09	5.12	5.21	0.09	1.30	1.39	6,711
% Reduced	< 0.5%	1%	< 0.5%	—	3%	—	< 0.5%	3%	—	< 0.5%	4%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.91	0.64	4.80	0.01	0.02	0.93	0.95	0.02	0.24	0.25	1,152
Mit.	0.91	0.63	4.79	0.01	0.02	0.93	0.95	0.02	0.24	0.25	1,111
% Reduced	< 0.5%	1%	< 0.5%	< 0.5%	3%	—	< 0.5%	3%	—	< 0.5%	4%

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.12	3.60	39.3	0.08	0.06	7.28	7.34	0.05	1.85	1.90	8,274
Area	1.78	0.02	2.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.7
Energy	0.04	0.68	0.57	< 0.005	0.05	—	0.05	0.05	—	0.05	1,134
Water	—	—	—	—	—	—	—	—	—	—	27.3
Waste	—	—	—	—	—	—	—	—	—	—	258
Refrig.	—	—	—	—	—	—	—	—	—	—	0.23
Total	6.94	4.30	42.5	0.08	0.12	7.28	7.39	0.11	1.85	1.96	9,704
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Mobile	4.71	4.19	34.5	0.07	0.06	7.28	7.34	0.06	1.85	1.90	7,570
Area	1.35	—	—	—	—	—	—	—	—	—	—
Energy	0.04	0.68	0.57	< 0.005	0.05	—	0.05	0.05	—	0.05	1,134
Water	—	—	—	—	—	—	—	—	—	—	27.3
Waste	—	—	—	—	—	—	—	—	—	—	258
Refrig.	—	—	—	—	—	—	—	—	—	—	0.23
Total	6.10	4.87	35.0	0.08	0.11	7.28	7.39	0.11	1.85	1.96	8,989
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.37	2.80	24.4	0.05	0.04	5.12	5.16	0.04	1.30	1.34	5,536
Area	1.56	0.01	1.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.29
Energy	0.04	0.68	0.57	< 0.005	0.05	—	0.05	0.05	—	0.05	1,134
Water	—	—	—	—	—	—	—	—	—	—	27.3
Waste	—	—	—	—	—	—	—	—	—	—	258
Refrig.	—	—	—	—	—	—	—	—	—	—	0.23
Total	4.97	3.49	26.3	0.06	0.10	5.12	5.22	0.09	1.30	1.39	6,960
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.61	0.51	4.46	0.01	0.01	0.93	0.94	0.01	0.24	0.24	916
Area	0.29	< 0.005	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.88
Energy	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	188
Water	—	—	—	—	—	—	—	—	—	—	4.52
Waste	—	—	—	—	—	—	—	—	—	—	42.7
Refrig.	—	—	—	—	—	—	—	—	—	—	0.04
Total	0.91	0.64	4.80	0.01	0.02	0.93	0.95	0.02	0.24	0.25	1,152

2.6. Operations Emissions by Sector, Mitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.12	3.60	39.3	0.08	0.06	7.28	7.34	0.05	1.85	1.90	8,274
Area	1.78	0.02	2.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.7
Energy	0.04	0.65	0.55	< 0.005	0.05	—	0.05	0.05	—	0.05	1,083
Water	—	—	—	—	—	—	—	—	—	—	21.8
Waste	—	—	—	—	—	—	—	—	—	—	64.5
Refrig.	—	—	—	—	—	—	—	—	—	—	0.23
Total	6.94	4.27	42.5	0.08	0.11	7.28	7.39	0.11	1.85	1.96	9,455
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.71	4.19	34.5	0.07	0.06	7.28	7.34	0.06	1.85	1.90	7,570
Area	1.35	—	—	—	—	—	—	—	—	—	—
Energy	0.04	0.65	0.55	< 0.005	0.05	—	0.05	0.05	—	0.05	1,083
Water	—	—	—	—	—	—	—	—	—	—	21.8
Waste	—	—	—	—	—	—	—	—	—	—	64.5
Refrig.	—	—	—	—	—	—	—	—	—	—	0.23
Total	6.10	4.84	35.0	0.08	0.11	7.28	7.39	0.10	1.85	1.95	8,740
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.37	2.80	24.4	0.05	0.04	5.12	5.16	0.04	1.30	1.34	5,536
Area	1.56	0.01	1.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.29
Energy	0.04	0.65	0.55	< 0.005	0.05	—	0.05	0.05	—	0.05	1,083
Water	—	—	—	—	—	—	—	—	—	—	21.8
Waste	—	—	—	—	—	—	—	—	—	—	64.5
Refrig.	—	—	—	—	—	—	—	—	—	—	0.23
Total	4.97	3.46	26.3	0.06	0.09	5.12	5.21	0.09	1.30	1.39	6,711
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.61	0.51	4.46	0.01	0.01	0.93	0.94	0.01	0.24	0.24	916

Area	0.29	< 0.005	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.88
Energy	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	179
Water	—	—	—	—	—	—	—	—	—	—	3.61
Waste	—	—	—	—	—	—	—	—	—	—	10.7
Refrig.	—	—	—	—	—	—	—	—	—	—	0.04
Total	0.91	0.63	4.79	0.01	0.02	0.93	0.95	0.02	0.24	0.25	1,111

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.0	10.2	0.02	0.52	—	0.52	0.48	—	0.48	1,780
Dust From Material Movement	—	—	—	—	—	6.26	6.26	—	3.00	3.00	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.75
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.61
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.40	0.00	0.00	0.06	0.06	0.00	0.01	0.01	62.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.0	10.2	0.02	0.08	—	0.08	0.07	—	0.07	1,780
Dust From Material Movement	—	—	—	—	—	2.44	2.44	—	1.17	1.17	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.75
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.61
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.40	0.00	0.00	0.06	0.06	0.00	0.01	0.01	62.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.32	12.1	11.2	0.02	0.57	—	0.57	0.52	—	0.52	1,953
Dust From Material Movement	—	—	—	—	—	7.25	7.25	—	3.45	3.45	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.13	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	21.4
Dust From Material Movement	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.54
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.54	0.00	0.00	0.08	0.08	0.00	0.02	0.02	83.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.50	26.2	6.33	0.14	0.40	5.66	6.06	0.40	1.55	1.95	22,416
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.30	0.07	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	245
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	40.6

3.4. Grading (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.32	12.1	11.2	0.02	0.57	—	0.57	0.52	—	0.52	1,953
Dust From Material Movement	—	—	—	—	—	2.83	2.83	—	1.35	1.35	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.13	0.12	< 0.005	0.01	—	0.01	0.01	—	0.01	21.4
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.54
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.54	0.00	0.00	0.08	0.08	0.00	0.02	0.02	83.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.50	26.2	6.33	0.14	0.40	5.66	6.06	0.40	1.55	1.95	22,416
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.30	0.07	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	245
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	40.6

3.5. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	7.32	8.08	0.02	0.26	—	0.26	0.24	—	0.24	1,485
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	7.32	8.08	0.02	0.26	—	0.26	0.24	—	0.24	1,485
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	3.83	4.22	0.01	0.14	—	0.14	0.13	—	0.13	776
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.08	0.70	0.77	< 0.005	0.03	—	0.03	0.02	—	0.02	128
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.07	1.35	0.00	0.00	0.19	0.19	0.00	0.04	0.04	209
Vendor	0.01	0.30	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	232
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	1.04	0.00	0.00	0.19	0.19	0.00	0.04	0.04	186
Vendor	0.01	0.32	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	232
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.56	0.00	0.00	0.10	0.10	0.00	0.02	0.02	100
Vendor	< 0.005	0.16	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	121
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	16.6
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	20.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.89	7.32	8.08	0.02	0.17	—	0.17	0.16	—	0.16	1,473
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.89	7.32	8.08	0.02	0.17	—	0.17	0.16	—	0.16	1,473
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	3.83	4.22	0.01	0.09	—	0.09	0.08	—	0.08	770
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.70	0.77	< 0.005	0.02	—	0.02	0.01	—	0.01	127
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.07	1.35	0.00	0.00	0.19	0.19	0.00	0.04	0.04	209
Vendor	0.01	0.30	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	232
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	1.04	0.00	0.00	0.19	0.19	0.00	0.04	0.04	186
Vendor	0.01	0.32	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	232
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.56	0.00	0.00	0.10	0.10	0.00	0.02	0.02	100
Vendor	< 0.005	0.16	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	121

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	16.6
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	20.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	7.00	8.00	0.02	0.23	—	0.23	0.22	—	0.22	1,484
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	37.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.25
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.08	0.96	0.00	0.00	0.19	0.19	0.00	0.04	0.04	182
Vendor	0.01	0.31	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	228
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.78
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.79
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.79
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.96
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2026) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	7.00	8.00	0.02	0.14	—	0.14	0.13	—	0.13	1,473
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	37.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.20
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.96	0.00	0.00	0.19	0.19	0.00	0.04	0.04	182
Vendor	0.01	0.31	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	228
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.78
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.79
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.79
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.96
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.37	3.38	4.57	0.01	0.15	—	0.15	0.14	—	0.14	703
Paving	0.34	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.09	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	19.3
Paving	0.01	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.19
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	90.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2026) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	3.38	4.57	0.01	0.02	—	0.02	0.02	—	0.02	703
Paving	0.34	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.09	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	19.3
Paving	0.01	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.19
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	90.8

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Architectural Coatings	27.7	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Architectural Coatings	0.76	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Architectural Coatings	0.14	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	36.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2026) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	NaN	—	NaN	NaN	—	NaN	0.00
Architectural Coatings	27.7	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	NaN	—	NaN	NaN	—	NaN	0.00
Architectural Coatings	0.76	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	NaN	—	NaN	NaN	—	NaN	0.00
Architectural Coatings	0.14	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	36.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.03

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	5.12	3.60	39.3	0.08	0.06	7.28	7.34	0.05	1.85	1.90	8,274
Total	5.12	3.60	39.3	0.08	0.06	7.28	7.34	0.05	1.85	1.90	8,274
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	4.71	4.19	34.5	0.07	0.06	7.28	7.34	0.06	1.85	1.90	7,570
Total	4.71	4.19	34.5	0.07	0.06	7.28	7.34	0.06	1.85	1.90	7,570
Annual	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.61	0.51	4.46	0.01	0.01	0.93	0.94	0.01	0.24	0.24	916
Total	0.61	0.51	4.46	0.01	0.01	0.93	0.94	0.01	0.24	0.24	916

4.1.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	5.12	3.60	39.3	0.08	0.06	7.28	7.34	0.05	1.85	1.90	8,274
Total	5.12	3.60	39.3	0.08	0.06	7.28	7.34	0.05	1.85	1.90	8,274
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	4.71	4.19	34.5	0.07	0.06	7.28	7.34	0.06	1.85	1.90	7,570
Total	4.71	4.19	34.5	0.07	0.06	7.28	7.34	0.06	1.85	1.90	7,570
Annual	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.61	0.51	4.46	0.01	0.01	0.93	0.94	0.01	0.24	0.24	916
Total	0.61	0.51	4.46	0.01	0.01	0.93	0.94	0.01	0.24	0.24	916

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	316
Total	—	—	—	—	—	—	—	—	—	—	316
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Elementary School	—	—	—	—	—	—	—	—	—	—	316
Total	—	—	—	—	—	—	—	—	—	—	316
Annual	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	52.4
Total	—	—	—	—	—	—	—	—	—	—	52.4

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	306
Total	—	—	—	—	—	—	—	—	—	—	306
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	306
Total	—	—	—	—	—	—	—	—	—	—	306
Annual	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	50.7
Total	—	—	—	—	—	—	—	—	—	—	50.7

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.04	0.68	0.57	< 0.005	0.05	—	0.05	0.05	—	0.05	817
Total	0.04	0.68	0.57	< 0.005	0.05	—	0.05	0.05	—	0.05	817
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.04	0.68	0.57	< 0.005	0.05	—	0.05	0.05	—	0.05	817
Total	0.04	0.68	0.57	< 0.005	0.05	—	0.05	0.05	—	0.05	817
Annual	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	135
Total	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	135

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.04	0.65	0.55	< 0.005	0.05	—	0.05	0.05	—	0.05	777
Total	0.04	0.65	0.55	< 0.005	0.05	—	0.05	0.05	—	0.05	777
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.04	0.65	0.55	< 0.005	0.05	—	0.05	0.05	—	0.05	777
Total	0.04	0.65	0.55	< 0.005	0.05	—	0.05	0.05	—	0.05	777
Annual	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	129

Total	0.01	0.12	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	129

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.28	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.08	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.43	0.02	2.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.7
Total	1.78	0.02	2.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.28	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.08	—	—	—	—	—	—	—	—	—	—
Total	1.35	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.23	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.04	< 0.005	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.88
Total	0.29	< 0.005	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.88

4.3.2. Mitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.28	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.08	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.43	0.02	2.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.7
Total	1.78	0.02	2.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.28	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.08	—	—	—	—	—	—	—	—	—	—
Total	1.35	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.23	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.04	< 0.005	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.88
Total	0.29	< 0.005	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.88

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	27.3
Total	—	—	—	—	—	—	—	—	—	—	27.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	27.3
Total	—	—	—	—	—	—	—	—	—	—	27.3
Annual	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	4.52
Total	—	—	—	—	—	—	—	—	—	—	4.52

4.4.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	21.8
Total	—	—	—	—	—	—	—	—	—	—	21.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	21.8
Total	—	—	—	—	—	—	—	—	—	—	21.8
Annual	—	—	—	—	—	—	—	—	—	—	—

Elementary School	—	—	—	—	—	—	—	—	—	—	3.61
Total	—	—	—	—	—	—	—	—	—	—	3.61

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	258
Total	—	—	—	—	—	—	—	—	—	—	258
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	258
Total	—	—	—	—	—	—	—	—	—	—	258
Annual	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	42.7
Total	—	—	—	—	—	—	—	—	—	—	42.7

4.5.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Elementary School	—	—	—	—	—	—	—	—	—	—	64.5
Total	—	—	—	—	—	—	—	—	—	—	64.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	64.5
Total	—	—	—	—	—	—	—	—	—	—	64.5
Annual	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	10.7
Total	—	—	—	—	—	—	—	—	—	—	10.7

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	0.23
Total	—	—	—	—	—	—	—	—	—	—	0.23
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	0.23
Total	—	—	—	—	—	—	—	—	—	—	0.23
Annual	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	0.04

Total	—	—	—	—	—	—	—	—	—	—	0.04

4.6.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	0.23
Total	—	—	—	—	—	—	—	—	—	—	0.23
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	0.23
Total	—	—	—	—	—	—	—	—	—	—	0.23
Annual	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	0.04
Total	—	—	—	—	—	—	—	—	—	—	0.04

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

4.7.2. Mitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

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

4.8.2. Mitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

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

4.9.2. Mitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	4/1/2025	4/2/2025	5.00	2.00	—
Grading	Grading	4/3/2025	4/8/2025	5.00	4.00	—
Building Construction	Building Construction	4/9/2025	1/13/2026	5.00	200	—
Paving	Paving	1/14/2026	1/27/2026	5.00	10.0	—
Architectural Coating	Architectural Coating	1/28/2026	2/10/2026	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40

Site Preparation	Tractors/Loaders/Backh	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backh oes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Electric	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backh oes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backh oes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel Hybrid	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Electric	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	10.8	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.17	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	10.8	LDA,LDT1,LDT2
Grading	Vendor	—	7.17	HHDT,MHDT

Grading	Hauling	305	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	25.1	10.8	LDA,LDT1,LDT2
Building Construction	Vendor	9.79	7.17	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	10.8	LDA,LDT1,LDT2
Paving	Vendor	—	7.17	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	5.02	10.8	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.17	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	10.8	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.17	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	10.8	LDA,LDT1,LDT2

Grading	Vendor	—	7.17	HHDT,MHDT
Grading	Hauling	305	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	25.1	10.8	LDA,LDT1,LDT2
Building Construction	Vendor	9.79	7.17	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	10.8	LDA,LDT1,LDT2
Paving	Vendor	—	7.17	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	5.02	10.8	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.17	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	89,571	29,857	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	1.88	0.00	—
Grading	9,768	—	4.00	0.00	—
Paving	0.00	0.00	0.00	0.00	1.28

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Elementary School	1.28	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	61.8	296	0.12	0.16
2026	141	290	0.11	0.16

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Elementary School	1,417	0.00	0.00	369,562	10,216	0.00	0.00	2,663,473

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Elementary School	1,417	0.00	0.00	369,562	10,216	0.00	0.00	2,663,473

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	89,571	29,857	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Elementary School	292,586	336	0.1307	0.1868	2,543,193

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Elementary School	283,346	336	0.1307	0.1868	2,418,234

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Elementary School	2,060,604	1,643,557

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Elementary School	1,648,483	1,314,846

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

Elementary School	137	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Elementary School	34.2	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Elementary School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Elementary School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Elementary School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Elementary School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Elementary School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00

Elementary School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.2	annual days of extreme heat
Extreme Precipitation	1.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	27.1	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	70.3
AQ-PM	52.1
AQ-DPM	52.8
Drinking Water	87.4
Lead Risk Housing	34.4

Pesticides	83.3
Toxic Releases	14.4
Traffic	2.79
Effect Indicators	—
CleanUp Sites	43.2
Groundwater	75.4
Haz Waste Facilities/Generators	28.3
Impaired Water Bodies	23.9
Solid Waste	0.00
Sensitive Population	—
Asthma	55.4
Cardio-vascular	74.0
Low Birth Weights	51.3
Socioeconomic Factor Indicators	—
Education	73.2
Housing	19.8
Linguistic	73.7
Poverty	61.5
Unemployment	84.6

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	41.48594893
Employed	30.10393943
Median HI	42.69215963

Education	—
Bachelor's or higher	20.4029257
High school enrollment	100
Preschool enrollment	52.04670858
Transportation	—
Auto Access	53.75336841
Active commuting	21.0701912
Social	—
2-parent households	30.59155653
Voting	43.57756961
Neighborhood	—
Alcohol availability	75.06736815
Park access	55.65250866
Retail density	29.68048248
Supermarket access	44.27049917
Tree canopy	64.24996792
Housing	—
Homeownership	64.54510458
Housing habitability	66.36725266
Low-inc homeowner severe housing cost burden	53.85602464
Low-inc renter severe housing cost burden	53.72770435
Uncrowded housing	47.26036186
Health Outcomes	—
Insured adults	39.29167201
Arthritis	0.0
Asthma ER Admissions	40.6
High Blood Pressure	0.0

Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	30.7
Cognitively Disabled	58.3
Physically Disabled	87.9
Heart Attack ER Admissions	13.7
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	39.3
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	4.8
Elderly	81.9
English Speaking	32.9
Foreign-born	40.4
Outdoor Workers	28.1

Climate Change Adaptive Capacity	—
Impervious Surface Cover	52.8
Traffic Density	5.7
Traffic Access	0.0
Other Indices	—
Hardship	67.1
Other Decision Support	—
2016 Voting	43.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	67.0
Healthy Places Index Score for Project Location (b)	40.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Per project site plan.
Construction: Construction Phases	No significant demolition work.
Construction: Off-Road Equipment	Some equipment to be non-diesel to facilitate compliance with air quality regulations.
Construction: Paving	Asphalt parking spaces and entryways.
Operations: Fleet Mix	No mobile home or urban bus traffic.

APPENDIX B
BIOLOGICAL RESOURCE ASSESSMENT

MOORE BIOLOGICAL CONSULTANTS

July 10, 2024

Mr. Charlie Simpson
BaseCamp Environmental
802 West Lodi Avenue
Lodi, CA 95240

Subject: "PATTERSON GARDENS SCHOOL", PATTERSON, CALIFORNIA: BIOLOGICAL ASSESSMENT

Dear Charlie:

Thank you for asking Moore Biological Consultants to prepare a biological assessment for this site in Patterson, Stanislaus County, California (Figures 1 and 2). The purposes of this assessment are to describe existing biological resources in the project site, identify potentially significant impacts to biological resources from the project, and provide recommendations for how to reduce those impacts to a less-than-significant level. The work involved reviewing databases, aerial photographs, and documents, and conducting field surveys to document vegetation communities, potentially jurisdictional Waters of the U.S. and/or wetlands, and potentially suitable habitat for or presence of special-status species. This report details the methodology and results of our investigation.

Project Overview

The project site is an open field that will be developed in to a new elementary school (see Site Plan in Attachment A). There will be a few buildings and a play area around a courtyard in the north part of the site, and soccer fields, basketball courts, and a playground area in the south part of the site. Access to the school will be from Ward Avenue, Calvison Parkway, and Wolf Pack Court. The

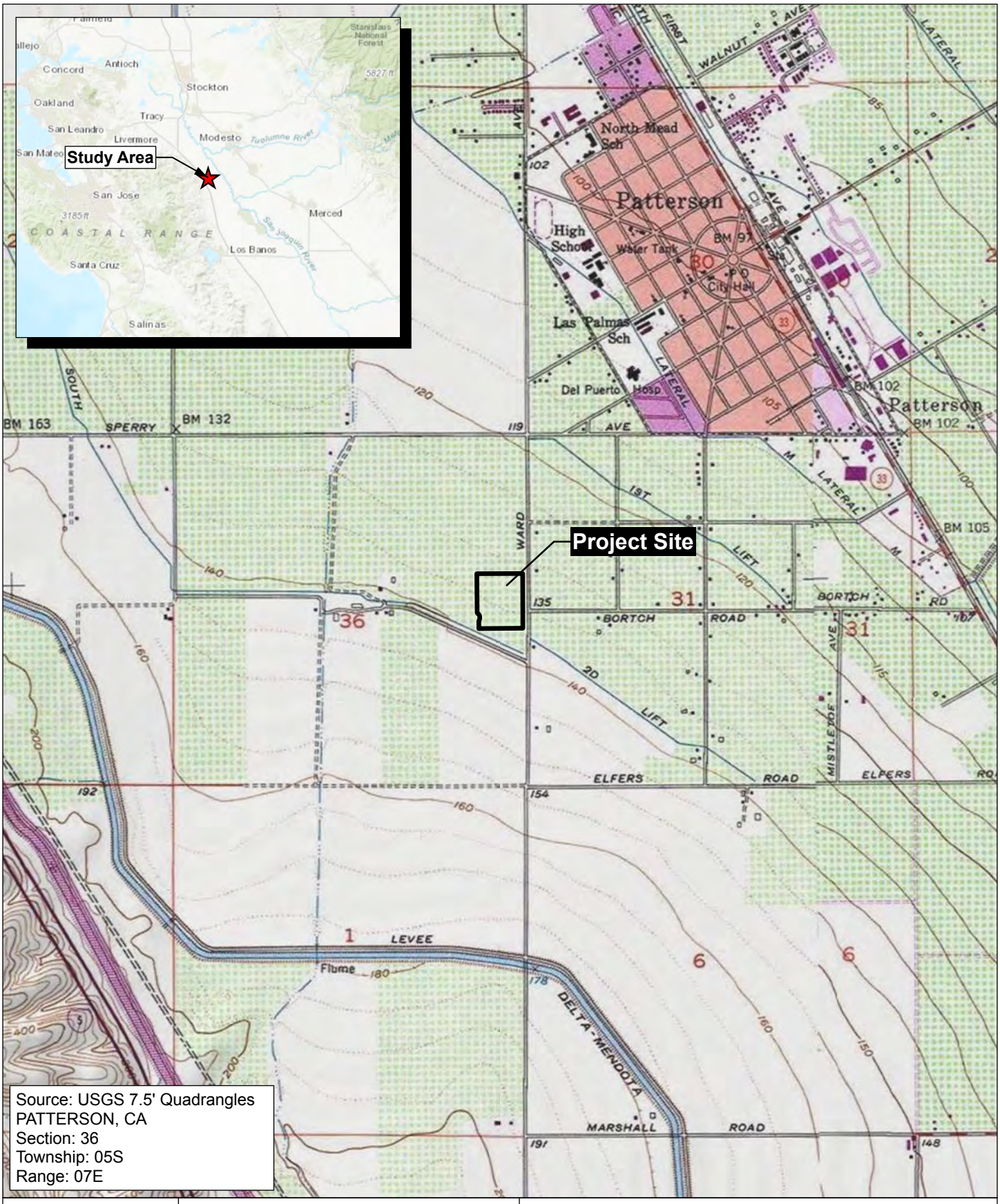


Figure 1

0 1,000 2,000
Feet

N
W E
S

Map Date: 07/03/2024

Moore Biological Consultants

USGS

Patterson Gardens School

City of Patterson, Stanislaus County, CA



Figure 2

0 100 200
Feet

N
W E
S

Map Date: 07/03/2024

Moore Biological Consultants

AERIAL

Patterson Gardens School

City of Patterson, Stanislaus County, CA

proposed project will connect to existing City infrastructure to provide sewer, water, and gas to the site. Stormwater will be collected, treated on site, and then discharged in to the City's storm drain system.

Methods

Prior to the field survey, we conducted a search of California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB, 2024). The 5-mile radius CNDDB search area encompassed portions of the Westley, Brush Lake, Patterson, and Crows Landing USGS 7.5-minute topographic quadrangles (Attachment B). The United States Fish and Wildlife Service (USFWS*)* IPaC Trust Resource Report of Federally Threatened and Endangered species that may occur in or be affected by projects in the project vicinity was also reviewed. This information was used to identify wildlife and plant species that have been documented in the project vicinity or that may have the potential to occur if suitable habitat is present.

The National Marine Fisheries Service (NMFS) and USFWS on-line-maps of designated critical habitat and the National Wetland Inventory (NWI) were also reviewed.

Biologist Colleen Laskowski, M.S. conducted a field survey on June 21, 2024. The survey consisted of walking throughout the site making observations of habitat conditions, noting surrounding land uses, habitat types, and plant and wildlife species, and taking representative photographs.

The survey included an assessment of the site for potentially jurisdictional Waters of the U.S. (a term that includes wetlands) as defined by the ACOE, (1987; 2008) and/or Waters of the State, including wetlands.

The site was for searched for special-status species and potentially suitable habitat for special-status species (e.g., vernal pools, blue elderberry shrubs, areas with unusual soils). Additionally, trees near the site were assessed for the potential use by nesting raptors, especially Swainson's hawk (*Buteo swainsoni*). The grassland areas in the site were searched for burrowing owls (*Athene cunicularia*) or ground squirrel burrows with evidence of past occupancy.

A table of "Special-Status Species" pursuant to CEQA was compiled from the results of the database searches. Special-status species include those listed as threatened or endangered, or species that are candidates for listing at the state or federal level, rare plants, and animals considered sensitive by CDFW. The Special-Status Species table includes species documented in the CNDDB within 5 miles of the site and species listed in the IPAC; common species identified in the CNDDB were excluded.

Results

GENERAL SETTING: The site is in Patterson, in Stanislaus County, California. The site is in Section 36, in Township 5 South, Range 7 East of the USGS 7.5-minute Patterson topographic quadrangle (Figure 1). The site is essentially level and is at approximately 135 feet above mean sea level.

Aerial photographs confirm the site has been fallow for decades and subject to routine mowing and/or disking, presumably for weed abatement and fire suppression. Surrounding land uses in this portion of Stanislaus County are primarily residential and agricultural. Calvinson Parkway borders the north edge of the site, Wolfpack Court borders the west edge, and the east edge is bordered by Ward Avenue. There is a row of redwood and manicured lawn to the south of the site as part of a larger Sports Complex (Figure 2 and photographs in Attachment C).

VEGETATION AND HABITAT TYPES: As described above, the grassland in the site is subject to routine mowing and/or disking, leaving it ruderal and highly disturbed. The California Annual Grassland series (Sawyer and Keeler-Wolf, 1995) is the only vegetation community in the project site.

Ruderal Grassland: Historically, the California Annual Grassland series was the most widespread upland vegetation type occurring in the greater project vicinity and was comprised of native grass and weed species. In contrast, the grasslands in the site have been subject to decades of disturbance, are highly disturbed, and comprised of mostly non-native species.

Oats (*Avena fatua*), foxtail barley (*Hordeum murinum*), and ripgut brome (*Bromus diandrus*) are the dominant grasses in the site. Other grassland species such as wild radish (*Raphanus sativus*), prickly lettuce (*Lactuca serriola*), field bindweed (*Convolvulus arvensis*), yellow starthistle (*Centaurea solstitialis*), and broad-leaf filaree (*Erodium botrys*) are intermixed with the grasses. A list of plant species observed in the study area is included in Table 1.

There are no trees in the site. The most notable trees near the site are a row of redwoods (*Sequoia sp*.) just to the south of the site (Figure 2 and photographs in Attachment C). There are other landscape trees and ornamental shrubs and plants near the site, associated with nearby residential development. There are also orchards in nearby parcels.

WILDLIFE: Several birds were observed in the site during the field survey. Representative species include turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), and Brewer's blackbird (*Euphagus cyanocephalus*). Table 2 is a list of birds and other wildlife species observed in the site.

TABLE 1

PLANT SPECIES OBSERVED IN THE PROJECT SITE

Acmispon americanus	Spanish clover
Avena fatua	oats
Brassica nigra	black mustard
Bromus diandrus	ripgut brome
Centaurea solstitialis	yellow star thistle
Convolvulus arvensis	field bindweed
Epilobium brachycarpum	willowherb
Erigeron canadensis	Canadian horseweed
Erodium botrys	filaree
Hordeum murinum	foxtail barley
Lactuca serriola	prickly lettuce
Malva neglecta	common mallow
Polygonum aviculare	prostrate knotweed
Raphanus sativus	wild radish
Rumex crispus	curly dock
Salsola tragus	Russian thistle

The row of redwood trees to the south of the site and a cluster of large trees to the northeast of the site, across Ward Avenue, are potentially suitable for nesting raptors, including Swainson's hawk. There are also several large trees in the project vicinity that are suitable for nesting raptors. Given the presence of large trees near the site and raptor foraging habitat (i.e., open fields) in and near the site, it is likely one or more pairs of raptors nest in and near the site during most years. Ground-nesting songbirds such as killdeer (*Charadrius vociferous*) may nest on the ground in and near the site and the grassland vegetation in parts of the site may be suitable for grassland-nesting species, such as red-winged blackbird (*Agelaius phoeniceus*).

TABLE 2

WILDLIFE SPECIES DOCUMENTED IN THE SITE

Birds	
Turkey vulture	*Cathartes aura*
Red-tailed hawk	*Buteo jamaicensis*
Mourning dove	*Zenaida macroura*
Rock dove	*Columba livia*
American crow	*Corvus brachyrhynchos*
Northern mockingbird	*Mimus polyglottos*
Brewer's blackbird	*Euphagus cyanocephalus*
European starling	*Sturnus vulgaris*
House finch	*Haemorhous mexicanus*
Tree swallow	*Tachycineta bicolor*
Mammals	
California ground squirrel	*Otospermophilus beecheyi*

A few common mammals have potential to occur in the site and California ground squirrel (*Otospermophilus beecheyi*) was the only mammal observed in the site during the field survey; several ground squirrel burrows were also observed. The site provides suitable habitat for mammals such as coyote (*Canis latrans*), black-tailed hare (*Lepus californicus*), desert cottontail (Sy*lvilagus bachmani*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*). However, the small size of the site and it being situated in a residential area, reduces the likelihood that larger mammals would occur in the site. Small rodents including mice (*Mus musculus, Reithrodontomys megalotis,* and *Peromyscus maniculatus*) and voles (*Microtus californicus*) may occur in or adjacent to the site.

Due to lack of suitable habitat, few amphibians and reptiles are expected to use habitats in the site and none were observed. The site is within the range of common reptiles such as western fence lizard (*Sceloporus occidentalis*), western skink (*Eumeces skiltonianus*), western terrestrial garter snake (*Thamnophis elegans*), and common king snake (*Lampropeltis getulus*); these and other common reptile species may occur in the site. The lack of aquatic habitat in the site greatly reduces the probability for the site to be utilized by amphibians.

AQUATIC RESOURCES: Waters of the U.S., including wetlands, are defined under 33 Code of Federal Regulations (CFR) 328 to include navigable waterways, their tributaries, and adjacent wetlands. State and federal agencies regulate these habitats and Section 404 of the Clean Water Act requires that a permit be secured prior to the discharge of dredged or fill materials into any Waters of the U.S. The California Regional Water Quality Control Board (RWQCB) implements Section 401 of the Clean Water Act by issuing 401 Certification in support of 404 permits. Many jurisdictional Waters of the U.S. in California are also Waters of the State, and also fall under the jurisdiction of CDFW.

"Waters of the U.S.", as defined in 33 CFR 328.4, encompasses Territorial Seas, Tidal Waters, and Non-Tidal Waters; Non-Tidal Waters includes interstate and intrastate rivers and streams, their tributaries, and their adjacent wetlands. The limit of federal jurisdiction of Non-Tidal Waters of the U.S. extends to the "ordinary high water mark" (OHWM). The OHWM is established by physical characteristics such as a natural water line impressed on the bank, presence of shelves, destruction of terrestrial vegetation, or the presence of litter and debris.

Wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the ACOE *Wetlands Delineation Manual* and Regional Supplement (ACOE, 1987; 2008). Wetlands that are adjacent to and hydrologically very closely associated with jurisdictional lakes, rivers, streams,

and tributaries can also fall under ACOE jurisdiction as “adjacent wetlands”. Pursuant to a May 2023 Supreme Court decision, adjacent wetlands must have a continuous surface connection with a jurisdictional Water of the U.S. Geographically and hydrologically isolated wetlands are outside federal jurisdiction, but are regulated by RWQCB as a “Water of the State”.

Jurisdictional Waters of the U.S. and wetlands include, but are not limited to, most perennial and intermittent creeks and lakes, as well as adjacent wetlands such as riparian wetlands along the edges of rivers. Waters of the U.S., wetlands, and other aquatic habitats provide critical habitat components, such as nest sites and a reliable source of water, for a wide variety of wildlife species.

The entire site is upland grassland and has soils that appear to be well draining. No potentially jurisdictional Waters of the U.S. or wetlands were observed in the site. There are also no areas in the site meeting the criteria of Waters of the State, including wetlands. No blue-line streams are reflected on the USGS topographic map (Figure 1) and no aquatic features are depicted in the NWI.

SPECIAL-STATUS SPECIES: Special-status species are plants and animals that are legally protected under the state and/or federal endangered species acts or other regulations. The Federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall utilize their authority to conserve endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species.

Special-status species also include other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitats. The presence of species with legal protection under CESA and/or FESA often

represents a major constraint to development, particularly when the species are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a take of these species.

Special-status plants are those which are designated rare, threatened, or endangered and candidate species for listing by the USFWS. Special-status plants also include species considered rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act Guidelines, such as those plant species identified on Lists 1A, 1B, and 2 in the Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2024). Finally, special-status plants may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on CNPS List 3.

The likelihood of occurrence of listed, candidate, and other special-status species in the site is extremely low. Table 3 provides a summary of the listing status and habitat requirements of special-status species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the greater project vicinity. This table also includes an assessment of the likelihood of occurrence of each of these species in the site. The evaluation of the potential for occurrence of each species is based on the distribution of regional occurrences (if any), habitat suitability, and field observations.

SPECIAL-STATUS PLANTS: Thirteen (13) species of special-status plants were identified in the CNDDB (2024) search, most of which are several miles from the site (Table 3 and Attachment B). Only five special-status plant species are documented in the CNDDB within five miles of the site: big tarplant (*Blepharizonia plumosa ssp. plumosa*), Lemmon's jewelflower (*Caulanthus lemmoni*), spiny-sepaled button-celery (*Eryngium spinosepalum*), diamond-petaled California poppy (*Eschscholzia rhombipetala*), and shining navarretia

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Site
PLANTS						
Big tarplant	*Blepharizonia plumosa ssp. plumosa*	None	None	1B	Valley and foothill grassland, usually on clay soils.	Unlikely: the site does not provide suitable habitat for this species; the grassland in the site is highly disturbed. The nearest occurrence of big tarplant in the CNDDB (2024) search area is approximately 4.5 miles northwest of the site.
Lemmon's jewelflower	*Caulanthus. lemmonii*	None	None	1B	Pinyon-juniper woodland, valley and foothill grassland.	Unlikely: the site does not provide suitable habitat for and is also below the elevation range of this species (CNPS, 2024). The nearest occurrence of Lemmon's jewelflower in the CNDDB (2024) search area is approximately 5 miles northwest of the site.
Spiny-sepaled button-celery	*Eryngium spinosepalum*	None	None	1B	Vernal pools within foothill and valley grassland.	Unlikely: there are no vernal pools in the site. The nearest occurrence of spiny-sepaled button-celery in the CNDDB (2024) search area is approximately 5 miles southwest of the site.
Diamond-petaled California poppy	*Eschscholzia rhombipetala*	None	None	1B	Valley and foothill grasslands, in alkaline and clay soils.	Unlikely: the site does not provide suitable habitat for diamond-petaled California poppy; the grassland in the site is highly disturbed. The nearest occurrence of this species in the CNDDB (2024) is approximately 5 miles northwest of the site.
Shining navarretia	*Navarretia nigelliformis ssp. radians*	None	None	1B	Cismontane woodland, valley and foothill grassland, vernal pools, usually in clay soils.	Unlikely: the site does not provide suitable habitat for and is also below the elevation range of this species (CNPS, 2024). The nearest occurrence of shining navarretia in the CNDDB (2024) search area is approximately 5 miles southwest of the site.
WILDLIFE						
Birds						
California condor	*Gymnogyps californianus*	E	E	N/A	Rocky shrubland, coniferous forests and oak savannas; found near cliffs or large trees, which they use as nesting sites.	Unlikely: the site does not provide suitable habitat for California condor. There are no occurrences of this species in the CNDDB (2024) search area.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Site
Least Bell's vireo	*Vireo bellii pusillus*	E	E	N/A	Nests in willow thickets and other shrubs, primarily in southern California riparian forests.	Unlikely: there is no suitable habitat for least Bell's vireo in or near the site; there is no riparian habitat in or near the site. The nearest occurrence of least Bell's vireo in the CNDDB (2024) search area is approximately 4 miles northwest of the site.
Swainson's hawk	*Buteo swainsoni*	None	T	N/A	Nests in large trees, usually within riparian corridors. Forages in agricultural fields and annual grassland.	Low: the ruderal grassland in the site provides low quality foraging habitat for Swainson's hawks and there are some large trees that are suitable for nesting in close proximity to the site. The nearest record of nesting Swainson's hawk in the CNDDB (2024) search area is approximately 2 miles northeast of the site.
Tricolored blackbird	*Agelaius tricolor*	None	T	N/A	Open water and protected nesting substrate, usually cattails and riparian scrub.	Unlikely: tricolored blackbird may fly over or forage in the site, but there is no nesting habitat in or adjacent to the site. The nearest occurrence of tricolored blackbird in the CNDDB (2024) search area is approximately 1.5 miles northwest of the site.
Burrowing owl	*Athene cunicularia*	None	SC	N/A	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Unlikely: the grassland in the site is highly disturbed and routinely mowed and/or disked, providing poor quality habitat for burrowing owls. No burrowing owls were observed in the site, but a few ground squirrels and burrows were observed in the site. The nearest occurrence of this species in the CNDDB (2024) search area is approximately 1 mile northwest of the site.
Loggerhead shrike	*Lanius ludovicianus*	None	SC	N/A	Annual grasslands and agricultural areas; nests in trees and shrubs.	Unlikely: the grassland in the site is disturbed, but provides suitable foraging habitat for loggerhead shrike. There are a few suitable nest trees and shrubs near the site that may be used for nesting by this species. The nearest occurrence of this species in the CNDDB (2024) search area is approximately 2 miles northwest of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Site
Mammals						
San Joaquin kit fox	*Vulpes macrotis mutica*	E	T	N/A	Inhabits open, dry annual or perennial grasslands and scrublands with loose textured soils for denning.	Unlikely: no suitable dens for this species were observed in the site and San Joaquin kit fox is not expected to occur in such as small site surrounded by development. The nearest occurrence of this species in the CNDDB (2024) search area is approximately 2.5 miles northwest of the site.
American badger	*Taxidea taxus*	None	SC	N/A	Drier open stages of most shrub, forest, and herbaceous habitats, with friable soils	Unlikely: the site does not provide suitable habitat for American badger; no potential badger dens were observed in the site. The nearest record of this species in the CNDDB (2024) search area is approximately 4 miles southwest of the site.
Reptiles & Amphibians						
California tiger salamander	*Ambystoma californiense pop. 1*	T	T	N/A	Seasonal water bodies without fish (i.e., vernal pools and stock ponds) and grassland or woodland habitats containing burrows.	Unlikely: there is no potentially suitable breeding habitat for this species in or near the site. There are no occurrences of this species in the CNDDB (2024) search area. The site is not in California tiger salamander critical habitat (USFWS, 2005a).
Western pond turtle	*Emys marmorata*	PT	SC	N/A	Ponds, marshes, streams, and ditches with emergent aquatic vegetation and basking areas.	Unlikely: there is no suitable habitat in or adjacent to the site to support western pond turtle. There are no occurrences of this species in the CNDDB (2024) search area.
Western spadefoot	*Spea hammondii*	PT	SC	N/A	Breeds and lays eggs in seasonal water bodies such as deep vernal pools or stock ponds.	Unlikely: there is no suitable breeding habitat for western spadefoot in or adjacent to the site. The nearest occurrence of this species in the CNDDB search area is approximately 4 miles southwest of the site.
San Joaquin coachwhip	*Masticophis flagellum ruddocki*	None	SC	N/A	Open, dry habitats with little or no tree cover; valley grassland.	Unlikely: the site does not provide suitable habitat for San Joaquin coachwhip; the grassland in the site is highly disturbed. The nearest occurrence of this species in the CNDDB (2024) search area is approximately 4.5 miles northwest of the site.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Site
Fish						
Steelhead - Central Valley DPS	*Oncorhynchus mykiss irideus pop. 11*	T	SC	N/A	Riffle and pool complexes with adequate spawning substrates within Central Valley drainages.	None: there is no aquatic habitat in the site. The nearest record of steelhead in the CNDDB (2024) search area is approximately 4 miles northeast of the site. The site is not within designated critical habitat for Central Valley DPS steelhead (NOAA, 2005).
Green sturgeon – southern DPS	*Acipenser medirostris pop.1*	T	SC	N/A	Non-spawning adults occupy marine/estuarine waters; Delta estuary important for rearing juveniles. Spawning occurs in cool sections of mainstem rivers in deep pools.	None: there is no aquatic habitat in the site. The nearest occurrence of green sturgeon in the CNDDB (2024) search area is approximately 4 miles northeast of the site. The site is not in designated critical habitat for green sturgeon (NMFS, 2009).
Invertebrates						
Vernal pool tadpole shrimp	*Lepidurus packardi*	E	None	N/A	Vernal pools.	Unlikely: there are no vernal pools in the site. There are no occurrences of vernal pool tadpole shrimp in the CNDDB (2024) search area. The site is not within designated critical habitat for vernal pool tadpole shrimp (USFWS 2005b).
Vernal pool fairy shrimp	Branchinecta lynchi	T	None	N/A	Vernal pools and seasonally inundated depressions in the Central Valley.	Unlikely: there are no vernal pools or seasonal wetlands in the site to support vernal pool fairy shrimp. There are no occurrences of this species in the CNDDB (2024) search area. The site is not within designated critical habitat for vernal pool fairy shrimp (USFWS, 2005b).
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T	None	N/A	Elderberry shrubs in the Central Valley and surrounding foothills.	Unlikely: no blue elderberry shrubs were observed in or adjacent to the site. There are no occurrences of this species within the CNDDB (2024) search area.

TABLE 3

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES DOCUMENTED OR POTENTIALLY-OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Federal Status[1]	State Status[2]	CNPS List[3]	Habitat	Potential for Occurrence in the Site
Monarch butterfly	*Danaus plexippus*	C	None	N/A	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	Unlikely: Monarch butterfly may fly over the site during its migration, but is not expected to occur in the site in a meaningful capacity due to a lack of floristic resources. This species is also commonly known to overwinter in coastal environments. There are no occurrences of monarch butterfly in the CNDDB (2024) search area.
Crotch bumble bee	*Bombus crotchii*	None	CE	N/A	Open grassland and scrub habitats throughout California; rarely found in the Central Valley.	Unlikely: the site does not provide suitable habitat for Crotch bumble bee; this species may fly over the site on occasion. The nearest occurrence of Crotch bumble bee in the CNDDB (2024) search area is a large, nonspecific record around the City of Patterson.

1 T= Threatened; E = Endangered; PT = Proposed for Threatened Listing; C = Candidate for Listing.

2 T = Threatened; E = Endangered; CE = Candidate for Endangered Listing; SC = State of California Species of Special Concern.

3 CNPS (California Native Plant Society) List 1B includes species that are rare, threatened, or endangered in California and elsewhere.

(*Navarretia nigelliformis ssp. radians*) (Table 3 and Attachment B). The USFWS IPaC does not include any special-status plant species in the project vicinity.

Special-status plants generally occur in relatively undisturbed areas in vegetation communities such as vernal pools, marshes and swamps, chenopod scrub, seasonal wetlands, riparian scrub, chaparral, and areas with unusual substrates, such as serpentine or alkaline soils. In contrast, the ruderal grasslands in the site have been disturbed by historical agricultural uses and periodic disking and/or mowing for weed abatement. The site does not provide suitable habitat for any special-status plants and none are expected to occur in the site.

SPECIAL-STATUS WILDLIFE: The potential for intensive use of the site by special-status wildlife species is generally low. A total of twenty-two (22) wildlife species are recorded in the CNDDB (2024) query, twelve (12) of which have been found within 5 miles of the site (Table 3 and Attachment B). These species include: Swainson's hawk, tricolored blackbird (*Agelaius tricolor*), burrowing owl, least Bell's vireo (*Vireo bellii pusillus*), loggerhead shrike (*Lanius ludovicianus*), American badger (*Taxidea taxus*), San Joaquin kit fox (*Vulpes macrotis mutica*), San Joaquin coachwhip (*Masticophis flagellum ruddocki*), western spadefoot (*Spea hammondii*), steelhead (*Oncorhynchus mykiss irideus*), green sturgeon (*Acipenser medirostris*), and Crotch bumble bee (*Bombus crotchii*).

The IPaC includes a few of these same species and also includes California condor (*Gymnogyps californianus*), California tiger salamander (*Ambystoma californiense*), western pond turtle (*Emys marmorata*), monarch butterfly (*Danaus plexippus*), vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardi*), and valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*).

While the site may have provided habitat for one or more special-status wildlife species at some time in the past, agriculture and development have substantially

modified natural habitats in the greater project vicinity, including those within the site. Swainson's hawk is the only species with much potential to occur in the site, as it may nest in adjacent or nearby trees and could be disturbed by construction; this species is discussed further below. Due to a lack of suitable habitat, the remaining wildlife species in Table 3 have essentially no potential to occur in or near the site on more than a transitory basis.

SWAINSON'S HAWK: The Swainson's hawk is a migratory hawk listed by the State of California as a Threatened species. The Migratory Bird Treaty Act (MBTA) and Fish and Game Code of California (FGCC) protect Swainson's hawks year-round, as well as their nests during the nesting season (March 1 through September 15). Swainson's hawks are found in the Central Valley primarily during their breeding season, a population is known to winter in the San Joaquin Valley.

Swainson's hawks prefer nesting sites that provide sweeping views of nearby foraging grounds consisting of grasslands, irrigated pasture, hay, and wheat crops. Most Swainson's hawks are migratory, wintering in Mexico and breeding in California and elsewhere in the western United States. This raptor generally arrives in the Central Valley in mid-March, and begins courtship and nest construction immediately upon arrival at the breeding sites. The young fledge in early July, and most Swainson's hawks leave their breeding territories by late August.

Swainson's hawk was a focal species during the field survey, which was conducted in the heart of the nesting season for this species. No Swainson's hawks were observed during the field survey. A family of red-tailed hawks, including two adults and three juveniles, were observed associated with the row of redwood trees to the south of the site and the cluster of trees in the residence just northeast of the site, across Ward Avenue. The presence of red-tailed hawks in the area likely indicates Swainson's hawks did not nest in the immediate area

this past Spring, as red-tailed hawks are highly territorial and establish nest territories several weeks to a month before Swainson's hawks arrive from their wintering grounds. It is possible Swainson's hawks may nest in close proximity to the site in the future. The CNDDB (2024) contains a few records of Swainson's hawks within 5 miles of the site, with the nearest being approximately 2 miles northeast of the site.

The conversion of 13+/- acres of potential low-quality Swainson's hawk foraging habitat to developed uses is viewed as less than significant. The grasslands in the site are not irrigated and are routinely mowed and/or disked; the foraging habitat qualities of the dry grassland are substantially lower than those of nearby fields of alfalfa and row crops. The potential use of the grasslands in the site by foraging Swainson's hawk is also reduced by the small size of the field and surrounding development.

OTHER SPECIAL-STATUS WILDLIFE SPECIES: The site does not provide highly suitable habitat for other special-status wildlife species. Special-status birds may fly over the area, but are not be expected to nest in or immediately adjacent to the project site, primarily due to lack of habitat. For example, tricolored blackbird may fly over or forage in the site on occasion, but there is no suitable nesting habitat for this species in or adjacent to the site. There is no riparian habitat to support least Bell's vireo. California condor is not expected to occur or nest in the are due to levels of development and the species' preference to nest on large cliffs or in mature trees. Loggerhead shrike could potentially nest in nearby trees and shrubs and forage in the grasslands in the site on occasion.

There were a few California ground squirrel and burrows in the site, but the suitability of the site for burrowing owls is reduced by routine disking, the small size of the site, and proximity to development. Burrowing owl is also a species that was once found in higher numbers in San Joaquin County, but have become few and far between in recent years, likely due to several factors.

No special-status mammals, including American badger and San Joaquin kit fox, are expected to occur in the site and no suitable dens were observed during the field survey. These species may occur in more natural areas in the project vicinity, such as the hills to the southwest, further from development.

The disturbed grassland in the site also does not provide suitable habitat for San Joaquin coachwhip.

There is no aquatic habitat in the site for western pond turtle, western spadefoot, California tiger salamander, Central Valley steelhead, or green sturgeon.

There are no vernal pools or seasonal wetlands in the site to support vernal pool fairy shrimp or vernal pool tadpole shrimp. There are no blue elderberry shrubs in the site to support valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). Monarch butterfly may fly over the site during its migration, but this species is more known to occur in coastal environments and would not be expected to utilize the site for overwintering. The site lacks the floristic requirements for intensive use by special-status bee species, including Crotch bumble bee, which is found more often in southern California as of recent.

CRITICAL HABITAT: The site is not in designated critical habitat of federally listed vernal pool shrimp or plants (USFWS, 2005), delta smelt (*Hypomesus transpacificus*) (USFWS, 1994), green sturgeon (NOAA, 2009), Central Valley steelhead (NOAA, 2005), or other federally listed species (Attachment D).

WILDLIFE MOVEMENT CORRIDORS: Well-developed riparian corridors are often utilized for movement by wildlife species such as deer, coyote, red fox (*Vulpes vulpes*), and bobcat (*Felis rufus*), as well as a variety of amphibians, reptiles, and fish. There are no wildlife movement corridors in the site.

HABITAT CONSERVATION PLANS: The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Conclusions and Recommendations

- The site is comprised of ruderal grassland; grassland habitat in the site is best described as highly disturbed.

- There are no potentially jurisdictional Waters of the U.S. or wetlands in the site. There are also no areas in the site meeting the criteria of Waters of the State, including wetlands.

- Due to a lack of suitable habitat, it is unlikely that special-status plants occur in the site. No special-status plants were observed and none are expected to occur in the site.

- The site provides low quality potential foraging habitat for Swainson's hawk. The conversion of this very small amount of potential Swainson's hawk foraging habitat to developed uses is viewed as less than significant. No Swainson's hawks were observed during the field survey.

- Due to a lack of suitable habitat, it is unlikely other special-status wildlife species occur in the site on more than a transitory or very occasional basis.

- The site is not within designated critical habitat for any federally listed species.

- The project will not result in adverse impacts to wildlife movement corridors.

- The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

- Pre-construction surveys for nesting Swainson's hawks within 0.25 miles of the study area are recommended within 15 days prior to the commencement of construction between March 1 and August 31. The surveys should incorporate methodologies from the Swainson's Hawk Technical Advisory Committee (SHTAC, 2000) survey guidelines. If active nests are found, it is recommended a qualified biologist should determine the need (if any) for temporal restrictions on construction pursuant to criteria outlined by the SHTAC (2000).

- The trees and grasslands in the site could be used by birds protected by the MBTA or FGCC. If vegetation removal or construction commences during the nesting season of raptors (January 1 through July 31), a pre-construction survey for nesting raptors is recommended. If vegetation removal or construction commences during the general avian nesting season (March 1 through July 31), a pre-construction survey for all species of nesting birds is recommended. If active nests are found, work in the vicinity of the nests should be delayed until the young fledge.

Please call me at (209) 745-1159 with any questions.

Sincerely,

Diane S. Moore, M.S.
Principal Biologist

References and Literature Consulted

ACOE (U.S. Army Corps of Engineers). 1987. Technical Report Y87-1. U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MI.

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Sawyer & Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society, Sacramento. California.

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USFWS. 2005a. Part II, Department of the Interior, Fish and Wildlife Service. 50 CFR Part 17: Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the California Tiger Salamander, Central Population; Final Rule. Federal Register Vol. 70, No. 162, August 23, 2005, pp. 49390 – 49458.

USFWS. 2005b. Part II, Department of the Interior, Fish and Wildlife Service. 50 CFR Part 17: Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants in California and Southern Oregon; Evaluation and Economic Exclusions from August 2003 Final Designation, Final Rule. Federal Register Vol. 70, No. 154, August 11.

Attachment A

Site Plan

CALVINSON PKWY

IN

OUT

48 PARKING STALLS

IN

BUS DROP OFF ZONE

63 PARKING STALLS

ADMIN

TK & K

PLAY AREA

COURTYARD

KITCHEN

MPR

LIBRARY
CLASS ROOMS
STAFF LOUNGE / WORKROOM

DROP OFF ZONE

WOLF PACK CT

WARD AVE

HARD COURT

SOCCER FIELD - 2

SOCCER FIELD - 1

OUT

TOTAL = 110 PARKING STALLS

SITE PLAN - OPTION 1B

SCALE : 1'=30'

PATTERSON GARDENS E.S.

1000 Calvinson Pkwy, Patterson, CA 95363

DATE : 12/11/23

NORTH

COMMUNITY ARCHITECTURE

Attachment B

CNDDB Summary Report and Exhibits

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Brush Lake (3712151) OR Patterson (3712142) OR Westley (3712152) OR Crows Landing (3712141))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Acipenser medirostris pop. 1 green sturgeon - southern DPS	AFCAA01031	Threatened	None	G2T1	S1	SSC
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Anniella pulchra Northern California legless lizard	ARACC01020	None	None	G3	S2S3	SSC
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S2	SSC
Atriplex cordulata var. cordulata heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
Atriplex minuscula lesser saltscale	PDCHE042M0	None	None	G2	S2	1B.1
Atriplex persistens vernal pool smallscale	PDCHE042P0	None	None	G2	S2	1B.2
Blepharizonia plumosa big tarplant	PDAST1C011	None	None	G1G2	S1S2	1B.1
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G2G3	S1S2	
Bombus crotchii Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Bombus pensylvanicus American bumble bee	IIHYM24260	None	None	G3G4	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branta hutchinsii leucopareia cackling (=Aleutian Canada) goose	ABNJB05035	Delisted	None	G5T3	S3	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Caulanthus lemmonii Lemmon's jewelflower	PDBRA0M0E0	None	None	G3	S3	1B.2
Ceratochrysis menkei Menke's cuckoo wasp	IIHYM71050	None	None	G2	S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
Egretta thula snowy egret	ABNGA06030	None	None	G5	S4	
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Eryngium racemosum Delta button-celery	PDAPI0Z0S0	None	Endangered	G1	S1	1B.1
Eryngium spinosepalum spiny-sepaled button-celery	PDAPI0Z0Y0	None	None	G2	S2	1B.2
Eschscholzia rhombipetala diamond-petaled California poppy	PDPAP0A0D0	None	None	G1	S1	1B.1
Falco mexicanus prairie falcon	ABNKD06090	None	None	G5	S4	WL
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S2	
Great Valley Valley Oak Riparian Forest Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	G1	S1.1	
Lanius ludovicianus loggerhead shrike	ABPBR01030	None	None	G4	S4	SSC
Lasiurus cinereus hoary bat	AMACC05032	None	None	G3G4	S4	
Lasthenia chrysantha alkali-sink goldfields	PDAST5L030	None	None	G2	S2	1B.1
Lytta moesta moestan blister beetle	IICOL4C020	None	None	G2	S2	
Masticophis flagellum ruddocki San Joaquin coachwhip	ARADB21021	None	None	G5T2T3	S3	SSC
Melospiza melodia pop. 1 song sparrow ("Modesto" population)	ABPBXA3013	None	None	G5T3?Q	S3?	SSC
Mylopharodon conocephalus hardhead	AFCJB25010	None	None	G3	S3	SSC
Navarretia nigelliformis ssp. radians shining navarretia	PDPLM0C0J2	None	None	G4T2	S2S3	1B.2
Neotoma fuscipes riparia riparian (=San Joaquin Valley) woodrat	AMAFF08081	Endangered	None	G5T1	S1	SSC
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	SSC
Pogonichthys macrolepidotus Sacramento splittail	AFCJB34020	None	None	G3	S3	SSC

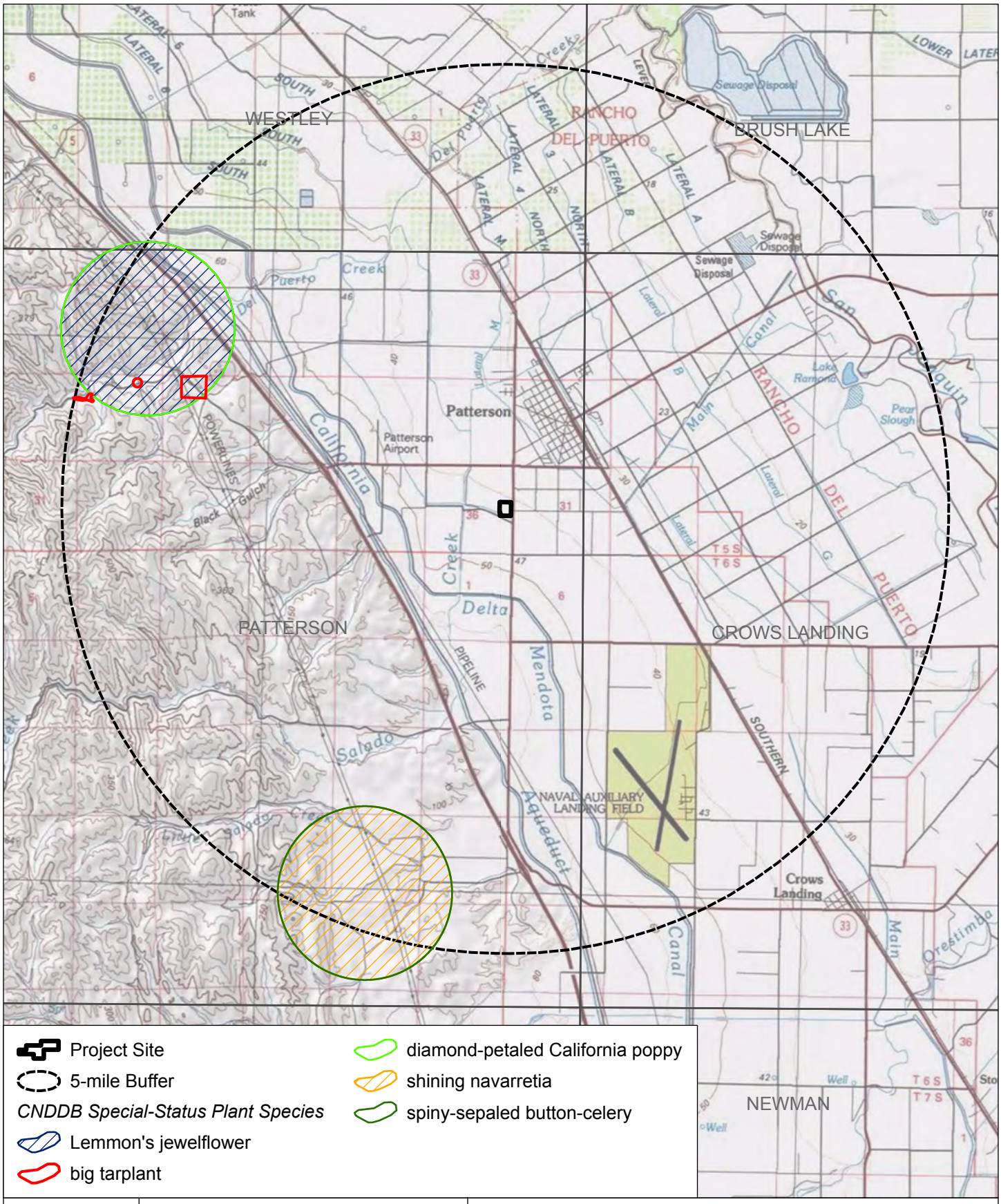
Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Puccinellia simplex California alkali grass	PMPOA53110	None	None	G2	S2	1B.2
Rana boylii pop. 4 foothill yellow-legged frog - central coast DPS	AAABH01054	Threatened	Endangered	G3T2	S2	
Spea hammondii western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Sphenopholis obtusata prairie wedge grass	PMPOA5T030	None	None	G5	S2	2B.2
Sylvilagus bachmani riparius riparian brush rabbit	AMAEB01021	Endangered	Endangered	G5T1	S2	
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	
Vulpes macrotis mutica San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S3	

Record Count: 48



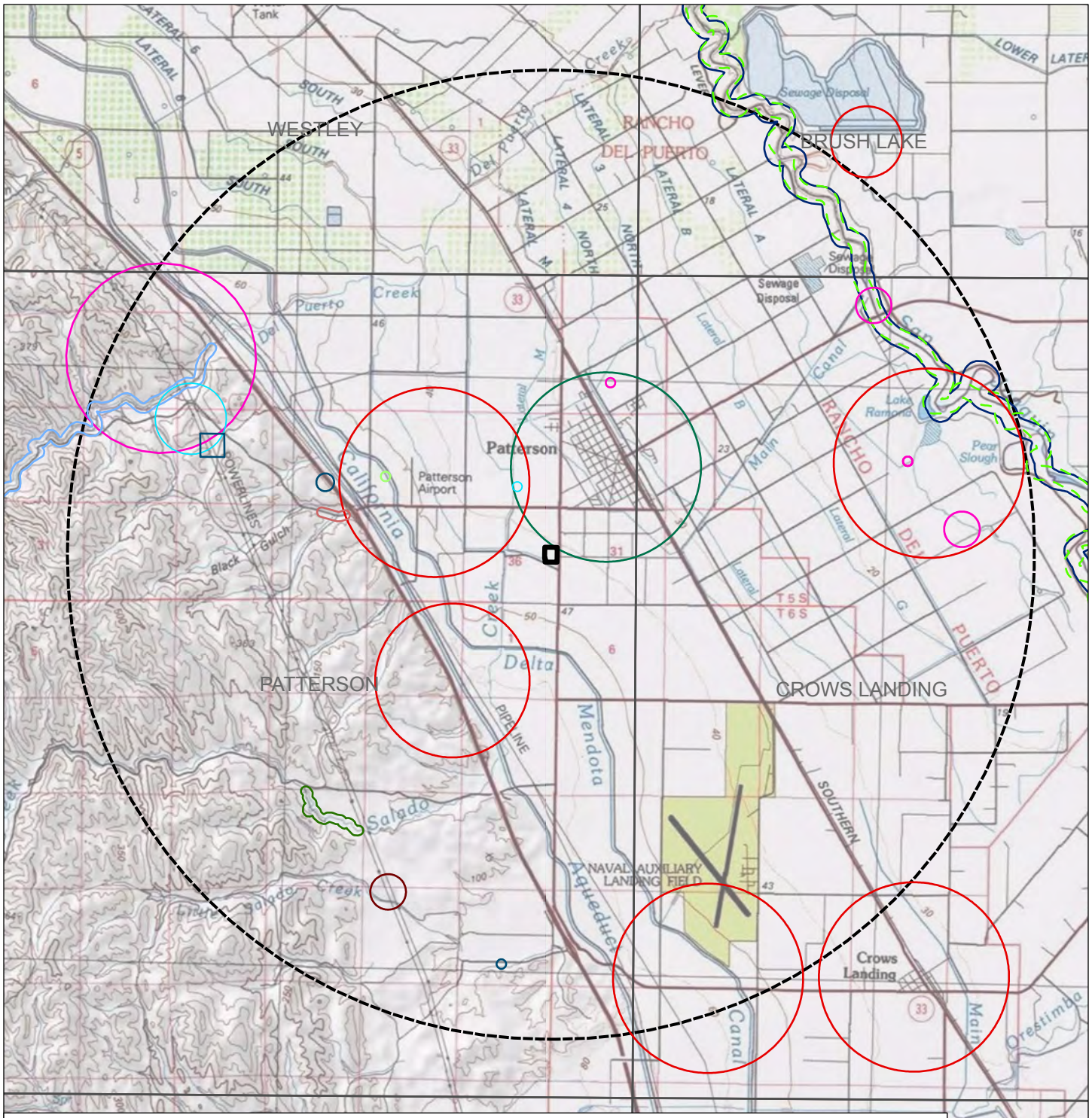
CNDDB - PLANT

Patterson Gardens School

City of Patterson, Stanislaus County, CA

Moore Biological Consultants

Map Date: 07/03/2024
Source: CDFW, USA Topo Maps (2024)



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CNDDB - WILDLIFE

Patterson Gardens School

City of Patterson, Stanislaus County, CA

Moore Biological Consultants

Map Date: 07/03/2024
Source: CDFW, USA Topo Maps (2024)

Attachment C

Photographs



Disked grassland in the site, looking east from the west edge of the site; 06/21/24.



Disked grassland in the site, looking north from the approximate central part of the site; 06/21/24.



North edge of the site, looking east along Calvinson Parkway from the northwest corner of the site; 06/21/24.



West edge of the site, looking south along Wolfpack Court from the northwest corner of the site; 06/21/24.



East edge of the site, looking south along Ward Avenue from the northeast corner of the site; 06/21/24.



Ground squirrel burrow in the southwest part of the site; 06/21/24. There were a few ground squirrel burrows scattered in the site.



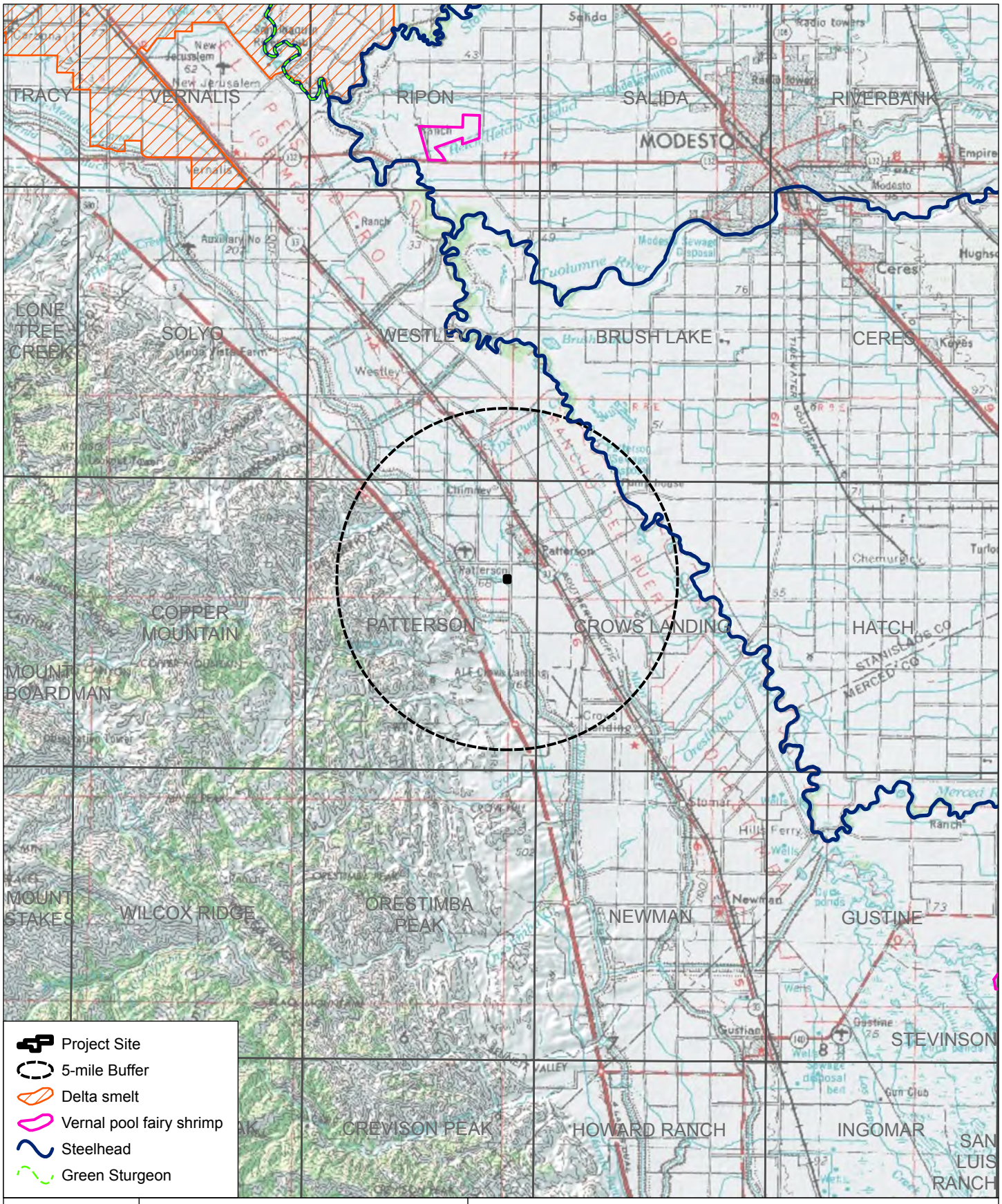
Row of trees to the south of the site, looking southwest from the southeast part of the site; 06/21/24.



Juvenile red-tailed hawks associated with the trees to the south of the site; 06/21/24. Although a nest was not seen, these hawks likely nested in these trees the past Spring.

Attachment D

Designated Critical Habitat



CRITICAL HABITAT

Patterson Gardens School

City of Patterson, Stanislaus County, CA

Moore Biological Consultants

Map Date: 07/08/2024
Source: USFWS; NOAA (2024); USA Topo Maps (2024)

APPENDIX C
CULTURAL RESOURCES ASSESSMENT
(Confidental)

APPENDIX D
GEOTECHNICAL REPORT

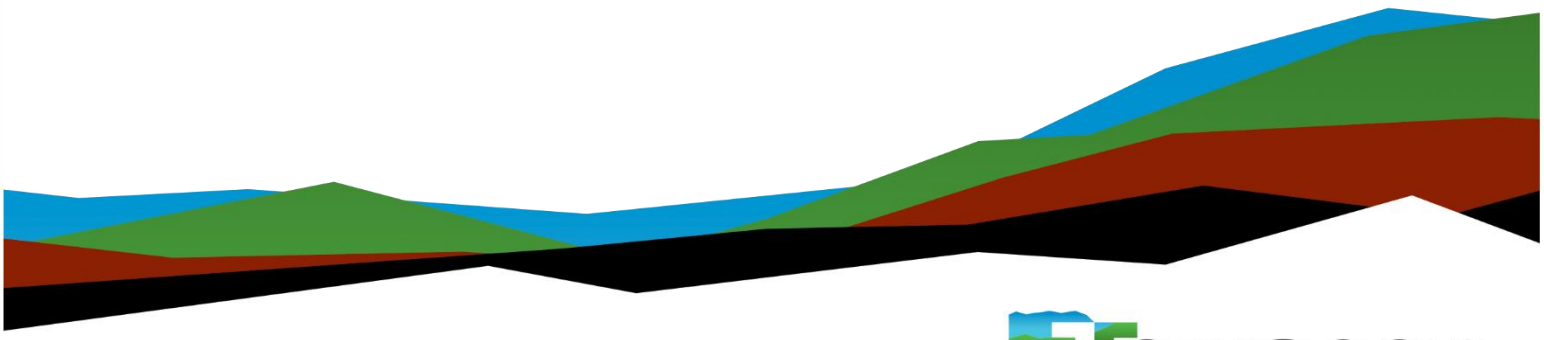
Patterson Gardens Elementary School

Geotechnical Engineering Report

May 15, 2024 | Terracon Project No. NA235132

Prepared for:

Patterson Unified School District
510 Keystone Blvd.
Patterson, CA 95363



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902 Industrial Way
Lodi, CA 92540
P (209) 367-3701
Terracon.com

May 15, 2024

Patterson Unified School District
510 Keystone Blvd.
Patterson, CA 95363

Attn: Kristi Ventura
P: (209) 495-6115
E: kventura@patterson.k12.ca.us

Re: Geotechnical Engineering Report
Patterson Gardens Elementary School
1000 Calvinson Parkway
Patterson, CA
Terracon Project No. NA235132

Dear Kristi:

We have completed the scope of Geotechnical Engineering services for the referenced project in general accordance with Terracon Proposal No. PNA235132 dated December 6, 2023. This report presents the findings of the subsurface exploration and provides geotechnical recommendations concerning earthwork and the design and construction of foundations and floor slabs for the proposed project.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,

Terracon

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER CONGRAVE
NO. C92512
CIVIL
STATE OF CALIFORNIA

Christopher B. Congrave, PE 92512
Geotechnical Group Manager

Garret S.H. Hubbart, GE 2588
Regional Manager

John S. McKeown, CEG 2396
Senior Geologist

PROFESSIONAL GEOLOGIST
JOHN S. McKEOWN
No. EG2396
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

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Exploration and Testing Procedures
Site Location and Exploration Plans
Exploration and Laboratory Results
Supporting Information

Note: This report was originally delivered in a web-based format. **Blue Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the terracon logo will bring you back to this page. For more interactive features, please view your project online at **client.terracon.com**.

Refer to each individual Attachment for a listing of contents.

Report Summary

Topic [1]	Overview Statement [2]
Project Description	The project includes construction of a new elementary school to include administration offices, multi-purpose rooms, library, and classrooms along with associated parking and playground areas.
Geotechnical Characterization	Near surface soils generally consist of medium stiff to very stiff lean clay with various amounts of sand. Underlying soils generally consist of similar clays with some interbedded layers of silt and sand. Groundwater not observed in our borings at the time of our exploration. Upon review of historical groundwater information a State Well No. 05S08E31E001M, located approximately 0.3 mile east of the site, indicated a groundwater depth of 24 feet below ground surface (bgs) in April 1978.
Earthwork	Preliminary grading plans were not available for review at the time this report was prepared. We have assumed site grades will generally remain similar, if not the same, as existing at the time this report was prepared. Cuts and fills on the order of 4 feet or less are anticipated to be required to develop final grades, excluding remedial grading requirements. Excavated on-site clay soils have low to medium plasticity, are expansive, and should not be used as engineered fill.
Shallow Foundations	Shallow foundations are recommended for building support Allowable bearing pressure = 2,000 psf Expected settlements: < 1-inch total, < ½-inch differential
Pavements	See the **Pavements** section for pavement recommendations.
General Comments	This section contains important information about the limitations of this geotechnical engineering report.

1. If the reader is reviewing this report as a pdf, the topics in the table can be used to access the appropriate section of the report by simply clicking on the topic itself.
2. This summary is for convenience only. It should be used in conjunction with the entire report for design purposes.

Introduction

This report presents the results of our subsurface exploration and Geotechnical Engineering services performed for the proposed elementary school to be located at 1000 Calvinson Parkway in Patterson, CA. The purpose of these services was to provide information and geotechnical engineering recommendations relative to:

- Subsurface soil conditions
- Groundwater conditions
- Seismic site classification per the 2022 California Building Code (CBC)
- Site preparation and earthwork
- Foundation design and construction
- Floor slab design and construction
- Lateral earth pressure
- Pavement design and construction
- Liquefaction potential

The geotechnical engineering Scope of Services for this project included the advancement of test borings, laboratory testing, engineering analysis, and preparation of this report.

Drawings showing the site and boring locations are shown on the **Site Location** and **Exploration Plan**, respectively. The results of the laboratory testing performed on soil samples obtained from the site during our field exploration are included on the boring logs and/or as separate graphs in the **Exploration Results** section.

Project Description

Our initial understanding of the project was provided in our proposal and was discussed during project planning. A period of collaboration has transpired since the project was initiated, and our final understanding of the project conditions is as follows:

Item	Description
Information Provided	An email request for proposal was provided by Kristi Ventura with the District on November 30, 2023. The request included a conceptual site plan of the planned development.
Project Description	The project includes construction of a new elementary school to include administration offices, multi-purpose rooms, library, and classrooms along with associated parking and playground areas.

Item	Description
Proposed Structure	Structures associated with the project include single-story classroom buildings with a footprint of about 16,000 square feet (SF) to 25,000 SF, a single-story administration building with a footprint of about 5,000 square feet, a single-story library building with a footprint of about 7,000 square feet, and a single-story multi-purpose building with a footprint of about 13,000 square feet.
Building Construction	We anticipate construction may consist of steel/wood framed or masonry wall structures supported on shallow foundations with concrete slab on grade floors.
Finished Floor Elevation	The finished floor elevation was not provided. Boring depths have assumed that finished floor is within 2 feet of existing grade.
Maximum Loads	Anticipated structural loads were not provided. In the absence of information provided by the design team, we used the following loads in estimating settlement based on our experience with similar projects. ▪ Columns: 30 to 60 kips ▪ Walls: 1 to 4 kips per linear foot (klf) ▪ Slabs: 150 pounds per square foot (psf)
Grading	A preliminary grading plan was not available for review at the time this proposal was prepared. Approximately 4 feet of cut and 4 feet of fill may be required to develop final grade, excluding remedial grading requirements.

Item	Description
Pavements	Paved driveway, parking, or playground area may be constructed as part of this project. Asphalt and Concrete surfacing are common in the area for projects of this nature. The anticipated ACI traffic categories and daily truck traffic will be assumed to consist of: ■ Category A: Car parking areas and access lanes, 1 truck per day ■ Category B: Entrance and truck service lanes, 10 trucks per day ■ Category C: Buses ■ Category E: Garbage or fire truck lanes We assume the following traffic indices (TIs) will be used: ■ Walkways and Playground: TI = 4.5 ■ Auto Parking Areas: TI = 5.0 ■ Auto Road: TI = 5.5 ■ Bus Parking Areas: TI = 6.0 The pavement design period is 20 years.
Building Code	2022 California Building Code (CBC)

Terracon should be notified if any of this information is inconsistent with the planned construction, especially the grading limits, as modifications to our recommendations may be necessary.

Site Conditions

The following description of site conditions is derived from our site visit in association with the field exploration and our review of publicly available geologic and topographic maps.

Item	Description
Parcel Information	The project is located at 1000 Calvinson Parkway in Patterson, CA. APN: 021-027-038-000 Latitude/Longitude (approximate): 37.4578°N, 121.1422°W See **Site Location**
Existing Improvements	The site is a vacant lot that was formerly used for row crops before the area was mass graded for the surrounding development.
Current Ground Cover	The site consists of bare ground with light to moderate native vegetation.
Existing Topography	The property is relatively flat based on a review of Google Earth. Actual elevations can be referenced if a site-specific topo map is provided. Boring depths have been estimated in part with this information and improved topographic information should be provided if available.

Geotechnical Characterization

We have developed a general characterization of the subsurface conditions based upon our review of the subsurface exploration, laboratory data, geologic setting, and our understanding of the project. This characterization, termed GeoModel, forms the basis of our geotechnical calculations and evaluation of the site. Conditions observed at each exploration point are indicated on the individual logs. The individual logs can be found in the **Exploration Results** and the GeoModel can be found in the **Figures** attachment of this report.

As part of our analyses, we identified the following model layers within the subsurface profile. For a more detailed view of the model layer depths at each boring location, refer to the GeoModel.

Model Layer	Layer Name	General Description
1	**Lean Clay**	Medium stiff to hard lean clay with various amounts of sand
2	**Sand**	Medium dense to very dense sand with various amounts of clay or silt
3	**Silt**	Medium stiff to very stiff silt with various amounts of sand

Additional borings, auger probes, test pits, or geophysical testing could be performed to obtain more specific subgrade information.

Groundwater Conditions

Groundwater was not encountered within the maximum 51.5-foot depth of our borings at the time of our exploration. Nearby wells recorded by the California Department of Water Resources were researched for area groundwater levels. State Well No. 05S08E31E001M, located approximately 0.3 mile east of the site, indicated a groundwater depth of 24 feet below ground surface (bgs) in April 1978. The elevations between the project site and the monitoring well are relatively similar based on Google Earth.

Groundwater conditions may change because of seasonal variations in rainfall, runoff, and other conditions not apparent at the time the borings were performed. Therefore, groundwater levels during construction or at other times in the life of the structure may be higher or lower than the levels indicated on the boring logs. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

Geologic Hazards

The site is located within the San Joaquin Valley - the southern part of the Great Valley Geomorphic Province. The Great Valley is an alluvial plain that lies within central California and is separated along the Stockton Arch into northern and southern basins. The Great Valley is a trough into which sediments have been deposited since Jurassic time. The surface geology of the site is mapped as Quaternary age alluvium of the valley areas. A Geologic Map based on Dibble and Minch (2007) is attached.

Faulting and Seismicity

Regional Faults

The tectonics of the central California area are dominated by the interaction of the North American and Pacific tectonic plates, which are sliding past each other in transform motion. The San Andreas fault zone represents the major surface expression of the tectonic boundary and accommodates a significant portion of the slip between the Pacific and North American plates. Some of the slip is accommodated by other northwest-trending strike-slip faults that are related to the San Andreas system, such as the Concord-Green Valley fault and Hayward fault. The Great Valley thrust fault system marks a boundary between the Coast Ranges and Central Valley of California. A **Regional Faults** map is attached.

The Stockton fault is a basin structure associated with the Stockton Arch, an ancient antiform at the north end of the San Joaquin structural basin (Bartow, 1991). This fault is buried beneath the alluvium and sediments of the valley and is considered inactive for planning purposes.

Fault Rupture Potential: The site is not located within an Alquist-Priolo Earthquake Fault Zone (APZ) designated by the State of California for active faults (https://www.conservation.ca.gov/cgs/geohazards/eq-zapp). The closest APZ boundary, designated for the Greenville fault, is located approximately 16 miles (25 kilometers) southwest of the site. Known faults or fault-related features are not located within the site; therefore, the potential for fault rupture within the site is considered low.

The following table summarizes mapped faults in the site region.

Fault	Distance (km)	Direction	Magnitude[1]	Type
San Joaquin	2.5	SW	7.3[3]	Blind thrust
Great Valley 7– Orestimba	5.9	SW	6.9	reverse
Greenville	30	WSW	6.9	Strike slip
Calaveras	51	SW	6.86	Strike slip
Hayward	53	SW	7.58	Strike slip
Las Positas	54	NW	6.5	Strike slip
Great Valley 6– Midland	62	NW	7.12	reverse
Mount Diablo Thrust	64	NW	6.72	thrust
Foothills Fault System	68	NE	6.5[2]	--
San Andreas	73	SW	8.04	Strike slip
Great Valley 5 -Pittsburg – Kirby Hills	88	NW	6.6	reverse
Concord	90	NW	6.45	Strike slip
Vaca	91	NW	6.6	Strike slip

[1] Magnitude per BSSC (2014) scenario events (https://earthquake.usgs.gov/scenarios/catalog/bssc2014)

[2] estimated based on length.

[3] Gaviott and Meigs (2021).

Historical Seismicity

The following table summarizes selected seismic events in the site region.

Date	Distance from Site (km)	Direction	Magnitude
9-19-2023	14	W	4.5
4-10-1881	23	SW	6.3
08-06-1979	37	NW	4.3

Date	Distance from Site (km)	Direction	Magnitude
7-15-1866	40	NW	6.0
11-26-1858	58	W	6.2
01-27-1980	59	NW	5.4
6-11-1903	64	SW	6.1
03-05-1864	64	W	6.0
07-16-2019	68	NW	4.3
10-08-1865	73	SW	6.5
06-25-1838	90	W	7.4
05-19-1889	92	NW	6.0
10-15-2019	98	NW	4.5
04-19-1892	128	NW	6.6
04-18-1906	128	WNW	7.9
08-24-2014	134	WNW	6.0

A search of the USGS earthquake catalog (USGS, 2024a) for earthquakes of magnitude 4.5 or greater within 150 kilometers of the site returned 471 results including 2 events of magnitude 7 or greater, 30 events of magnitude 6 to 7, 72 events of magnitude 5 to 6, and 129 events of magnitude 4.5 to 5. A **Regional Seismicity** map based on these data is attached.

Based on the seismic setting and history of the greater Bay Area and Great Valley regions, a potential exists for strong ground shaking to occur within the lifetime of the proposed project. Seismic shaking hazard can be addressed by application of building code provisions that consider building use and type, geographic location, site geologic conditions, and distance to seismic sources.

Slope Stability and Lateral Spreading

The California Geological Survey (CGS) has designated certain areas within California as potential seismically-induced landslide hazard zones. These are areas considered at a risk of slope failure during a seismic event, based upon mapped surficial deposits and ground-shaking potential. The project area has not been evaluated by CGS for seismically-induced landslide hazard zoning.

The site is situated in a relatively planar area of low relief. Slopes or natural features conducive to slope instability are not located in the project area. The potential for landslide or lateral spreading is very low. The potential for earthquake-induced landsliding is also very low.

Flooding

Based on a review of the Federal Emergency Management Agency (FEMA) National Flood Layer (NFHL) the project site is a Special Flood Hazard Area, subject to inundation by the 1% annual chance flood.

Dam inundation from reservoirs impounded by dams in the Sierra Nevada east of the site are not indicated as a potential threat to the Patterson area (Stanislaus County General Plan, 2015). These dams are monitored by State and/or Federal agencies for seismic safety.

The site is not within a coastal area or within ¼ mile of a large open water body; therefore, no potential for tsunami or seiche exists at the site.

Subsidence

Subsidence due to fluid withdrawal (groundwater, oil, gas) or peat oxidation is not documented in the site area (USGS, 2024b, 2018a, 2018b). The potential for subsidence to affect the proposed project is low.

Oil and Gas Exploration

According to available mapping by the California Division of Oil, Gas and Geothermal Resources, the subject property is not located within, or near, any gas or oil production area (see **Oil and Gas Map**). The closest mapped well is a plugged and abandoned gas well approximately 3 kilometers from the site (CalGEM, 2024). We do not consider oil- or gas-related hazards to be potential hazards at the site.

Additional Hazards

Radon is a naturally occurring, colorless and tasteless gas produced in soil or rock by the decay of uranium and radium; radon is a known cause of lung cancer in the United States. Sections 307 and 309 of the Indoor Radon Abatement Act of 1988 (IRAA) directed EPA to list and identify areas of the U.S. with the potential for elevated indoor radon levels. EPA's Map of Radon Zones (EPA, 2019) assigns each of the 3,141 counties in the U.S. to one of three zones based on radon potential. Stanislaus County and the project site are located in Zone 3 for radon potential. Zone 3 counties have a predicted average indoor radon screening level less than 2 pCi/L and are anticipated to have a low potential for radon.

The site is not within an area indicated by State of California as having a potential for indoor radon (CGS, 2023).

The site is not within an area indicated as having a potential for asbestos minerals (CGS, 2000)

Liquefaction

Liquefaction is a mode of ground failure that results from the generation of high pore water pressures during earthquake ground shaking, causing loss of shear strength. Liquefaction is typically a hazard where loose sandy soils or low plasticity fine grained soils exist below groundwater. The California Geological Survey (CGS) has designated certain areas within California as potential liquefaction hazard zones. These are areas considered at a risk of liquefaction-related ground failure during a seismic event, based upon mapped surficial deposits and the presence of a relatively shallow water table. The project site (Patterson quadrangle) has not been evaluated by the CGS for liquefaction hazards. Due to the depth of historical groundwater, less than 50 feet bgs, and as required by CGS, a liquefaction analysis for the site has been performed and is included within this report.

Seismic Considerations

The San Joaquin Valley of California is a relatively moderate seismicity region. The type and magnitude of seismic hazards affecting the site are dependent on the distance to causative faults, the intensity, and the magnitude of the seismic event. The following information is based on the 2018 USGS seismic model, as calculated using the USGS Earthquake Hazard Toolbox. Fault sources that contribute to the seismic hazard for the site include the Great Valley – Orestimba segment, Ortigalita – North segment, and the Calaveras – Center segment, with disaggregated model distances of approximately 10 kilometers, 22 kilometers, and 49 kilometers, respectively. Non-fault 'gridded' or background seismic sources are not considered to have significant effect at the site from a design standpoint. A Mean Earthquake Magnitude of 6.38 may be considered for this site based on the USGS disaggregation.

Based on the ASCE 7-16 Standard, the site-modified design peak ground acceleration (PGA_M) at the subject site is 0.585g. Based on the USGS 2018 interactive disaggregation, the PGA at the subject site for a 2% probability of exceedance in 50 years (return period of 2475 years) is calculated as 0.515g.

The 2022 California Building Code (CBC) Seismic Design Parameters have been generated using the SEAOC/OSHPD Seismic Design Maps Tool. This web-based software application calculates seismic design parameters in accordance with ASCE 7-16, and 2022 CBC. The 2022 CBC requires that a site-specific ground motion study be performed in accordance with Section 11.4.8 of ASCE 7-16 for Site Class E sites with a mapped S_s value greater than or equal 0.2.

However, Section 11.4.8 of ASCE 7-16 (updated in Supplement 3) includes an exception from such analysis where specific structural design procedures are used. The structural engineer should verify the applicability of this exception.

Based on this exception, the spectral response accelerations presented in the following table were calculated using the site coefficients (F_a and F_v) from Tables 1613.2.3(1) and 1613.2.3(2) presented in Section 16.4.4 of the 2022 CBC.

Description	Value
2022 California Building Code (CBC) Site Classification[1]	F[2]
Risk Category	II
Site Latitude[3]	37.4578º N
Site Longitude[3]	121.1422º W
S_S, Spectral Acceleration for a Short Period[4]	1.08
S_1, Spectral Acceleration for a 1-Second Period[4]	0.378
Fa, Site Coefficient	1.2
Fv, Site Coefficient (1-Second Period)	2.488
S_{DS}, Spectral Acceleration for a Short Period	0.864
S_{D1}, Spectral Acceleration for a 1-Second Period	0.627

1. Seismic site soil classification in general accordance with the *2022 California Building Code*, which refers to ASCE 7-16. Site Classification is required to determine the Seismic Design Category for a structure.
2. The Site Classification is based on the upper 100 feet of the site profile defined by a weighted average value of either shear wave velocity, standard penetration resistance, or undrained shear strength in accordance with Section 20.4 of ASCE 7-16 and the 2022 CBC. Subsurface explorations at this site were extended to a maximum depth of approximately 51½ feet bgs. The site properties below the maximum exploration depth to 100 feet were estimated based on our experience and knowledge of geologic conditions of the general area. Additional deeper exploration or geophysical testing may be performed to confirm the conditions below the current maximum depth of exploration.
3. Provided coordinates represent a point located at the general center of the site.
4. These values were obtained using online seismic design maps and tools provided by SEAOC and OSHPD (**https://seismicmaps.org/**).

Description	Value
5. This site qualifies as a site class F due to the presence of liquefiable soils. A site class E was used to develop the listed seismic design parameters due to soils encountered in the boring. Based on the exception for liquefiable soils provided in ASCE 7-16 Section 11.4.8 revised in Supplement 3, structures may use the listed design parameters provided the site has S_S greater than or equal to 1.0 or S_1 greater than or equal to 0.2, where certain specific design procedures are used. Otherwise, a site-specific ground motion analysis is required to develop seismic design parameters. Terracon is qualified to perform such an analysis.	

Typically, a site-specific ground motion study may reduce construction costs. We recommend consulting with a structural engineer to evaluate the need for such a study and its potential impact on construction costs. Terracon should be contacted if a site-specific ground motion study is desired.

Liquefaction

We performed a liquefaction hazard evaluation in general compliance with the California Geological Survey (CGS) Special Publication 117A (2008); Southern California Earthquake Center "Recommended Procedures for Implementation of DMG Special Publication 117 Guidelines for Analyzing and Mitigating Liquefaction Hazards in California," 1999 report.

As recommended in these reports, we performed a screening analysis to determine if there is a potential for liquefaction to occur at the site. We evaluated the soils encountered in our borings advanced to a maximum depth of 51½ feet below the existing ground surface (bgs). We evaluated these soils based on soil classification, corrected SPT blow counts, water content, Atterberg limits, groundwater elevation, and peak ground acceleration. In our screening investigation we looked at the Atterberg limits for cohesive soils in the upper 50 feet of our soil borings. The Atterberg limits for these cohesive soils exhibited a liquid limit ranging from 24 to 37 and a plasticity index ranging from 9 to 24. We also calculated the ratio of the in-situ moisture content to the liquid limit. This data was then compared to the criteria by Idriss and Boulanger (2006) and Bray and Sancio (2006) for potential liquefaction or cyclic softening of fine-grained soils. The cohesive soils classify as "clay-like" and non-liquefiable by Idriss/Boulanger. Additionally, due to the in-situ moisture content to the liquid limit being less than 85 percent in the cohesive soils, we believe the cohesive soils have a low susceptibility to liquefaction by Bray/Sancio. However, cohesionless soils were present in the soil profile that do have the potential for liquefaction. As a result, we performed a quantitative evaluation of the potential for liquefaction to occur considering the cohesionless soils only and the effects if liquefaction were to occur on this project.

A Peak Ground Acceleration (PGA_m) of 0.585g and an earthquake magnitude of 6.38 for the project site was used in our evaluation. A groundwater depth of 24 feet was utilized in our evaluation.

The liquefaction study and analysis of seismic settlement of unsaturated sands utilized the software "LiquefyPro" by CivilTech Software. The analysis was based on the soil data obtained from our borings. Analyses were performed on data obtained from boring B1. Fines corrections were made using the Modify Stark/Olson method. The settlement analyses used the Ishihara/Yoshimine method. A factor of safety of 1.3 was used against liquefaction. The liquefaction potential analysis was calculated from a depth of 0 to 50 feet bgs. A summary of the results of our analyses has been attached to this report.

Based on the analysis, the soil layers contributing to the majority of potential liquefaction settlement were encountered between the depths of approximately 28 feet bgs and 32 feet bgs. Based on our review of the calculations, the anticipated potential total liquefaction-induced settlement across the site is about 1 inch. We estimate the differential liquefaction-induced settlement may be about ½ of total settlement or less due to the near surface medium stiff to hard clays.

With regards to the potential for lateral spreading, we note that the site and surrounding area is relatively level. Therefore, the potential for lateral spreading during a strong seismic event is low.

Infiltration

We performed two double-ring infiltrometer tests within the proposed site development for use by the project civil engineer. The infiltration tests were performed using test pits DR1 and DR2 excavated to a depth of about 4 feet bgs. The approximate locations of the test pits are shown on the **Exploration Plan**.

The test pits were excavated with a rubber-tired backhoe. The infiltration tests were performed in the bottom of the test pits. Following completion of the tests, the test pits were backfilled by the backhoe, using the soil excavated from the test pits. The test pits were not backfilled to standards typical of engineered fill.

The infiltration tests were performed utilizing a double ring infiltrometer in general accordance with the ASTM D3385 test method. The calculations are based on the volume of water displaced over the measured time interval of 30 minutes. In this method, both the inner and outer rings were driven into the excavated soil layer approximately 6 inches. A reference point was marked to ensure the water was refilled in the inner and outer ring to the same level after each reading. Measurements using a steel tape measure was used for reference.

The measured infiltration rates using double ring infiltrometers are summarized in the following table.

Perc. Test Location	Depth (ft)	Avg. Head (inch)	Soil Type	Infiltration Rate (inch/hr)	Infiltration Rate (cm/sec)
DR1	4	6	Lean Clay with Sand	3.0	0.0021
DR2	4	6	Lean Clay with Sand	1.5	0.0011

Since our tests were performed using clean water, the storm water runoff may likely contain materials such as silt, leaves, oil residues, and other matter that may reduce the percolation characteristics of the soil. We therefore recommend that a filtration system be implemented into the design and installed. An appropriate safety factor should be applied to the measured infiltration rates by the designer for use in design and be based on the amount of filtration designed into the system, at a minimum a Safety Factor of 2 shall be utilized. The values above are clear water rates and do not have a safety factor applied. In addition, we recommend a regular maintenance program be implemented to monitor the storm drainage/filtration system prior to the beginning of each wet weather season.

We have provided the following considerations for the design and construction of the retention/detention facilities. Planned retention/detention facilities should be located no closer than 10 feet to structural site improvements.

The long-term infiltration rates will depend on many factors, and can vary or be reduced if the following conditions are present:

- Fill placement,
- Variability of site soils,
- Fine layering of soils, or
- Maintenance and pre-treatment (filtration) of the influent are not performed regularly

Fill Placement: We anticipate earthwork required to develop the site may consist of cuts and fills of 2 feet or less. It is unknown whether final grades will consist of native material or imported fill. As a result, the percolation tests performed may not be representative of the final soil conditions depending on the blend of soils utilized as structural fill and native soils exposed where cuts and fills are made. Additional

percolation testing may be warranted following rough grading to confirm the values utilized in design are appropriate.

Subsurface Soil Variation: Variations in subsurface soil conditions and the presence of fine layering can affect the infiltration rate of the receptor soils. Due to variation in thickness of the upper surface fine grained soils, infiltration rates may vary across the site.

Construction Considerations: The infiltration rate of the receptor soils will be reduced in the event that fine sediment, organic materials, and/or oil residue are allowed to accumulate in the retention facilities. The use of a filtration system is highly recommended as well as a maintenance program.

Operation of heavy equipment during construction may densify the receptor soils below the infiltration facility. The soils exposed in the bottom of the infiltration facility should not be compacted and should remain in their native condition. This may require scarification of the soils prior to construction.

Maintenance of Facilities: Satisfactory long-term performance of an infiltration facility will require some degree of maintenance. Accumulations of sediment, organic materials, or other material that serve to reduce their permeability of the receptor soils should be removed from the filtration system on a regular basis so as not to enter the retention system. The filtration system shall have a rigorous maintenance program, debris from the filtration maintenance should be disposed of at an approved facility in accordance with applicable regulation.

Corrosivity

The following table lists the results of laboratory soluble sulfate, soluble chloride, electrical resistivity, and pH testing. The values may be used to estimate potential corrosive characteristics of the on-site soils with respect to contact with the various underground materials which will be used for project construction.

Corrosivity Test Results Summary

Boring	Sample Depth (feet)	Soil Description	Soluble Sulfate (%)	Soluble Chloride (%)	Electrical Resistivity (Ω-cm)	pH
B12	2½	Lean Clay	0.006	nil	1,800	8.26

Results of soluble sulfate testing can be classified in accordance with ACI 318 – Building Code Requirements for Structural Concrete. Numerous sources are available to characterize corrosion potential to buried metals using the parameters presented in the

previous table. ANSI/AWWA is commonly used for ductile iron, while threshold values for evaluating the effect on steel can be specific to the buried feature (e.g., piling, culverts, welded wire reinforcement, etc.) or agency for which the work is performed. Imported fill materials may have significantly different properties than the site materials noted in the table and should be evaluated if expected to be in contact with metals used for construction. Consultation with a NACE certified corrosion professional is recommended for buried metals on the site.

Mapping by the NRCS includes qualitative severity of corrosion to concrete and steel. Based on this source, the near-surface materials are rated "Low" for corrosion to concrete and "Moderate" for corrosion of steel.

Geotechnical Overview

The subject site has geotechnical considerations that will affect the construction and performance of the proposed improvements that are discussed in this report. The primary geotechnical considerations that have been identified at the subject site that will affect development are the following:

- Expansive soils
- Liquefaction settlement

Expansive Soils

Medium plasticity soils which are slightly (low potential) expansive are present on this site. This report provides recommendations to help mitigate the effects of soil shrinkage and expansion. However, even if these procedures are followed, some movement and (at least minor) cracking in the structure should be anticipated. The severity of cracking and other damage such as uneven floor slabs will probably increase if modification of the site results in excessive wetting or drying of the expansive soils. Eliminating the risk of movement and distress may not be feasible, but it may be possible to further reduce the risk of movement if significantly more expensive measures are used during construction. Some of these options are discussed in this report such as complete replacement of expansive soils or chemical stabilization using high calcium quick lime.

Laboratory testing was performed on the near surface clay soils from boring B13 and B20 for expansion index properties. Test results indicate that the expansion index of 41 for boring B13 and 33 for boring B20 at testing depths of about 2½ feet bgs correlates to a "low" expansive potential.

The near surface, medium stiff to very stiff medium plasticity lean clay could become unstable with typical earthwork and construction traffic, especially after precipitation events. The effective drainage should be completed early in the construction sequence and maintained after construction to avoid potential issues. If possible, the grading should be performed during the warmer and drier times of the year. If grading is performed during the winter months, an increased risk for possible undercutting and replacement of unstable subgrade will persist. Additional site preparation recommendations, including subgrade improvement and fill placement, are provided in the **Earthwork** section.

The soils which form the bearing stratum for shallow foundations are plastic and exhibit potential for shrink-swell movements with changes in moisture. Maintaining above optimum moisture conditions in the bearing soils and a minimum dead load pressure on footings should reduce the anticipated swell movements to tolerable levels. The **Shallow Foundations** section addresses support of the building directly bearing on structural fill or lean concrete. We do not expect significant dead load on the floors and recommend over-excavation of near-surface medium plasticity clays to reduce the heave potential. The **Floor Slabs** section addresses slab-on-grade support of the building using over-excavation techniques.

Liquefaction Settlement

There is a potential for strong earthquake shaking within the lifetime of the structure, and there is a potential for liquefaction at the site. Seismically-induced settlements of up to 1 inch should be expected in the event of liquefaction during the design earthquake. The differential liquefaction-induced settlement is anticipated to be less than ½ of total settlement over 30 feet due to the upper 20 plus feet consisting of medium stiff to hard clay. Due to the cohesive nature and thickness of non-liquefiable soils across the surface of the site as well as the lithology consisting predominantly of clayey soils, we believe the probability for liquefaction to manifest at the surface as well as any associated lateral spreading is minor. Given the lack of manifestation to the surface, there should not be any loss of bearing support at the foundations.

If the proposed buildings can tolerate the estimated total and differential settlements noted, the building may be supported by **Shallow Foundations**. Per the 2022 CBC **Shallow Foundations** shall be interconnected by foundation ties designed to accommodate the differential settlements between adjacent footings due to the potential for liquefaction. As an alternative, the effects of the anticipated liquefaction settlement could be mitigated by supporting the proposed building on a mat slab or deep foundations that derive support below the potentially liquefiable soils or by ground improvement methods. Terracon shall be consulted to provide recommendations for these alternatives if one of these systems is desired.

The recommendations contained in this report are based upon the results of field and laboratory testing (presented in the **Exploration Results**), engineering analyses, and our current understanding of the proposed project. The **General Comments** section provides an understanding of the report limitations.

Earthwork

We anticipate grading may consist of cuts and fills on the order of 4 feet or less and that site grades will be within 2 feet of existing grades. Specific site grading information was unavailable at the time this report was prepared. If elevation and site grading differ from our stated assumptions, Terracon should be contacted to determine if additional earthwork recommendations are warranted, particularly with regard to potential ground settlement.

Earthwork is anticipated to include clearing and grubbing, excavations, and engineered fill placement. The following sections provide recommendations for use in the preparation of specifications for the work. Recommendations include critical quality criteria, as necessary, to render the site in the state considered in our geotechnical engineering evaluation for foundations, floor slabs, and pavements.

Site Preparation

Prior to placing fill, existing vegetation, topsoil, and root mats should be removed. Complete stripping of the topsoil should be performed in the proposed building and parking/driveway areas. Stripping should extend laterally a minimum of 5 feet beyond the limits of proposed improvements.

Although no evidence of fill or underground facilities (such as septic tanks, cesspools, basements, and utilities) was observed during the exploration and site reconnaissance, such features could be encountered during construction. If unexpected fills or underground facilities are encountered, such features should be removed, and the excavation thoroughly cleaned prior to backfill placement and/or construction.

Subgrade Preparation

After clearing, any required cuts and overexcavation should be made.

In order to provide more uniform foundation support, we recommend that the soils within the footprint of the proposed structures be removed to a minimum depth of 2 feet below the bottom of footings, or 4 feet below existing grades, whichever is deeper. Recompacted native soil or structural fill may be used for footing bearing support. Structural fill should be placed a minimum of 12 inches beneath the entire footprint of

the floor slab should extend horizontally a minimum distance of 5 feet beyond the outside edge of footings. On-site soils are not considered suitable to be used as structural fill materials unless they are chemically treated.

Subgrade soils beneath proposed exterior slabs should be removed to a depth of 12 inches beneath proposed slab section, or existing grade, whichever is greater and replaced with granular structural fill or the subgrade shall be chemically treated to a depth of 12 inches. Native subgrade soils beneath proposed pavements should be scarified to a depth of 1 foot beneath proposed pavement section, or existing grade, whichever is greater.

Excavated material may be stockpiled for use as fill provided it is cleaned of organic material, debris, and any other deleterious material and meets the criteria for general or structural fill specified in the ***Fill Material Types*** section of this report.

Once cuts and over-excavation operations are complete, the resulting subgrade should be proofrolled with an adequately loaded vehicle such as a fully-loaded tandem-axle dump truck. The proofrolling should be performed under the observation of the Geotechnical Engineer or their representative. Areas excessively deflecting under the proofroll should be delineated and subsequently addressed by the Geotechnical Engineer. Such areas should either be removed or modified by stabilizing as noted in the ***Soil Stabilization*** section. Excessively wet or dry material should either be removed, or moisture conditioned and recompacted.

The depth of scarification of subgrade soils and moisture conditioning of the subgrade is highly dependent upon the time of year of construction and the site conditions that exist immediately prior to construction. If construction occurs during the winter or spring, when the subgrade soils are typically already in a moist condition, scarification and compaction may only be 8 inches. If construction occurs during the summer or fall when the subgrade soils have been allowed to dry out deeper, the depth of scarification and moisture conditioning may be as much as 18 inches or more. A representative from Terracon should be present during earthwork to observe the exposed subgrade and confirm the depth of scarification and moisture conditioning required.

Following scarification, moisture conditioning, and compaction of the subgrade soils, compacted structural fill soils should then be placed to the proposed design grade and the moisture content and compaction of subgrade soils should be maintained until foundation or pavement construction.

Soft soil conditions could be encountered in the bottom of excavations. These soils may be unworkable. The contractor may utilize dry crushed rock or clean granular fill material placed over a geotextile such as Tensar NX850 geogrid or equivalent to stabilize wet subgrade materials in the bottom of the excavations prior to backfill. If further soil stabilization is needed or another method is preferred or desired, Terracon should be consulted to evaluate the situation as needed.

Based upon the subsurface conditions determined from the geotechnical exploration, subgrade soils exposed during construction are anticipated to be relatively workable; however, the workability of the subgrade may be affected by precipitation, repetitive construction traffic or other factors. If unworkable conditions develop, workability may be improved by scarifying and drying.

Excavation

We anticipate that excavations for the proposed construction can be accomplished with conventional earthmoving equipment. The bottom of excavations should be thoroughly cleaned of loose soils and disturbed materials prior to backfill placement and/or construction.

Individual contractors are responsible for designing and constructing stable, temporary excavations. Excavations should be sloped or shored in the interest of safety following local, and federal regulations, including current OSHA excavation and trench safety standards.

Soil Stabilization

Methods of subgrade stabilization, as described in this section, could include scarification, moisture conditioning and recompaction, removal of unstable materials and replacement with granular fill (with or without geosynthetics), and chemical stabilization. The appropriate method of improvement, if required, would be dependent on factors such as schedule, weather, the size of area to be stabilized, and the nature of the instability. More detailed recommendations can be provided during construction as the need for subgrade stabilization occurs. Performing site grading operations during warm seasons and dry periods would help reduce the amount of subgrade stabilization required.

If the exposed subgrade is unstable during proofrolling operations, it could be stabilized using one of the following methods:

- **Scarification and Recompaction** - It may be feasible to scarify, dry, and recompact the exposed soils. The success of this procedure would depend primarily upon favorable weather and sufficient time to dry the soils. Stable subgrades likely would not be achievable if the thickness of the unstable soil is greater than about 1 foot, if the unstable soil is at or near groundwater levels, or if construction is performed during a period of wet or cool weather when drying is difficult.
- **Aggregate Base** - The use of Caltrans Class II aggregate base is a common procedure to improve subgrade stability. Typical undercut depths would be expected to range from about 6 to 18 inches below finished subgrade elevation.

The use of high modulus geosynthetics (i.e., engineering fabric or geogrid) could also be considered after underground work such as utility construction is completed. Prior to placing the fabric or geogrid, we recommend that all below grade construction, such as utility line installation, be completed to avoid damaging the fabric or geogrid. Equipment should not be operated above the fabric or geogrid until one full lift of aggregate base is placed above it. The maximum particle size of granular material placed over geotextile fabric or geogrid should meet the manufacturer's specifications.

- **Chemical Stabilization** - Improvement of subgrades with Portland cement or quicklime could be considered for improving unstable soils. Chemical stabilization should be performed by a pre-qualified contractor having experience with successfully stabilizing subgrades in the project area on similar sized projects with similar soil conditions. The hazards of chemicals blowing across the site or onto adjacent property should also be considered. Additional testing would be needed to develop specific recommendations to improve subgrade stability by blending chemicals with the site soils. Additional testing could include, but not be limited to, determining the most suitable stabilizing agent, the optimum amounts required, and the presence of sulfates in the soil. If this method is chosen to stabilize subgrade soils the actual amount of high calcium quicklime/Portland cement to be used should be determined by Terracon and by laboratory testing **at least three weeks prior** to the start of grading operations.

Further evaluation of the need and recommendations for subgrade stabilization can be provided during construction as the geotechnical conditions are exposed.

Fill Material Types

Fill required to achieve design grade should be classified as structural fill and general fill. Structural fill is material used below, or within 5 feet of structures and 3 feet of pavements. General fill is material used to achieve grade outside of these areas.

Reuse of On-Site Soil: Excavated on-site soil is not suitable for reuse as Structural Fill and should not be placed beneath settlement sensitive structures and within foundation bearing zones. Portions of the on-site soil have an elevated fines content and will be sensitive to moisture conditions (particularly during seasonally wet periods) and may not be suitable for reuse when above optimum moisture content.

Material property requirements for on-site soil for use as general fill are noted in the following table:

Property	General Fill
Composition	Free of deleterious material

Property	General Fill
Maximum particle size	6 inches (or 2/3 of the lift thickness)
Fines content	Not limited
Plasticity	Not limited
GeoModel Layer Expected to be Suitable[1]	1, 2, 3

1. Based on subsurface exploration. Actual material suitability should be determined in the field at time of construction.

Imported Fill Materials: Imported fill materials should meet the following material property requirements. Regardless of its source, compacted fill should consist of approved materials that are free of organic matter and debris. For all import material, the contractor shall submit current verified reports from a recognized analytical laboratory indicating that the import has a "not applicable" (Class S0) potential for sulfate attack based upon current ACI criteria and is "mildly corrosive" to ferrous metal and copper. The reports shall be accompanied by a written statement from the contractor that the laboratory test results are representative of all import material that will be brought to the project.

Soil Type [1]	USCS Classification	Acceptable Parameters (for Structural Fill)
Low Plasticity Cohesive	CL, SC	Liquid Limit less than 30 Plasticity index less than 10 Expansion index less than 20 Less than 60% passing No. 200 sieve
Granular[2]	GW, GM, GC, SW, SM	Less than 50% passing No. 200 sieve

1. Structural and general fill should consist of approved materials free of organic matter and debris and should contain no material larger than 3 inches and 6 inches in greatest dimension, respectively. A sample of each material type should be submitted to the Geotechnical Engineer for evaluation at least two weeks prior to use on this site. Additional geotechnical consultation should be provided prior to use of uniformly graded gravel on the site.
2. Caltrans Class II aggregate base may be used for this material. Recycled aggregate base should not be used without prior approval by the Geotechnical Engineer.

Fill Placement and Compaction Requirements

Compacted native soil and structural and general fill should meet the following compaction requirements.

Item	Structural Fill	General Fill
Maximum Lift Thickness	8 inches or less in loose thickness when heavy, self-propelled compaction equipment is used 4 to 6 inches in loose thickness when hand-guided equipment (i.e. jumping jack or plate compactor) is used	Same as structural fill
Minimum Compaction Requirements [1,2]	95% of max. for structural fill below foundations and slabs, within 1 foot of finished pavement subgrade, for aggregate base and chemically treated soil, and for fills deeper than 5 feet 90% of max. for all other locations	90% of max.
Water Content Range [1]	Low plasticity cohesive: +1% to +3% above optimum Medium plasticity cohesive: +2% to +4% above optimum Granular: -2% to +2% of optimum	As required to achieve min. compaction requirements

1. Maximum density and optimum water content as determined by the Modified Proctor test (ASTM D 1557).
2. If the granular material is a coarse sand or gravel, or of a uniform size, or has a low fines content, compaction comparison to relative density may be more appropriate. In this case, granular materials should be compacted to at least 70% relative density (ASTM D 4253 and D 4254). Materials not amenable to density testing should be placed and compacted to a stable condition observed full time by the Geotechnical Engineer or representative.

Utility Trench Backfill

Any soft or unsuitable materials encountered at the bottom of utility trench excavations should be removed and replaced with structural fill or bedding material in accordance with public works specifications for the utility be supported. This recommendation is particularly applicable to utility work requiring grade control and/or in areas where subsequent grade raising could cause settlement in the subgrade supporting the utility. Trench excavation should not be conducted below a downward 1:1 projection from

existing foundations without engineering review of shoring requirements and geotechnical observation during construction.

It is recommended utilities and piping be designed with flexible connections and/or other means to accommodate soil movement to preclude damage due to excessive settlement from liquefaction. Utility and drain lines designed for gravity flow should consider steeper gradients to account for these settlements, especially where such lines enter a buildings.

On-site materials are considered suitable for backfill of utility and pipe trenches from 1 foot above the top of the pipe to the final ground surface, provided the material is free of organic matter and deleterious substances. Where trenches are placed beneath slabs or footings, the backfill should satisfy the gradation and Atterberg limit requirements for structural fill discussed in this report.

Trench backfill should be mechanically placed and compacted as discussed earlier in this report. Compaction of initial lifts should be accomplished with hand-operated tampers or other lightweight compactors. Flooding or jetting for placement and compaction of backfill is not recommended.

All trench excavations should be made with sufficient working space to permit construction including backfill placement and compaction. If utility trenches are backfilled with relatively clean granular material, they should be capped with at least 18 inches of cementitious flowable fill or cohesive fill in non-pavement areas to reduce the infiltration and conveyance of surface water through the trench backfill. Attempts should also be made to limit the amount of fines migration into the clean granular material. Fines migration into clean granular fill may result in unanticipated localized settlements over a period of time. To help limit the amount of fines migration, Terracon recommends the use of a geotextile fabric that is designed to prevent fines migration in areas of contact between clean granular material and fine-grained soils. Terracon also recommends that clean granular fill be tracked or tamped in place where possible to limit the amount of future densification which may cause localized settlements over time.

For low permeability subgrades, utility trenches are a common source of water infiltration and migration. Utility trenches penetrating beneath the building should be effectively sealed to restrict water intrusion and flow through the trenches, which could migrate below the building. The trench should provide an effective trench plug that extends at least 5 feet from the face of the building exterior. The plug material should consist of cementitious flowable fill or low permeability clay. The trench plug material should be placed to surround the utility line. If used, the clay trench plug material should be placed and compacted to comply with the water content and compaction recommendations for structural fill stated previously in this report.

If chemical treatment of subgrade soils occurs before utility construction, Controlled Low Strength Material (CLSM) or sand/cement slurry should be used as backfill material to cap utility trenches in all areas where trenches have cut through the treated subgrade. The thickness of the CLSM or slurry should be at least the thickness or depth of chemically treated subgrade. Below that depth, imported structural fill or moisture conditioned native clay may be used for backfill. Such areas trenched through chemically treated soil should not be backfilled with aggregate base, native soil, or disturbed chemically treated soil.

Post construction trenching through geogrid reinforced pavement areas shall be accomplished with conventional trenching equipment. Repairs to the trenched section shall be accomplished using a full structural replacement of the displaced materials or with a repaired section that is identical to the original section. If the trench section is repaired to match the original, the trench backfill must be compacted to the same or higher density and the geogrid must be over-lapped a minimum 3-inches at the proper geogrid elevation.

Grading and Drainage

All grades must provide effective drainage away from the building during and after construction and should be maintained throughout the life of the structure. Water retained next to the building can result in soil movements greater than those discussed in this report. Greater movements can result in unacceptable differential floor slab and/or foundation movements, cracked slabs and walls, and roof leaks. The roof should have gutters/drains with downspouts that are tied to tight lines that discharge into a storm drain system or onto pavements.

Exposed ground should be sloped and maintained at a minimum 5 percent away from the building for at least 10 feet beyond the perimeter of the building. If a minimum 5 percent slope cannot be achieved due to site grades, a minimum 2½ percent slope could be used provided pavement or hardscape surrounds and extends to the building, or a subdrain could be installed around the perimeter of the foundations that carries water away from the building. Locally, flatter grades may be necessary to transition ADA access requirements for flatwork. After building construction and landscaping have been completed, final grades should be verified to document effective drainage has been achieved. Grades around the structure should also be periodically inspected and adjusted, as necessary, as part of the structure's maintenance program. Where paving or flatwork abuts the structure, a maintenance program should be established to effectively seal and maintain joints and prevent surface water infiltration.

Any planters and/or bio-swales located within 10 feet of the building should be self-contained or lined with an impermeable membrane to prevent water from accessing subgrade soils below the building. Sprinkler mains and spray heads should be located a minimum of 5 feet away from the foundation lines.

No vegetation over six feet in height shall be planted within 20 feet of the building perimeter unless a root barrier is provided between the structure and tree to limit roots within 10 feet of the building. Roots can draw additional moisture from the soils and cause excessive volume changes in the soil resulting in building movement.

Implementation of adequate drainage for this project can affect the surrounding developments. Consequently, in addition to designing and constructing drainage for this project, the effects of site drainage should be taken into consideration for the planned structures on this property, the undeveloped portions of this property, and surrounding sites. Extra care should be taken to ensure irrigation and drainage from adjacent areas do not drain onto the project site or saturate the construction area.

Earthwork Construction Considerations

Shallow excavations for the proposed structure are anticipated to be accomplished with conventional construction equipment. Upon completion of filling and grading, care should be taken to maintain the subgrade water content prior to construction of grade-supported improvements such as floor slabs, exterior hardscape, and pavements. Construction traffic over the completed subgrades should be avoided to the extent practical. The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. Water collecting over or adjacent to construction areas should be removed. If the subgrade should become desiccated, saturated, or is disturbed, the affected material should be removed, or the materials should be scarified, moisture conditioned, and recompacted prior to construction.

We recommend that the earthwork portion of this project be completed during extended periods of dry weather if possible. If earthwork is completed during the wet season (typically November through April) it may be necessary to take extra precautionary measures to protect subgrade soils. Wet season earthwork operations may require additional mitigation measures beyond that which would be expected during the drier summer and fall months. This could include ground stabilization utilizing chemical treatment of the subgrade, diversion of surface runoff around exposed soils, and draining of ponded water on the site. Once subgrades are established, it may be necessary to protect the exposed subgrade soils from construction traffic.

As a minimum, excavations should be performed in accordance with OSHA 29 CFR, Part 1926, Subpart P, "Excavations" and its appendices, and in accordance with any applicable local and/or state regulations. Stockpiles of soil, construction materials, and construction equipment should not be placed near trenches or excavations. ***The Contractor is responsible for maintaining the stability of adjacent structures during construction.***

Construction site safety is the sole responsibility of the contractor who controls the means, methods, and sequencing of construction operations. Under no circumstances

shall the information provided herein be interpreted to mean Terracon is assuming responsibility for construction site safety or the contractor's activities; such responsibility shall neither be implied nor inferred.

Excavations or other activities resulting in ground disturbance have the potential to affect adjoining properties and structures. Our scope of services does not include review of available final grading information or consider potential temporary grading performed by the contractor for potential effects such as ground movement beyond the project limits. A preconstruction/ precondition survey should be conducted to document nearby property/infrastructure prior to any site development activity. Excavation or ground disturbance activities adjacent or near property lines should be monitored or instrumented for potential ground movements that could negatively affect adjoining property and/or structures.

Construction Observation and Testing

The earthwork efforts should be observed by the Geotechnical Engineer (or others under their direction). Observation should include documentation of adequate removal of surficial materials (vegetation, topsoil, debris, and pavements), evaluation and remediation of existing fill materials, as well as proofrolling and mitigation of unsuitable areas delineated by the proofroll.

Each lift of compacted fill should be tested, evaluated, and reworked, as necessary, as recommended by the Geotechnical Engineer prior to placement of additional lifts. Each lift of fill should be tested for density and water content at a frequency of at least one test for every 2,500 square feet of compacted fill in the building areas and 5,000 square feet in pavement areas. Where not specified by local ordinance, one density and water content test should be performed for every 100 linear feet of compacted utility trench backfill and a minimum of one test performed for every 12 vertical inches of compacted backfill. The frequency of the testing may be adjusted during construction under the direction of the geotechnical engineer.

In areas of foundation excavations, the bearing subgrade should be evaluated by the Geotechnical Engineer. If unanticipated conditions are observed, the Geotechnical Engineer should prescribe mitigation options.

In addition to the documentation of the essential parameters necessary for construction, the continuation of the Geotechnical Engineer into the construction phase of the project provides the continuity to maintain the Geotechnical Engineer’s evaluation of subsurface conditions, including assessing variations and associated design changes.

Shallow Foundations

The proposed buildings may be supported by spread footings. If the site has been prepared in accordance with the requirements noted in **Earthwork**, the following design parameters are applicable for shallow foundations.

Design Parameters – Compressive Loads

Item	Description
Maximum Net Allowable Bearing Pressure [1, 2]	2,000 psf
Required Bearing Stratum [3]	2 feet of recompacted native soil or structural fill
Minimum Foundation Dimensions	Per CBC 1809.7
Maximum Foundation Dimensions	Columns: 6 feet Continuous: 3 feet
Passive Resistance [4, 8] **(equivalent fluid pressures)**	250 pcf
Sliding Resistance [5, 8]	0.32 allowable coefficient of friction
Minimum Embedment below Finished Subgrade [6]	18 inches
Estimated Total Settlement from Structural Loads [2]	Less than about 1 inch
Estimated Differential Settlement [2, 7]	About ½ of total settlement

1. The maximum net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation. This bearing pressure can be increased by 1/3 for transient loads unless those loads have been factored to account for transient conditions. Values assume that exterior grades are no steeper than 20% within 10 feet of structure.
2. Values provided are for maximum loads noted in **Project Description**. Additional geotechnical consultation will be necessary if higher loads are anticipated.
3. Unsuitable or soft soils should be overexcavated and replaced per the recommendations presented in **Earthwork**.
4. Use of passive earth pressures require the sides of the excavation for the spread footing foundation to be nearly vertical and the concrete placed neat against these vertical faces or that the footing forms be removed and compacted structural fill be placed against the vertical footing face. Assumes no hydrostatic pressure.
5. Can be used to compute sliding resistance where foundations are placed on suitable soil/materials. Frictional resistance for granular materials is dependent on the bearing

Item	Description

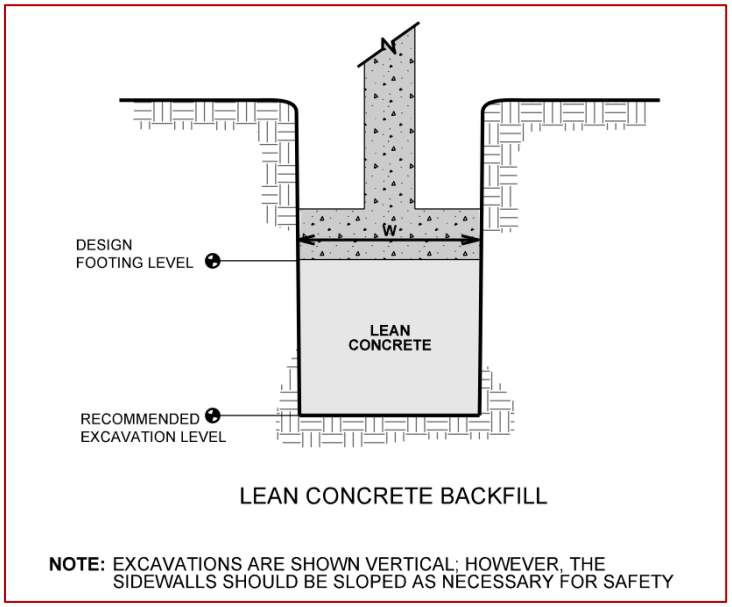
pressure which may vary due to load combinations. For fine-grained materials, lateral resistance using cohesion should not exceed ½ the dead load.

6. Embedment necessary to minimize the effects of seasonal water content variations. For sloping ground, maintain depth below the lowest adjacent exterior subgrade within 5 horizontal feet of the structure.
7. Differential settlements are noted for equivalent-loaded foundations and bearing elevation as measured over a span of 50 feet or across the foundation width whichever is less.
8. Passive Resistance and Sliding Resistance may be combined to resist sliding provided the Passive Resistance is reduced by 50 percent.

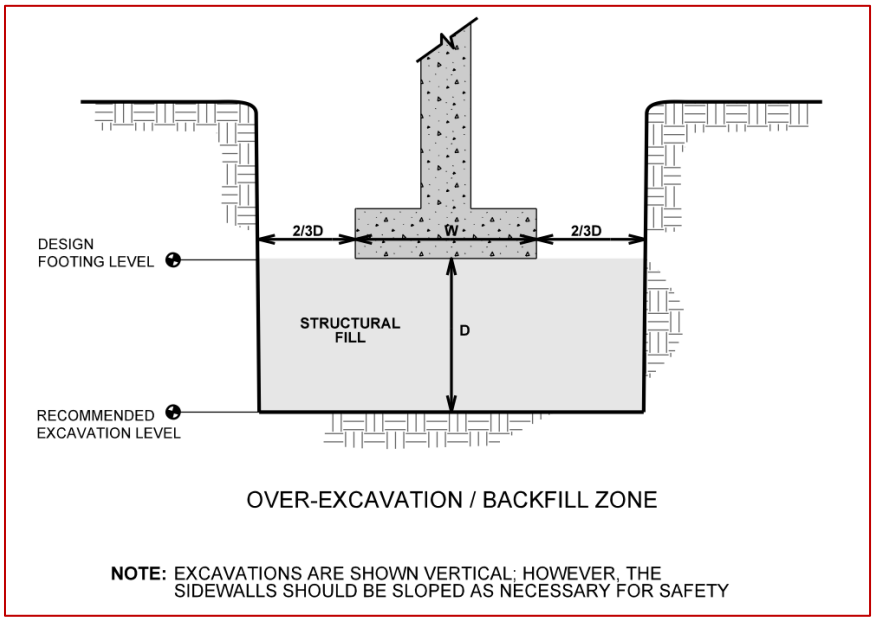
Foundation Construction Considerations

As noted in **Earthwork**, the footing excavations should be evaluated under the observation of the Geotechnical Engineer. The base of all foundation excavations should be free of water and loose soil, prior to placing concrete. Concrete should be placed soon after excavating to reduce bearing soil disturbance. Care should be taken to prevent wetting or drying of the bearing materials during construction. Excessively wet or dry material or any loose/disturbed material in the bottom of the footing excavations should be removed/reconditioned before foundation concrete is placed.

If unsuitable bearing soils are observed at the base of the planned footing excavation, the excavation should be extended deeper to suitable soils, and the footings could bear directly on these soils at the lower level or on lean concrete backfill placed in the excavations. The lean concrete replacement zone is illustrated on the following sketch.



Overexcavation for structural fill placement below footings should be conducted as shown in the following sketch. The overexcavation should be backfilled up to the footing base elevation, with structural fill placed, as recommended in the **Earthwork** section.



To ensure foundations have adequate support, special care should be taken when footings are located adjacent to trenches. The bottom of such footings should be at least 1 foot below an imaginary plane with an inclination of 1.5 horizontal to 1.0 vertical extending upward from the nearest edge of the adjacent trench.

Floor Slabs

Design parameters for floor slabs assume the requirements for **Earthwork** have been followed. Specific attention should be given to positive drainage away from the structure and positive drainage of the floor slab support course beneath the floor slab.

The subgrade soils are comprised of moderate to high plasticity clays exhibiting the potential to shrink/swell with variations in water content. Construction of the floor slab and revising site drainage creates the potential for gradual increased water contents within the clays. Increases in water content will cause the clays to swell and damage the floor slab. To reduce the potential effects of the medium plasticity clays on the building floor slabs, at least the upper 12 inches of subgrade soils below the floor slab should consist of granular structural fill or be chemically treated with high calcium quicklime or Portland cement.

Chemical treatment involves treating the subgrade soils with a certain percentage of high calcium quicklime or Portland cement, usually 3.5 to 5.5 percent and 5.0 to 7.0

percent, respectively, based on the dry unit weight of the soil, for a depth of 18 inches. For estimating purposes, we recommend using 4.5 percent lime and 6.0 percent cement, and a soil unit weight of 110 pounds per cubic foot. For an 12-inch treatment depth, this results in an estimated minimum spread rate of 5.0 and 6.6 pounds per square foot lime and cement, respectively. The actual amount of lime or cement to be used should be determined by Terracon and by laboratory testing **at least three weeks prior** to the start of grading operations. Chemical treatment is performed after rough grading is completed. This procedure reduces the swell potential of the surface soils and creates a stable working platform on which construction can proceed. All chemical treatment operations should be observed by a representative of the project Geotechnical Engineer.

Due to the potential for significant moisture fluctuations of subgrade material beneath floor slabs supported at-grade, the Geotechnical Engineer should evaluate the material within 18 inches of the bottom of the granular structural fill or chemically treated zone immediately prior to placement of additional fill or floor slabs. In chemically treated areas, this can be accomplished by having the grading contractor excavate several test pits within the proposed construction areas prior to the start of grading operations to determine the moisture condition of the subgrade soils. A representative of the Geotechnical Engineer should be present during the excavation of these test pits and samples of the subgrade soils should be obtained for moisture content testing. Soils below the specified water contents within this zone should be moisture conditioned or replaced with structural fill as stated in our **Earthwork** section.

Floor Slab Design Parameters

Item	Description
Floor Slab Support[1]	Minimum 4 inches of ¾ inch free draining crushed aggregate[3] overlying 12 inches of granular structural fill or chemically treated soil. Subgrade compacted to the recommendations in **Earthwork**
Estimated Modulus of Subgrade Reaction [2]	150 pounds per square inch per inch (psi/in) for point loads. 250 psi/in for points loads may be used where subgrade soils are chemically treated.

1. Floor slabs should be structurally independent of building footings or walls to reduce the possibility of floor slab cracking caused by differential movements between the slab and foundation.
2. Modulus of subgrade reaction is an estimated value based upon our experience with the subgrade condition, the requirements noted in **Earthwork**, and the floor slab support as noted in this table. It is provided for point loads. For large area loads the modulus of subgrade reaction would be lower.

Item	Description

3. Free-draining granular material should have less than 5% fines (material passing the No. 200 sieve). Other design considerations such as cold temperatures and condensation development could warrant more extensive design provisions.

It is common to reduce the k-value to account for dimensional effects of large, loaded areas. For such features, the value of K_c in the following formula is the corrected or design modulus value in units of psi/in, k is the value provided in the previous table, and b is the mat width (short dimension) or tributary loaded area measured in units of feet. Soft or unstable subgrade will be remediated by scarifying and re-compacting or by over-excavation and replacement. For clay subgrades, this can be estimated as:

$$K_c = k(\frac{1}{b})$$

Terracon can provide refined estimates of K_c if provided more detailed information regarding the loads and application area to conduct settlement analysis.

The use of a vapor retarder should be considered beneath concrete slabs on grade covered with wood, tile, carpet, or other moisture sensitive or impervious coverings, when the project includes humidity-controlled areas, or when the slab will support equipment sensitive to moisture. When conditions warrant the use of a vapor retarder, the slab designer should refer to ACI 302 and/or ACI 360 for procedures and cautions regarding the use and placement of a vapor retarder.

Saw-cut contraction joints should be placed in the slab to help control the location and extent of cracking. For additional recommendations, refer to the ACI Design Manual. Joints or cracks should be sealed with a waterproof, non-extruding compressible compound specifically recommended for heavy duty concrete pavement and wet environments.

Where floor slabs are tied to perimeter walls or turn-down slabs to meet structural or other construction objectives, our experience indicates differential movement between the walls and slabs will likely be observed in adjacent slab expansion joints or floor slab cracks beyond the length of the structural dowels. The Structural Engineer should account for potential differential settlement through use of sufficient control joints, appropriate reinforcing, or other means.

Floor Slab Construction Considerations

Finished subgrade, within and for at least 10 feet beyond the floor slab, should be protected from traffic, rutting, or other disturbance and maintained in a relatively moist condition until floor slabs are constructed. If the subgrade should become damaged or

desiccated prior to construction of floor slabs, the affected material should be removed, and structural fill should be added to replace the resulting excavation. Final conditioning of the finished subgrade should be performed immediately prior to placement of the floor slab support course.

The Geotechnical Engineer should observe the condition of the floor slab subgrades immediately prior to placement of the floor slab support course, reinforcing steel, and concrete. Attention should be paid to high traffic areas that were rutted and disturbed earlier, and to areas where backfilled trenches are located.

Exterior Hardscape

In order to help protect the exterior hardscape against the swell pressure of the surficial moderately plastic clays, we recommend the subgrade soil below hardscapes either be over-excavated to a minimum depth of 18 inches and replaced with compacted granular structural fill per the recommendations provided in this report or be chemically treated to a depth of 18 inches.

Exterior hardscape, exterior architectural features, and utilities may experience some movement due to the volume change of the subgrade soils. To reduce the potential for damage caused by movement, we recommend:

- Slabs should be underlain by a minimum of 18 inches of compacted granular structural fill or chemically treated material as indicated. However, at the contractor's discretion, gravel may be placed between the slab and granular structural fill or chemically treated material to assist with constructability.
- Minimizing moisture increases in the subgrade soils and backfill;
- Controlling moisture-density during placement of fill;
- Using designs which allow vertical movement between the exterior features and adjoining structural elements;
- Placing effective control joints on relatively close centers.
- Ensuring clay subgrade soils are in a moist condition prior to slab construction.
- Reinforcing exterior slabs and flatwork with a minimum No. 4 bars at 18 inches on center.

Pavements

General Pavement Comments

Pavement designs are provided for the traffic conditions and pavement life conditions as noted in **Project Description** and in the following sections of this report. A critical aspect of pavement performance is site preparation. Pavement designs noted in this

section must be applied to the site which has been prepared as recommended in the **Earthwork** section.

Differential movement should be considered when planning the development of pavement areas. Site drainage should be designed to compensate for differential settlement in pavement areas. Long term maintenance should be planned for in pavement and drainage areas adjacent to building entrances.

Support characteristics of subgrade for pavement design do not account for shrink/swell movements of an expansive clay subgrade, such as soils observed on this project. Thus, the pavement may be adequate from a structural standpoint, yet still experience cracking and deformation due to shrink/swell related movement of the subgrade.

On most project sites, the site grading is accomplished relatively early in the construction phase. Fills are placed and compacted in a uniform manner. However, as construction proceeds, excavations are made into these areas, rainfall and surface water saturates some areas, heavy traffic from concrete trucks and other delivery vehicles disturbs the subgrade and many surface irregularities are filled in with loose soils to improve trafficability temporarily. As a result, the pavement subgrades, initially prepared early in the project, should be carefully evaluated as the time for pavement construction approaches.

We recommend the moisture content and density of the top 12 inches of the subgrade be evaluated and the pavement subgrades be proofrolled within two days prior to commencement of actual paving operations. Areas not in compliance with the required ranges of moisture or density should be moisture conditioned and recompacted. Particular attention should be paid to high traffic areas that were rutted and disturbed earlier and to areas where backfilled trenches are located. Areas where unsuitable conditions are located should be repaired by removing and replacing the materials with properly compacted fills.

If a significant precipitation event occurs after the evaluation or if the surface becomes disturbed, the subgrade should be reviewed by qualified personnel immediately prior to paving. The subgrade should be in its finished form at the time of the final review.

Pavement Design Parameters

Design of Asphaltic Concrete (AC) pavement sections were calculated using the Caltrans Highway Design Manual, latest edition, and a 20-year design life. Design of Portland Cement Concrete (PCC) pavement sections were designed using ACI 330R-21, "Guide for the Design and Construction of Concrete Parking Lots."

Bulk samples of the near surface native soils were collected to perform Hveem Stabilometer (R-Value) testing. A representative bulk sample from Borings B17 and B19 were selected for testing. The testing resulted in R-Values of less than 5 for both

samples. Subsequently, an R-Value of 5 was used for the subgrade for the asphaltic concrete (AC) pavement designs. A modulus of subgrade reaction of 100 pci was used for the Portland cement concrete (PCC) pavement designs. The value was empirically derived based upon our experience with the clayey subgrade soils and our expectation of the quality of the subgrade as prescribed by the **Site Preparation** conditions as outlined in **Earthwork**. A modulus of rupture of 550 psi was used in design for the concrete (based on correlations with a minimum 28-day compressive strength of 4,500 psi).

Based on this relatively low R-value the conventional pavement sections will be relatively thick. The deeper pavement sections may require more off haul of material on site if the same grades are kept. As an alternative to conventional pavement sections, reinforcing the pavement sections with geogrid or chemical treatment of the subgrade soils may be performed to improve their physical support characteristics and reduce the pavement section.

As more specific traffic information becomes available for the specific project and project traffic indexes are determined, we should be contacted to reevaluate the pavement calculations.

Recommendations for conventional, geogrid reinforced, and chemically treated pavement sections are presented next. The recommendations are based on the subgrade being in a firm and unyielding condition.

Pavement Section Thicknesses

The following table provides our opinion of minimum thickness for AC sections:

Asphaltic Concrete Design

Layer	Thickness (inches)			
	Playground Areas (TI=4.5)[1]	Auto Parking Areas (TI=5.0)[1]	Auto Road (TI=5.5)[1]	Bus Parking Areas (TI=6.0)[1]
AC [2, 3]	2.5	3.0	3.0	3.5
Aggregate Base[2]	10.0	10.0	12.0	13.0

1. See **Project Description** for more specifics regarding traffic assumptions.
2. All materials should meet the current Caltrans Highway Design Manual specifications.
   - Base – Caltrans Class 2 aggregate base
3. A minimum 1.5-inch surface course should be used on ACC pavements.

The following table provides options for AC pavement sections reinforced with geogrid. The sections were calculated based on the Tensar Technical Note from June 2023. Tensar allows pavements to be designed using a R-Value of 50 when placing Tensar InterAx NX850 Geogrid on compacted subgrade. The geogrid shall be placed directly on the subgrade below the aggregate base layer. Adjacent rolls of geogrid shall be overlapped a minimum of 1 foot. Soft subgrade conditions should be evaluated by the geotechnical engineer. The development of wrinkles in the geogrid shall be avoided. A minimum loose fill thickness of 6 inches is required prior to operation of tracked vehicles over the geogrid. When underlying substrate is trafficable with minimal rutting, rubber-tired equipment may pass over the geogrid reinforcement at slow speeds (less than 10 mph).

Reinforced pavement design procedures developed by grid producers rely on product specific field and laboratory research. In some cases, this research has tested pavement sections within a limited range of subgrade conditions and pavement thicknesses. Extrapolations are typically used for thicker pavement sections outside those parameters based on computer modeling. These methods represent the state of the practice but have not always been specifically verified by performance testing.

Asphaltic Concrete Design with Geogrid Reinforcement

Layer	Thickness (inches)			
	Playground Areas (TI=4.5)[1]	Auto Parking Areas (TI=5.0)[1]	Auto Road (TI=5.5)[1]	Bus Parking Areas (TI=6.0)[1]
AC [2, 3]	2.5	3.0	3.0	3.5
Aggregate Base[2]	4.0	4.0	4.0	4.0

1. See **Project Description** for more specifics regarding traffic assumptions.
2. All materials should meet the current Caltrans Highway Design Manual specifications.
   - Base – Caltrans Class 2 aggregate base
3. A minimum 1.5-inch surface course should be used on ACC pavements.

The following table provides options for AC pavement sections supported by chemically treated soil. Chemical treatment involves treating the pavement subgrade soils with a certain percentage of high calcium quick lime or Portland cement. Usually, 4.0 to 6.0 percent and 6 to 8 percent, respectively, based on the dry unit weight of the soil, for a depth of 12 inches. For estimating purposes, we recommend using 5 percent high calcium quick lime and 6.0 percent Portland cement and a soil unit weight of 110 pounds

per cubic foot. For a 12-inch treatment depth, this results in an estimated minimum spread rate of 5.5 and 6.6 pounds per square foot of lime and cement, respectively. The actual amount of lime or cement to be used should be determined by Terracon and by laboratory testing **at least three weeks prior** to the start of grading operations. Chemical treatment is performed after rough grading of the pavement areas is completed.

Asphaltic Concrete Design with Chemically Treated Subgrade

Layer	Thickness (inches)			
	Playground Areas (TI=4.5)[1]	Auto Parking Areas (TI=5.0)[1]	Auto Road (TI=5.5)[1]	Bus Parking Areas (TI=6.0)[1]
AC [2, 3]	2.5	3.0	3.0	3.5
Aggregate Base [2]	4.0	4.0	4.0	4.0
Chemically Treated Subgrade[4]	12.0	12.0	12.0	12.0

1. See **Project Description** for more specifics regarding traffic assumptions.
2. All materials should meet the current Caltrans Highway Design Manual specifications.
   - Base – Caltrans Class 2 aggregate base
3. A minimum 1.5-inch surface course should be used on ACC pavements.
4. Chemically treated material shall have a minimum unconfined compressive strength of 300 psi.

The following table provides our estimated minimum thickness of PCC pavements.

Portland Cement Concrete Design

Layer	Thickness (inches)			
	Traffic Category A [1]	Traffic Category B [1]	Traffic Category C [1]	Traffic Category E [1]
PCC [2]	4.5	5.5	8.0	7.0
Aggregate Base[2]	4.0	4.0	6.0	5.0

1. See **Project Description** for more specifics regarding traffic classifications.

Portland Cement Concrete Design

Layer	Thickness (inches)			
	Traffic Category A [1]	Traffic Category B [1]	Traffic Category C [1]	Traffic Category E [1]

2. All materials should meet the current Caltrans Highway Design Manual specifications.

Areas for parking of heavy vehicles, concentrated turn areas, and start/stop maneuvers could require thicker pavement sections. Edge restraints (i.e. concrete curbs or aggregate shoulders) should be planned along curves and areas of maneuvering vehicles.

Although not required for structural support, a minimum 4-inch-thick base course layer is recommended to help reduce potential for slab curl, shrinkage cracking, and subgrade pumping through joints. Proper joint spacing will also be required to prevent excessive slab curling and shrinkage cracking. Joints should be sealed to prevent entry of foreign material and doweled where necessary for load transfer. PCC pavement details for joint spacing, joint reinforcement, and joint sealing should be prepared in accordance with ACI 330 and ACI 325.

Where practical, we recommend early-entry cutting of crack-control joints in PCC pavements. Cutting of the concrete in its "green" state typically reduces the potential for micro-cracking of the pavements prior to the crack control joints being formed, compared to cutting the joints after the concrete has fully set. Micro-cracking of pavements may lead to crack formation in locations other than the sawed joints, and/or reduction of fatigue life of the pavement.

Openings in pavements, such as decorative landscaped areas, are sources for water infiltration into surrounding pavement systems. Water can collect in the islands and migrate into the surrounding subgrade soils thereby degrading support of the pavement. Islands with raised concrete curbs, irrigated foliage, and low permeability near-surface soils are particular areas of concern. The civil design for the pavements with these conditions should include features to restrict or collect and discharge excess water from the islands. Examples of features are edge drains connected to the stormwater collection system, longitudinal subdrains, or other suitable outlets and impermeable barriers preventing lateral migration of water such as a cutoff wall installed to a depth below the pavement structure.

Pavement Maintenance

The pavement sections represent minimum recommended thicknesses and, as such, periodic upkeep should be anticipated. Preventive maintenance should be planned and

provided for through an on-going pavement management program. Maintenance activities are intended to slow the rate of pavement deterioration and to preserve the pavement investment. Pavement care consists of both localized (e.g., crack, and joint sealing and patching) and global maintenance (e.g., surface sealing). Additional engineering consultation is recommended to determine the type and extent of a cost-effective program. Even with periodic maintenance, some movements and related cracking may still occur, and repairs may be required.

Pavement performance is affected by its surroundings. In addition to providing preventive maintenance, the civil engineer should consider the following recommendations in the design and layout of pavements:

- Final grade adjacent to paved areas should slope down from the edges at a minimum 2%.
- Subgrade and pavement surfaces should have a minimum 2% slope to promote proper surface drainage.
- Install pavement drainage systems surrounding areas anticipated for frequent wetting.
- Install joint sealant and seal cracks immediately.
- Seal all landscaped areas in or adjacent to pavements to reduce moisture migration to subgrade soils.
- Place compacted, low permeability backfill against the exterior side of curb and gutter.
- Place curb, gutter and/or sidewalk directly on clay subgrade soils rather than on unbound granular base course materials.

General Comments

Our analysis and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. Terracon should be retained as the Geotechnical Engineer, where noted in this report, to provide observation and testing services during pertinent construction phases. If variations appear, we can provide further evaluation and supplemental recommendations. If variations are noted in the absence of our observation and testing services on-site, we should be immediately notified so that we can provide evaluation and supplemental recommendations.

Our Scope of Services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials, or conditions. If the

owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly affect excavation cost. Any parties charged with estimating excavation costs should seek their own site characterization for specific purposes to obtain the specific level of detail necessary for costing. Site safety and cost estimating including excavation support and dewatering requirements/design are the responsibility of others. Construction and site development have the potential to affect adjacent properties. Such impacts can include damages due to vibration, modification of groundwater/surface water flow during construction, foundation movement due to undermining or subsidence from excavation, as well as noise or air quality concerns. Evaluation of these items on nearby properties are commonly associated with contractor means and methods and are not addressed in this report. The owner and contractor should consider a preconstruction/precondition survey of surrounding development. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing. This report should not be used after 3 years without written authorization from Terracon.

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U.S. Geologic Survey, 2018b, Land Subsidence in the San Joaquin Valley, https://www.usgs.gov/centers/land-subsidence-in-california/science/land-subsidence-san-joaquin-valley.

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Figures

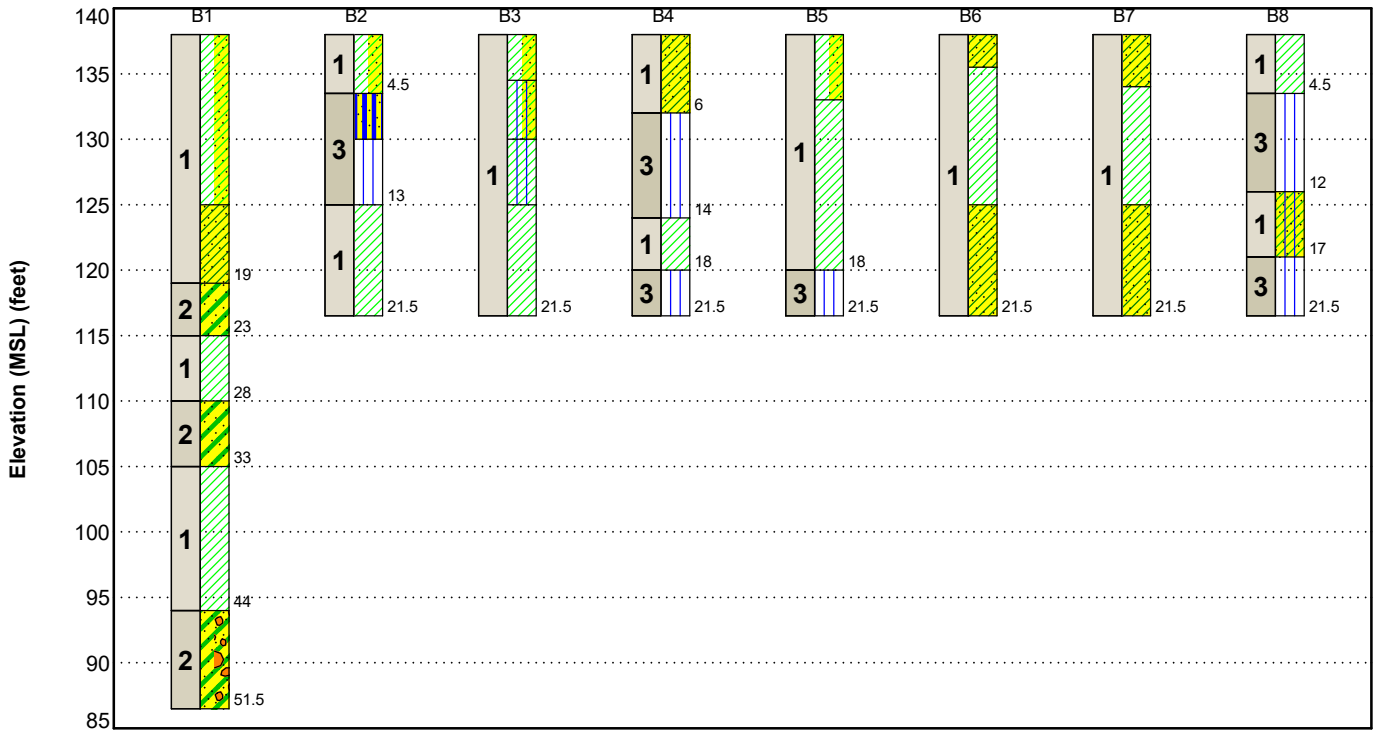
Contents:

GeoModel

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

GeoModel



This is not a cross section. This is intended to display the Geotechnical Model only. See individual logs for more detailed conditions.

Model Layer	Layer Name	General Description
1	**Lean Clay**	Medium stiff to hard lean clay with various amounts of sand
2	**Sand**	Medium dense to very dense sand with various amounts of clay or silt
3	**Silt**	Medium stiff to very stiff silt with various amounts of sand

LEGEND

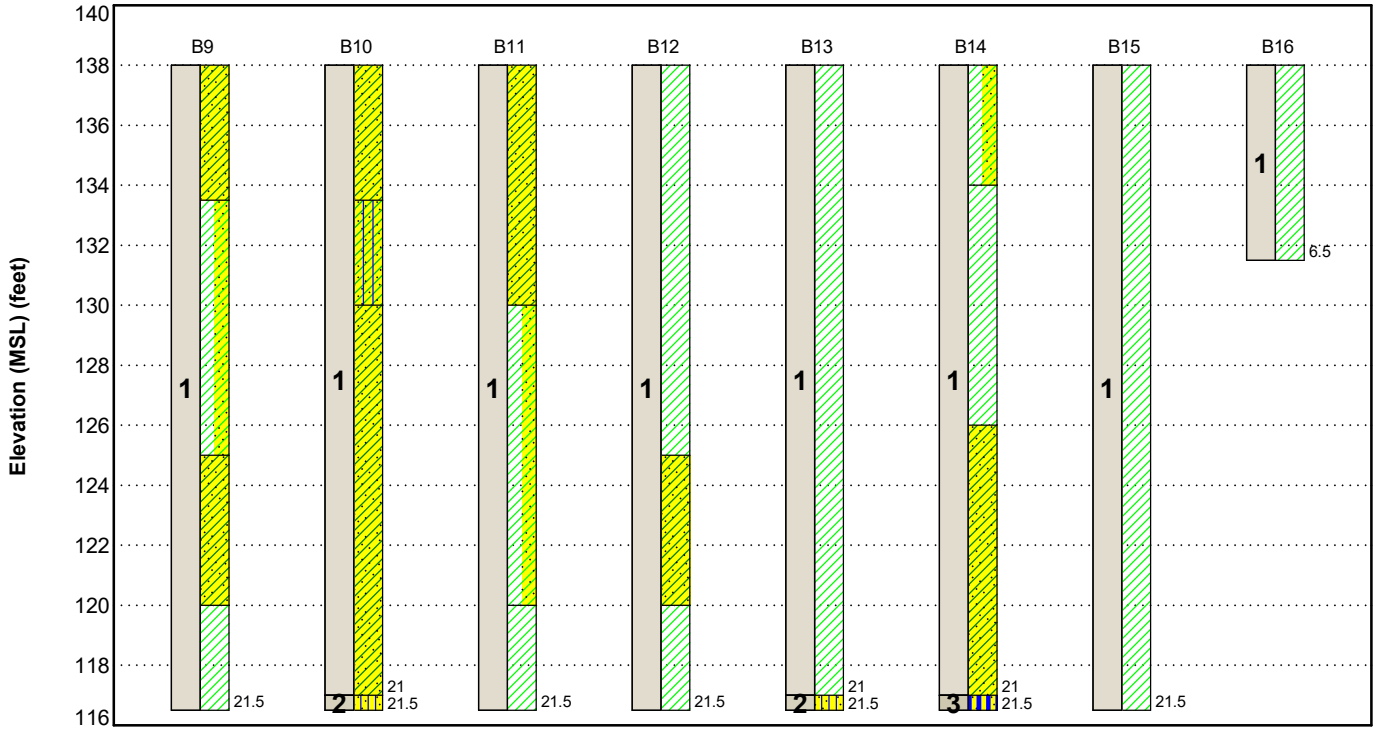
- Lean Clay with Sand
- Lean Clay
- Silt
- Sandy Silty Clay
- Sandy Lean Clay
- Clayey Sand with Gravel
- Silty Clay with Sand
- Clayey Sand
- Sandy Silt
- Silty Clay

NOTES:
Layering shown on this figure has been developed by the geotechnical engineer for purposes of modeling the subsurface conditions as required for the subsequent geotechnical engineering for this project. Numbers adjacent to soil column indicate depth below ground surface.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

GeoModel



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LEGEND

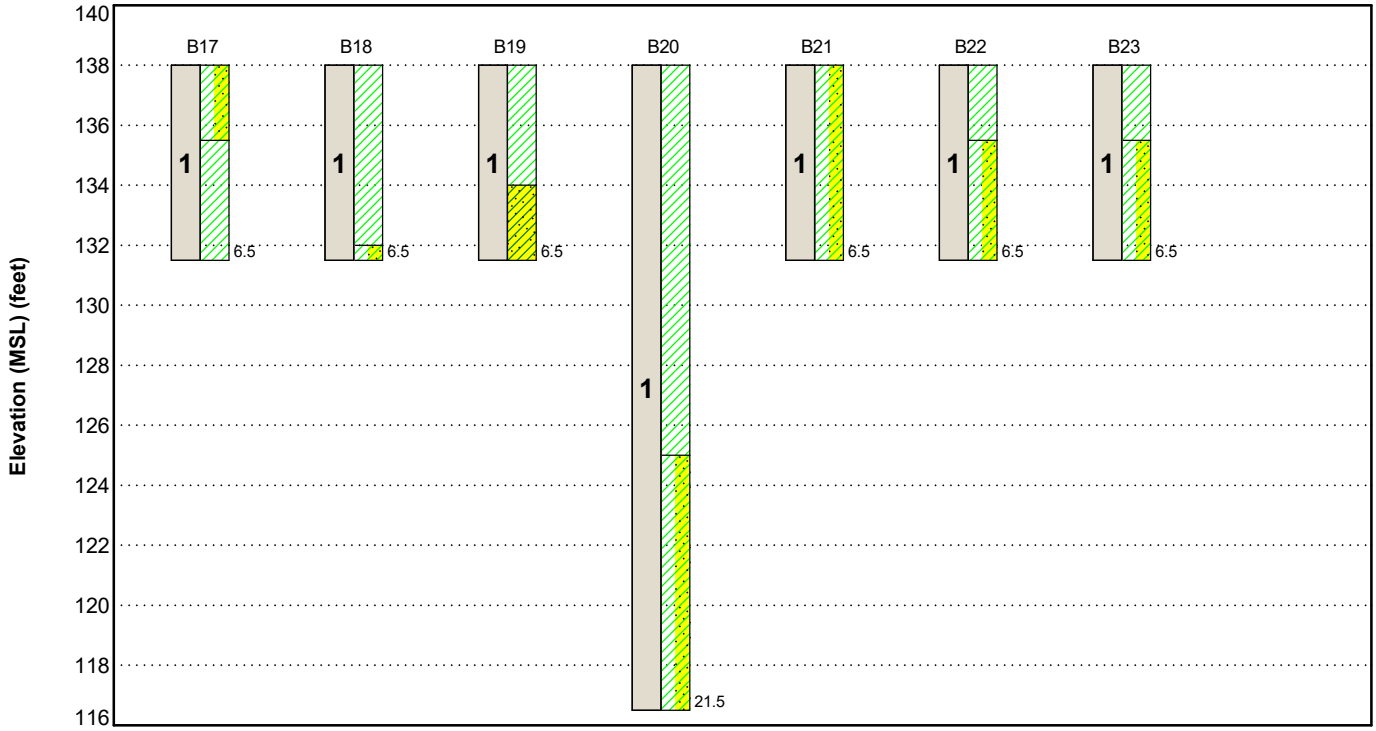
- Sandy Lean Clay
- Lean Clay with Sand
- Lean Clay
- Sandy Silty Clay
- Silty Sand
- Sandy Silt

NOTES:
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Patterson Gardens Elementary School
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902 Industrial Way
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LEGEND

- Lean Clay with Sand
- Lean Clay
- Sandy Lean Clay

NOTES:
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Attachments

Exploration and Testing Procedures

Field Exploration

Number of Borings	Approximate Boring Depth (feet)	Location
1	51½	Building areas
15	21½	Building areas
7	6½	Parking, driveway, and playground area

Boring Layout and Elevations: Terracon personnel provided the boring layout using handheld GPS equipment (estimated horizontal accuracy of about ±10 feet) and referencing existing site features. Approximate ground surface elevations were estimated using Google Earth. If elevations and a more precise boring layout are desired, we recommend the exploration locations be surveyed.

Subsurface Exploration Procedures: We advanced the borings with a track-mounted rotary drill rig using continuous flight augers (solid stem and/or hollow stem, as necessary, depending on soil conditions). Four samples were obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. In the split-barrel sampling procedure, a standard 2-inch outer diameter split-barrel sampling spoon was driven into the ground by a 140-pound automatic hammer falling a distance of 30 inches. The number of blows required to advance the sampling spoon the last 12 inches of a normal 18-inch penetration is recorded as the Standard Penetration Test (SPT) resistance value. The SPT resistance values, also referred to as N-values, are indicated on the boring logs at the test depths. Ring-lined, split-barrel sampling procedures are similar to standard split spoon sampling procedure; however, blow counts are typically recorded for 6-inch intervals for a total of 12 inches of penetration. For safety purposes, all borings were backfilled with soil cuttings or cement-grout after their completion.

We also observed the boreholes while drilling and at the completion of drilling for the presence of groundwater. Groundwater was not observed at these times in the boreholes.

The sampling depths, penetration distances, and other sampling information was recorded on the field boring logs. The samples were placed in appropriate containers and taken to our soil laboratory for testing and classification by a Geotechnical Engineer. Our exploration team prepared field boring logs as part of the drilling operations. These field logs included visual classifications of the materials observed during drilling and our interpretation of the subsurface conditions between samples. Final boring logs were prepared from the field logs. The final boring logs represent the Geotechnical Engineer's

interpretation of the field logs and include modifications based on observations and tests of the samples in our laboratory.

Laboratory Testing

The project engineer reviewed the field data and assigned laboratory tests. The laboratory testing program included the following types of tests:

- Moisture Content
- Dry Unit Weight
- Atterberg Limits
- Expansive Index
- R-Value
- Corrosivity

The laboratory testing program often included examination of soil samples by an engineer. Based on the results of our field and laboratory programs, we described and classified the soil samples in accordance with the Unified Soil Classification System.

Site Location and Exploration Plans

Contents:

Site Location Plan
Exploration Plan
Subsurface Profile Cross Section A-A’
Subsurface Profile Cross Section B-B’
Subsurface Profile Cross Section C-C’
Geologic Map
Regional Faults
Regional Seismicity
Oil and Gas Map

Note: All attachments are one page unless otherwise noted.

Site Location



DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES MAP PROVIDED BY MICROSOFT BING MAPS

Exploration Plan

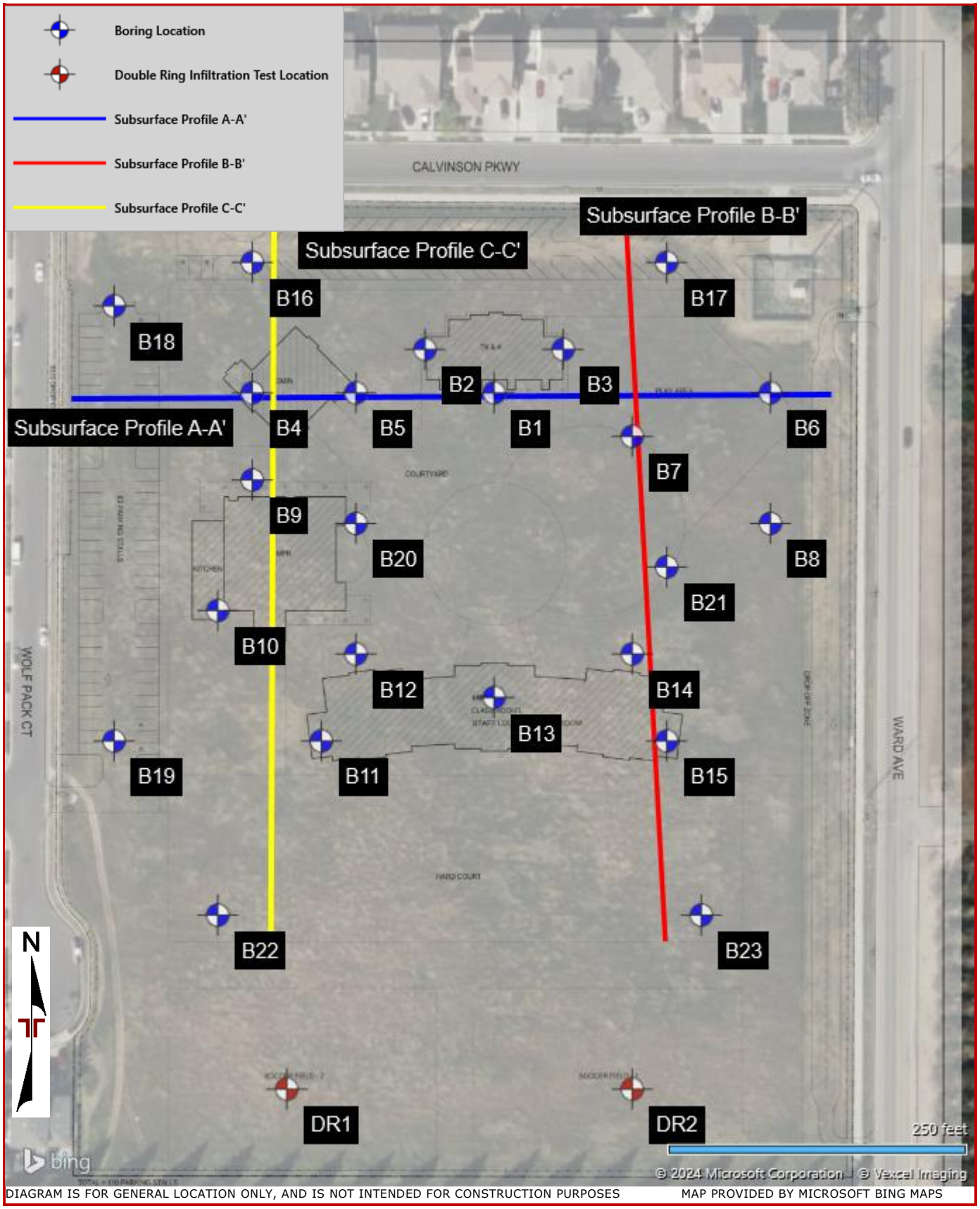


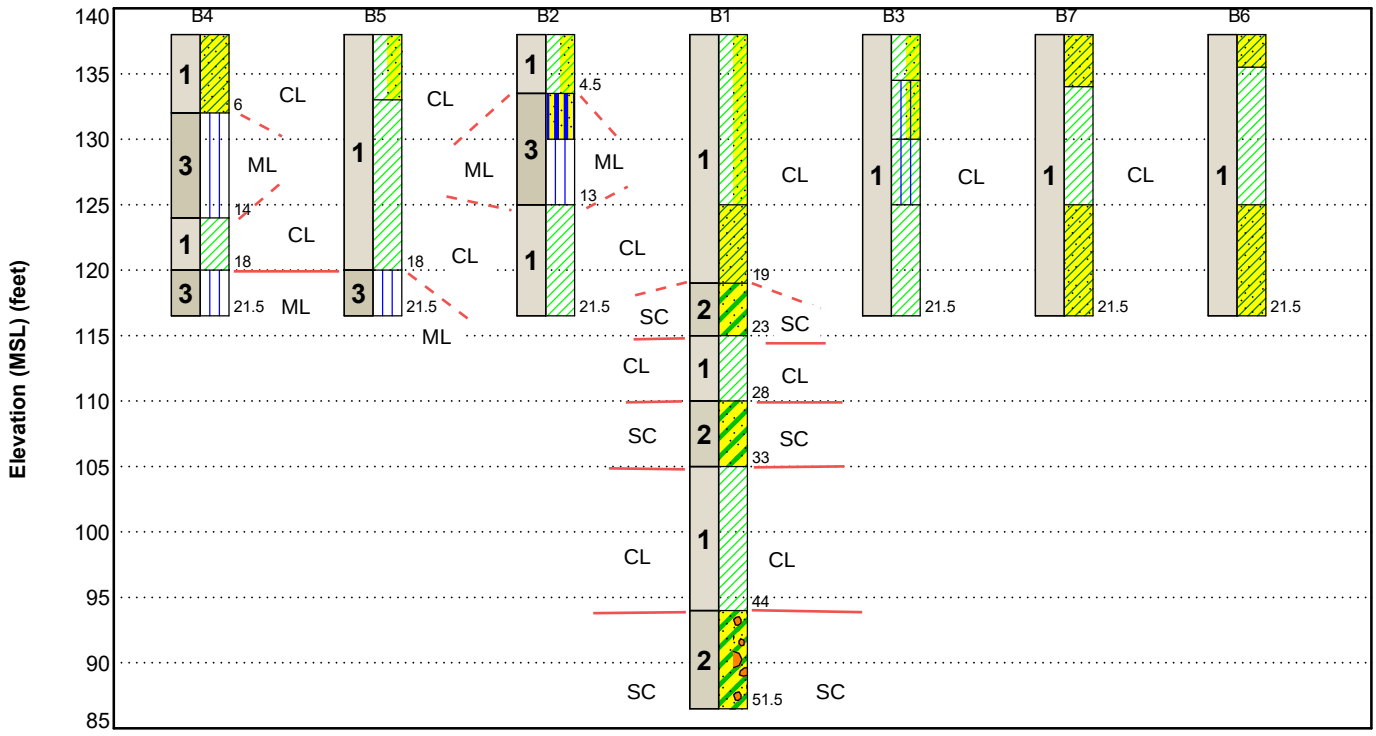
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MAP PROVIDED BY MICROSOFT BING MAPS

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Subsurface Profile A-A'



This is not a cross section. This is intended to display the Geotechnical Model only. See individual logs for more detailed conditions.

Model Layer	Layer Name	General Description
1	**Lean Clay**	Medium stiff to hard lean clay with various amounts of sand
2	**Sand**	Medium dense to very dense sand with various amounts of clay or silt
3	**Silt**	Medium stiff to very stiff silt with various amounts of sand

LEGEND

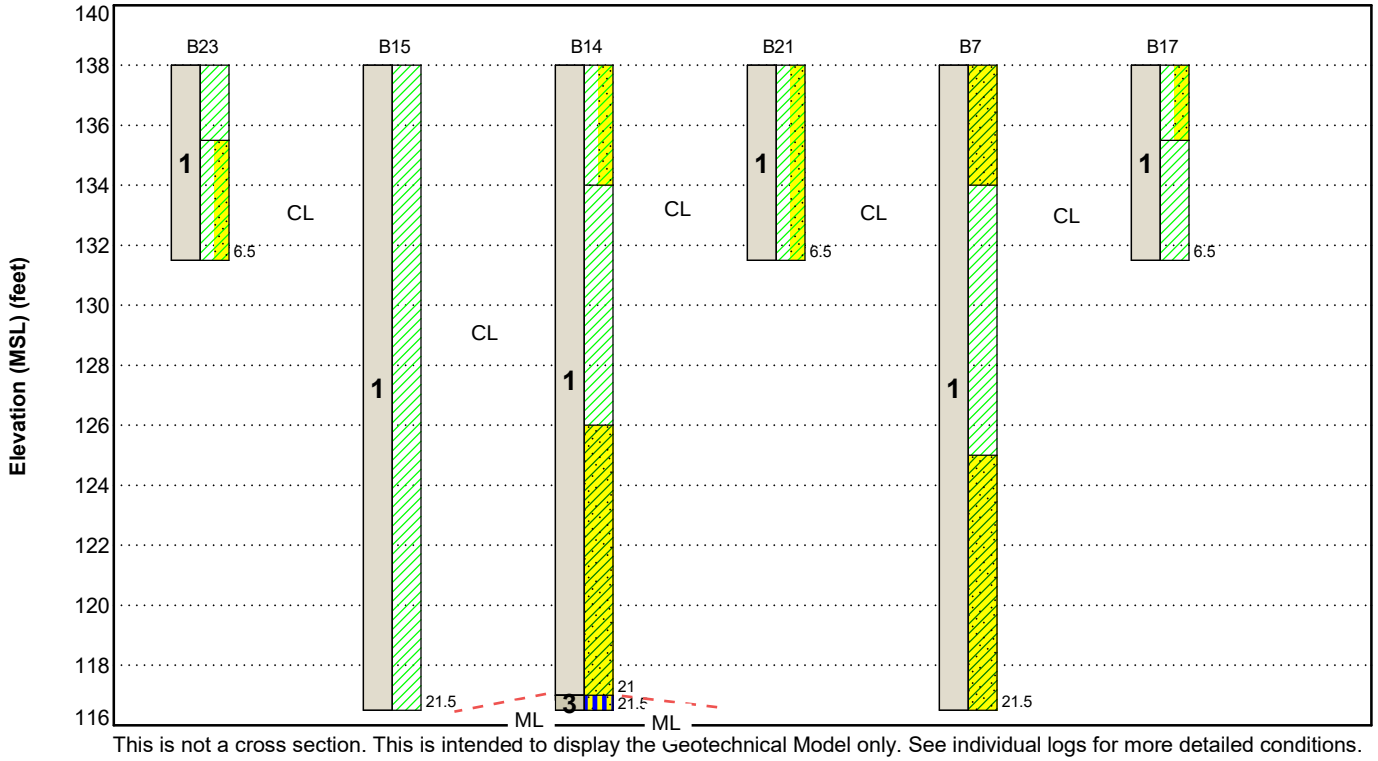
- Lean Clay with Sand
- Lean Clay
- Silt
- Sandy Lean Clay
- Clayey Sand with Gravel
- Silty Clay with Sand
- Clayey Sand
- Sandy Silt
- Silty Clay

NOTES:
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Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Subsurface Profile B-B'



This is not a cross section. This is intended to display the Geotechnical Model only. See individual logs for more detailed conditions.

Model Layer	Layer Name	General Description
1	**Lean Clay**	Medium stiff to hard lean clay with various amounts of sand
2	**Sand**	Medium dense to very dense sand with various amounts of clay or silt
3	**Silt**	Medium stiff to very stiff silt with various amounts of sand

LEGEND

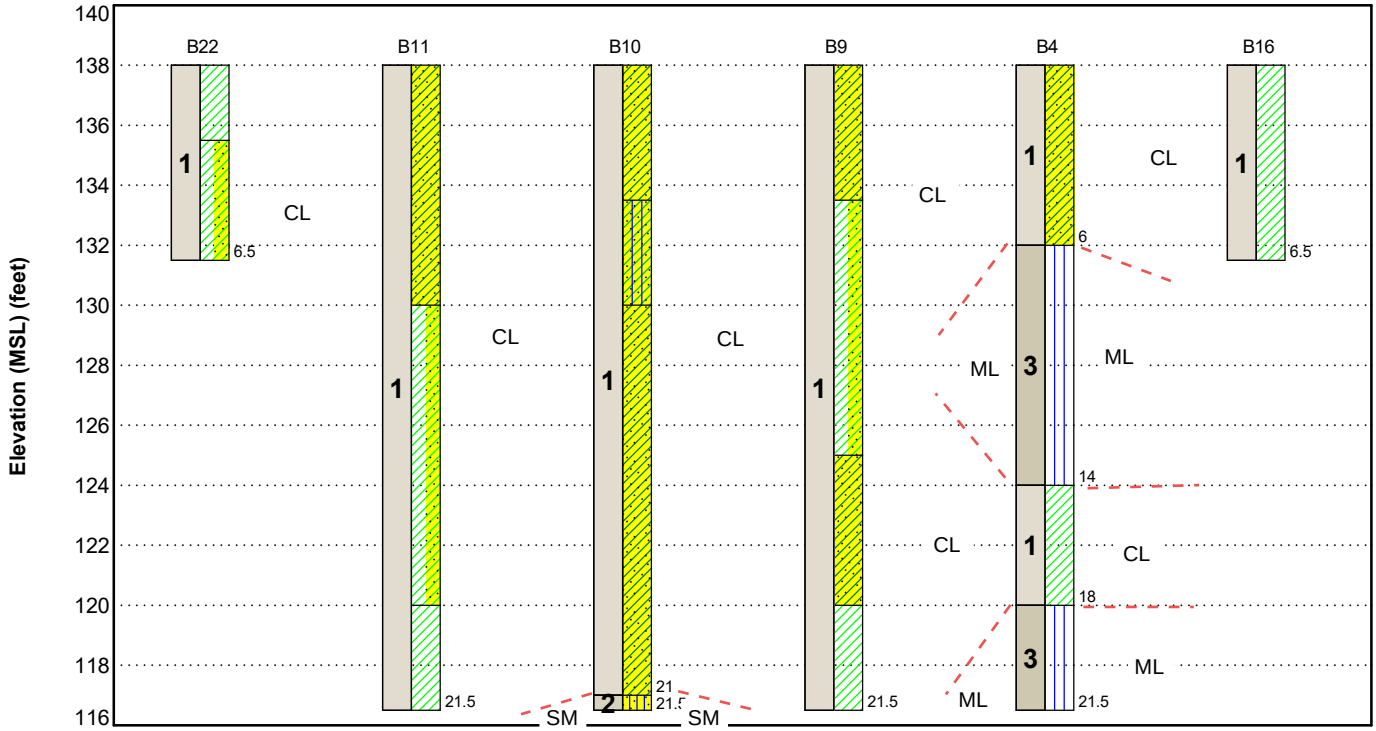
- Sandy Lean Clay
- Sandy Silt
- Lean Clay
- Lean Clay with Sand

NOTES:
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Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Subsurface Profile C-C'



This is not a cross section. This is intended to display the Geotechnical Model only. See individual logs for more detailed conditions.

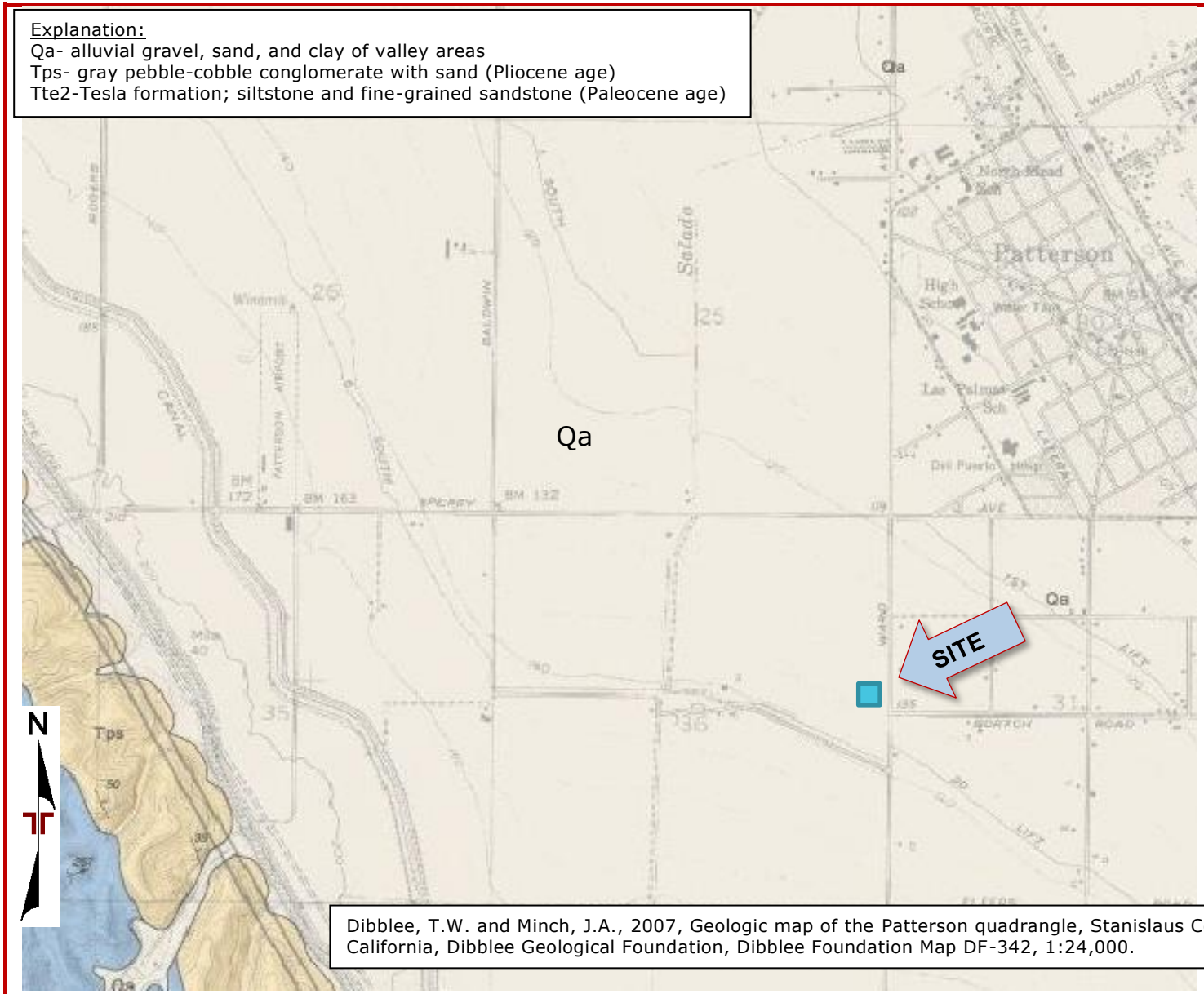
Model Layer	Layer Name	General Description
1	**Lean Clay**	Medium stiff to hard lean clay with various amounts of sand
2	**Sand**	Medium dense to very dense sand with various amounts of clay or silt
3	**Silt**	Medium stiff to very stiff silt with various amounts of sand

LEGEND

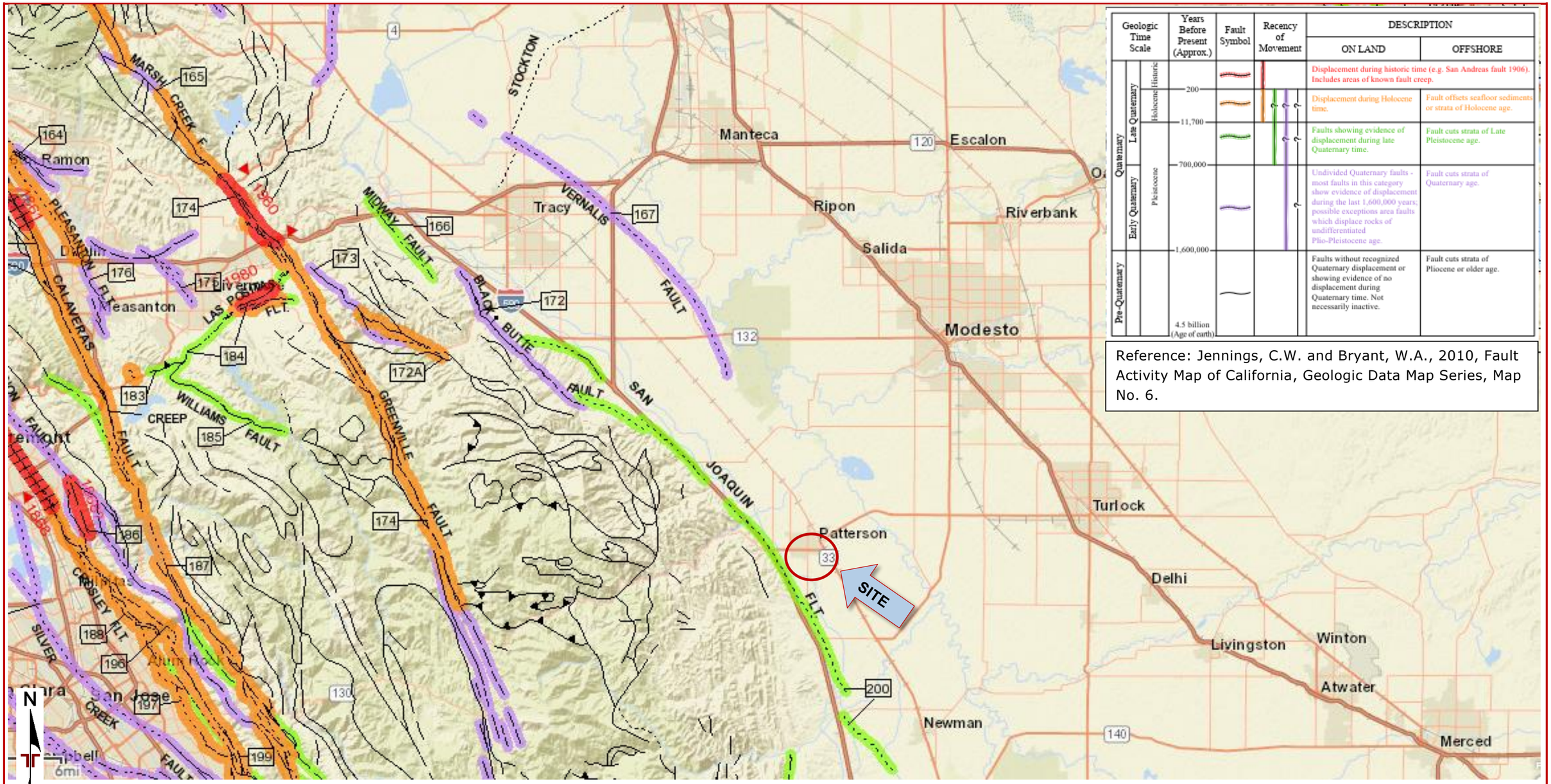
- Sandy Lean Clay
- Lean Clay with Sand
- Silt
- Sandy Silty Clay
- Lean Clay
- Silty Sand

NOTES:
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Geologic Map



Regional Faults



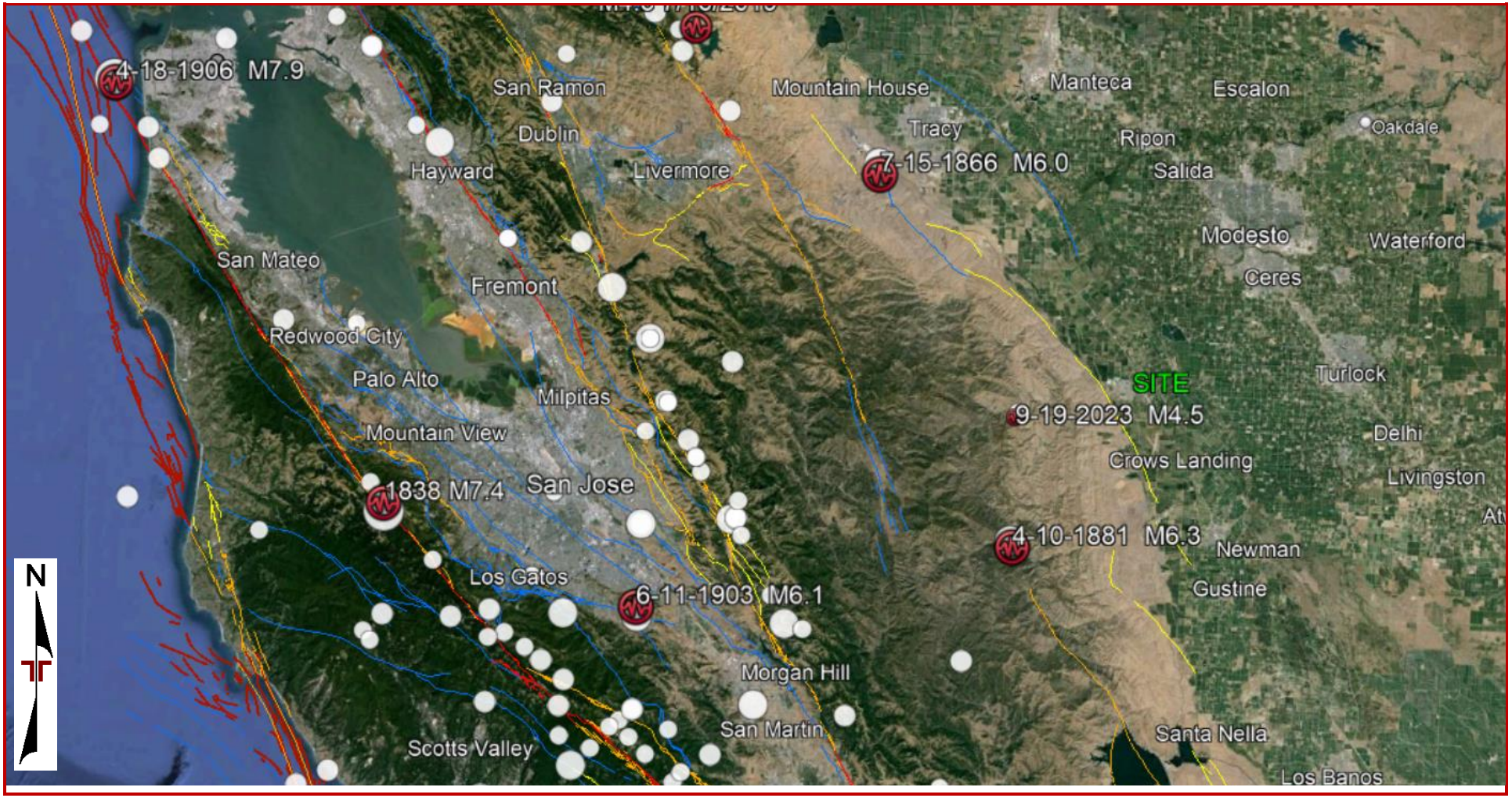
Geologic Time Scale	Years Before Present (Approx.)	Fault Symbol	Recency of Movement	DESCRIPTION: ON LAND	DESCRIPTION: OFFSHORE
Quaternary – Holocene – Historic	200			Displacement during historic time (e.g. San Andreas fault 1906). Includes areas of known fault creep.	
Quaternary – Late Quaternary – Holocene	11,700			Displacement during Holocene time.	Fault offsets seafloor sediments or strata of Holocene age.
Quaternary – Late Quaternary – Pleistocene	700,000			Faults showing evidence of displacement during late Quaternary time.	Fault cuts strata of Late Pleistocene age.
Quaternary – Early Quaternary – Pleistocene	1,600,000			Undivided Quaternary faults - most faults in this category show evidence of displacement during the last 1,600,000 years; possible exceptions area faults which displace rocks of undifferentiated Plio-Pleistocene age.	Fault cuts strata of Quaternary age.
Pre-Quaternary	4.5 billion (Age of earth)			Faults without recognized Quaternary displacement or showing evidence of no displacement during Quaternary time. Not necessarily inactive.	Fault cuts strata of Pliocene or older age.

Reference: Jennings, C.W. and Bryant, W.A., 2010, Fault Activity Map of California, Geologic Data Map Series, Map No. 6.

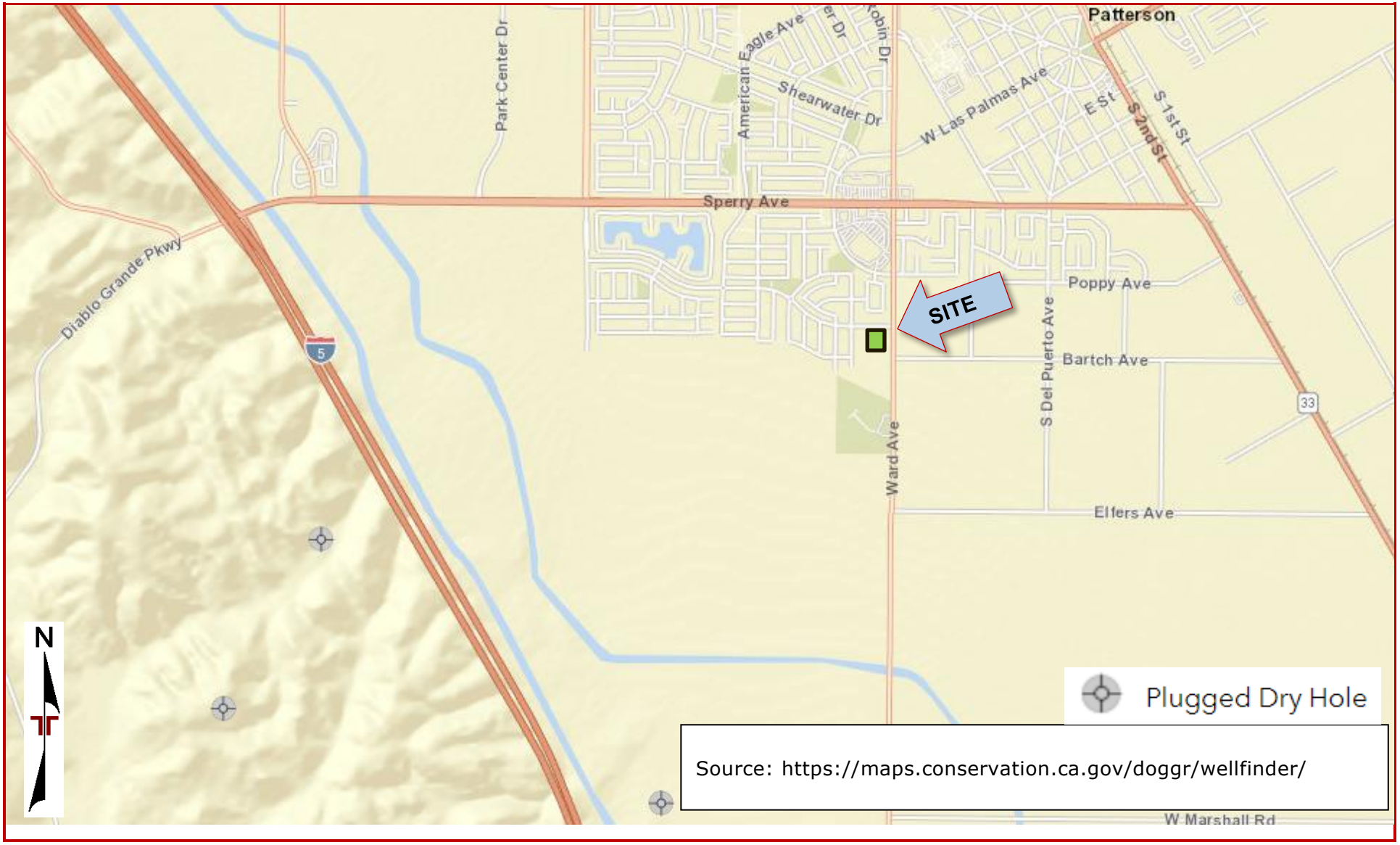
DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

Regional Seismicity



Oil and Gas Map



Exploration and Laboratory Results

Contents:

Boring Logs (B1 through B23)
Atterberg Limits
R-Value (2 pages)
Corrosivity

Note: All attachments are one page unless otherwise noted.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B1

Location: See Exploration Plan

Latitude: 37.4581° Longitude: -121.1422°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**LEAN CLAY WITH SAND (CL)**, medium plasticity, gray, very stiff								
					2-1-2 N=3	2.5 (HP)	22.8			
		stiff			2-2-4 N=6	1.5 (HP)	17.1			
		hard			4-4-5 N=9	4.5+ (HP)	8.5			
		brown, very stiff			4-3-4 N=7	4.0 (HP)	11.8		35-17-18	77
		13.0 125								
		SANDY LEAN CLAY (CL), dark brown, hard			4-6-7 N=13	4.5+ (HP)	11.8		37-16-21	65
		19.0 119								
2		**CLAYEY SAND (SC)**, fine to medium grained, brown, medium dense			4-5-7 N=12		23.7			
		23.0 115								
1		**LEAN CLAY (CL)**, medium plasticity, dark brown, hard			4-7-9 N=16	4.5+ (HP)	18.3			

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-11-2024

Boring Completed
03-11-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with grout upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B1

Location: See Exploration Plan

Latitude: 37.4581° Longitude: -121.1422°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**LEAN CLAY (CL)**, medium plasticity, dark brown, hard *(continued)* 28.0 110								
2		**CLAYEY SAND (SC)**, fine to coarse grained, brown, medium dense			4-5-5 N=10		18.0		24-15-9	44
1		**LEAN CLAY (CL)**, medium plasticity, brown, hard 33.0 105			6-6-10 N=16	4.5+ (HP)	17.0			
		very stiff			6-6-10 N=16	3.5 (HP)	23.5			
2		**CLAYEY SAND WITH GRAVEL (SC)**, fine to coarse grained, brown, very dense, gravel up to 1" 44.0 94			19-39-33 N=72		10.5			
		dense 51.5 86.5			9-16-26 N=42		11.9			
		Boring Terminated at 51.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-11-2024

Boring Completed
03-11-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with grout upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B2

Location: See Exploration Plan

Latitude: 37.4582° Longitude: -121.1424°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**LEAN CLAY WITH SAND (CL)**, dark brown, stiff								
					2-2-3	1.5 (HP)	23.3	88	36-16-20	75
					2-4-5	1.0 (HP)	10.4			
		4.5 133.5								
3		**SANDY SILT (ML)**, low plasticity, brown, medium stiff								
		5			4-4-3	1.0 (HP)	8.5			
		8.0 130								
		SILT (ML), low plasticity, brown, stiff								
		10			5-4-6	2.0 (HP)	8.1			
		13.0 125								
1		**LEAN CLAY (CL)**, medium plasticity, brown, very stiff								
		15			6-6-6	3.5 (HP)	11.8			
		stiff								
		20			6-6-8	1.5 (HP)	9.1			
		21.5 116.5								
		Boring Terminated at 21.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-11-2024

Boring Completed
03-11-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B3

Location: See Exploration Plan

Latitude: 37.4582° Longitude: -121.1420°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
				2-1-2	1.5 (HP)	19.6			
				2-2-4	1.5 (HP)	15.7			
	5			4-3-4	1.5 (HP)	9.8	86		
1	10			5-5-6	2.5 (HP)	11.2	80		
	15			5-6-9	4.5+ (HP)	11.3	95		
	20			6-5-7	2.5 (HP)	17.3	81		

LEAN CLAY WITH SAND (CL), medium plasticity, brown, stiff — 3.5 / 134.5

SILTY CLAY WITH SAND (CL-ML), low plasticity, brown, stiff — 8.0 / 130

SILTY CLAY (CL-ML), low plasticity, brown, very stiff — 13.0 / 125

LEAN CLAY (CL), medium plasticity, brown, hard

very stiff — 21.5 / 116.5

Boring Terminated at 21.5 Feet

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-11-2024

Boring Completed
03-11-2024

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B4

Location: See Exploration Plan

Latitude: 37.4581° Longitude: -121.1429°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**SANDY LEAN CLAY (CL)**, medium plasticity, brown, medium stiff								
					2-2-2	1.0 (HP)	17.8	94		
					2-2-2	1.0 (HP)	18.2	86		
		very stiff								
		6.0 132			3-7-3	2.75 (HP)	10.2	81		
3		**SILT (ML)**, low plasticity, brown, very stiff								
		14.0 124			4-4-5	2.5 (HP)	9.1	86		
1		**LEAN CLAY (CL)**, medium plasticity, brown, hard								
		18.0 120			5-4-5	4.5+ (HP)	12.5	91		
3		**SILT (ML)**, low plasticity, brown, very stiff								
		21.5 116.5			5-5-5	2.25 (HP)	7.8			
		Boring Terminated at 21.5 Feet								

5
10
15
20

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-12-2024

Boring Completed
03-12-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B5

Location: See Exploration Plan

Latitude: 37.4581° Longitude: -121.1426°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
		LEAN CLAY WITH SAND (CL), medium plasticity, brown, stiff								
					2-2-4	2.0 (HP)	22.0		36-12-24	72
					2-2-2	1.5 (HP)	19.4	88		
		5.0 133								
1		**LEAN CLAY (CL)**, medium plasticity, brown, stiff								
					2-1-2	1.5 (HP)	15.3	90		
		5								
		10								
		very stiff			5-6-5	2.5 (HP)	12.5	74		
		15								
		hard			5-5-7	4.5+ (HP)	10.9	90		
		18.0 120								
3		**SILT (ML)**, low plasticity, brown, hard								
		20								
					5-5-4	4.5+ (HP)	9.4			
		21.5 116.5								
		Boring Terminated at 21.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-11-2024

Boring Completed
03-11-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B6

Location: See Exploration Plan

Latitude: 37.4581° Longitude: -121.1414°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
		SANDY LEAN CLAY (CL), medium plasticity, brown, very stiff								
		2.5 / 135.5			2-2-2	2.5 (HP)	19.4	102		
		LEAN CLAY (CL), medium plasticity, brown, very stiff			2-2-2	2.5 (HP)	18.4	104		
					1-1-3	2.5 (HP)	19.0	96		
1		13.0 / 125			4-5-8	2.75 (HP)	13.2			
		SANDY LEAN CLAY (CL), medium plasticity, brown, stiff			6-6-6		9.3			
		hard								
		21.5 / 116.5			4-5-8	4.5 (HP)	11.3	107		
		Boring Terminated at 21.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-13-2024

Boring Completed
03-13-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B7

Location: See Exploration Plan

Latitude: 37.4580° Longitude: -121.1418°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
		SANDY LEAN CLAY (CL), medium plasticity, brown, stiff								
					2-1-1	2.0 (HP)	20.3	95		
		very stiff			2-3-3	2.5 (HP)	15.8			
		4.0 134								
		LEAN CLAY (CL), medium plasticity, brown, very stiff								
		5			3-4-3	3.5 (HP)	8.7	92		
1		brown, stiff								
		10			5-5-7	1.5 (HP)	9.5	95		
		13.0 125								
		SANDY LEAN CLAY (CL), medium plasticity, brown, very stiff								
		15			7-6-8	3.0 (HP)	10.1	86		
		20			6-7-9		15.6	99		
		21.5 116.5								
		Boring Terminated at 21.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-13-2024

Boring Completed
03-13-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B8

Location: See Exploration Plan

Latitude: 37.4578° Longitude: -121.1414°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**LEAN CLAY (CL)**, medium plasticity, brown, stiff								
					2-2-3	1.75 (HP)	20.3			
		hard			2-2-3	4.5+ (HP)	17.8	99		
		4.5 133.5								
3		**SILT (ML)**, low plasticity, brown, hard								
		5			4-3-3	4.5+ (HP)	11.9	87		
		10			4-4-5	4.5+ (HP)	11.4	88		
		12.0 126								
1		**SANDY SILTY CLAY (CL-ML)**, low plasticity, brown, hard								
		15			6-6-5	4.5+ (HP)	8.5	95		
		17.0 121								
3		**SILT (ML)**, low plasticity, brown, hard								
		20			5-6-6	4.5+ (HP)	20.5	84		
		21.5 116.5								
		Boring Terminated at 21.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-13-2024

Boring Completed
03-13-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B9

Location: See Exploration Plan

Latitude: 37.4579° Longitude: -121.1429°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**SANDY LEAN CLAY (CL)**, medium plasticity, brown, stiff								
		4.5 133.5			2-2-3	1.5 (HP)	22.6	93		
					2-2-2	1.0 (HP)	17.9			
		LEAN CLAY WITH SAND (CL), medium plasticity, brown, hard								
		5			2-2-3	4.5+ (HP)	15.1	101		
		13.0 125								
		SANDY LEAN CLAY (CL), medium plasticity, brown, hard								
		10			4-4-5	4.5+ (HP)	10.5	92		
		15			6-7-8	4.5+ (HP)	12.1	104		
		18.0 120								
		LEAN CLAY (CL), medium plasticity, brown, very stiff								
		20			5-6-9	4.0 (HP)	14.6	92		
		21.5 116.5								
		Boring Terminated at 21.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-12-2024

Boring Completed
03-12-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B10

Location: See Exploration Plan

Latitude: 37.4576° Longitude: -121.1430°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**SANDY LEAN CLAY (CL)**, brown, stiff								
					2-1-2	1.75 (HP)	21.7	81		
		very stiff			2-2-4	3.5 (HP)	18.4	105	32-17-15	62
		4.5 133.5								
		SANDY SILTY CLAY (CL-ML), low plasticity, brown, hard								
		5			3-3-3	4.5+ (HP)	8.1	87		
		8.0 130								
		SANDY LEAN CLAY (CL), medium plasticity, brown, hard								
		10			4-5-8	4.5+ (HP)	11.1			
		very stiff								
		15			5-5-6	2.5 (HP)	11.5	90		
		hard								
		20			5-6-7	4.5 (HP)	17.7			
		21.0 117								
2		21.5 **SILTY SAND (SM)**, fine to medium grained, brown, medium dense 116.5								
		Boring Terminated at 21.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-12-2024

Boring Completed
03-12-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B11

Location: See Exploration Plan

Latitude: 37.4573° Longitude: -121.1427°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
		SANDY LEAN CLAY (CL), brown, medium stiff								
					2-1-3	1.0 (HP)	20.6			
		hard			2-2-2	4.5+ (HP)	16.8	100		
		very stiff								
					3-4-3	2.5 (HP)	10.4	83	28-17-11	68
		8.0 130								
1		**LEAN CLAY WITH SAND (CL)**, medium plasticity, brown, hard			4-5-7	4.5+ (HP)	10.1	93		
					5-6-7	4.5+ (HP)	12.0	99		
		18.0 120								
		LEAN CLAY (CL), medium plasticity, brown, very stiff								
					5-6-6	3.0 (HP)	15.1			
		21.5 116.5								
		Boring Terminated at 21.5 Feet								

5
10
15
20

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-12-2024

Boring Completed
03-12-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B12

Location: See Exploration Plan

Latitude: 37.4575° Longitude: -121.1426°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**LEAN CLAY (CL)**, medium plasticity, brown, medium stiff								
					2-1-2	1.0 (HP)	20.2	93		
					2-1-3	1.25 (HP)	17.6			
		hard								
		5			2-2-2	4.5+ (HP)	17.3	101		
		stiff								
		10			5-5-6	2.0 (HP)	9.3	86		
		13.0 125								
		SANDY LEAN CLAY (CL), medium plasticity, brown, hard								
		15			5-4-6	4.5+ (HP)	11.7	94		
		18.0 120								
		LEAN CLAY (CL), medium plasticity, brown, very stiff								
		20			5-5-6	3.0 (HP)	13.7	98		
		21.5 116.5								
		Boring Terminated at 21.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-12-2024

Boring Completed
03-12-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B13

Location: See Exploration Plan

Latitude: 37.4574° Longitude: -121.1422°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**LEAN CLAY (CL)**, medium plasticity, brown, stiff								
					2-1-3	1.5 (HP)	18.9	96		
		very stiff, expansion index of 41			2-2-4	2.25 (HP)	15.2	83		
		5			3-4-5	2.0 (HP)	10.6	91		
		stiff								
		10			5-5-7	1.0 (HP)	10.3	77		
		very stiff								
		15			6-7-9	3.25 (HP)	11.6	85		
		20			6-6-8		15.5	88		
		21.0 117								
2		21.5 **SILTY SAND (SM)**, fine to medium grained, brown, medium dense 116.5								
		Boring Terminated at 21.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-12-2024

Boring Completed
03-12-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B14

Location: See Exploration Plan

Latitude: 37.4575° Longitude: -121.1418°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**LEAN CLAY WITH SAND (CL)**, brown, medium stiff								
					2-1-2	1.0 (HP)	19.1		32-17-15	77
		very stiff			2-3-5	2.5 (HP)	14.4	86		
		4.0 134								
		LEAN CLAY (CL), medium plasticity, brown, stiff								
		5			4-4-4	1.75 (HP)	9.0	80		
		hard								
		10			5-6-9	4.5+ (HP)	10.0	97		
		12.0 126								
		SANDY LEAN CLAY (CL), medium plasticity, brown, hard								
		trace gravel								
		15			7-7-8	4.5+ (HP)	9.5	93		
		20			7-8-8	3.5 (HP)	8.4	96		
		21.0 117								
3		21.5 **SANDY SILT (ML)**, low plasticity, brown, very stiff 116.5								
		Boring Terminated at 21.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-12-2024

Boring Completed
03-12-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B15

Location: See Exploration Plan

Latitude: 37.4573° Longitude: -121.1417°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**LEAN CLAY (CL)**, medium plasticity, brown, medium stiff								
					2-1-2	1.0 (HP)	19.1	83		
		stiff			2-2-3	1.5 (HP)	18.3	95		
		5								
		medium stiff			4-4-4	1.0 (HP)	10.3	75		
		10								
		hard			4-5-8	4.5+ (HP)	11.1	97		
		15								
					5-5-6	4.5+ (HP)	11.8	92		
		20								
		trace gravel, light brown, very stiff			5-6-8	4.0 (HP)	17.8	89		
		21.5 116.5								
		Boring Terminated at 21.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-12-2024

Boring Completed
03-12-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B16

Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 37.4584° Longitude: -121.1429° Depth (Ft.) Elevation: 138 (Ft.) +/-	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**LEAN CLAY (CL)**, medium plasticity, brown, stiff									
						3-2-2	2.0 (HP)	20.9	93		
						2-2-3	1.75 (HP)	19.2	101		
			5								
						2-2-2	2.0 (HP)	17.3			
		6.5 131.5 ***Boring Terminated at 6.5 Feet***									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-13-2024

Boring Completed
03-13-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B17

Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 37.4584° Longitude: -121.1417° Depth (Ft.) Elevation: 138 (Ft.) +/-	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
		LEAN CLAY WITH SAND (CL), medium plasticity, brown, stiff									
		2.5 135.5				3-2-2	1.75 (HP)	19.2	95		
1		**LEAN CLAY (CL)**, medium plasticity, brown, very stiff				2-2-3	3.25 (HP)	19.8	102		
			5								
		6.5 131.5				2-2-2	2.5 (HP)	18.5	97		
		Boring Terminated at 6.5 Feet									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-13-2024

Boring Completed
03-13-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B18

Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 37.4583° Longitude: -121.1433° Depth (Ft.) Elevation: 138 (Ft.) +/-	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**LEAN CLAY (CL)**, medium plasticity, brown, medium stiff									
		stiff				2-1-2	1.0 (HP)	21.0	81		
						2-2-2	2.0 (HP)	17.9	101		
			5								
		6.0 132				2-1-1	2.0 (HP)	17.9	93		
		6.5 **LEAN CLAY WITH SAND (CL)**, medium plasticity, brown, stiff 131.5									
		Boring Terminated at 6.5 Feet									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-13-2024

Boring Completed
03-13-2024

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B19

Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 37.4573° Longitude: -121.1433° Depth (Ft.) Elevation: 138 (Ft.) +/-	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**LEAN CLAY (CL)**, medium plasticity, brown, stiff									
						2-2-2	2.0 (HP)	20.6	98		
						2-2-2	2.0 (HP)	16.1	105		
		4.0 134									
		SANDY LEAN CLAY (CL), trace gravel, medium plasticity, brown, very stiff	5								
						3-2-3	2.5 (HP)	12.4	102		
		6.5 131.5									
		Boring Terminated at 6.5 Feet									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-13-2024

Boring Completed
03-13-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B20

Location: See Exploration Plan

Latitude: 37.4578° Longitude: -121.1426°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**LEAN CLAY (CL)**, medium plasticity, brown, stiff								
					2-1-2	1.5 (HP)	20.7	89		
		very stiff, expansion index of 33			2-1-2 EI=33	3.25 (HP)	15.2	97		
		5								
		medium stiff			2-2-2	1.0 (HP)	12.0	81		
		10								
		stiff			4-4-5	1.75 (HP)	13.2	88		
		13.0 125								
		LEAN CLAY WITH SAND (CL), medium plasticity, brown, very stiff								
		15			5-5-5	3.25 (HP)	12.0	90		
		20			4-5-8	3.0 (HP)	14.1	89		
		21.5 116.5								
		Boring Terminated at 21.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-13-2024

Boring Completed
03-13-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B21

Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 37.4577° Longitude: -121.1417° Depth (Ft.) Elevation: 138 (Ft.) +/-	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
1		**LEAN CLAY WITH SAND (CL)**, medium plasticity, brown, very stiff									
						2-2-2	2.5 (HP)	18.4			
						2-1-2	2.5 (HP)	18.3	90		
			5								
						2-1-2	3.25 (HP)	17.6	99		
		6.5 131.5 ***Boring Terminated at 6.5 Feet***									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-13-2024

Boring Completed
03-13-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B22

Location: See Exploration Plan

Latitude: 37.4569° Longitude: -121.1430°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
		LEAN CLAY (CL), medium plasticity, brown, very stiff								
		2.5 135.5			2-1-3	2.5 (HP)	20.2	95		
1		**LEAN CLAY WITH SAND (CL)**, medium plasticity, brownish tan, stiff			2-2-1	1.5 (HP)	16.3	89		
		hard								
		5			2-3-4	4.5+ (HP)	9.8	89		
		6.5 131.5								
		Boring Terminated at 6.5 Feet								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-13-2024

Boring Completed
03-13-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

Terracon
902 Industrial Way
Lodi, CA

Boring Log No. B23

Location: See Exploration Plan

Latitude: 37.4569° Longitude: -121.1416°

Depth (Ft.) Elevation: 138 (Ft.) +/-

Model Layer	Graphic Log	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	HP (tsf)	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
		LEAN CLAY (CL), medium plasticity, brown, stiff								
		2.5 135.5			2-2-2	2.0 (HP)	18.9	91		
1		**LEAN CLAY WITH SAND (CL)**, medium plasticity, brown, very stiff			2-2-2	3.5 (HP)	18.9	93		
		6.5 131.5			3-2-4	2.0 (HP)	15.8	85		
		Boring Terminated at 6.5 Feet								

5

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No free water observed

Drill Rig
D-90

Hammer Type
Automatic

Driller
Terracon

Logged by
RG

Boring Started
03-13-2024

Boring Completed
03-13-2024

Notes
Elevation Reference: Elevations were estimated using Google Earth

Advancement Method
6" Hollow Stem Auger

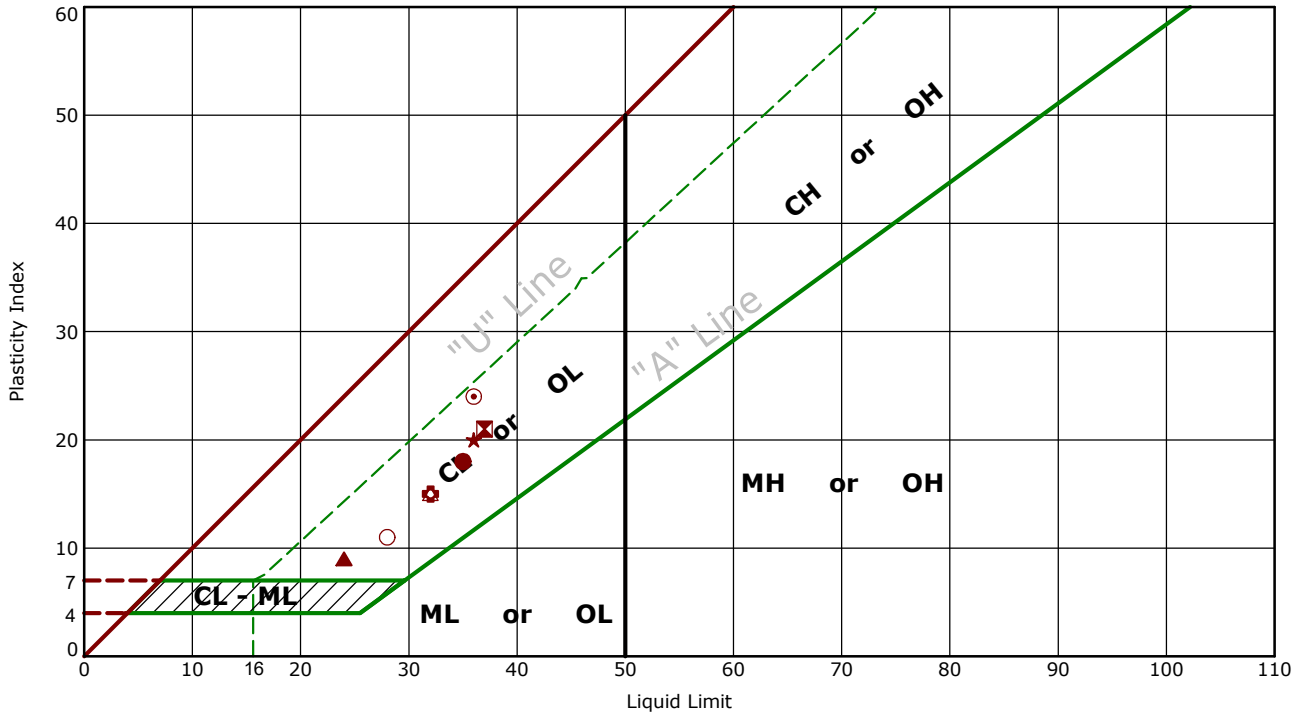
Abandonment Method
Boring backfilled with auger cuttings upon completion.

Patterson Gardens Elementary School
1000 Calvinson Parkway | Patterson, CA
Terracon Project No. NA235132

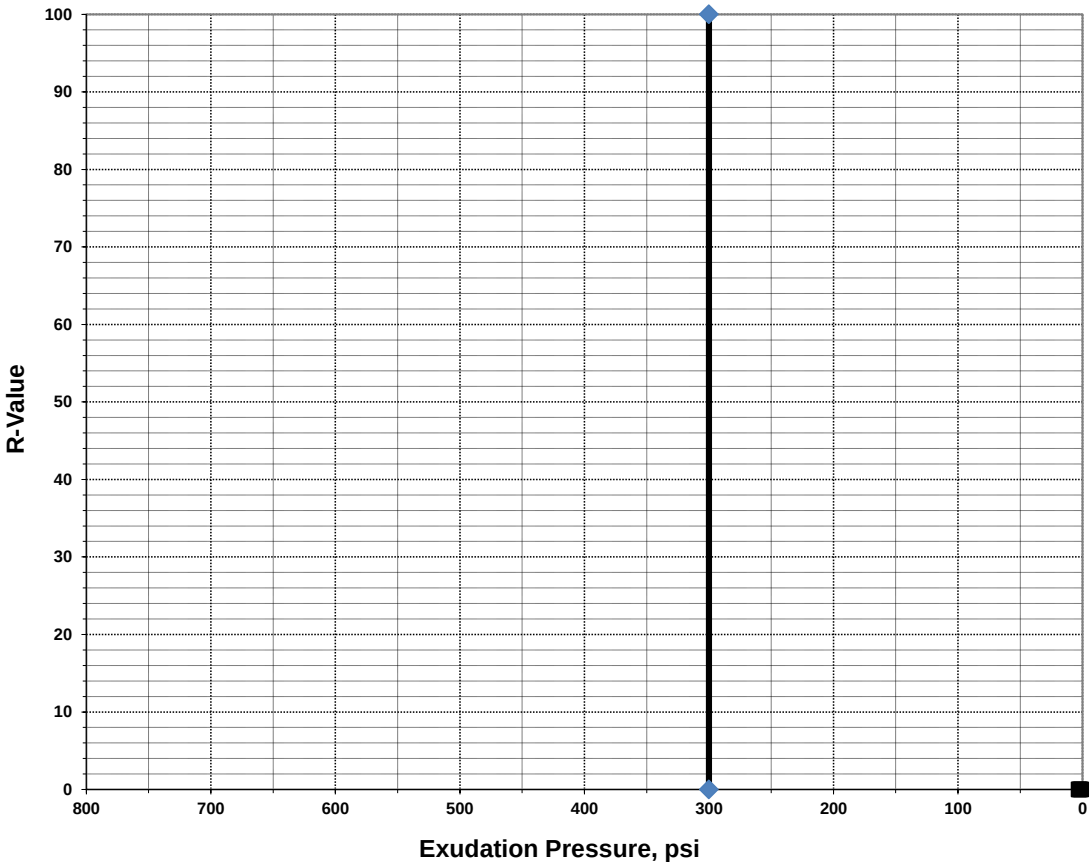
Terracon
902 Industrial Way
Lodi, CA

Atterberg Limit Results

ASTM D4318



	Boring ID	Depth (Ft)	LL	PL	PI	Fines	USCS	Description
●	B1	10 - 11.5	35	17	18	77.0	CL	LEAN CLAY with SAND
⊠	B1	15 - 16.5	37	16	21	64.7	CL	SANDY LEAN CLAY
▲	B1	30 - 31.5	24	15	9	43.6	SC	CLAYEY SAND
★	B2	1 - 2.5	36	16	20	74.7	CL	LEAN CLAY with SAND
⊙	B5	1 - 2.5	36	12	24	71.7	CL	LEAN CLAY with SAND
✿	B10	2.5 - 4	32	17	15	62.4	CL	SANDY LEAN CLAY
○	B11	5 - 6.5	28	17	11	67.8	CL	SANDY LEAN CLAY
△	B14	1 - 2.5	32	17	15	76.7	CL	LEAN CLAY with SAND

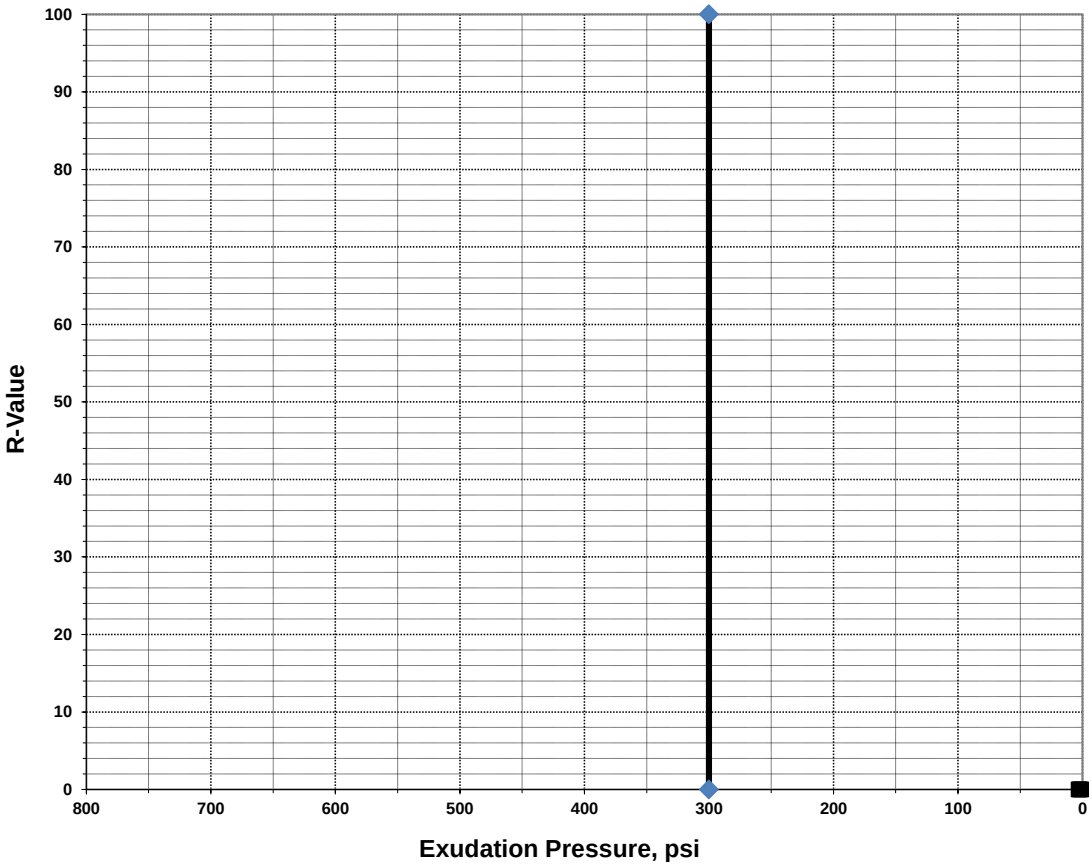


Specimen Identification	Compaction Pressure (psi)	R-Value at 300 psi
B17	**80.0**	**<5**

Material extruded from bottom of mold during exudation on 1st attempt. Test aborted. Material has an R-value of <5

R-Value Test

Client:	Patterson Unified School District
Project:	Patterson Gardens Elementary School
Site:	1000 Calvinson Parkway
Project No.:	NA235132



Specimen Identification	Compaction Pressure (psi)	R-Value at 300 psi
B19 Bulk	**200.0**	**<5**

Material extruded from bottom of mold during exudation on 1st attempt. Test aborted. Material has an R-value of <5

R-Value Test

Client:	Patterson Unified School District
Project:	Patterson Gardens Elementary School
Site:	1000 Calvinson Parkway
Project No.:	NA235132

902 Industrial Way
Lodi, California 95240
(209) 367-3701

Client
Patterson Unified School District

Project
Patterson Gardens Elementary School

Sample Submitted By: Terracon (NA) **Date Received:** 3/27/2024 **Project Number:** NA235132

Results of Corrosion Analysis

Sample Number	2-I
Sample Location	B-12
Sample Depth	2.5
pH Analysis, ASTM G 51	8.26
Water Soluble Sulfate (SO4), ASTM D516 (%)	0.006
Sulfides, AWWA 4500-S^{2-} D, (ppm)	<0.001
Chlorides, AWWA 4500-CL^{-} E, (%)	nil
Red-Ox, ASTM G 200, (mV)	+206
Total Salts, AWWA 2520 B, (mg/kg)	296.5
Saturated Minimum Resistivity, ASTM G 57, (ohm-cm)	1,800

Reviewed By: *Paula Arends*
Paula Arends
Laboratory Manager

The tests were performed in general accordance with applicable ASTM and AWWA test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

Supporting Information

Contents:

General Notes
Unified Soil Classification System
Liquefaction Analysis Results

Note: All attachments are one page unless otherwise noted.

Terracon
902 Industrial Way
Lodi, CA

General Notes

Sampling	Water Level	Field Tests
Modified California Ring Sampler Standard Penetration Test	Water Initially Encountered Water Level After a Specified Period of Time Water Level After a Specified Period of Time Cave In Encountered Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.	N Standard Penetration Test Resistance (Blows/Ft.) (HP) Hand Penetrometer (T) Torvane (DCP) Dynamic Cone Penetrometer UC Unconfined Compressive Strength (PID) Photo-Ionization Detector (OVA) Organic Vapor Analyzer

Descriptive Soil Classification

Soil classification as noted on the soil boring logs is based Unified Soil Classification System. Where sufficient laboratory data exist to classify the soils consistent with ASTM D2487 "Classification of Soils for Engineering Purposes" this procedure is used. ASTM D2488 "Description and Identification of Soils (Visual-Manual Procedure)" is also used to classify the soils, particularly where insufficient laboratory data exist to classify the soils in accordance with ASTM D2487. In addition to USCS classification, coarse grained soils are classified on the basis of their in-place relative density, and fine-grained soils are classified on the basis of their consistency. See "Strength Terms" table below for details. The ASTM standards noted above are for reference to methodology in general. In some cases, variations to methods are applied as a result of local practice or professional judgment.

Location And Elevation Notes

Exploration point locations as shown on the Exploration Plan and as noted on the soil boring logs in the form of Latitude and Longitude are approximate. See Exploration and Testing Procedures in the report for the methods used to locate the exploration points for this project. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

Strength Terms

Relative Density of Coarse-Grained Soils
(More than 50% retained on No. 200 sieve.)
Density determined by Standard Penetration Resistance

Relative Density	Standard Penetration or N-Value (Blows/Ft.)
Very Loose	0 - 3
Loose	4 - 9
Medium Dense	10 - 29
Dense	30 - 50
Very Dense	> 50

Consistency of Fine-Grained Soils
(50% or more passing the No. 200 sieve.)
Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance

Consistency	Unconfined Compressive Strength Qu (tsf)	Standard Penetration or N-Value (Blows/Ft.)
Very Soft	less than 0.25	0 - 1
Soft	0.25 to 0.50	2 - 4
Medium Stiff	0.50 to 1.00	4 - 8
Stiff	1.00 to 2.00	8 - 15
Very Stiff	2.00 to 4.00	15 - 30
Hard	> 4.00	> 30

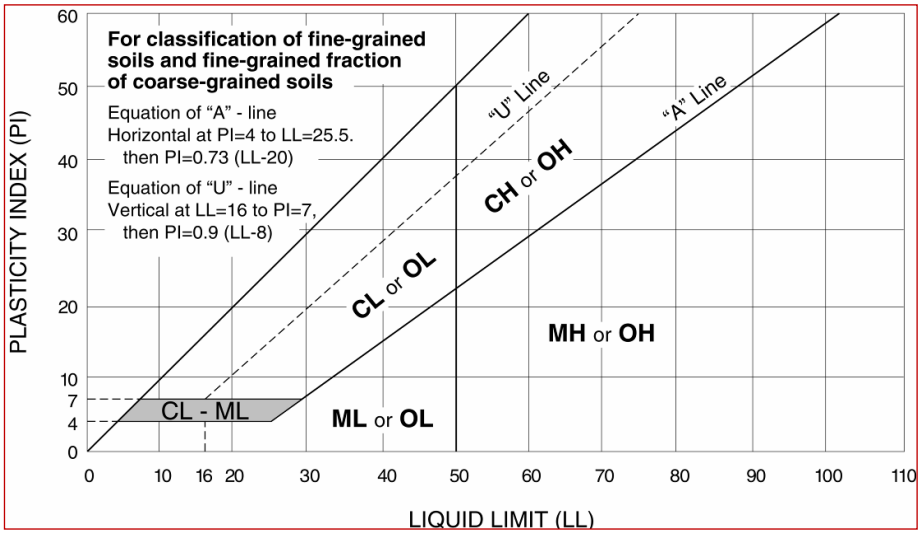
Relevance of Exploration and Laboratory Test Results

Exploration/field results and/or laboratory test data contained within this document are intended for application to the project as described in this document. Use of such exploration/field results and/or laboratory test data should not be used independently of this document.

Unified Soil Classification System

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests [A]				Soil Classification	
				Group Symbol	Group Name [B]
Coarse-Grained Soils: More than 50% retained on No. 4 sieve	**Gravels:** More than 50% of coarse fraction retained on No. 4 sieve	**Clean Gravels:** Less than 5% fines [C]	Cu≥4 and 1≤Cc≤3 [E]	GW	Well-graded gravel [F]
			Cu<4 and/or [Cc<1 or Cc>3.0] [E]	GP	Poorly graded gravel [F]
		Gravels with Fines: More than 12% fines [C]	Fines classify as ML or MH	GM	Silty gravel [F, G, H]
			Fines classify as CL or CH	GC	Clayey gravel [F, G, H]
	Sands: 50% or more of coarse fraction passes No. 4 sieve	**Clean Sands:** Less than 5% fines [D]	Cu≥6 and 1≤Cc≤3 [E]	SW	Well-graded sand [I]
			Cu<6 and/or [Cc<1 or Cc>3.0] [E]	SP	Poorly graded sand [I]
		Sands with Fines: More than 12% fines [D]	Fines classify as ML or MH	SM	Silty sand [G, H, I]
			Fines classify as CL or CH	SC	Clayey sand [G, H, I]
Fine-Grained Soils: 50% or more passes the No. 200 sieve	**Silts and Clays:** Liquid limit less than 50	**Inorganic:**	PI > 7 and plots above "A" line [J]	CL	Lean clay [K, L, M]
			PI < 4 or plots below "A" line [J]	ML	Silt [K, L, M]
		Organic:	$\frac{LL\ oven\ dried}{LL\ not\ dried} < 0.75$	OL	Organic clay [K, L, M, N]
					Organic silt [K, L, M, O]
	Silts and Clays: Liquid limit 50 or more	**Inorganic:**	PI plots on or above "A" line	CH	Fat clay [K, L, M]
			PI plots below "A" line	MH	Elastic silt [K, L, M]
		Organic:	$\frac{LL\ oven\ dried}{LL\ not\ dried} < 0.75$	OH	Organic clay [K, L, M, P]
					Organic silt [K, L, M, Q]
Highly organic soils:	Primarily organic matter, dark in color, and organic odor			PT	Peat

[A] Based on the material passing the 3-inch (75-mm) sieve.
[B] If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.
[C] Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.
[D] Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay.
[E] $Cu = D_{60}/D_{10}$ $Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
[F] If soil contains ≥ 15% sand, add "with sand" to group name.
[G] If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.
[H] If fines are organic, add "with organic fines" to group name.
[I] If soil contains ≥ 15% gravel, add "with gravel" to group name.
[J] If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.
[K] If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.
[L] If soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.
[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.
[N] PI ≥ 4 and plots on or above "A" line.
[O] PI < 4 or plots below "A" line.
[P] PI plots on or above "A" line.
[Q] PI plots below "A" line.

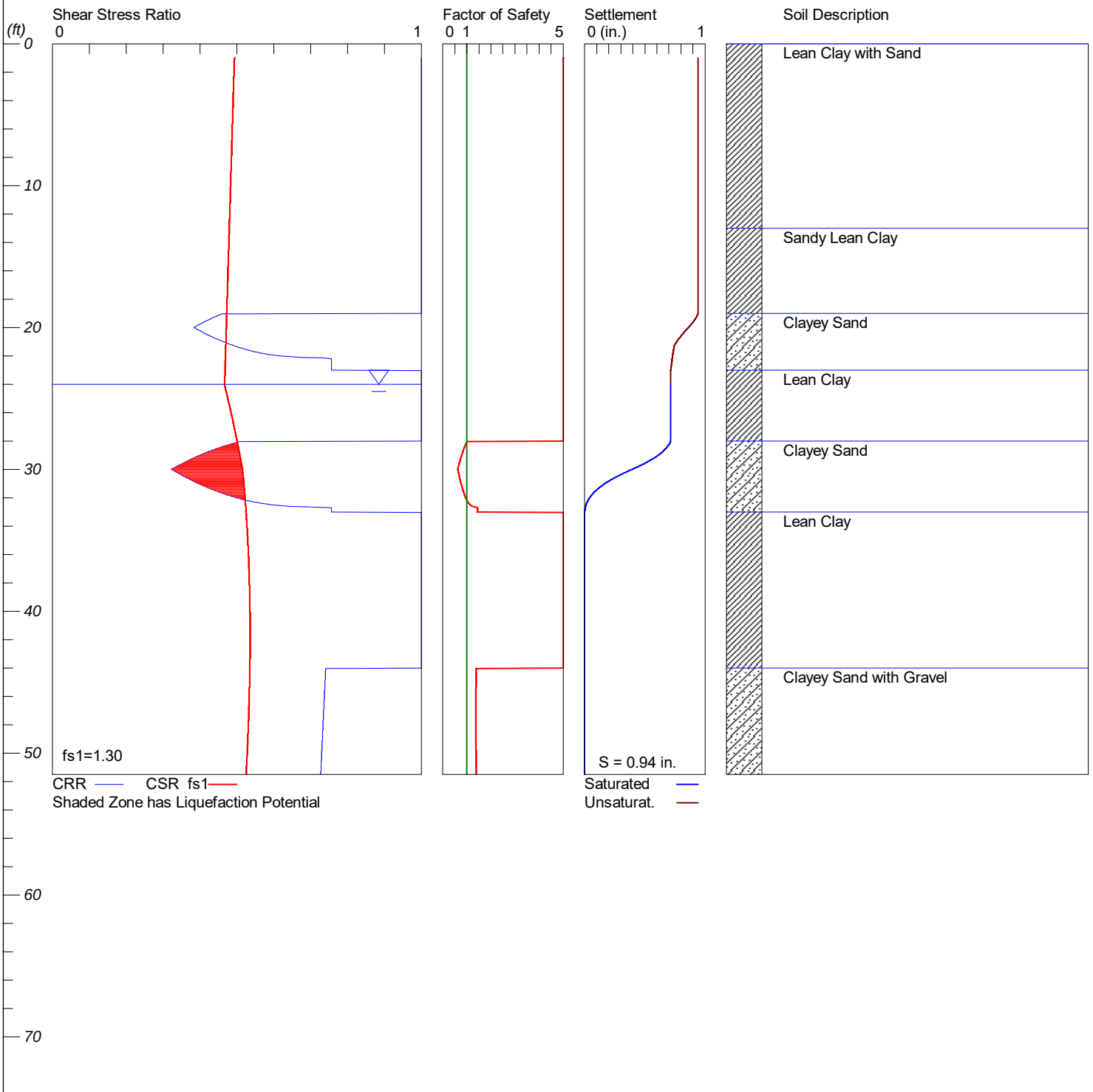


LIQUEFACTION ANALYSIS

Patterson Gardens Elementary School

Hole No.=B1 Water Depth=24 ft Surface Elev.=138

Magnitude=6.38
Acceleration=0.585g



LiquefyPro CivilTech Software USA www.civiltech.com

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LIQUEFACTION ANALYSIS SUMMARY

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Input File Name: N:\Projects\2023\NA235132\Working Files\Calculations-Analyses\NA235132 Liquefaction Analysis Site Class E.liq
Title: Patterson Gardens Elementary School
Subtitle:

Surface Elev.=138
Hole No.=B1
Depth of Hole= 51.50 ft
Water Table during Earthquake= 24.00 ft
Water Table during In-Situ Testing= 24.00 ft
Max. Acceleration= 0.58 g
Earthquake Magnitude= 6.38

Input Data:
Surface Elev.=138
Hole No.=B1
Depth of Hole=51.50 ft
Water Table during Earthquake= 24.00 ft
Water Table during In-Situ Testing= 24.00 ft
Max. Acceleration=0.58 g
Earthquake Magnitude=6.38
No-Liquefiable Soils: CL, OL are Non-Liq. Soil

1. SPT or BPT Calculation.
2. Settlement Analysis Method: Ishihara / Yoshimine
3. Fines Correction for Liquefaction: Modify Stark/Olson
4. Fine Correction for Settlement: During Liquefaction*
5. Settlement Calculation in: All zones*
6. Hammer Energy Ratio, Ce = 1.25
7. Borehole Diameter, Cb= 1
8. Sampling Method, Cs= 1
9. User request factor of safety (apply to CSR) , User= 1.3
   Plot one CSR curve (fs1=User)
10. Use Curve Smoothing: Yes*
* Recommended Options

In-Situ Test Data:
Depth SPT gamma Fines

ft		pcf	
1.00	3.00	115.00	NoLiq
2.50	6.00	115.00	NoLiq
5.00	9.00	115.00	NoLiq
10.00	7.00	115.00	NoLiq
15.00	13.00	115.00	NoLiq
20.00	12.00	115.00	44.00
25.00	16.00	115.00	NoLiq
30.00	10.00	115.00	44.00
35.00	16.00	115.00	NoLiq
40.00	16.00	115.00	NoLiq
45.00	72.00	115.00	44.00
50.00	42.00	115.00	44.00

Output Results:

Settlement of Saturated Sands=0.71 in.
Settlement of Unsaturated Sands=0.23 in.
Total Settlement of Saturated and Unsaturated Sands=0.94 in.
Differential Settlement=0.471 to 0.622 in.

Depth ft	CRRm	CSRfs	F.S.	S_sat. in.	S_dry in.	S_all in.
1.00	2.00	0.49	5.00	0.71	0.23	0.94
1.05	2.00	0.49	5.00	0.71	0.23	0.94
1.10	2.00	0.49	5.00	0.71	0.23	0.94
1.15	2.00	0.49	5.00	0.71	0.23	0.94
1.20	2.00	0.49	5.00	0.71	0.23	0.94
1.25	2.00	0.49	5.00	0.71	0.23	0.94
1.30	2.00	0.49	5.00	0.71	0.23	0.94
1.35	2.00	0.49	5.00	0.71	0.23	0.94
1.40	2.00	0.49	5.00	0.71	0.23	0.94
1.45	2.00	0.49	5.00	0.71	0.23	0.94
1.50	2.00	0.49	5.00	0.71	0.23	0.94
1.55	2.00	0.49	5.00	0.71	0.23	0.94
1.60	2.00	0.49	5.00	0.71	0.23	0.94
1.65	2.00	0.49	5.00	0.71	0.23	0.94
1.70	2.00	0.49	5.00	0.71	0.23	0.94
1.75	2.00	0.49	5.00	0.71	0.23	0.94
1.80	2.00	0.49	5.00	0.71	0.23	0.94
1.85	2.00	0.49	5.00	0.71	0.23	0.94
1.90	2.00	0.49	5.00	0.71	0.23	0.94
1.95	2.00	0.49	5.00	0.71	0.23	0.94
2.00	2.00	0.49	5.00	0.71	0.23	0.94
2.05	2.00	0.49	5.00	0.71	0.23	0.94
2.10	2.00	0.49	5.00	0.71	0.23	0.94
2.15	2.00	0.49	5.00	0.71	0.23	0.94
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2.70	2.00	0.49	5.00	0.71	0.23	0.94
2.75	2.00	0.49	5.00	0.71	0.23	0.94
2.80	2.00	0.49	5.00	0.71	0.23	0.94
2.85	2.00	0.49	5.00	0.71	0.23	0.94
2.90	2.00	0.49	5.00	0.71	0.23	0.94
2.95	2.00	0.49	5.00	0.71	0.23	0.94
3.00	2.00	0.49	5.00	0.71	0.23	0.94
3.05	2.00	0.49	5.00	0.71	0.23	0.94
3.10	2.00	0.49	5.00	0.71	0.23	0.94
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3.75	2.00	0.49	5.00	0.71	0.23	0.94
3.80	2.00	0.49	5.00	0.71	0.23	0.94
3.85	2.00	0.49	5.00	0.71	0.23	0.94
3.90	2.00	0.49	5.00	0.71	0.23	0.94
3.95	2.00	0.49	5.00	0.71	0.23	0.94
4.00	2.00	0.49	5.00	0.71	0.23	0.94
4.05	2.00	0.49	5.00	0.71	0.23	0.94
4.10	2.00	0.49	5.00	0.71	0.23	0.94
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4.65	2.00	0.49	5.00	0.71	0.23	0.94
4.70	2.00	0.49	5.00	0.71	0.23	0.94
4.75	2.00	0.49	5.00	0.71	0.23	0.94
4.80	2.00	0.49	5.00	0.71	0.23	0.94

4.85	2.00	0.49	5.00	0.71	0.23	0.94
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13.95	2.00	0.48	5.00	0.71	0.23	0.94
14.00	2.00	0.48	5.00	0.71	0.23	0.94
14.05	2.00	0.48	5.00	0.71	0.23	0.94
14.10	2.00	0.48	5.00	0.71	0.23	0.94
14.15	2.00	0.48	5.00	0.71	0.23	0.94
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14.80	2.00	0.48	5.00	0.71	0.23	0.94
14.85	2.00	0.48	5.00	0.71	0.23	0.94
14.90	2.00	0.48	5.00	0.71	0.23	0.94
14.95	2.00	0.48	5.00	0.71	0.23	0.94
15.00	2.00	0.48	5.00	0.71	0.23	0.94

15.05	2.00	0.48	5.00	0.71	0.23	0.94
15.10	2.00	0.48	5.00	0.71	0.23	0.94
15.15	2.00	0.48	5.00	0.71	0.23	0.94
15.20	2.00	0.48	5.00	0.71	0.23	0.94
15.25	2.00	0.48	5.00	0.71	0.23	0.94
15.30	2.00	0.48	5.00	0.71	0.23	0.94
15.35	2.00	0.48	5.00	0.71	0.23	0.94
15.40	2.00	0.48	5.00	0.71	0.23	0.94
15.45	2.00	0.48	5.00	0.71	0.23	0.94
15.50	2.00	0.48	5.00	0.71	0.23	0.94
15.55	2.00	0.48	5.00	0.71	0.23	0.94
15.60	2.00	0.48	5.00	0.71	0.23	0.94
15.65	2.00	0.48	5.00	0.71	0.23	0.94
15.70	2.00	0.48	5.00	0.71	0.23	0.94
15.75	2.00	0.48	5.00	0.71	0.23	0.94
15.80	2.00	0.48	5.00	0.71	0.23	0.94
15.85	2.00	0.48	5.00	0.71	0.23	0.94
15.90	2.00	0.48	5.00	0.71	0.23	0.94
15.95	2.00	0.48	5.00	0.71	0.23	0.94
16.00	2.00	0.48	5.00	0.71	0.23	0.94
16.05	2.00	0.48	5.00	0.71	0.23	0.94
16.10	2.00	0.48	5.00	0.71	0.23	0.94
16.15	2.00	0.48	5.00	0.71	0.23	0.94
16.20	2.00	0.48	5.00	0.71	0.23	0.94
16.25	2.00	0.48	5.00	0.71	0.23	0.94
16.30	2.00	0.48	5.00	0.71	0.23	0.94
16.35	2.00	0.48	5.00	0.71	0.23	0.94
16.40	2.00	0.48	5.00	0.71	0.23	0.94
16.45	2.00	0.48	5.00	0.71	0.23	0.94
16.50	2.00	0.48	5.00	0.71	0.23	0.94
16.55	2.00	0.48	5.00	0.71	0.23	0.94
16.60	2.00	0.48	5.00	0.71	0.23	0.94
16.65	2.00	0.48	5.00	0.71	0.23	0.94
16.70	2.00	0.48	5.00	0.71	0.23	0.94
16.75	2.00	0.48	5.00	0.71	0.23	0.94
16.80	2.00	0.47	5.00	0.71	0.23	0.94
16.85	2.00	0.47	5.00	0.71	0.23	0.94
16.90	2.00	0.47	5.00	0.71	0.23	0.94
16.95	2.00	0.47	5.00	0.71	0.23	0.94
17.00	2.00	0.47	5.00	0.71	0.23	0.94
17.05	2.00	0.47	5.00	0.71	0.23	0.94
17.10	2.00	0.47	5.00	0.71	0.23	0.94
17.15	2.00	0.47	5.00	0.71	0.23	0.94
17.20	2.00	0.47	5.00	0.71	0.23	0.94
17.25	2.00	0.47	5.00	0.71	0.23	0.94
17.30	2.00	0.47	5.00	0.71	0.23	0.94
17.35	2.00	0.47	5.00	0.71	0.23	0.94
17.40	2.00	0.47	5.00	0.71	0.23	0.94
17.45	2.00	0.47	5.00	0.71	0.23	0.94
17.50	2.00	0.47	5.00	0.71	0.23	0.94
17.55	2.00	0.47	5.00	0.71	0.23	0.94

17.60	2.00	0.47	5.00	0.71	0.23	0.94
17.65	2.00	0.47	5.00	0.71	0.23	0.94
17.70	2.00	0.47	5.00	0.71	0.23	0.94
17.75	2.00	0.47	5.00	0.71	0.23	0.94
17.80	2.00	0.47	5.00	0.71	0.23	0.94
17.85	2.00	0.47	5.00	0.71	0.23	0.94
17.90	2.00	0.47	5.00	0.71	0.23	0.94
17.95	2.00	0.47	5.00	0.71	0.23	0.94
18.00	2.00	0.47	5.00	0.71	0.23	0.94
18.05	2.00	0.47	5.00	0.71	0.23	0.94
18.10	2.00	0.47	5.00	0.71	0.23	0.94
18.15	2.00	0.47	5.00	0.71	0.23	0.94
18.20	2.00	0.47	5.00	0.71	0.23	0.94
18.25	2.00	0.47	5.00	0.71	0.23	0.94
18.30	2.00	0.47	5.00	0.71	0.23	0.94
18.35	2.00	0.47	5.00	0.71	0.23	0.94
18.40	2.00	0.47	5.00	0.71	0.23	0.94
18.45	2.00	0.47	5.00	0.71	0.23	0.94
18.50	2.00	0.47	5.00	0.71	0.23	0.94
18.55	2.00	0.47	5.00	0.71	0.23	0.94
18.60	2.00	0.47	5.00	0.71	0.23	0.94
18.65	2.00	0.47	5.00	0.71	0.23	0.94
18.70	2.00	0.47	5.00	0.71	0.23	0.94
18.75	2.00	0.47	5.00	0.71	0.23	0.94
18.80	2.00	0.47	5.00	0.71	0.23	0.94
18.85	2.00	0.47	5.00	0.71	0.23	0.94
18.90	2.00	0.47	5.00	0.71	0.23	0.94
18.95	2.00	0.47	5.00	0.71	0.23	0.94
19.00	2.00	0.47	5.00	0.71	0.23	0.94
19.05	0.46	0.47	5.00	0.71	0.23	0.94
19.10	0.45	0.47	5.00	0.71	0.22	0.94
19.15	0.45	0.47	5.00	0.71	0.22	0.94
19.20	0.44	0.47	5.00	0.71	0.22	0.93
19.25	0.44	0.47	5.00	0.71	0.21	0.93
19.30	0.44	0.47	5.00	0.71	0.21	0.92
19.35	0.43	0.47	5.00	0.71	0.21	0.92
19.40	0.43	0.47	5.00	0.71	0.20	0.92
19.45	0.42	0.47	5.00	0.71	0.20	0.91
19.50	0.42	0.47	5.00	0.71	0.19	0.91
19.55	0.42	0.47	5.00	0.71	0.19	0.91
19.60	0.41	0.47	5.00	0.71	0.19	0.90
19.65	0.41	0.47	5.00	0.71	0.18	0.90
19.70	0.40	0.47	5.00	0.71	0.18	0.89
19.75	0.40	0.47	5.00	0.71	0.17	0.89
19.80	0.40	0.47	5.00	0.71	0.17	0.88
19.85	0.39	0.47	5.00	0.71	0.16	0.88
19.90	0.39	0.47	5.00	0.71	0.16	0.87
19.95	0.39	0.47	5.00	0.71	0.15	0.87
20.00	0.38	0.47	5.00	0.71	0.15	0.86
20.05	0.39	0.47	5.00	0.71	0.14	0.86
20.10	0.39	0.47	5.00	0.71	0.14	0.85

20.15	0.39	0.47	5.00	0.71	0.13	0.84
20.20	0.40	0.47	5.00	0.71	0.13	0.84
20.25	0.40	0.47	5.00	0.71	0.12	0.83
20.30	0.40	0.47	5.00	0.71	0.11	0.83
20.35	0.41	0.47	5.00	0.71	0.11	0.82
20.40	0.41	0.47	5.00	0.71	0.10	0.82
20.45	0.42	0.47	5.00	0.71	0.10	0.81
20.50	0.42	0.47	5.00	0.71	0.09	0.81
20.55	0.42	0.47	5.00	0.71	0.09	0.80
20.60	0.43	0.47	5.00	0.71	0.09	0.80
20.65	0.43	0.47	5.00	0.71	0.08	0.79
20.70	0.44	0.47	5.00	0.71	0.08	0.79
20.75	0.44	0.47	5.00	0.71	0.07	0.79
20.80	0.44	0.47	5.00	0.71	0.07	0.78
20.85	0.45	0.47	5.00	0.71	0.06	0.78
20.90	0.45	0.47	5.00	0.71	0.06	0.77
20.95	0.46	0.47	5.00	0.71	0.05	0.77
21.00	0.46	0.47	5.00	0.71	0.05	0.76
21.05	0.47	0.47	5.00	0.71	0.05	0.76
21.10	0.47	0.47	5.00	0.71	0.04	0.76
21.15	0.48	0.47	5.00	0.71	0.04	0.75
21.20	0.48	0.47	5.00	0.71	0.03	0.75
21.25	0.49	0.47	5.00	0.71	0.03	0.74
21.30	0.49	0.47	5.00	0.71	0.03	0.74
21.35	0.50	0.47	5.00	0.71	0.03	0.74
21.40	0.50	0.47	5.00	0.71	0.03	0.74
21.45	0.51	0.47	5.00	0.71	0.03	0.74
21.50	0.52	0.47	5.00	0.71	0.03	0.74
21.55	0.52	0.47	5.00	0.71	0.02	0.74
21.60	0.53	0.47	5.00	0.71	0.02	0.74
21.65	0.54	0.47	5.00	0.71	0.02	0.74
21.70	0.55	0.47	5.00	0.71	0.02	0.74
21.75	0.55	0.47	5.00	0.71	0.02	0.73
21.80	0.56	0.47	5.00	0.71	0.02	0.73
21.85	0.57	0.47	5.00	0.71	0.02	0.73
21.90	0.59	0.47	5.00	0.71	0.02	0.73
21.95	0.60	0.47	5.00	0.71	0.02	0.73
22.00	0.62	0.47	5.00	0.71	0.02	0.73
22.05	0.64	0.47	5.00	0.71	0.02	0.73
22.10	0.67	0.47	5.00	0.71	0.01	0.73
22.15	0.73	0.47	5.00	0.71	0.01	0.73
22.20	0.76	0.47	5.00	0.71	0.01	0.73
22.25	0.76	0.47	5.00	0.71	0.01	0.73
22.30	0.76	0.47	5.00	0.71	0.01	0.73
22.35	0.76	0.47	5.00	0.71	0.01	0.72
22.40	0.76	0.47	5.00	0.71	0.01	0.72
22.45	0.76	0.47	5.00	0.71	0.01	0.72
22.50	0.76	0.47	5.00	0.71	0.01	0.72
22.55	0.76	0.47	5.00	0.71	0.01	0.72
22.60	0.76	0.47	5.00	0.71	0.01	0.72
22.65	0.76	0.47	5.00	0.71	0.01	0.72

22.70	0.76	0.47	5.00	0.71	0.00	0.72
22.75	0.76	0.47	5.00	0.71	0.00	0.72
22.80	0.76	0.47	5.00	0.71	0.00	0.72
22.85	0.76	0.47	5.00	0.71	0.00	0.72
22.90	0.76	0.47	5.00	0.71	0.00	0.72
22.95	0.76	0.47	5.00	0.71	0.00	0.72
23.00	0.76	0.47	5.00	0.71	0.00	0.72
23.05	2.00	0.47	5.00	0.71	0.00	0.71
23.10	2.00	0.47	5.00	0.71	0.00	0.71
23.15	2.00	0.47	5.00	0.71	0.00	0.71
23.20	2.00	0.47	5.00	0.71	0.00	0.71
23.25	2.00	0.47	5.00	0.71	0.00	0.71
23.30	2.00	0.47	5.00	0.71	0.00	0.71
23.35	2.00	0.47	5.00	0.71	0.00	0.71
23.40	2.00	0.47	5.00	0.71	0.00	0.71
23.45	2.00	0.47	5.00	0.71	0.00	0.71
23.50	2.00	0.47	5.00	0.71	0.00	0.71
23.55	2.00	0.47	5.00	0.71	0.00	0.71
23.60	2.00	0.47	5.00	0.71	0.00	0.71
23.65	2.00	0.47	5.00	0.71	0.00	0.71
23.70	2.00	0.47	5.00	0.71	0.00	0.71
23.75	2.00	0.47	5.00	0.71	0.00	0.71
23.80	2.00	0.47	5.00	0.71	0.00	0.71
23.85	2.00	0.47	5.00	0.71	0.00	0.71
23.90	2.00	0.47	5.00	0.71	0.00	0.71
23.95	2.00	0.47	5.00	0.71	0.00	0.71
24.00	2.00	0.47	5.00	0.71	0.00	0.71
24.05	2.00	0.47	5.00	0.71	0.00	0.71
24.10	2.00	0.47	5.00	0.71	0.00	0.71
24.15	2.00	0.47	5.00	0.71	0.00	0.71
24.20	2.00	0.47	5.00	0.71	0.00	0.71
24.25	2.00	0.47	5.00	0.71	0.00	0.71
24.30	2.00	0.47	5.00	0.71	0.00	0.71
24.35	2.00	0.47	5.00	0.71	0.00	0.71
24.40	2.00	0.47	5.00	0.71	0.00	0.71
24.45	2.00	0.47	5.00	0.71	0.00	0.71
24.50	2.00	0.47	5.00	0.71	0.00	0.71
24.55	2.00	0.47	5.00	0.71	0.00	0.71
24.60	2.00	0.47	5.00	0.71	0.00	0.71
24.65	2.00	0.47	5.00	0.71	0.00	0.71
24.70	2.00	0.47	5.00	0.71	0.00	0.71
24.75	2.00	0.47	5.00	0.71	0.00	0.71
24.80	2.00	0.47	5.00	0.71	0.00	0.71
24.85	2.00	0.47	5.00	0.71	0.00	0.71
24.90	2.00	0.47	5.00	0.71	0.00	0.71
24.95	2.00	0.47	5.00	0.71	0.00	0.71
25.00	2.00	0.48	5.00	0.71	0.00	0.71
25.05	2.00	0.48	5.00	0.71	0.00	0.71
25.10	2.00	0.48	5.00	0.71	0.00	0.71
25.15	2.00	0.48	5.00	0.71	0.00	0.71
25.20	2.00	0.48	5.00	0.71	0.00	0.71

25.25	2.00	0.48	5.00	0.71	0.00	0.71
25.30	2.00	0.48	5.00	0.71	0.00	0.71
25.35	2.00	0.48	5.00	0.71	0.00	0.71
25.40	2.00	0.48	5.00	0.71	0.00	0.71
25.45	2.00	0.48	5.00	0.71	0.00	0.71
25.50	2.00	0.48	5.00	0.71	0.00	0.71
25.55	2.00	0.48	5.00	0.71	0.00	0.71
25.60	2.00	0.48	5.00	0.71	0.00	0.71
25.65	2.00	0.48	5.00	0.71	0.00	0.71
25.70	2.00	0.48	5.00	0.71	0.00	0.71
25.75	2.00	0.48	5.00	0.71	0.00	0.71
25.80	2.00	0.48	5.00	0.71	0.00	0.71
25.85	2.00	0.48	5.00	0.71	0.00	0.71
25.90	2.00	0.48	5.00	0.71	0.00	0.71
25.95	2.00	0.48	5.00	0.71	0.00	0.71
26.00	2.00	0.48	5.00	0.71	0.00	0.71
26.05	2.00	0.48	5.00	0.71	0.00	0.71
26.10	2.00	0.48	5.00	0.71	0.00	0.71
26.15	2.00	0.49	5.00	0.71	0.00	0.71
26.20	2.00	0.49	5.00	0.71	0.00	0.71
26.25	2.00	0.49	5.00	0.71	0.00	0.71
26.30	2.00	0.49	5.00	0.71	0.00	0.71
26.35	2.00	0.49	5.00	0.71	0.00	0.71
26.40	2.00	0.49	5.00	0.71	0.00	0.71
26.45	2.00	0.49	5.00	0.71	0.00	0.71
26.50	2.00	0.49	5.00	0.71	0.00	0.71
26.55	2.00	0.49	5.00	0.71	0.00	0.71
26.60	2.00	0.49	5.00	0.71	0.00	0.71
26.65	2.00	0.49	5.00	0.71	0.00	0.71
26.70	2.00	0.49	5.00	0.71	0.00	0.71
26.75	2.00	0.49	5.00	0.71	0.00	0.71
26.80	2.00	0.49	5.00	0.71	0.00	0.71
26.85	2.00	0.49	5.00	0.71	0.00	0.71
26.90	2.00	0.49	5.00	0.71	0.00	0.71
26.95	2.00	0.49	5.00	0.71	0.00	0.71
27.00	2.00	0.49	5.00	0.71	0.00	0.71
27.05	2.00	0.49	5.00	0.71	0.00	0.71
27.10	2.00	0.49	5.00	0.71	0.00	0.71
27.15	2.00	0.49	5.00	0.71	0.00	0.71
27.20	2.00	0.49	5.00	0.71	0.00	0.71
27.25	2.00	0.49	5.00	0.71	0.00	0.71
27.30	2.00	0.49	5.00	0.71	0.00	0.71
27.35	2.00	0.50	5.00	0.71	0.00	0.71
27.40	2.00	0.50	5.00	0.71	0.00	0.71
27.45	2.00	0.50	5.00	0.71	0.00	0.71
27.50	2.00	0.50	5.00	0.71	0.00	0.71
27.55	2.00	0.50	5.00	0.71	0.00	0.71
27.60	2.00	0.50	5.00	0.71	0.00	0.71
27.65	2.00	0.50	5.00	0.71	0.00	0.71
27.70	2.00	0.50	5.00	0.71	0.00	0.71
27.75	2.00	0.50	5.00	0.71	0.00	0.71

27.80	2.00	0.50	5.00	0.71	0.00	0.71
27.85	2.00	0.50	5.00	0.71	0.00	0.71
27.90	2.00	0.50	5.00	0.71	0.00	0.71
27.95	2.00	0.50	5.00	0.71	0.00	0.71
28.00	2.00	0.50	5.00	0.71	0.00	0.71
28.05	0.51	0.50	1.01	0.71	0.00	0.71
28.10	0.50	0.50	1.00*	0.71	0.00	0.71
28.15	0.49	0.50	0.98*	0.71	0.00	0.71
28.20	0.49	0.50	0.97*	0.70	0.00	0.70
28.25	0.48	0.50	0.95*	0.70	0.00	0.70
28.30	0.47	0.50	0.94*	0.70	0.00	0.70
28.35	0.47	0.50	0.93*	0.69	0.00	0.69
28.40	0.46	0.50	0.92*	0.69	0.00	0.69
28.45	0.46	0.50	0.90*	0.68	0.00	0.68
28.50	0.45	0.50	0.89*	0.68	0.00	0.68
28.55	0.44	0.50	0.88*	0.67	0.00	0.67
28.60	0.44	0.50	0.87*	0.67	0.00	0.67
28.65	0.43	0.51	0.86*	0.66	0.00	0.66
28.70	0.43	0.51	0.85*	0.65	0.00	0.65
28.75	0.42	0.51	0.84*	0.65	0.00	0.65
28.80	0.42	0.51	0.83*	0.64	0.00	0.64
28.85	0.41	0.51	0.82*	0.63	0.00	0.63
28.90	0.41	0.51	0.81*	0.63	0.00	0.63
28.95	0.40	0.51	0.80*	0.62	0.00	0.62
29.00	0.40	0.51	0.79*	0.61	0.00	0.61
29.05	0.40	0.51	0.78*	0.60	0.00	0.60
29.10	0.39	0.51	0.77*	0.60	0.00	0.60
29.15	0.39	0.51	0.76*	0.59	0.00	0.59
29.20	0.38	0.51	0.75*	0.58	0.00	0.58
29.25	0.38	0.51	0.74*	0.57	0.00	0.57
29.30	0.37	0.51	0.73*	0.56	0.00	0.56
29.35	0.37	0.51	0.73*	0.55	0.00	0.55
29.40	0.37	0.51	0.72*	0.54	0.00	0.54
29.45	0.36	0.51	0.71*	0.53	0.00	0.53
29.50	0.36	0.51	0.70*	0.52	0.00	0.52
29.55	0.35	0.51	0.69*	0.51	0.00	0.51
29.60	0.35	0.51	0.69*	0.49	0.00	0.49
29.65	0.35	0.51	0.68*	0.48	0.00	0.48
29.70	0.34	0.51	0.67*	0.47	0.00	0.47
29.75	0.34	0.51	0.66*	0.46	0.00	0.46
29.80	0.34	0.51	0.65*	0.45	0.00	0.45
29.85	0.33	0.51	0.65*	0.43	0.00	0.43
29.90	0.33	0.51	0.64*	0.42	0.00	0.42
29.95	0.33	0.51	0.63*	0.41	0.00	0.41
30.00	0.32	0.52	0.63*	0.40	0.00	0.40
30.05	0.33	0.52	0.63*	0.38	0.00	0.38
30.10	0.33	0.52	0.64*	0.37	0.00	0.37
30.15	0.33	0.52	0.64*	0.36	0.00	0.36
30.20	0.34	0.52	0.65*	0.34	0.00	0.34
30.25	0.34	0.52	0.66*	0.33	0.00	0.33
30.30	0.34	0.52	0.66*	0.32	0.00	0.32

30.35	0.35	0.52	0.67*	0.31	0.00	0.31
30.40	0.35	0.52	0.68*	0.29	0.00	0.29
30.45	0.35	0.52	0.68*	0.28	0.00	0.28
30.50	0.36	0.52	0.69*	0.27	0.00	0.27
30.55	0.36	0.52	0.70*	0.26	0.00	0.26
30.60	0.36	0.52	0.70*	0.25	0.00	0.25
30.65	0.37	0.52	0.71*	0.24	0.00	0.24
30.70	0.37	0.52	0.72*	0.23	0.00	0.23
30.75	0.38	0.52	0.73*	0.22	0.00	0.22
30.80	0.38	0.52	0.73*	0.21	0.00	0.21
30.85	0.38	0.52	0.74*	0.20	0.00	0.20
30.90	0.39	0.52	0.75*	0.19	0.00	0.19
30.95	0.39	0.52	0.75*	0.18	0.00	0.18
31.00	0.40	0.52	0.76*	0.17	0.00	0.17
31.05	0.40	0.52	0.77*	0.16	0.00	0.16
31.10	0.40	0.52	0.78*	0.15	0.00	0.15
31.15	0.41	0.52	0.79*	0.14	0.00	0.14
31.20	0.41	0.52	0.79*	0.14	0.00	0.14
31.25	0.42	0.52	0.80*	0.13	0.00	0.13
31.30	0.42	0.52	0.81*	0.12	0.00	0.12
31.35	0.43	0.52	0.82*	0.11	0.00	0.11
31.40	0.43	0.52	0.83*	0.11	0.00	0.11
31.45	0.44	0.52	0.84*	0.10	0.00	0.10
31.50	0.44	0.52	0.85*	0.09	0.00	0.09
31.55	0.45	0.52	0.86*	0.09	0.00	0.09
31.60	0.45	0.52	0.87*	0.08	0.00	0.08
31.65	0.46	0.52	0.88*	0.08	0.00	0.08
31.70	0.46	0.52	0.89*	0.07	0.00	0.07
31.75	0.47	0.52	0.90*	0.07	0.00	0.07
31.80	0.47	0.52	0.91*	0.06	0.00	0.06
31.85	0.48	0.52	0.92*	0.06	0.00	0.06
31.90	0.49	0.52	0.93*	0.05	0.00	0.05
31.95	0.49	0.52	0.94*	0.05	0.00	0.05
32.00	0.50	0.52	0.96*	0.04	0.00	0.04
32.05	0.51	0.52	0.97*	0.04	0.00	0.04
32.10	0.51	0.52	0.98*	0.04	0.00	0.04
32.15	0.52	0.52	1.00*	0.03	0.00	0.03
32.20	0.53	0.52	1.01	0.03	0.00	0.03
32.25	0.54	0.52	1.03	0.03	0.00	0.03
32.30	0.55	0.52	1.04	0.02	0.00	0.02
32.35	0.56	0.52	1.06	0.02	0.00	0.02
32.40	0.57	0.52	1.08	0.02	0.00	0.02
32.45	0.58	0.52	1.11	0.01	0.00	0.01
32.50	0.60	0.52	1.14	0.01	0.00	0.01
32.55	0.61	0.52	1.17	0.01	0.00	0.01
32.60	0.64	0.52	1.22	0.01	0.00	0.01
32.65	0.68	0.52	1.31	0.01	0.00	0.01
32.70	0.76	0.52	1.44	0.01	0.00	0.01
32.75	0.76	0.52	1.44	0.00	0.00	0.00
32.80	0.76	0.52	1.44	0.00	0.00	0.00
32.85	0.76	0.52	1.44	0.00	0.00	0.00

32.90	0.76	0.52	1.44	0.00	0.00	0.00
32.95	0.76	0.52	1.44	0.00	0.00	0.00
33.00	0.76	0.52	1.44	0.00	0.00	0.00
33.05	2.00	0.52	5.00	0.00	0.00	0.00
33.10	2.00	0.53	5.00	0.00	0.00	0.00
33.15	2.00	0.53	5.00	0.00	0.00	0.00
33.20	2.00	0.53	5.00	0.00	0.00	0.00
33.25	2.00	0.53	5.00	0.00	0.00	0.00
33.30	2.00	0.53	5.00	0.00	0.00	0.00
33.35	2.00	0.53	5.00	0.00	0.00	0.00
33.40	2.00	0.53	5.00	0.00	0.00	0.00
33.45	2.00	0.53	5.00	0.00	0.00	0.00
33.50	2.00	0.53	5.00	0.00	0.00	0.00
33.55	2.00	0.53	5.00	0.00	0.00	0.00
33.60	2.00	0.53	5.00	0.00	0.00	0.00
33.65	2.00	0.53	5.00	0.00	0.00	0.00
33.70	2.00	0.53	5.00	0.00	0.00	0.00
33.75	2.00	0.53	5.00	0.00	0.00	0.00
33.80	2.00	0.53	5.00	0.00	0.00	0.00
33.85	2.00	0.53	5.00	0.00	0.00	0.00
33.90	2.00	0.53	5.00	0.00	0.00	0.00
33.95	2.00	0.53	5.00	0.00	0.00	0.00
34.00	2.00	0.53	5.00	0.00	0.00	0.00
34.05	2.00	0.53	5.00	0.00	0.00	0.00
34.10	2.00	0.53	5.00	0.00	0.00	0.00
34.15	2.00	0.53	5.00	0.00	0.00	0.00
34.20	2.00	0.53	5.00	0.00	0.00	0.00
34.25	2.00	0.53	5.00	0.00	0.00	0.00
34.30	2.00	0.53	5.00	0.00	0.00	0.00
34.35	2.00	0.53	5.00	0.00	0.00	0.00
34.40	2.00	0.53	5.00	0.00	0.00	0.00
34.45	2.00	0.53	5.00	0.00	0.00	0.00
34.50	2.00	0.53	5.00	0.00	0.00	0.00
34.55	2.00	0.53	5.00	0.00	0.00	0.00
34.60	2.00	0.53	5.00	0.00	0.00	0.00
34.65	2.00	0.53	5.00	0.00	0.00	0.00
34.70	2.00	0.53	5.00	0.00	0.00	0.00
34.75	2.00	0.53	5.00	0.00	0.00	0.00
34.80	2.00	0.53	5.00	0.00	0.00	0.00
34.85	2.00	0.53	5.00	0.00	0.00	0.00
34.90	2.00	0.53	5.00	0.00	0.00	0.00
34.95	2.00	0.53	5.00	0.00	0.00	0.00
35.00	2.00	0.53	5.00	0.00	0.00	0.00
35.05	2.00	0.53	5.00	0.00	0.00	0.00
35.10	2.00	0.53	5.00	0.00	0.00	0.00
35.15	2.00	0.53	5.00	0.00	0.00	0.00
35.20	2.00	0.53	5.00	0.00	0.00	0.00
35.25	2.00	0.53	5.00	0.00	0.00	0.00
35.30	2.00	0.53	5.00	0.00	0.00	0.00
35.35	2.00	0.53	5.00	0.00	0.00	0.00
35.40	2.00	0.53	5.00	0.00	0.00	0.00

35.45	2.00	0.53	5.00	0.00	0.00	0.00
35.50	2.00	0.53	5.00	0.00	0.00	0.00
35.55	2.00	0.53	5.00	0.00	0.00	0.00
35.60	2.00	0.53	5.00	0.00	0.00	0.00
35.65	2.00	0.53	5.00	0.00	0.00	0.00
35.70	2.00	0.53	5.00	0.00	0.00	0.00
35.75	2.00	0.53	5.00	0.00	0.00	0.00
35.80	2.00	0.53	5.00	0.00	0.00	0.00
35.85	2.00	0.53	5.00	0.00	0.00	0.00
35.90	2.00	0.53	5.00	0.00	0.00	0.00
35.95	2.00	0.53	5.00	0.00	0.00	0.00
36.00	2.00	0.53	5.00	0.00	0.00	0.00
36.05	2.00	0.53	5.00	0.00	0.00	0.00
36.10	2.00	0.53	5.00	0.00	0.00	0.00
36.15	2.00	0.53	5.00	0.00	0.00	0.00
36.20	2.00	0.53	5.00	0.00	0.00	0.00
36.25	2.00	0.53	5.00	0.00	0.00	0.00
36.30	2.00	0.53	5.00	0.00	0.00	0.00
36.35	2.00	0.53	5.00	0.00	0.00	0.00
36.40	2.00	0.53	5.00	0.00	0.00	0.00
36.45	2.00	0.53	5.00	0.00	0.00	0.00
36.50	2.00	0.53	5.00	0.00	0.00	0.00
36.55	2.00	0.53	5.00	0.00	0.00	0.00
36.60	2.00	0.53	5.00	0.00	0.00	0.00
36.65	2.00	0.53	5.00	0.00	0.00	0.00
36.70	2.00	0.53	5.00	0.00	0.00	0.00
36.75	2.00	0.53	5.00	0.00	0.00	0.00
36.80	2.00	0.53	5.00	0.00	0.00	0.00
36.85	2.00	0.53	5.00	0.00	0.00	0.00
36.90	2.00	0.53	5.00	0.00	0.00	0.00
36.95	2.00	0.53	5.00	0.00	0.00	0.00
37.00	2.00	0.53	5.00	0.00	0.00	0.00
37.05	2.00	0.53	5.00	0.00	0.00	0.00
37.10	2.00	0.53	5.00	0.00	0.00	0.00
37.15	2.00	0.53	5.00	0.00	0.00	0.00
37.20	2.00	0.53	5.00	0.00	0.00	0.00
37.25	2.00	0.53	5.00	0.00	0.00	0.00
37.30	2.00	0.53	5.00	0.00	0.00	0.00
37.35	2.00	0.53	5.00	0.00	0.00	0.00
37.40	2.00	0.53	5.00	0.00	0.00	0.00
37.45	2.00	0.53	5.00	0.00	0.00	0.00
37.50	2.00	0.53	5.00	0.00	0.00	0.00
37.55	2.00	0.53	5.00	0.00	0.00	0.00
37.60	2.00	0.53	5.00	0.00	0.00	0.00
37.65	2.00	0.53	5.00	0.00	0.00	0.00
37.70	2.00	0.53	5.00	0.00	0.00	0.00
37.75	2.00	0.53	5.00	0.00	0.00	0.00
37.80	2.00	0.53	5.00	0.00	0.00	0.00
37.85	2.00	0.53	5.00	0.00	0.00	0.00
37.90	2.00	0.53	5.00	0.00	0.00	0.00
37.95	2.00	0.53	5.00	0.00	0.00	0.00

38.00	2.00	0.53	5.00	0.00	0.00	0.00
38.05	2.00	0.53	5.00	0.00	0.00	0.00
38.10	2.00	0.53	5.00	0.00	0.00	0.00
38.15	2.00	0.53	5.00	0.00	0.00	0.00
38.20	2.00	0.53	5.00	0.00	0.00	0.00
38.25	2.00	0.53	5.00	0.00	0.00	0.00
38.30	2.00	0.53	5.00	0.00	0.00	0.00
38.35	2.00	0.53	5.00	0.00	0.00	0.00
38.40	2.00	0.53	5.00	0.00	0.00	0.00
38.45	2.00	0.53	5.00	0.00	0.00	0.00
38.50	2.00	0.53	5.00	0.00	0.00	0.00
38.55	2.00	0.53	5.00	0.00	0.00	0.00
38.60	2.00	0.53	5.00	0.00	0.00	0.00
38.65	2.00	0.53	5.00	0.00	0.00	0.00
38.70	2.00	0.53	5.00	0.00	0.00	0.00
38.75	2.00	0.53	5.00	0.00	0.00	0.00
38.80	2.00	0.53	5.00	0.00	0.00	0.00
38.85	2.00	0.53	5.00	0.00	0.00	0.00
38.90	2.00	0.53	5.00	0.00	0.00	0.00
38.95	2.00	0.53	5.00	0.00	0.00	0.00
39.00	2.00	0.53	5.00	0.00	0.00	0.00
39.05	2.00	0.53	5.00	0.00	0.00	0.00
39.10	2.00	0.53	5.00	0.00	0.00	0.00
39.15	2.00	0.53	5.00	0.00	0.00	0.00
39.20	2.00	0.53	5.00	0.00	0.00	0.00
39.25	2.00	0.53	5.00	0.00	0.00	0.00
39.30	2.00	0.53	5.00	0.00	0.00	0.00
39.35	2.00	0.53	5.00	0.00	0.00	0.00
39.40	2.00	0.53	5.00	0.00	0.00	0.00
39.45	2.00	0.53	5.00	0.00	0.00	0.00
39.50	2.00	0.53	5.00	0.00	0.00	0.00
39.55	2.00	0.54	5.00	0.00	0.00	0.00
39.60	2.00	0.54	5.00	0.00	0.00	0.00
39.65	2.00	0.54	5.00	0.00	0.00	0.00
39.70	2.00	0.54	5.00	0.00	0.00	0.00
39.75	2.00	0.54	5.00	0.00	0.00	0.00
39.80	2.00	0.54	5.00	0.00	0.00	0.00
39.85	2.00	0.54	5.00	0.00	0.00	0.00
39.90	2.00	0.54	5.00	0.00	0.00	0.00
39.95	2.00	0.54	5.00	0.00	0.00	0.00
40.00	2.00	0.54	5.00	0.00	0.00	0.00
40.05	2.00	0.54	5.00	0.00	0.00	0.00
40.10	2.00	0.54	5.00	0.00	0.00	0.00
40.15	2.00	0.54	5.00	0.00	0.00	0.00
40.20	2.00	0.54	5.00	0.00	0.00	0.00
40.25	2.00	0.54	5.00	0.00	0.00	0.00
40.30	2.00	0.54	5.00	0.00	0.00	0.00
40.35	2.00	0.54	5.00	0.00	0.00	0.00
40.40	2.00	0.54	5.00	0.00	0.00	0.00
40.45	2.00	0.54	5.00	0.00	0.00	0.00
40.50	2.00	0.54	5.00	0.00	0.00	0.00

40.55	2.00	0.54	5.00	0.00	0.00	0.00
40.60	2.00	0.54	5.00	0.00	0.00	0.00
40.65	2.00	0.54	5.00	0.00	0.00	0.00
40.70	2.00	0.54	5.00	0.00	0.00	0.00
40.75	2.00	0.54	5.00	0.00	0.00	0.00
40.80	2.00	0.54	5.00	0.00	0.00	0.00
40.85	2.00	0.54	5.00	0.00	0.00	0.00
40.90	2.00	0.54	5.00	0.00	0.00	0.00
40.95	2.00	0.54	5.00	0.00	0.00	0.00
41.00	2.00	0.54	5.00	0.00	0.00	0.00
41.05	2.00	0.54	5.00	0.00	0.00	0.00
41.10	2.00	0.54	5.00	0.00	0.00	0.00
41.15	2.00	0.54	5.00	0.00	0.00	0.00
41.20	2.00	0.54	5.00	0.00	0.00	0.00
41.25	2.00	0.54	5.00	0.00	0.00	0.00
41.30	2.00	0.54	5.00	0.00	0.00	0.00
41.35	2.00	0.54	5.00	0.00	0.00	0.00
41.40	2.00	0.54	5.00	0.00	0.00	0.00
41.45	2.00	0.54	5.00	0.00	0.00	0.00
41.50	2.00	0.54	5.00	0.00	0.00	0.00
41.55	2.00	0.54	5.00	0.00	0.00	0.00
41.60	2.00	0.54	5.00	0.00	0.00	0.00
41.65	2.00	0.54	5.00	0.00	0.00	0.00
41.70	2.00	0.54	5.00	0.00	0.00	0.00
41.75	2.00	0.54	5.00	0.00	0.00	0.00
41.80	2.00	0.54	5.00	0.00	0.00	0.00
41.85	2.00	0.54	5.00	0.00	0.00	0.00
41.90	2.00	0.54	5.00	0.00	0.00	0.00
41.95	2.00	0.54	5.00	0.00	0.00	0.00
42.00	2.00	0.54	5.00	0.00	0.00	0.00
42.05	2.00	0.54	5.00	0.00	0.00	0.00
42.10	2.00	0.54	5.00	0.00	0.00	0.00
42.15	2.00	0.54	5.00	0.00	0.00	0.00
42.20	2.00	0.54	5.00	0.00	0.00	0.00
42.25	2.00	0.54	5.00	0.00	0.00	0.00
42.30	2.00	0.54	5.00	0.00	0.00	0.00
42.35	2.00	0.54	5.00	0.00	0.00	0.00
42.40	2.00	0.54	5.00	0.00	0.00	0.00
42.45	2.00	0.54	5.00	0.00	0.00	0.00
42.50	2.00	0.54	5.00	0.00	0.00	0.00
42.55	2.00	0.54	5.00	0.00	0.00	0.00
42.60	2.00	0.54	5.00	0.00	0.00	0.00
42.65	2.00	0.54	5.00	0.00	0.00	0.00
42.70	2.00	0.54	5.00	0.00	0.00	0.00
42.75	2.00	0.54	5.00	0.00	0.00	0.00
42.80	2.00	0.54	5.00	0.00	0.00	0.00
42.85	2.00	0.54	5.00	0.00	0.00	0.00
42.90	2.00	0.54	5.00	0.00	0.00	0.00
42.95	2.00	0.54	5.00	0.00	0.00	0.00
43.00	2.00	0.54	5.00	0.00	0.00	0.00
43.05	2.00	0.54	5.00	0.00	0.00	0.00

43.10	2.00	0.54	5.00	0.00	0.00	0.00
43.15	2.00	0.54	5.00	0.00	0.00	0.00
43.20	2.00	0.54	5.00	0.00	0.00	0.00
43.25	2.00	0.54	5.00	0.00	0.00	0.00
43.30	2.00	0.54	5.00	0.00	0.00	0.00
43.35	2.00	0.54	5.00	0.00	0.00	0.00
43.40	2.00	0.54	5.00	0.00	0.00	0.00
43.45	2.00	0.54	5.00	0.00	0.00	0.00
43.50	2.00	0.54	5.00	0.00	0.00	0.00
43.55	2.00	0.54	5.00	0.00	0.00	0.00
43.60	2.00	0.54	5.00	0.00	0.00	0.00
43.65	2.00	0.54	5.00	0.00	0.00	0.00
43.70	2.00	0.54	5.00	0.00	0.00	0.00
43.75	2.00	0.54	5.00	0.00	0.00	0.00
43.80	2.00	0.54	5.00	0.00	0.00	0.00
43.85	2.00	0.54	5.00	0.00	0.00	0.00
43.90	2.00	0.54	5.00	0.00	0.00	0.00
43.95	2.00	0.53	5.00	0.00	0.00	0.00
44.00	2.00	0.53	5.00	0.00	0.00	0.00
44.05	0.74	0.53	1.38	0.00	0.00	0.00
44.10	0.74	0.53	1.38	0.00	0.00	0.00
44.15	0.74	0.53	1.38	0.00	0.00	0.00
44.20	0.74	0.53	1.38	0.00	0.00	0.00
44.25	0.74	0.53	1.38	0.00	0.00	0.00
44.30	0.74	0.53	1.38	0.00	0.00	0.00
44.35	0.74	0.53	1.38	0.00	0.00	0.00
44.40	0.74	0.53	1.38	0.00	0.00	0.00
44.45	0.74	0.53	1.38	0.00	0.00	0.00
44.50	0.74	0.53	1.38	0.00	0.00	0.00
44.55	0.74	0.53	1.38	0.00	0.00	0.00
44.60	0.74	0.53	1.38	0.00	0.00	0.00
44.65	0.74	0.53	1.38	0.00	0.00	0.00
44.70	0.74	0.53	1.38	0.00	0.00	0.00
44.75	0.74	0.53	1.38	0.00	0.00	0.00
44.80	0.74	0.53	1.38	0.00	0.00	0.00
44.85	0.74	0.53	1.38	0.00	0.00	0.00
44.90	0.74	0.53	1.38	0.00	0.00	0.00
44.95	0.74	0.53	1.38	0.00	0.00	0.00
45.00	0.74	0.53	1.38	0.00	0.00	0.00
45.05	0.74	0.53	1.38	0.00	0.00	0.00
45.10	0.74	0.53	1.38	0.00	0.00	0.00
45.15	0.74	0.53	1.38	0.00	0.00	0.00
45.20	0.74	0.53	1.38	0.00	0.00	0.00
45.25	0.74	0.53	1.38	0.00	0.00	0.00
45.30	0.74	0.53	1.38	0.00	0.00	0.00
45.35	0.74	0.53	1.38	0.00	0.00	0.00
45.40	0.74	0.53	1.38	0.00	0.00	0.00
45.45	0.74	0.53	1.38	0.00	0.00	0.00
45.50	0.74	0.53	1.38	0.00	0.00	0.00
45.55	0.74	0.53	1.38	0.00	0.00	0.00
45.60	0.74	0.53	1.38	0.00	0.00	0.00

45.65	0.74	0.53	1.38	0.00	0.00	0.00
45.70	0.74	0.53	1.38	0.00	0.00	0.00
45.75	0.74	0.53	1.38	0.00	0.00	0.00
45.80	0.74	0.53	1.38	0.00	0.00	0.00
45.85	0.74	0.53	1.38	0.00	0.00	0.00
45.90	0.74	0.53	1.38	0.00	0.00	0.00
45.95	0.74	0.53	1.38	0.00	0.00	0.00
46.00	0.74	0.53	1.38	0.00	0.00	0.00
46.05	0.74	0.53	1.38	0.00	0.00	0.00
46.10	0.74	0.53	1.38	0.00	0.00	0.00
46.15	0.74	0.53	1.38	0.00	0.00	0.00
46.20	0.74	0.53	1.38	0.00	0.00	0.00
46.25	0.74	0.53	1.38	0.00	0.00	0.00
46.30	0.74	0.53	1.38	0.00	0.00	0.00
46.35	0.74	0.53	1.38	0.00	0.00	0.00
46.40	0.74	0.53	1.38	0.00	0.00	0.00
46.45	0.74	0.53	1.38	0.00	0.00	0.00
46.50	0.74	0.53	1.38	0.00	0.00	0.00
46.55	0.74	0.53	1.38	0.00	0.00	0.00
46.60	0.74	0.53	1.38	0.00	0.00	0.00
46.65	0.74	0.53	1.38	0.00	0.00	0.00
46.70	0.74	0.53	1.38	0.00	0.00	0.00
46.75	0.74	0.53	1.38	0.00	0.00	0.00
46.80	0.74	0.53	1.38	0.00	0.00	0.00
46.85	0.74	0.53	1.38	0.00	0.00	0.00
46.90	0.74	0.53	1.38	0.00	0.00	0.00
46.95	0.74	0.53	1.38	0.00	0.00	0.00
47.00	0.74	0.53	1.38	0.00	0.00	0.00
47.05	0.74	0.53	1.38	0.00	0.00	0.00
47.10	0.74	0.53	1.38	0.00	0.00	0.00
47.15	0.73	0.53	1.38	0.00	0.00	0.00
47.20	0.73	0.53	1.38	0.00	0.00	0.00
47.25	0.73	0.53	1.38	0.00	0.00	0.00
47.30	0.73	0.53	1.38	0.00	0.00	0.00
47.35	0.73	0.53	1.38	0.00	0.00	0.00
47.40	0.73	0.53	1.38	0.00	0.00	0.00
47.45	0.73	0.53	1.38	0.00	0.00	0.00
47.50	0.73	0.53	1.38	0.00	0.00	0.00
47.55	0.73	0.53	1.38	0.00	0.00	0.00
47.60	0.73	0.53	1.38	0.00	0.00	0.00
47.65	0.73	0.53	1.38	0.00	0.00	0.00
47.70	0.73	0.53	1.38	0.00	0.00	0.00
47.75	0.73	0.53	1.38	0.00	0.00	0.00
47.80	0.73	0.53	1.38	0.00	0.00	0.00
47.85	0.73	0.53	1.38	0.00	0.00	0.00
47.90	0.73	0.53	1.38	0.00	0.00	0.00
47.95	0.73	0.53	1.38	0.00	0.00	0.00
48.00	0.73	0.53	1.38	0.00	0.00	0.00
48.05	0.73	0.53	1.38	0.00	0.00	0.00
48.10	0.73	0.53	1.38	0.00	0.00	0.00
48.15	0.73	0.53	1.38	0.00	0.00	0.00

48.20	0.73	0.53	1.38	0.00	0.00	0.00
48.25	0.73	0.53	1.38	0.00	0.00	0.00
48.30	0.73	0.53	1.38	0.00	0.00	0.00
48.35	0.73	0.53	1.38	0.00	0.00	0.00
48.40	0.73	0.53	1.38	0.00	0.00	0.00
48.45	0.73	0.53	1.38	0.00	0.00	0.00
48.50	0.73	0.53	1.38	0.00	0.00	0.00
48.55	0.73	0.53	1.38	0.00	0.00	0.00
48.60	0.73	0.53	1.38	0.00	0.00	0.00
48.65	0.73	0.53	1.38	0.00	0.00	0.00
48.70	0.73	0.53	1.38	0.00	0.00	0.00
48.75	0.73	0.53	1.38	0.00	0.00	0.00
48.80	0.73	0.53	1.38	0.00	0.00	0.00
48.85	0.73	0.53	1.38	0.00	0.00	0.00
48.90	0.73	0.53	1.38	0.00	0.00	0.00
48.95	0.73	0.53	1.38	0.00	0.00	0.00
49.00	0.73	0.53	1.38	0.00	0.00	0.00
49.05	0.73	0.53	1.38	0.00	0.00	0.00
49.10	0.73	0.53	1.38	0.00	0.00	0.00
49.15	0.73	0.53	1.38	0.00	0.00	0.00
49.20	0.73	0.53	1.38	0.00	0.00	0.00
49.25	0.73	0.53	1.38	0.00	0.00	0.00
49.30	0.73	0.53	1.38	0.00	0.00	0.00
49.35	0.73	0.53	1.38	0.00	0.00	0.00
49.40	0.73	0.53	1.38	0.00	0.00	0.00
49.45	0.73	0.53	1.38	0.00	0.00	0.00
49.50	0.73	0.53	1.38	0.00	0.00	0.00
49.55	0.73	0.53	1.38	0.00	0.00	0.00
49.60	0.73	0.53	1.38	0.00	0.00	0.00
49.65	0.73	0.53	1.38	0.00	0.00	0.00
49.70	0.73	0.53	1.38	0.00	0.00	0.00
49.75	0.73	0.53	1.38	0.00	0.00	0.00
49.80	0.73	0.53	1.38	0.00	0.00	0.00
49.85	0.73	0.53	1.38	0.00	0.00	0.00
49.90	0.73	0.53	1.38	0.00	0.00	0.00
49.95	0.73	0.53	1.38	0.00	0.00	0.00
50.00	0.73	0.53	1.38	0.00	0.00	0.00
50.05	0.73	0.53	1.38	0.00	0.00	0.00
50.10	0.73	0.53	1.38	0.00	0.00	0.00
50.15	0.73	0.53	1.38	0.00	0.00	0.00
50.20	0.73	0.53	1.38	0.00	0.00	0.00
50.25	0.73	0.53	1.38	0.00	0.00	0.00
50.30	0.73	0.53	1.38	0.00	0.00	0.00
50.35	0.73	0.53	1.38	0.00	0.00	0.00
50.40	0.73	0.53	1.38	0.00	0.00	0.00
50.45	0.73	0.53	1.38	0.00	0.00	0.00
50.50	0.73	0.53	1.38	0.00	0.00	0.00
50.55	0.73	0.53	1.38	0.00	0.00	0.00
50.60	0.73	0.53	1.38	0.00	0.00	0.00
50.65	0.73	0.53	1.38	0.00	0.00	0.00
50.70	0.73	0.53	1.38	0.00	0.00	0.00

50.75	0.73	0.53	1.38	0.00	0.00	0.00
50.80	0.73	0.53	1.38	0.00	0.00	0.00
50.85	0.73	0.53	1.38	0.00	0.00	0.00
50.90	0.73	0.53	1.38	0.00	0.00	0.00
50.95	0.73	0.53	1.38	0.00	0.00	0.00
51.00	0.73	0.53	1.38	0.00	0.00	0.00
51.05	0.73	0.53	1.38	0.00	0.00	0.00
51.10	0.73	0.53	1.38	0.00	0.00	0.00
51.15	0.73	0.53	1.38	0.00	0.00	0.00
51.20	0.73	0.53	1.38	0.00	0.00	0.00
51.25	0.73	0.53	1.38	0.00	0.00	0.00
51.30	0.73	0.53	1.38	0.00	0.00	0.00
51.35	0.73	0.53	1.38	0.00	0.00	0.00
51.40	0.73	0.53	1.38	0.00	0.00	0.00
51.45	0.73	0.53	1.38	0.00	0.00	0.00
51.50	0.73	0.53	1.39	0.00	0.00	0.00

---

* F.S.<1, Liquefaction Potential Zone
(F.S. is limited to 5, CRR is limited to 2, CSR is limited to 2)

Units: Unit: qc, fs, Stress or Pressure = atm (1.0581tsf); Unit Weight = pcf; Depth = ft; Settlement = in.

---

1 atm (atmosphere) = 1 tsf (ton/ft2)
CRRm Cyclic resistance ratio from soils
CSRsf Cyclic stress ratio induced by a given earthquake (with user request factor of safety)
F.S. Factor of Safety against liquefaction, F.S.=CRRm/CSRsf
S_sat Settlement from saturated sands
S_dry Settlement from Unsaturated Sands
S_all Total Settlement from Saturated and Unsaturated Sands
NoLiq No-Liquefy Soils

APPENDIX E
HAZARDS REPORTS

ENVIRONMENTAL HAZARDS ASSESSMENT REPORT

PROPOSED ELEMENTARY SCHOOL
APN 021-027-038

1000 CALVISON PARKWAY
PATTERSON, STANISLAUS COUNTY, CALIFORNIA

Prepared for
Patterson Joint Unified School District
510 Keystone Blvd
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June 29, 2022
Condor Project No. 8874

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ENVIRONMENTAL HAZARDS ASSESSMENT REPORT
PROPOSED ELEMENTARY SCHOOL
APN 021-027-038
1000 CALVISON PARKWAY
PATTERSON, STANISLAUS COUNTY, CALIFORNIA

EXECUTIVE SUMMARY

June 29, 2022

This ASTM E 1527-21 Phase I Environmental Site Assessment (ESA) and school site Environmental Hazards Assessment (EHA) was performed by Condor Earth (Condor) at the request of the Patterson Joint Unified School District (Client). The assessment was performed on Assessor's Parcel Number (APN) 021-027-038 (Site), totaling approximately 12.11 acres. The Site is located at 1000 Calvison Parkway, Patterson, Stanislaus County, California (Figures 1 through 7, **Appendix A**). The Site and adjacent properties were historically used as agricultural land from the early 20th century until the early 2000s. Agricultural uses of the Site included orchards, irrigated row crops, and feed crops. The Site is vacant and unpaved, with no existing or previous structures. Based on review of publicly available information, none of the properties listed in the environmental database search appear to pose a risk to the Site and no nearby or on-Site sources of contamination were identified that would pose a subsurface vapor intrusion risk to future occupants of the Site.

Additional services included the review of other information resources. Based on historical use review, file review, and the Site reconnaissance, the following information was obtained:

- There are no railroad tracks within 1,500 feet of the Site (the nearest are 5,600 feet northeast).
- There are no major roadways within 1,500 feet of the Site (the nearest is one mile northeast).
- There are 115kV (single phase) electrical transmission lines located along the southeastern portion of the Site along Ward Avenue operated by PG&E. There are no other high voltage electrical transmission lines within 0.5 mile of the Site.
- There are no high-pressure pipelines within 1,500 feet of the Site. Natural gas transmission lines are located less than 0.5 mile from the Site (the nearest is 0.4 miles north).
- According to DOGGR, no active gas or oil wells are located within 0.5 mile of the Site (the nearest well is over 8,000 feet southwest of the Site), and the Site is not within a known oil or gas field.
- According to information received from SJVAPCD, no hazardous air emissions facilities were identified within 0.25 mile of the Site.
- There are no active airports within 2 nautical miles of the Site (the nearest is 2.6 nautical miles).
- According to published geologic maps, the nearest ultramafic rocks are approximately 9 miles west of the Site in Del Puerto Canyon but not hydraulically connected to the Site. Therefore, NOA is not likely present and does not appear to pose a risk to the Site.

Condor recommends that a Preliminary Environmental Assessment (PEA) be conducted under DTSC oversight to evaluate the Site for residual agricultural chemicals.

LIMITATIONS TO EXECUTIVE SUMMARY

This executive summary should only be read in conjunction with the full report text. Terminology is defined in the Glossary of Terms and Acronyms in **Appendix G**. The scope of work, significant assumptions, limitations, and exceptions should be understood prior to reading the Site-specific information, findings, opinions, and conclusions.

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ENVIRONMENTAL HAZARDS ASSESSMENT REPORT
PROPOSED ELEMENTARY SCHOOL
APN 021-027-038
1000 CALVISON PARKWAY
PATTERSON, STANISLAUS COUNTY, CALIFORNIA

June 29, 2022

1.0 INTRODUCTION

Patterson Joint Unified School District (Client) retained Condor Earth (Condor) to conduct an Environmental Hazards Assessment (EHA) for Assessor's Parcel Number (APN) 021-027-038 (referred to hereinafter as "Site"), totaling approximately 12.11 acres. The Site is located at 1000 Calvison Parkway, Patterson, California (Figures 1 through 7, **Appendix A**). The Site is being considered for development as an elementary school by the Client.

The EHA was performed in accordance with the guidelines set forth in Practice E 1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process,* published November 2021 by the American Society for Testing and Materials (ASTM) and in accordance with the prevailing standard of care for completing such assessments in California at this time.

This EHA has two distinct components.

1. A Phase I Environmental Site Assessment (ESA) performed in accordance with American Society for Testing and Materials (ASTM) Designation: E 1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and is hereinafter referred to as an ASTM Phase I ESA. Phase I ESAs focus on the presence or likely presence of hazardous substances and petroleum products. Additional environmental conditions specific to California school sites include the presence of oil/gas fields, proximity to rock units potentially containing naturally occurring asbestos, dairy facilities, and other past land uses of environmental concern.

2. An assessment directed to address California Education Code and Public Resources Code requirements. These activities focus on investigating for the proximity of hazardous air emissions, high voltage power lines, pressurized pipelines, railroads, major roadways, and current and proposed airport runways.

Included is a discussion of the purpose for the work, a description of the Site and adjacent properties, a discussion of the information gathered from records, interviews, and Site visits, and Condor's findings, opinions, and conclusions. Figures referenced in the report are included in **Appendix A**. Photographs of the Site are located in **Appendix B**. The results of researched ASTM-recommended government databases [Environmental Data Resources, Inc. (EDR™) Radius Map with GeoCheck®] are contained in **Appendix C**. Historical topographic maps, aerial photographs, Sanborn fire insurance maps, and city directories information are contained in **Appendix D**. The User questionnaire and Owner transaction screening questionnaire are contained in **Appendix E**. A copy of the Scope of Work is contained in **Appendix F.** The glossary of terms associated with an ASTM Phase I EHA is contained in **Appendix G**. The local Air Resources District correspondence is included in **Appendix H**.

1.1 PURPOSE

The purpose of the ASTM Phase I ESA is to conduct all appropriate inquiries into previous ownership and uses of the property to satisfy one of the requirements to qualify for the *innocent landowner, contiguous property owner, or bona fide prospective purchaser* limitations on liability under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) "*landowner liability protections*" or "*LLPs*". These potential environmental conditions are identified as *recognized environmental condition* and *historical recognized environmental condition*. (See **Appendix G** for definitions.)

The purpose of the additional group of activities in the EHA is to address the requirements of the California Education and Public Resources Codes not included in the scope of a typical ASTM Phase I ESA. These additional activities include review of records to identify facilities within ¼-mile of the Site that could emit hazardous air emissions (California Education Code § 39003 and California Public Resources Code § 21151.8) and existing and proposed airports within two nautical miles of the Site (California Education Code § 39005, 39007). In accordance with State policies the additional activities include Site observations to determine the relative locations of high voltage power lines, high-pressure gas lines, and railroad tracks.

The goal of this assessment is not to demonstrate that no hazardous materials are present at the Site. The assessment is necessary, however, to complete "...all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial or customary standards and practice" [42 U.S.C. § 9601 (35)(B)]. The use of an environmental professional in the performance of this assessment will minimize environmental risks but cannot completely eliminate these risks.

1.2 USER RELIANCE, LIMITATIONS, AND EXCEPTIONS

The scope of this project was presented in our proposal and contract number 8874 dated May 12, 2022, and subsequently approved by the Client (see **Appendix F** for Scope of Work).

This EHA is thorough, but it is not intended to identify all potential concerns, or to eliminate all risk of the subject properties bearing some degree of environmental liability. Condor cannot and will not warrant or certify that the Site is free of contaminants because it is impossible to know if such a condition exists. Although risks can never be eliminated, more detailed and extensive investigations yield more information, thereby further minimizing risk.

Land use, Site conditions (both on-site and off-site), and other factors will change over time. Site activities and regulations beyond Condor's control could change at any time after the completion of this report. Our observations, findings, and opinions can be considered valid only as of the date of the Site visit/reconnaissance, **June 23, 2022**. If any changes are made or errors found in the information used for this report, the interpretations and conclusions contained herein shall not be considered valid unless the changes or errors are reviewed by Condor and either appropriately modified or re-approved in writing.

The all appropriate inquiries components listed in Section 4.6.2 of the ASTM E 1527-21 Standard must be conducted or updated within 180 days of and prior to the date of acquisition of the subject property, and all other components of the all appropriate inquiries must be conducted within one year prior to the date of acquisition of the subject property. The components listed in Section 4.6.2 include interviews, environmental cleanup liens search, environmental database reviews, visual inspection of the Site and adjoining properties, and the declaration of the environmental professional.

The property owner is solely responsible for notifying all governmental agencies, and the public at large, of the existence, release, treatment, or disposal of any hazardous materials observed at the Site, either before or during performance of Condor's services. Condor assumes no responsibility or liability whatsoever for any claim, loss of property value, damage, or injury which results from pre-existing hazardous materials being encountered or present on the project site, or from the discovery of such hazardous materials.

Condor, as an independent contractor, has completed the ASTM Phase I EHA in accordance with the ASTM guidelines and with the customary state of the practice and the prevailing standard of care for completing such assessments for the state of California at this time. Condor shall not be subject to any express or implied warranties whatsoever.

This report and other instruments or service are prepared and made available for the sole use of the officers and representatives of the Client. The contents thereof may not be used or relied upon by any other person(s) without the expressed written consent and authorization of the Client and Condor.

1.3 SIGNIFICANT ASSUMPTIONS

An assumed northerly groundwater gradient direction was utilized when assessing the potential risk posed to the Site from off-site locations. This assumed groundwater gradient is based upon groundwater monitoring associated with the Paul Oil Company property[1] located approximately 1 mile northeast of the Site and local topographic relief.

1.4 SPECIAL TERMS AND CONDITIONS

None noted.

2.0 SITE DESCRIPTION

This section provides a brief description of the Site and surrounding areas. More information regarding the Site and its description, including historical data, is included in Sections 4.0 and 5.0.

2.1 SITE LOCATION, LEGAL DESCRIPTION, AND PHYSICAL SETTING

The Site parcel comprises approximately 12.11 acres designated as APN 021-027-038 located in a primarily residential and agricultural area. The Site is depicted in the Site reconnaissance photographs (**Appendix B**) and in Figures 1 through 7 (**Appendix A**).

The resources used for determining the physical setting of the Site were the GeoCheck® Physical Setting Source Summary, provided by EDR™ (**Appendix C**), the USGS Patterson, California 7.5-Minute Topographic Map dated 2018 (Figure 1, **Appendix A**), information from the current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) and Site reconnaissance. The Site is located in the eastern portion of Section 36, Township 5 South, Range 7 East of the Mount Diablo Base and Meridian, at approximately North Latitude 37.4575 and West Longitude -121.1422. The average elevation of the Site is approximately 138 feet above mean sea level.

The Site is located in the northern portion of the San Joaquin Valley in the City of Patterson. Downtown Patterson is located approximately 1.1 miles northeast of the Site. Calvison Parkway adjoins the northern Site boundary, Ward Avenue adjoins the eastern Site boundary, and Wolfpack Court adjoins the western

[1] *Semi-Annual Groundwater Monitoring Report-2nd Half 2012, Paul Oil Company, 511 S. 2nd Street, Patterson, CA*, January 10, 2013, Ground Zero Analysis, Inc.

Site boundary. The Delta-Mendota and California Aqueducts are located approximately 1.1 and 1.5 miles southwest of the Site and Interstate 5 is located approximately 1.5 miles southwest of the Site. Highway 33 and the Southern Pacific Railroad are located approximately 1.1 miles northeast of the Site. The San Joaquin River is approximately 4.5 miles northeast of the Site. The FEMA FIRM map indicates that Site is within Zone X: 0.2% annual chance flood hazard (outside the "100-year flood" zone) (Figure 7**, Appendix A**).

2.2 SITE GEOLOGY

The Site is located in the Great Valley Geomorphic Province in the northern San Joaquin Valley. The San Joaquin Valley is a northwest-trending, structural depression, filled with up to six vertical miles of lithified non-marine and marine sediments and unlithified non-marine sediments. Regionally, the lithology of the upper 3,000 feet of sediments is indicative of uplift and erosion of the Sierra Nevada to the east and, to lesser degree, the Coast Range Mountains to the west.

Near-surface sedimentary deposits underlying the Site consist of quaternary-age alluvial deposits. These sediments are derived primarily from the Tertiary and Cretaceous rocks of the Coastal Range Mountains. The Site is situated on alluvial fan deposits derived from Miocene fanglomerate deposits, Miocene Valley Springs Formation, Paleocene-Eocene Tesla Formation, and Cretaceous marine sedimentary rocks of the Panoche and Moreno Formations. The Site soil type as mapped by the US Department of Agriculture is Vernalis loam with Class B hydrologic group (moderate infiltration rate), Elsaldo loam with Class B hydrologic group (moderate infiltration rate), Stomar clay loam with a Class C hydrologic group (slow infiltration rate), and Capay clay with a Class D hydrologic group (very slow infiltration rate). Based on a review of available well records, groundwater in the vicinity is anticipated to be approximately 80 feet below ground surface (bgs) and likely varies between 50 and 150 feet bgs. A well located approximately 1.25 miles west-northwest of the Site[2] (DWR Station 374607N1211652W001) recently had a depth to groundwater measurement of approximately 108 feet bgs.

Naturally occurring asbestos (NOA) is typically associated with ultramafic rocks. According to published geologic maps, the nearest ultramafic rocks are approximately 9 miles west (aerial straight-line distance) of the Site in Del Puerto Canyon. The Site is located 3.5 miles south of the drainage watershed and alluvial fan of Del Puerto Canyon and is not hydraulically connected to that drainage. The drainage and watershed that is hydraulically connected to the Site does not have ultramafic rock units within it. Therefore, NOA is not likely present and does not appear to pose a risk to the Site.

2.3 CURRENT USES OF THE SUBJECT PROPERTY

Stanislaus County Assessor's Office property use for the Site is indicated as schools. Based on Site reconnaissance, the Site is vacant.

2.4 DESCRIPTIONS OF STRUCTURES, ROADS, OTHER IMPROVEMENTS ON SITE

The Site is an unpaved vacant lot. An electrical transformer is located in the northeastern portion of the Site along the Site boundary and sidewalk. A newly-constructed wireless service tower and enclosure are located on the northeastern corner of the Site. Electrical lines (115 kV) are located along the southeastern portion of the Site along Ward Avenue.

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2 https://wdl.water.ca.gov/WaterDataLibrary/GroundwaterBrowseData.aspx?LocalWellNumber=&StationId=27920&StateWellNumber=05S07E35G001M&SelectedCounties=&SiteCode=374607N1211652W001&SelectedGWBasins=

2.5 CURRENT USES OF THE ADJOINING PROPERTIES

The adjoining properties are agricultural/residential to the east of the Site. A residential neighborhood adjoins the Site to the west and north. The southern adjoining property is a park.

3.0 USER PROVIDED INFORMATION

3.1 TITLE RECORDS

A Preliminary Title Report was provided by the Client. No easements or other environmental encumbrances were found.

3.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

An environmental lien is a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property. The Client indicated that no environmental liens have been placed on the Site property (User Questionnaire returned June 15, 2022, **Appendix E**). No evidence of any environmental lien placed on the Site property was revealed in the course of this investigation.

3.3 SPECIALIZED KNOWLEDGE

None noted.

3.4 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

The Client indicated that the purchase price reasonably reflects fair market value for the Site property (User Questionnaire, **Appendix E**). Although an evaluation of property value was not included or performed during this EHA, no valuation reduction for environmental issues was revealed during review of historical information.

3.5 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

Information obtained from the ParcelQuest indicated the current owner of the Site parcel as Patterson Unified School District.

3.6 REASON FOR PERFORMING PHASE I EHA

This Phase I ESA was performed to evaluate the Site for *recognized environmental conditions* pursuant to the ASTM Standard Practice E 1527-21 as part of the Client's school site approval process with state agencies. The Site is being considered for proposed future school construction by the Client.

3.7 OTHER

None noted.

4.0 SITE RECONNAISSANCE

4.1 METHODOLOGY AND LIMITING CONDITIONS

A walking reconnaissance of the Site and surrounding area was performed on June 23, 2022, in accordance with the ASTM practice by the Environmental Professional.

4.2 EXTERIOR OBSERVATIONS

The Site is an unpaved vacant lot. An electrical transformer is located in the northeastern portion of the Site along the Site boundary and sidewalk and all utilities for the Site and surrounding development are underground. Overhead electrical lines are located along the southeastern portion of the Site along Ward Avenue. Photographs of the Site are contained in **Appendix B**.

The following items were not observed at the Site during the Site reconnaissance unless otherwise noted.

1. Source of potable water: City of Patterson
2. Sewage disposal: City of Patterson
3. Hazardous substances and petroleum products in connection with identified uses
4. Storage tanks
5. Odors
6. Pools of liquid
7. Drums
8. Hazardous substances and petroleum products containers
9. Unidentified Substance Containers
10. Polychlorinated biphenyls (PCBs)
11. Stained soil or pavement
12. Pits, ponds, or lagoons
13. Stressed vegetation
14. Solid waste
15. Waste water
16. Wells
17. Septic Systems

4.3 INTERIOR OBSERVATIONS

No structures were present.

4.3.1 Heating/Cooling

Not applicable. Future heating and cooling will be electrical and natural gas.

4.3.2 Stains/Corrosion

Not applicable.

4.3.3 Drains and Sumps

Not applicable.

5.0 RECORDS REVIEW

5.1 STANDARD ENVIRONMENTAL RECORD RESOURCES

Locations identified in the ASTM specified databases within the specified search radii are included in the EDR™ Radius Map with GeoCheck® report dated June 8, 2022 in **Appendix C**. It is Condor's practice to submit the Site addresses/location for local regulatory file reviews whether or not it has been identified within the database search. The databases specified by ASTM are commonly subject to infrequent and partial updating. This is especially true of those locations that no longer warrant inclusion in a given database. It is therefore not unusual to fail to find supporting documentation for locations identified in the ASTM specified database search on file with local regulatory agencies. A total of 11 database entries

were returned including 3 records of hazardous waste facilities (Envirostor), 1 record of leaking underground storage tanks (LUST), and 2 records of leaking storage tanks (CPS-SLIC). Additional environmental record resources included in the EDR™ report included 2 records of registered underground storage tank (UST) (SWEEPS UST), 2 records of historic UST (HIST UST), and 1 record of historic auto service (253 Tissot Drive). The listings in the general and immediate vicinity of the Site are primarily the Campbell Ranch Co., Monterey Chevron Inc., and George H Pedroni. The majority of the database listings are related to these businesses. Other listings are for nearby school site evaluations that were approved by DTSC. One dry cleaner listing is approximately 0.6 miles northeast and downgradient to the Site at 420 Del Puerto Avenue and does not appear to pose a risk to the Site due to distance and downgradient position.

Campbell Ranch Co is listed at 16521 Ward Avenue and at Hyacinth Drive which was a 600-acre agricultural farm with the release location in the southeastern portion of the farm approximately 1,500 feet west of the Site. These locations are listed on the LUST, SPC-SLIC, SWEEPS UST, HIST UST, CPS-SLIC, and CERS databases. This location is listed as having five fuel storage tanks: a 300-gallon diesel tank, a 500-gallon unleaded gasoline tank, a 700-gallon leaded gasoline tank, a 700-gallon unleaded gasoline tank which were located south of Hyacinth Drive. This location is discussed further in Section 5.2.1.

Monterey Chevron Inc is listed at 253 Tissot Drive which is approximately 140 feet northwest of the Site on the historic auto database as a gasoline service station from 2012 through 2014. Aerial photos show this location as a residence between those years. A property search revealed this location is the residence of the station owner and not a gas station. Therefore, this location does not pose a risk to the Site.

George H Pedroni is listed at 16718 Ward Avenue which is approximately 1,400 feet southeast of the Site on the SWEEPS UST and historic UST databases. This location had a 525-gallon leaded gasoline UST. Due to distance from the Site, this location does not pose a risk to the Site.

Additional locations listed are greater than 1,000 feet from the Site, are not upgradient with respect to groundwater gradient direction, and do not appear to pose a risk to the Site.

None of the listed locations appear to pose a significant risk to the Site based on listing type, regulatory status, and distance.

5.2 ADDITIONAL ENVIRONMENTAL RECORD RESOURCES

5.2.1 State Water Resource's Control Board

Campbell Ranch Co is listed at 16521 Ward Avenue had five aboveground fuel tanks in a cluster with underground fuel lines leading from the tanks (tanks were located south of the current Hyacinth Drive). This location is greater than 1,500 feet west of the Site. Condor reviewed the Soil and Ground Water Assessment and Preliminary Remedial Cost Estimates, Blackhawk Development, Campbell Ranch Facility report dated November 28, 1989. During Blackhawk Corporation's Phase II investigation to purchase the property for development, petroleum hydrocarbon concentrations were detected in soil samples collected around the tank cluster. The current owner stated 800-gallons of gasoline leaked from one of the underground fuel lines. Benzene was found to be the constituent of concern in the soil and groundwater. Groundwater was approximately 45 feet bgs and flowed northwest at a slight gradient. Keystone Corporation had additional soil and groundwater samples collected between 1989 and 2002 which determined the constituents of concern were total petroleum hydrocarbons as gasoline (TPH-g), benzene, and 1,2-dicholorethane (1,2-DCA). The highest concentrations in the soil were at the northeast corner of the ASTs. Groundwater impacts were reported at approximately 45 feet bgs and extended

beneath the ASTs in a northwest direction approximately 65 feet downgradient of the ASTs. Various remediation activities including in-situ chemical oxidation substantially reduced the contaminant concentrations. Additional groundwater monitoring and sampling was proposed in 2019 by Keystone Corporations consultant TRC using the current monitoring wells; however, the Central Valley Water Board requested a work plan to install a monitoring well downgradient of the existing monitoring well MW-3 to monitor groundwater for a one-year period. Shortly thereafter, the attorney for Keystone Corporation responded to the Central Valley Water Board that Keystone Corporation never owned or operated the former ASTs nor owned the property where the tanks were located. The attorney contended that Keystone is not legally responsible for the release and that they would not proceed with further work. **Due to groundwater gradient, reduced groundwater concentrations of contaminants, and distance from the Site, this location does not pose a risk to the Site.**

5.2.2 Local Regulatory Agency

The Stanislaus County Department of Environmental Resources (SCDER) was contacted for a public file review request on June 9, 2022. No files were available to review for the Site or adjoining properties. There are no entries for any database locations within 0.25 mile of the Site.

5.2.3 California Department of Toxic Substances Control (EnviroStor)

Condor reviewed the EnviroStor database on June 10, 2022. No documents were located regarding the Site. There are no entries in the database for locations within 0.25 mile of the Site.

5.2.4 Information Provided by the Past and Present Owners, Operators, and Occupants

The Client, past and present owners, operators, and occupants did not provide any information for Condor to review regarding the Site.

5.3 HISTORICAL USE INFORMATION RESEARCH FOR THE SITE

Historical use information pertaining to the Site was researched using historical USGS topographic maps, aerial photographs, Sanborn fire insurance maps, and city directories information provided by EDR™. USGS topographic maps provided by EDR™ for the years 1916; 1919; 1941; 1947; 1952, 1953; 1971; 1978, 1980; 2012; 2015; and 2018. Aerial photographs provided by EDR™ for the years 1937, 1950, 1957, 1971, 1977, 1982, 1998, 2006, 2009, 2012, and 2016. Sanborn Fire Insurance Maps provided by EDR™ indicated no coverage for the area. City directory information for the Site address of 1000 Calvison Parkway were not listed in City Directories provided by EDR™. Copies of the maps, photographs, Sanborn fire insurance maps, and city directories are included in **Appendix D**. The following is a summary of our review.

Data Source	Site Historical Use Summary
Topographic Maps	In 1916 and 1919 the Site was vacant with an improved road along the eastern Site boundary. An unimproved road transected the Site to the west. By 1941 the unimproved road was removed. By 1952, 1953 the Site was an orchard with a canal along the southwestern Site boundary. By 2012 the Site is a vacant lot.
Aerial Photographs	The Site was agricultural land until 2006 when it was a vacant lot and part of the surrounding development.
Sanborn Maps	No coverage for the area.
City Directories	**1000 Calvison Parkway –** not listed.

In summary, the Site was used as a portion of a larger an agricultural field from the early 20th Century until the mid-2000s. The Site remains undeveloped.

5.4 HISTORICAL USE INFORMATION RESEARCH FOR ADJOINING PROPERTIES

Historical use information pertaining to the adjoining properties was researched using the same historical USGS topographic maps, aerial photographs, Sanborn fire insurance maps, and city directories information provided by EDR™ as the Site. Copies of the maps, photographs, Sanborn fire insurance maps, and city directories are included in **Appendix D**.

Data Source	Adjoining Properties Historical Use Summary
Topographic Maps	In 1916 the adjoining properties are undeveloped rural land with a residence on the western and northeastern adjoining properties. A road is located along the eastern Site boundary. An undeveloped road transects the Site to the western adjoining residence. Salado Creek is located west of the western residence. The Union Pacific Railroad lines are located east of the Site. By 1941 the unimproved road transecting the Site has been removed to the western adjoining property. Multiple buildings are located on the western adjoining property. The northeastern adjoining property is an orchard with two buildings. Additional buildings are located on the eastern and southeastern adjoining properties. By 1952, 1953 the adjoining properties are orchards. A road is located south of the orchard and canal on the southern adjoining property. Two buildings are located in the western adjoining orchard. The Delta-Mendota Canal is located southwest of the Site. By 1971 the California Aqueduct and I-5 are shown southwest of the Delta-Mendota Canal from the Site. By 2012 the City of Patterson has expanded to the northern and western adjoining properties.
Aerial Photographs	The surrounding properties are rural residences with agricultural land until 1998 when neighborhood development is shown to the northeast and a park is developed south of the Site. By 2006 neighborhood development is shown west and north of the Site. The southern adjoining property is also a park. By 2016 most of the northern neighborhood has been developed which includes a school.
Sanborn Maps	No coverage for the area.
City Directories	Adjoining properties are primarily residential. **16521 Ward Avenue –** Campbell Ranch Co, Campbell Ranch Shop, and Delpuerto Supply Co (1971-1974); Campbell Ranch Co, Campbell Ranch Shop, and Delpuerto Supply Co, Patterson Gold Inc, and Ramon Samano (1977); Campbell Ranch OFC, Campbell Ranch Shop, and Delpuerto Supply Co, and Ramon Samano (1981-1985); Campbell Ranch OFC (Co), Roman Reyes, and Ramon Samano (1992-1995); Campbell Ranch Company and Del Puerto Supply Company (2000); and Campbell Ranch Co (2005).

In summary, the adjoining properties to the west and north of the Site (including the Site) was used as portion of a larger agricultural field from the early 20th Century until the mid-2000s.

6.0 INTERVIEWS

6.1 INTERVIEWS WITH PAST AND PRESENT OWNERS, OPERATORS, AND OCCUPANTS

6.1.1 Interview with Past Owner

The past owner was unavailable for an interview.

6.1.2 Interview with Present Owner

The User was interviewed, and the questionnaire is included in **Appendix E**. The District has owned the Site since 2007 and the land has remained vacant since.

6.1.3 Interview with Site Manager/Operator

Not Applicable.

6.1.4 Interview with Occupants

Not Applicable.

6.2 INTERVIEWS WITH STATE AND/OR LOCAL GOVERNMENT OFFICIALS

6.2.1 Interview with State Government Officials

Condor reviewed the State of California websites GeoTracker and EnviroStor on June 9 and 10, 2022.

6.2.2 Interview with Local Government Officials

A Public File Review Request was submitted via email to the SCDER on June 9, 2022. No files were available to review for the Site or adjoining properties.

7.0 ADDITIONAL SERVICES

A Tier one vapor encroachment screen was performed in accordance with the ASTM Standard. No nearby or on-Site sources of contamination were identified that would pose a subsurface vapor intrusion risk to future occupants of the Site.

7.1 CALIFORNIA EDUCATION AND PUBLIC RESOURCES CODE REQUIREMENTS

7.1.1 High Voltage Power Lines, Gas Lines/Wells, and Railroad Tracks within Site Vicinity

Based on review of topographic maps, aerial photos, and the Site reconnaissance, there are no railroad tracks or major roadways within 1,500 feet of the Site. The nearest railroad tracks are approximately 5,600 feet northeast of the Site. The nearest major roadways are Interstate 5 approximately 1.7 miles west of the Site and California State Route 33, located approximately 1.2 miles northeast of the Site. According to the National Pipeline Hazard Mapping System, one underground natural gas pipeline is located within 0.5 mile of the Site: the nearest high-pressure natural gas line is approximately 0.4 miles (2,100 feet) north of the Site along Sperry Avenue (Highway 130). There are 115kV (single phase) electrical transmission lines located along the southeastern portion of the Site along Ward Avenue operated by PG&E[3]. There are no other high voltage electrical transmission lines within 0.5 mile of the Site.

The California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) website was viewed to ascertain if any gas or oil wells are located in the vicinity of the Site. According to DOGGR, no active gas or oil wells are located within 0.5 miles of the Site (the nearest historic well is over 8,000 feet southwest of the Site), and the Site is not within a known oil or gas field.

[3]https://cecgis-caenergy.opendata.arcgis.com/datasets/260b4513acdb4a3a8e4d64e69fc84fee_0/explore?location=37.415631%2C-121.026142%2C12.34

7.1.2 Hazardous Air Emissions within 0.25 Mile of the Site

Condor requested the San Joaquin Valley Air Pollution Control District (SJVAPCD) on June 10, 2022 to review their records to identify facilities within 0.25 mile of the Site that may produce hazardous air emissions. SJVAPCD had no records on file for locations within 0.25 mile of the Site (**Appendix H**).

7.1.3 State Fire Marshal Pipeline Safety Program within One Mile of the Site

Two Pacific Gas and Electric (PG&E) active filled natural gas pipelines adjoin Interstate 5 west of the Site, one of which splits off and adjoins Sperry Avenue approximately 0.4 miles north of the Site; and a SFPP, LP active filled natural gas pipeline adjoins Highway 33 more than one mile east of the Site. One Phillips 66 Pipeline LLC active filled (crude oil) hazardous liquid pipeline and one Crimson Pipeline L.P. active filled (crude oil) hazardous liquid pipeline adjoins Interstate 5 more than 1.5 miles west of the Site.

7.1.4 Existing and Proposed Airports within Two Nautical Miles of the Site

There are no existing or proposed airports within two nautical miles of the Site. NASA Crows Landing Airport and Test Facility (the nearest airport) is located approximately 2.6 nautical miles southeast of the Site.

8.0 FINDINGS

The Site comprises approximately 12.11 acres of vacant property located at 1000 Calvison Parkway, Patterson, California and designated as APN 021-027-038. The Site and adjacent properties were historically used as agricultural land from the early 20th century until the early 2000s. Agricultural uses of the Site included orchards, irrigated row crops, and feed crops. The Site is vacant and unpaved, with no existing or previous structures, except a newly-constructed wireless service tower and fenced enclosure. Based on review of publicly available information, none of the properties listed in the environmental database search appear to pose a risk to the Site and no nearby or on-Site sources of contamination were identified that would pose a subsurface vapor intrusion risk to future occupants of the Site.

Additional services included the review of other information resources. Based on historical use review, file review, and the Site reconnaissance, the following information was obtained:

- There are no railroad tracks within 1,500 feet of the Site (the nearest are 5,600 feet northeast).
- There are no major roadways within 1,500 feet of the Site (the nearest is one mile northeast).
- There are 115kV (single phase) electrical transmission lines located along the southeastern portion of the Site along Ward Avenue operated by PG&E. There are no other high voltage electrical transmission lines within 0.5 mile of the Site.
- There are no high-pressure pipelines within 1,500 feet of the Site. Natural gas transmission lines are located less than 0.5 mile from the Site (the nearest is 0.4 miles north).
- According to DOGGR, no active gas or oil wells are located within 0.5 mile of the Site (the nearest well is over 8,000 feet southwest of the Site), and the Site is not within a known oil or gas field.
- According to information received from SJVAPCD, no hazardous air emissions facilities were identified within 0.25 mile of the Site.
- There are no active airports within 2 nautical miles of the Site (the nearest is 2.6 nautical miles).
- According to published geologic maps, the nearest ultramafic rocks are approximately 9 miles west of the Site in Del Puerto Canyon. The Site is located 3.5 miles south of the drainage watershed and alluvial fan of Del Puerto Canyon and is not hydraulically connected to that drainage. The drainage and watershed that is hydraulically connected to the Site does not have ultramafic rock units within it. Therefore, NOA is not likely present and does not appear to pose a risk to the Site.

9.0 OPINIONS AND CONCLUSIONS

We (Condor) have performed a Phase I EHA in conformance with the scope and limitations of ASTM E 1527-21 for APN 021-027-038, located at 1000 Calvison Parkway, Patterson, California. Any exceptions to, or deletions from, this practice are described in Section 10.0 of this report. This assessment has revealed the following *recognized environmental conditions, controlled recognized environmental conditions,* and/or *significant data gaps* in connection with the subject property:

It is Condor's opinion that the past agricultural use and likely historical application of agricultural chemicals to the Site constitutes a *recognized environmental condition* pursuant to the ASTM E 1527-21. Agricultural chemicals, including organochlorine pesticides have been extensively used in the Central Valley and are likely residual in the soil.

It is Condor's opinion that there are no factors relating to the Site that could be considered *historical or controlled recognized environmental conditions* pursuant to the ASTM Standard and there are no significant data gaps.

Condor recommends that a Preliminary Environmental Assessment (PEA) be conducted under DTSC oversight to evaluate the Site in accordance with DTSC protocols for school sites.

10.0 DEVIATIONS AND DATA GAPS

This ASTM Phase I EHA was performed by Condor according to the scope and limitations of ASTM Practice E 1527-21, except for the following:

- Past owner interviews were not conducted. The contact information for past owners was not readily available.

This is not considered a significant deviation since the Site use history as agricultural fields is well-documented.

11.0 REFERENCES

SITE AND VICINITY GENERAL CHARACTERISTICS AND SETTING

1. CalGEM GIS Well Finder on-line information, https://maps.conservation.ca.gov/doggr/wellfinder/#/, reviewed on June 10, 2022.

2. California Department of Water Resources Water Data Library Station Map on-line information, https://wdl.water.ca.gov/WaterDataLibrary/, reviewed on June 10, 2022.

3. California Energy Commission, California Electric Transmission Lines on-line information, https://cecgis-caenergy.opendata.arcgis.com/datasets/260b4513acdb4a3a8e4d64e69fc84fee_0/explore?location=37.202012%2C-118.629288%2C7.07, reviewed on June 28, 2022.

4. FEMA National Flood Insurance Program on-line information, http://store.msc.fema.gov/; and FIRM Map Index for Sacramento County, California, 06099C0734E, dated September 26, 2008, reviewed on June 9, 2022.

5. GeoCheck® Physical Setting Source Summary, provided by EDR™, dated June 8, 2022.

6. National Pipeline Mapping System on-line information, https://www.npms.phmsa.dot.gov/, reviewed on June 10, 2022.

7. Parcel Quest®, parcel identification, on-line information, http://www.parcelquest.com, reviewed on June 9, 2022.

8. Site reconnaissance, June 23, 2022.

9. USGS Patterson, California 7.5-minute topographic quadrangle map dated 2018 obtained from EDR™ dated June 8, 2022.

10. E.J. Bortugno, McJunkin, and Wagner, D.L., Geologic Map of the San Francisco-San Jose Quadrangle, California, 1:250,000, 1991.

CURRENT USES OF THE ADJOINING PROPERTIES

11. Site reconnaissance, June 23, 2022.

HISTORICAL USE INFORMATION ON SITE AND ADJOINING PROPERTIES

12. Aerial photographs dated 1937, 1950, 1957, 1971, 1977, 1982, 1998, 2006, 2009, 2012, and 2016 obtained from EDR™ dated June 8, 2022.

13. Historical USGS topographic maps dated 1916; 1919; 1941; 1947; 1952, 1953; 1971; 1978, 1980; 2012; 2015; and 2018, obtained from EDR™ dated June 8, 2022.

RECORDS REVIEW

14. California State Department of Toxic Substances Control EnviroStor website: https://www.envirostor.dtsc.ca.gov/public/, reviewed on June 10, 2022.

15. California State Water Resource Control Board website: http://geotracker.swrcb.ca.gov/reports, reviewed on June 9, 2022.

16. EDR™ Radius Map and Report, dated June 8, 2022.

REPORT STANDARDS

17. ASTM E 1527-21.

12.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

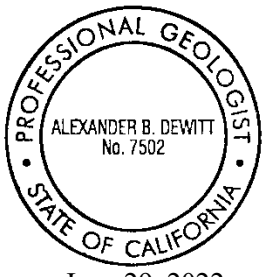
Condor has over 75 years of aggregate experience in the performance of Phase I EHAs and environmental audits for financial institutions, attorneys, private companies and public agencies. Experienced environmental professionals perform assessments and audits that provide a standard of care consistent with industry practice and employ guidelines developed by the ASTM Practice E 1527-21. Alexander B. Dewitt, California Professional Geologist, performed this assessment. Mr. Dewitt has over 17 years of experience conducting environmental assessments in California for public agencies and commercial businesses. Mr. Dewitt has performed Environmental Assessments under regulatory oversight on over 40 school sites.

13.0 ENVIRONMENTAL PROFESSIONAL'S STATEMENT AND SIGNATURE

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 C.F.R. 312. Further, I declare that I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CF.R. Part 312.

Respectfully submitted,
CONDOR EARTH

ENVIRONMENTAL PROFESSIONAL:



ASSISTED BY:

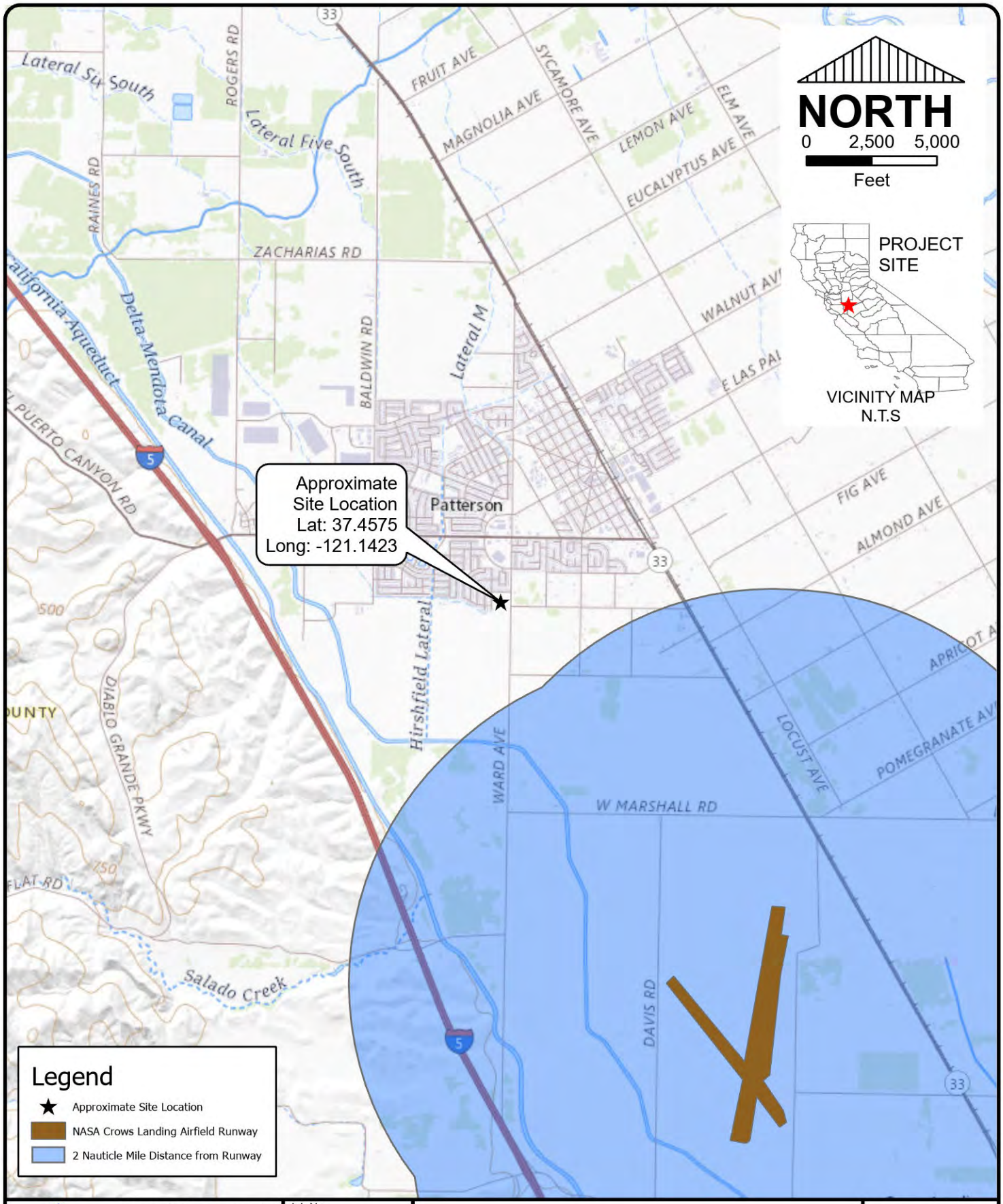
Alexander B. Dewitt, CA PG No. 7502
Vice President, Environmental Services

June 29, 2022

Rebecca Selvage
Environmental Specialist

X:\Project\8000_prj\8874 PJUSD Environmental Review\Reports\EHA\FR 20220629 PJUSD EHA.docx

APPENDIX A



CONDOR EARTH
21663 Brian Lane
P.O. Box 3905
Sonora, CA 95370
(209) 532-0361
fax (209) 532-0773
www.condorearth.com

Job No.	8874
Date	08 Jun 2022
Scale	AS SHOWN
Drawn	JW
Chk'd	AD

VICINITY MAP
ENVIRONMENTAL HAZARDS ASSESSMENT
PATTERSON GARDENS SCHOOL SITE
PATTERSON JOINT UNIFIED SCHOOL DISTRICT
PATTERSON, CA

FIGURE 1

8874_Patterson.aprx

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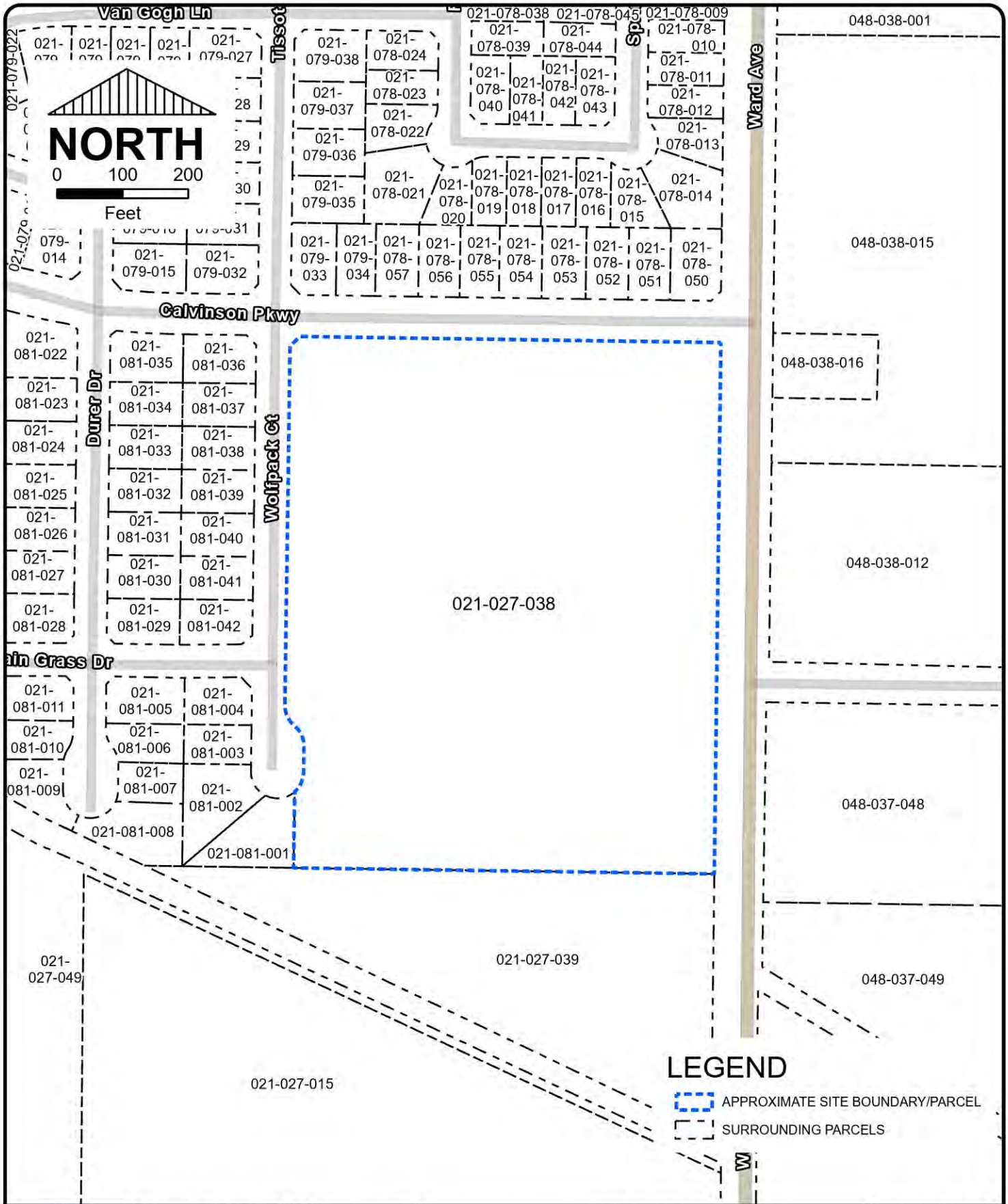
Job No.	8874
Date	08 Jun 2022
Scale	AS SHOWN
Drawn	JW
Chk'd	AD

SITE MAP
ENVIRONMENTAL HAZARDS ASSESSMENT
PATTERSON GARDENS SCHOOL SITE
PATTERSON JOINT UNIFIED SCHOOL DISTRICT
PATTERSON, CA

FIGURE 2

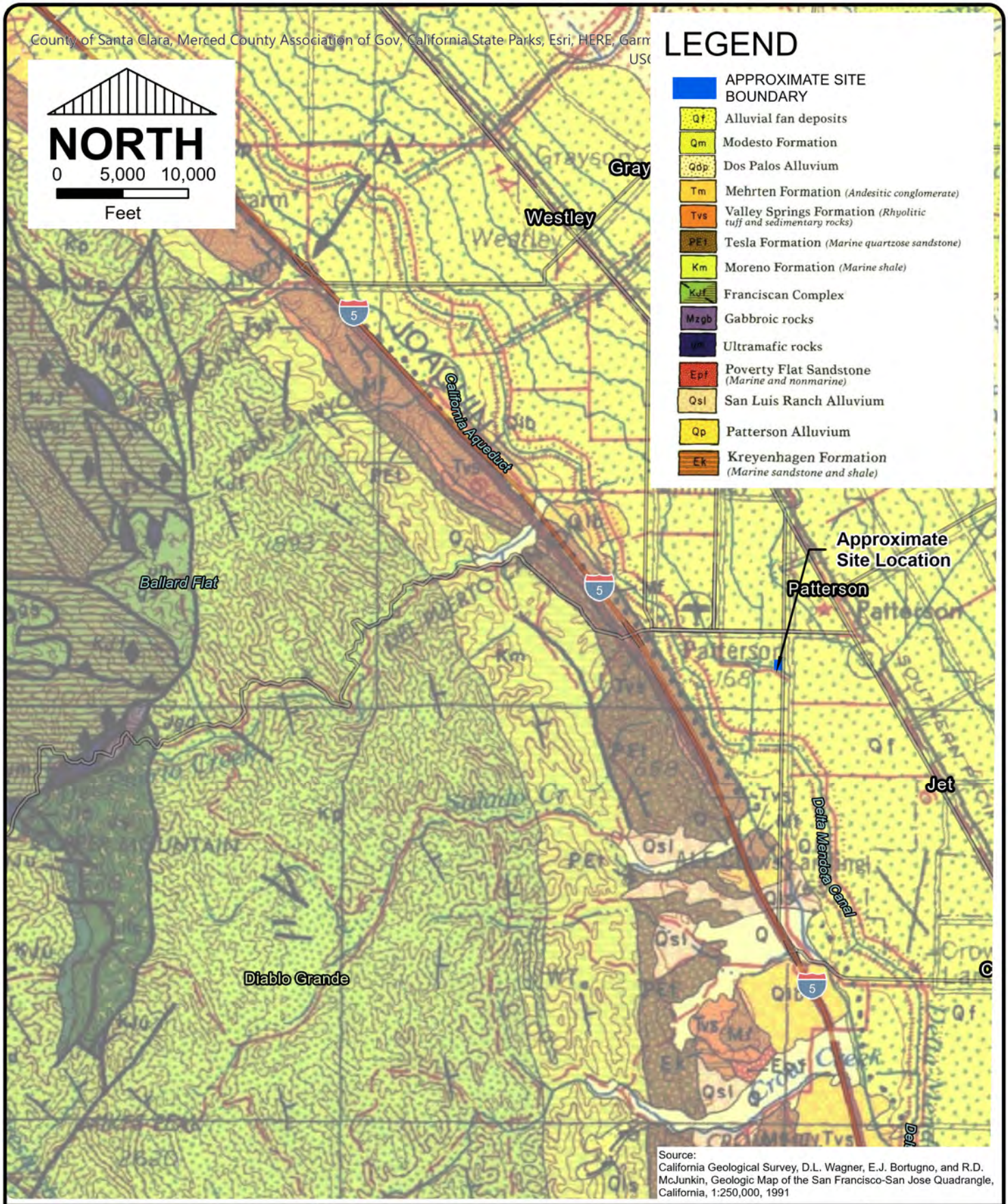
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CONDOR EARTH 21663 Brian Lane P.O. Box 3905 Sonora, CA 95370 (209) 532-0361 fax (209) 532-0773 www.condorearth.com	Job No. 8874 Date 08 Jun 2022 Scale AS SHOWN Drawn JW / Chk'd AD	APN MAP ENVIRONMENTAL HAZARDS ASSESSMENT PATTERSON GARDENS SCHOOL SITE PATTERSON JOINT UNIFIED SCHOOL DISTRICT PATTERSON, CA	FIGURE 3 8874_Patterson.aprx

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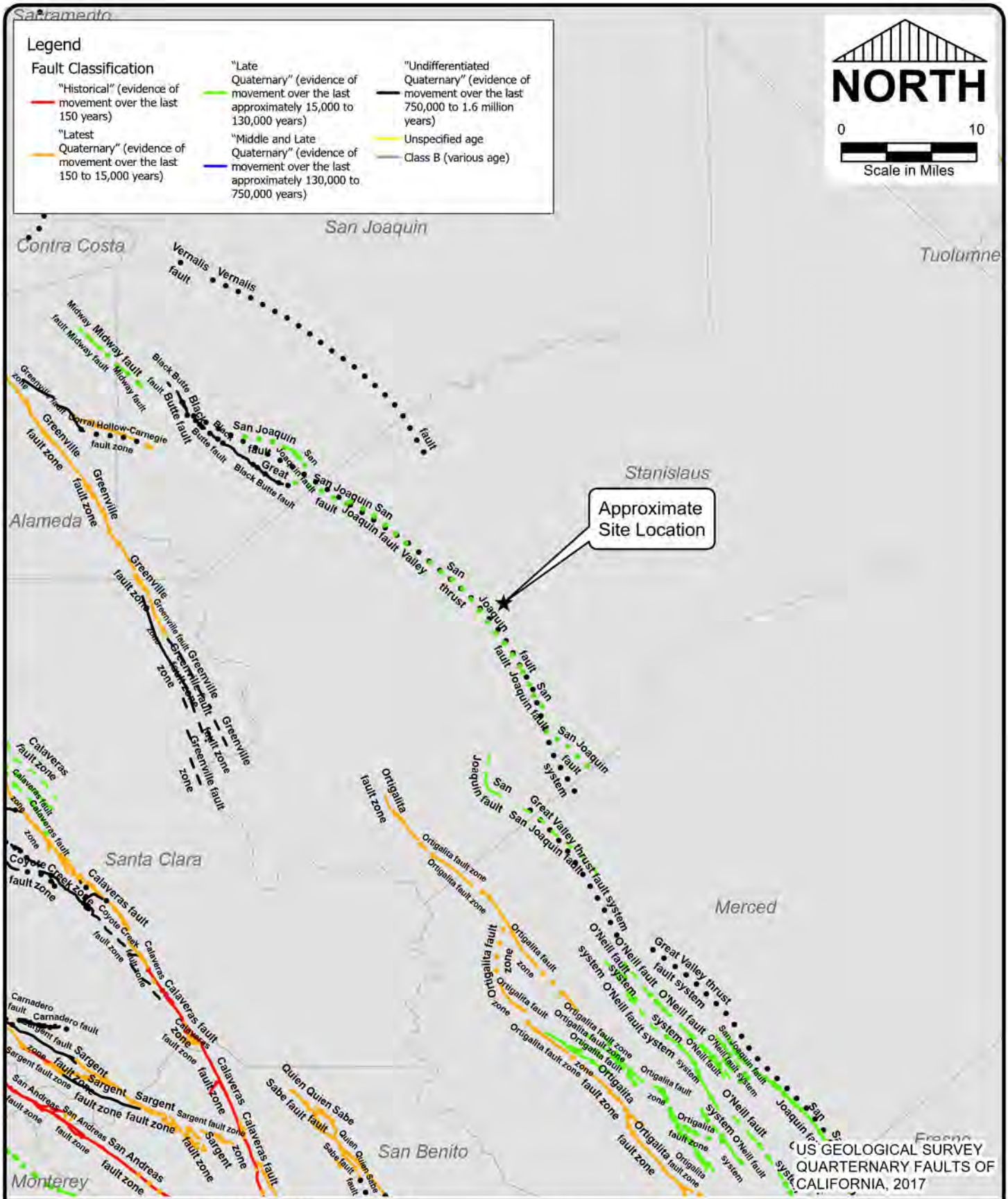
Job No.	8874
Date	29 Jun 2022
Scale	AS SHOWN
Drawn	JW
Chk'd	AD

GEOLOGIC MAP
ENVIRONMENTAL HAZARDS ASSESSMENT
PATTERSON GARDENS SCHOOL SITE
PATTERSON JOINT UNIFIED SCHOOL DISTRICT
PATTERSON, CA

FIGURE 4

8874_Patterson.aprx

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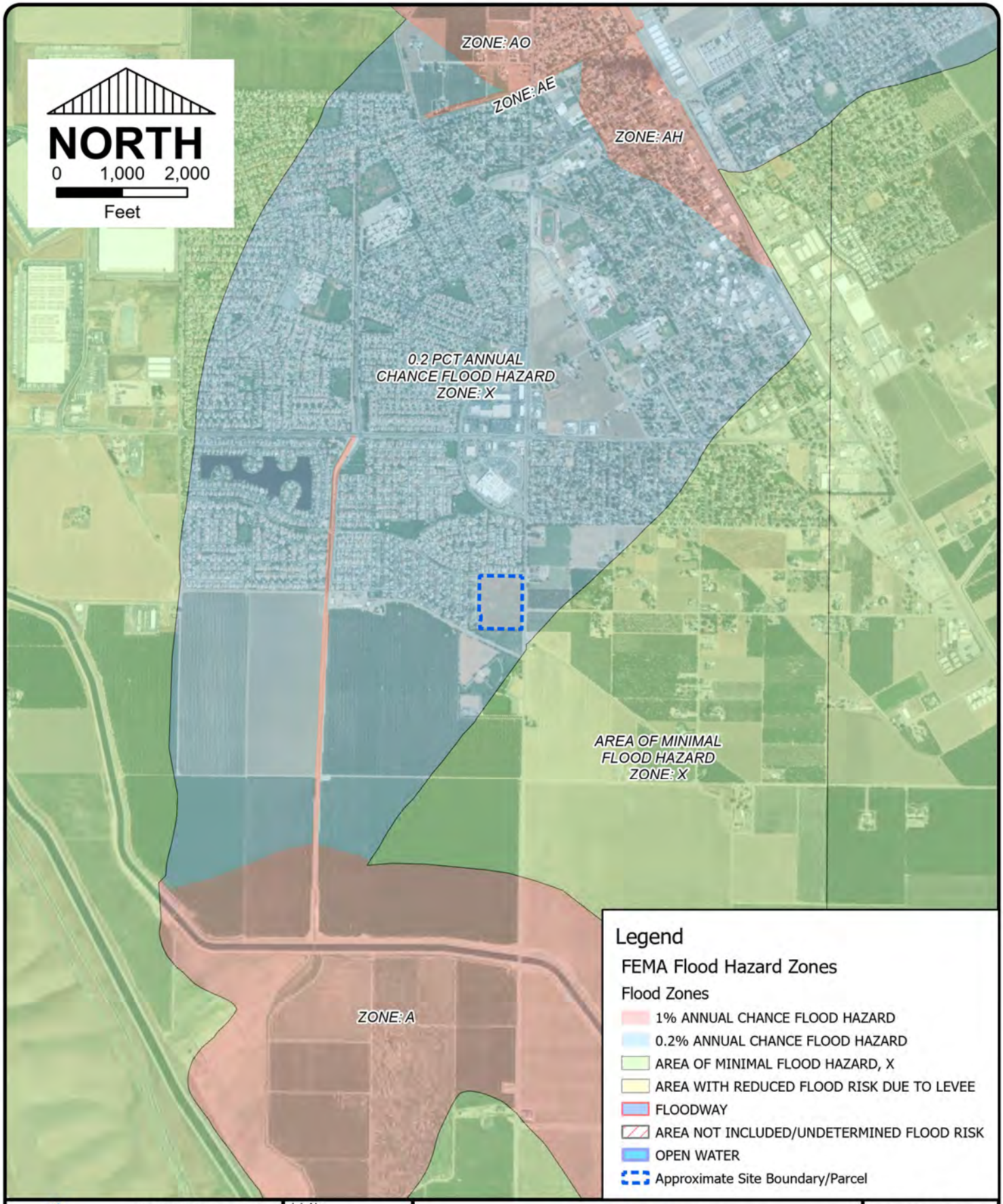
Job No.	Date	Scale	Drawn	Chk'd
8874	28 Jun 2022	AS SHOWN	JW	AD

REGIONAL FAULT MAP
ENVIRONMENTAL HAZARDS ASSESSMENT
PATTERSON GARDENS SCHOOL SITE
PATTERSON JOINT UNIFIED SCHOOL DISTRICT
PATTERSON, CA

FIGURE 5

8874_Patterson.aprx

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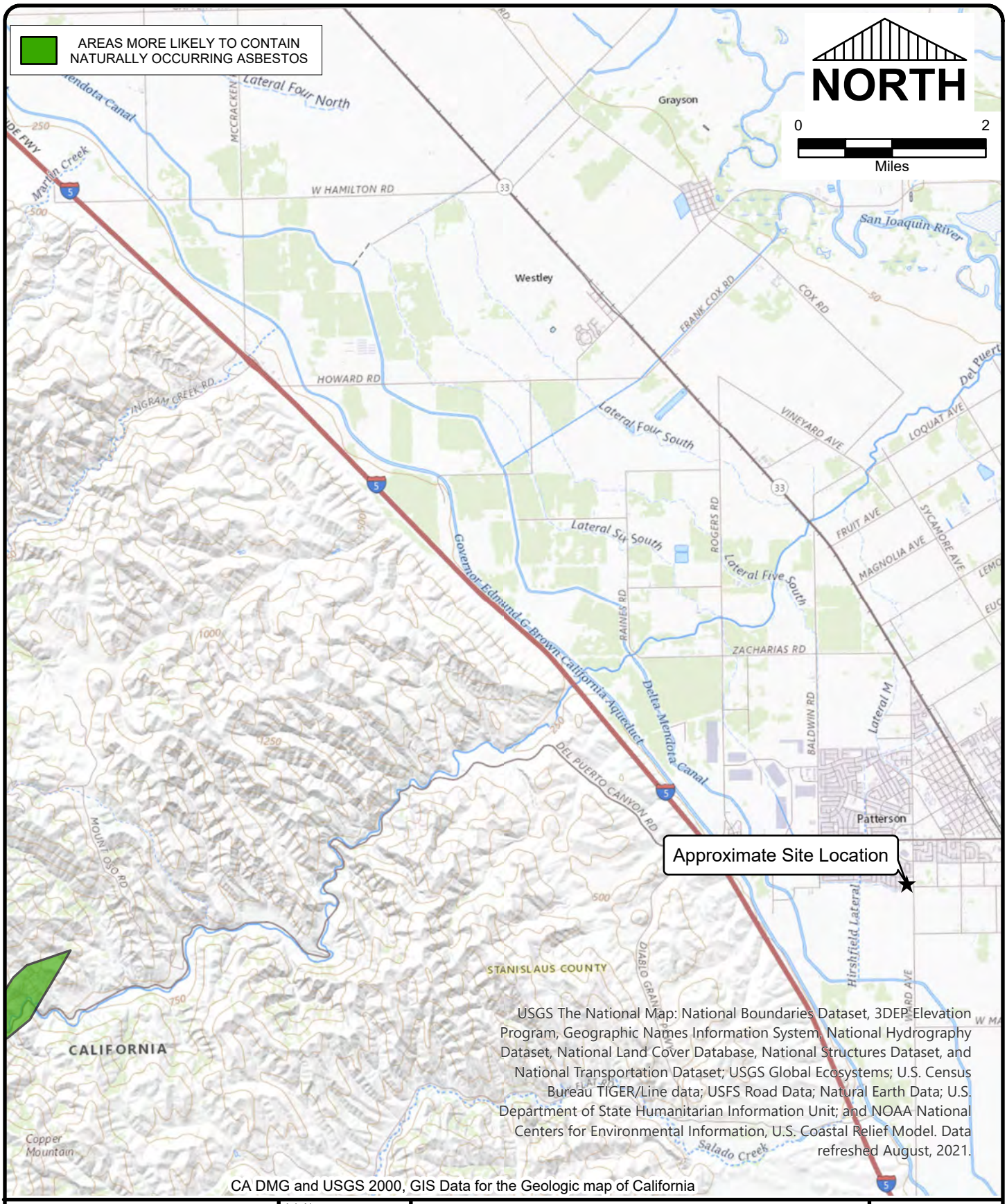
Job No.	8874
Date	28 Jun 2022
Scale	AS SHOWN
Drawn	JW
Chk'd	AD

FEMA FLOOD MAP
ENVIRONMENTAL HAZARDS ASSESSMENT
PATTERSON GARDENS SCHOOL SITE
PATTERSON JOINT UNIFIED SCHOOL DISTRICT
PATTERSON, CA

FIGURE 6

8874_Patterson.aprx

P:\GIS\Current Project\8874_Patterson\8874_Patterson.aprx



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Job No.	8874
Date	22 Jun 2022
Scale	AS SHOWN
Drawn	MT
Chk'd	AD

ULTRAMAFIC ROCK MAP
ENVIRONMENTAL HAZARDS ASSESSMENT
PATTERSON GARDENS SCHOOL SITE
PATTERSON JOINT UNIFIED SCHOOL DISTRICT
PATTERSON, CA

FIGURE 7

8874.aprx

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APPENDIX B



Photo 1: Looking west along Calivson Parkway, school site is to the left of photo.



Photo 2: Looking southeast at the northeastern corner of the Site at the newly-installed wireless service tower.



Photo 3: Looking south at the central portion of the Site.



Photo 4: Looking east from the southwestern portion of the Site and the southern Site boundary (line of redwood trees).



Photo 5: Looking north from the southwestern portion of the Site.



Photo 6: Looking northeast from the central portion of the Site.



Photo 7: Looking west from the southeastern corner of the Site along the southern boundary.



Photo 8: Looking north along the eastern Site boundary. Note 115 kV power pole at far right.

APPENDIX C

Proposed Elementary School
1000 Calvison Parkway
Patterson, CA 95363

Inquiry Number: 7011484.2s
June 08, 2022

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Detail Map	3
Map Findings Summary	4
Map Findings	9
Orphan Summary	28
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-12
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by 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 (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1000 CALVISON PARKWAY
PATTERSON, CA 95363

COORDINATES

Latitude (North):	37.4574220 - 37ˆ 27' 26.71''
Longitude (West):	121.1423060 - 121ˆ 8' 32.30''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	664306.5
UTM Y (Meters):	4147033.5
Elevation:	137 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	12008770 PATTERSON, CA
Version Date:	2018
East Map:	12008702 CROWS LANDING, CA
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140628
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
1000 CALVISON PARKWAY
PATTERSON, CA 95363

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	CAMPBELL RANCH CO.	16521 WARD AVE	LUST, CPS-SLIC, SWEEPS UST, HIST UST	Higher	23, 0.004, SE
2	MONTEREY CHEVRON INC	253 TISSOT DR	EDR Hist Auto	Lower	138, 0.026, NW
3	GEORGE H PEDRONI	16718 WARD AVE	SWEEPS UST, HIST UST	Higher	894, 0.169, SSE
4	CAMPBELL RANCH	HYACINTH DRIVE	CPS-SLIC, CERS	Higher	1377, 0.261, West
5	WESTSIDE CLEANERS	420 DEL PUERTO	ENVIROSTOR, LUST, SWEEPS UST, HIST CORTESE	Lower	3554, 0.673, NE
6	CREEKSIDE ELEMENTARY	SHEARWATER DRIVE/HEA	ENVIROSTOR, SCH	Lower	4865, 0.921, NNW
7	PATTERSON HIGH SCHOO	200 N 7TH STREET	ENVIROSTOR, SCH, HAZNET, NPDES, CIWQS, CERS, HWTS	Lower	4941, 0.936, NNE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

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

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System

US ENG CONTROLS Engineering Controls Sites List
US INST CONTROLS Institutional Controls Sites List

Federal ERNS list

ERNS Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE State Response Sites

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF Solid Waste Information System

Lists of state and tribal leaking storage tanks

INDIAN LUST Leaking Underground Storage Tanks on Indian Land

Lists of state and tribal registered storage tanks

FEMA UST Underground Storage Tank Listing
UST Active UST Facilities
AST Aboveground Petroleum Storage Tank Facilities
INDIAN UST Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

VCP Voluntary Cleanup Program Properties
INDIAN VCP Voluntary Cleanup Priority Listing

Lists of state and tribal brownfield sites

BROWNFIELDS Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT Waste Management Unit Database
SWRCY Recycler Database
HAULERS Registered Waste Tire Haulers Listing
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
ODI Open Dump Inventory
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register

HIST Cal-Sites ---- Historical Calsites Database
SCH ---- School Property Evaluation Program
CDL ---- Clandestine Drug Labs
Toxic Pits ---- Toxic Pits Cleanup Act Sites
CERS HAZ WASTE ---- CERS HAZ WASTE
US CDL ---- National Clandestine Laboratory Register
AQUEOUS FOAM ---- Former Fire Training Facility Assessments Listing
PFAS ---- PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

CA FID UST ---- Facility Inventory Database
CERS TANKS ---- California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information
DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
CHMIRS ---- California Hazardous Material Incident Report System
LDS ---- Land Disposal Sites Listing
MCS ---- Military Cleanup Sites Listing
SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR ---- RCRA - Non Generators / No Longer Regulated
FUDS ---- Formerly Used Defense Sites
DOD ---- Department of Defense Sites
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
2020 COR ACTION ---- 2020 Corrective Action Program List
TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System
SSTS ---- Section 7 Tracking Systems
ROD ---- Records Of Decision
RMP ---- Risk Management Plans
RAATS ---- RCRA Administrative Action Tracking System
PRP ---- Potentially Responsible Parties
PADS ---- PCB Activity Database System
ICIS ---- Integrated Compliance Information System
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---- Material Licensing Tracking System
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---- PCB Transformer Registration Database
RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data

CONSENT Superfund (CERCLA) Consent Decrees
INDIAN RESERV Indian Reservations
FUSRAP Formerly Utilized Sites Remedial Action Program
UMTRA Uranium Mill Tailings Sites
LEAD SMELTERS Lead Smelter Sites
US AIRS Aerometric Information Retrieval System Facility Subsystem
US MINES Mines Master Index File
ABANDONED MINES Abandoned Mines
FINDS Facility Index System/Facility Registry System
DOCKET HWC Hazardous Waste Compliance Docket Listing
ECHO Enforcement & Compliance History Information
UXO Unexploded Ordnance Sites
FUELS PROGRAM EPA Fuels Program Registered Listing
CA BOND EXP. PLAN Bond Expenditure Plan
Cortese "Cortese" Hazardous Waste & Substances Sites List
CUPA Listings CUPA Resources List
DRYCLEANERS Cleaner Facilities
EMI Emissions Inventory Data
ENF Enforcement Action Listing
Financial Assurance Financial Assurance Information Listing
HAZNET Facility and Manifest Data
ICE ICE
HIST CORTESE Hazardous Waste & Substance Site List
HWP EnviroStor Permitted Facilities Listing
HWT Registered Hazardous Waste Transporter Database
MINES Mines Site Location Listing
MWMP Medical Waste Management Program Listing
NPDES NPDES Permits Listing
PEST LIC Pesticide Regulation Licenses Listing
PROC Certified Processors Database
Notify 65 Proposition 65 Records
UIC UIC Listing
UIC GEO UIC GEO (GEOTRACKER)
WASTEWATER PITS Oil Wastewater Pits Listing
WDS Waste Discharge System
WIP Well Investigation Program Case List
MILITARY PRIV SITES MILITARY PRIV SITES (GEOTRACKER)
PROJECT PROJECT (GEOTRACKER)
WDR Waste Discharge Requirements Listing
CIWQS California Integrated Water Quality System
CERS CERS
NON-CASE INFO NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ Well Stimulation Project (GEOTRACKER)
MINES MRDS Mineral Resources Data System
HWTS Hazardous Waste Tracking System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of state- and tribal hazardous waste facilities

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 01/24/2022 has revealed that there are 3 ENVIROSTOR sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WESTSIDE CLEANERS Facility Id: 50720007 Status: Refer: RWQCB	***420 DEL PUERTO***	***NE 1/2 - 1 (0.673 mi.)***	***5***	***14***
CREEKSIDE ELEMENTARY Facility Id: 50010014 Status: No Further Action	***SHEARWATER DRIVE/HEA***	***NNW 1/2 - 1 (0.921 mi.)***	***6***	***16***
PATTERSON HIGH SCHOO Facility Id: 60002878 Status: Active	***200 N 7TH STREET***	***NNE 1/2 - 1 (0.936 mi.)***	***7***	***19***

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAMPBELL RANCH CO.	***16521 WARD AVE***	***SE 0 - 1/8 (0.004 mi.)***	***1***	***9***
Database: LUST REG 5, Date of Government Version: 07/01/2008				
Status: Remedial action (cleanup) Underway				

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there are 2 CPS-SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAMPBELL RANCH CO.	***16521 WARD AVE***	***SE 0 - 1/8 (0.004 mi.)***	***1***	***9***
Database: SLIC REG 5, Date of Government Version: 04/01/2005				
CAMPBELL RANCH	***HYACINTH DRIVE***	***W 1/4 - 1/2 (0.261 mi.)***	***4***	***13***
Database: CPS-SLIC, Date of Government Version: 05/23/2022				
Global Id: T0609991946				
Facility Status: Open - Remediation				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

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 2 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAMPBELL RANCH CO.	***16521 WARD AVE***	***SE 0 - 1/8 (0.004 mi.)***	***1***	***9***
Status: A				
Tank Status: A				
Comp Number: 11777				
GEORGE H PEDRONI	***16718 WARD AVE***	***SSE 1/8 - 1/4 (0.169 mi.)***	***3***	***12***

Status: A
Tank Status: A
Comp Number: 11299

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 2 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAMPBELL RANCH CO. Facility Id: 00000011777	***16521 WARD AVE***	***SE 0 - 1/8 (0.004 mi.)***	***1***	***9***
GEORGE H PEDRONI Facility Id: 00000011299	***16718 WARD AVE***	***SSE 1/8 - 1/4 (0.169 mi.)***	***3***	***12***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

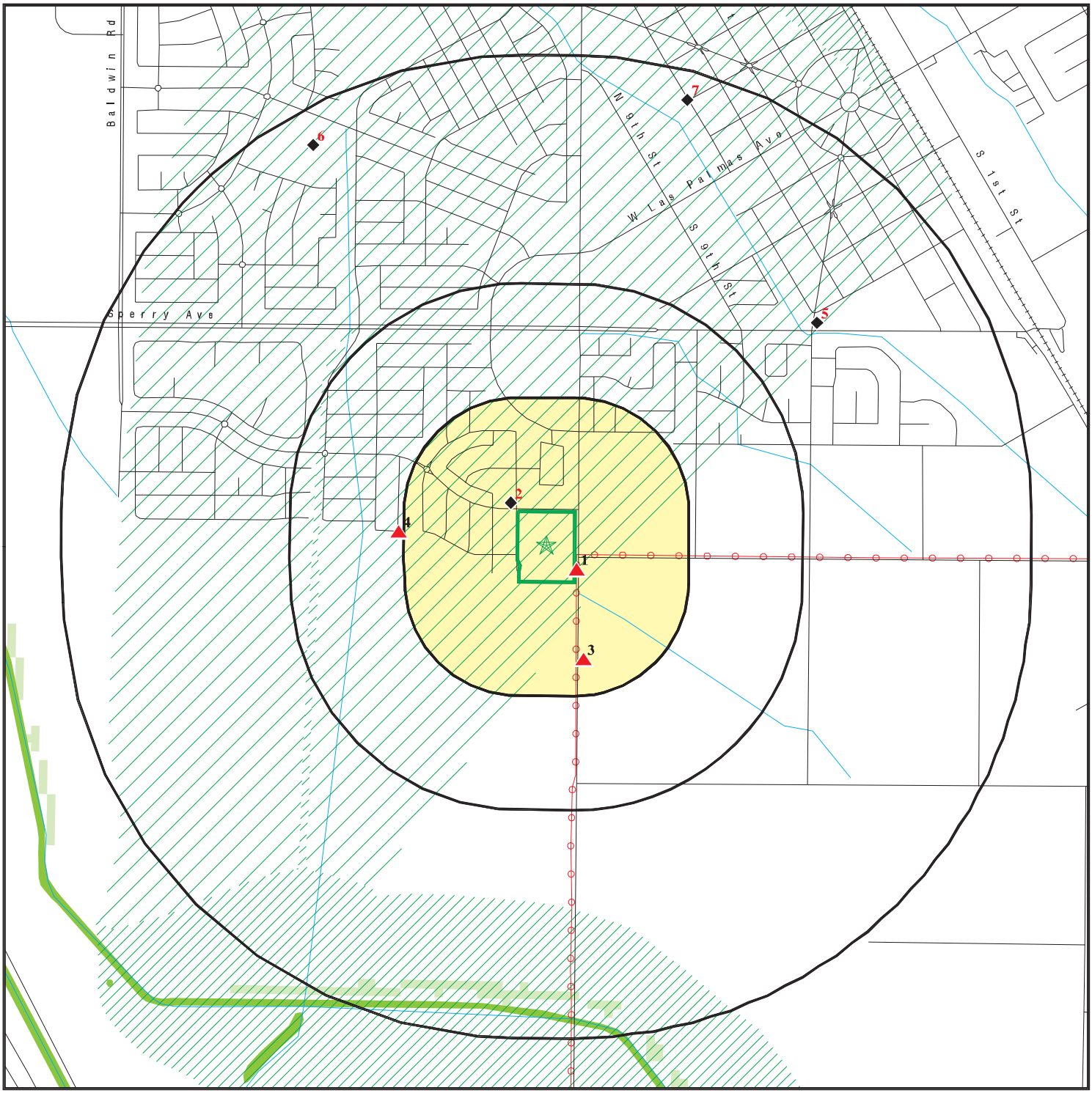
A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
MONTEREY CHEVRON INC	253 TISSOT DR	NW 0 - 1/8 (0.026 mi.)	2	12

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 7011484.2S



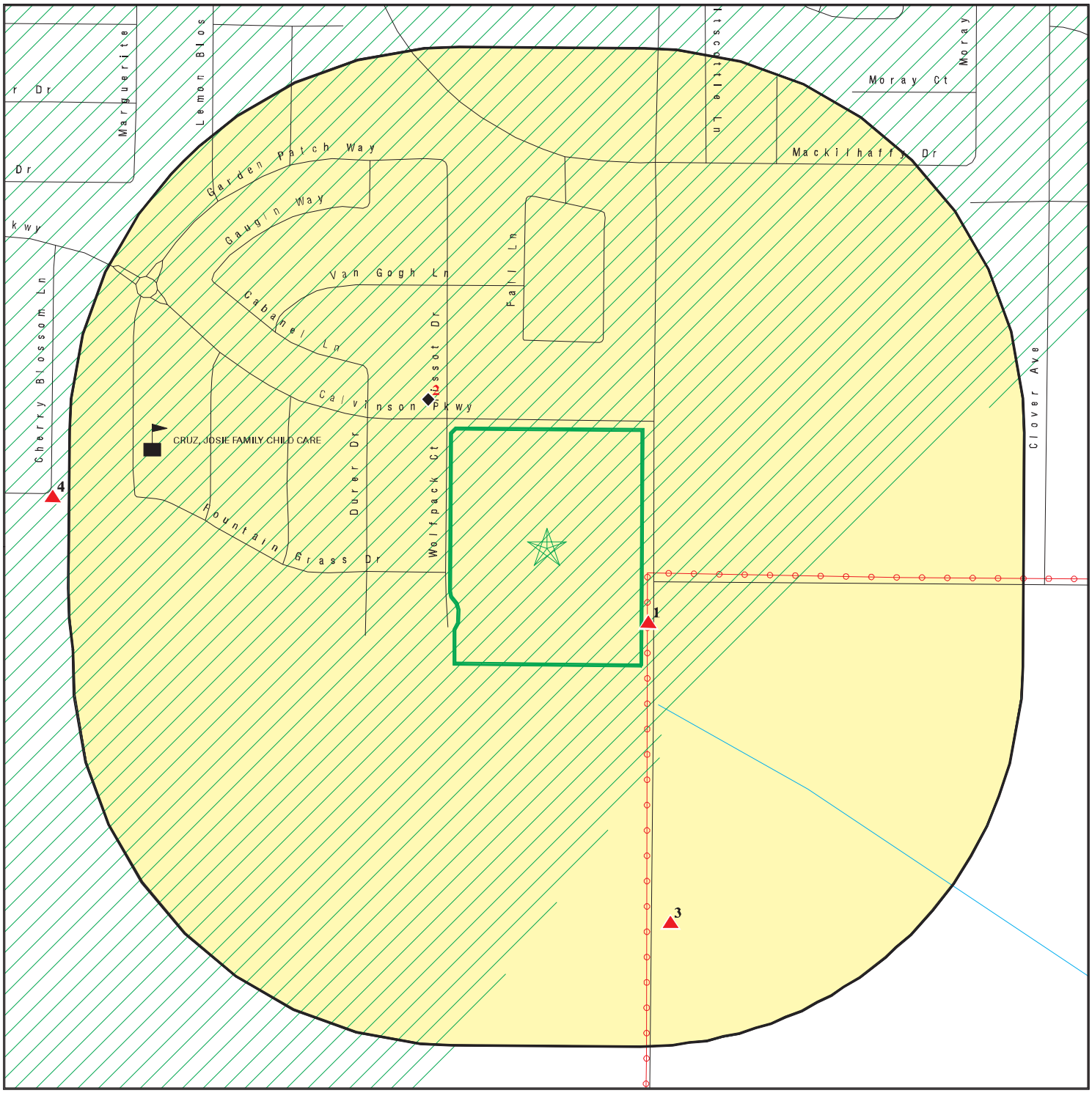
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

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

SITE NAME:	Proposed Elementary School	CLIENT:	Condor Earth Technologies, Inc
ADDRESS:	1000 Calvison Parkway Patterson CA 95363	CONTACT:	Rebecca Selvage
LAT/LONG:	37.457422 / 121.142306	INQUIRY #:	7011484.2s
		DATE:	June 08, 2022 6:06 pm

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DETAIL MAP - 7011484.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

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: Proposed Elementary School	CLIENT: Condor Earth Technologies, Inc
ADDRESS: 1000 Calvison Parkway Patterson CA 95363	CONTACT: Rebecca Selvage
LAT/LONG: 37.457422 / 121.142306	INQUIRY #: 7011484.2s DATE: June 08, 2022 6:07 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	0	0	3	NR	3
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		1	0	0	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		1	0	1	NR	NR	2
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
AQUEOUS FOAM	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	1	NR	NR	NR	2
HIST UST	0.250		1	1	NR	NR	NR	2
CA FID UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CERS TANKS	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	5	2	1	3	0	11

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
SE
< 1/8
0.004 mi.
23 ft.

CAMPBELL RANCH CO.
16521 WARD AVE
PATTERSON, CA 95363

LUST **U001607870**
CPS-SLIC **N/A**
SWEEPS UST
HIST UST

Relative:
Higher

Actual:
137 ft.

LUST REG 5:

Name:	CAMPBELL RANCH
Address:	16521 WARD
City:	PATTERSON
Region:	5
Status:	Remedial action (cleanup) Underway
Case Number:	500504
Case Type:	Drinking Water Aquifer affected
Substance:	Not reported
Staff Initials:	MTS
Lead Agency:	Local
Program:	LOCNL
MTBE Code:	N/A

SLIC REG 5:

Name:	Campbell Ranch
Address:	16521 Ward Ave
City:	Patterson
Region:	5
Facility Status:	Phase Two Remedial Investigation
Unit:	Facility is a Spill or site
Pollutant:	TPH
Lead Agency:	STA Co.
Date Filed:	04/10/96
Report Date:	/ /
Date Added:	Not reported
Date Closed:	Not reported

SWEEPS UST:

Name:	CAMPBELL RANCH CO.
Address:	16521 WARD AVE
City:	PATTERSON
Status:	Active
Comp Number:	11777
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	2
SWRCB Tank Id:	50-000-011777-000001
Tank Status:	A
Capacity:	300
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	4

Name:	CAMPBELL RANCH CO.
Address:	16521 WARD AVE
City:	PATTERSON

CAMPBELL RANCH CO. (Continued) **U001607870**

Status: Active
Comp Number: 11777
Number: 9
Board Of Equalization: Not reported
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 50-000-011777-000002
Tank Status: A
Capacity: 500
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Name: CAMPBELL RANCH CO.
Address: 16521 WARD AVE
City: PATTERSON
Status: Active
Comp Number: 11777
Number: 9
Board Of Equalization: Not reported
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 50-000-011777-000003
Tank Status: A
Capacity: 700
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: Not reported

Name: CAMPBELL RANCH CO.
Address: 16521 WARD AVE
City: PATTERSON
Status: Active
Comp Number: 11777
Number: 9
Board Of Equalization: Not reported
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 2
SWRCB Tank Id: 50-000-011777-000004
Tank Status: A
Capacity: 700
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

CAMPBELL RANCH CO. (Continued) **U001607870**

HIST UST:

Name:	CAMPBELL RANCH CO
Address:	16521 WARD AVE
City,State,Zip:	PATTERSON, CA 95363
File Number:	00021BF1
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00021BF1.pdf
Region:	STATE
Facility ID:	00000011777
Facility Type:	Other
Other Type:	ROW CROP & ORCHARD F
Contact Name:	LAUREN CAMPBELL
Telephone:	2098928401
Owner Name:	CAMPBELL RANCH CO.
Owner Address:	16521 WARD AVE.
Owner City,St,Zip:	PATTERSON, CA 95363
Total Tanks:	0004
Tank Num:	001
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00000300
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000700
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor
Tank Num:	004
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00000700
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

2
NW
< 1/8
0.026 mi.
138 ft.

MONTEREY CHEVRON INC
253 TISSOT DR
PATTERSON, CA 95363

EDR Hist Auto **1021587740**
N/A

Relative:
Lower

Actual:
135 ft.

EDR Hist Auto

Year:	Name:	Type:
2012	MONTEREY CHEVRON INC	Gasoline Service Stations, NEC
2013	MONTEREY CHEVRON INC	Gasoline Service Stations, NEC
2014	MONTEREY CHEVRON INC	Gasoline Service Stations, NEC

3
SSE
1/8-1/4
0.169 mi.
894 ft.

GEORGE H PEDRONI
16718 WARD AVE
PATTERSON, CA 95363

SWEEPS UST **U001607890**
HIST UST **N/A**

Relative:
Higher

Actual:
145 ft.

SWEEPS UST:

Name:	GEORGE H. PEDRONI
Address:	16718 WARD AVE
City:	PATTERSON
Status:	Active
Comp Number:	11299
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	50-000-011299-000001
Tank Status:	A
Capacity:	525
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	1

HIST UST:

Name:	GEORGE H PEDRONI
Address:	16718 WARD AVE
City,State,Zip:	PATTERSON, CA 95363
File Number:	00022072
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00022072.pdf
Region:	STATE
Facility ID:	00000011299
Facility Type:	Other
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	2098926160
Owner Name:	GEORGE H. PEDRONI
Owner Address:	16718 WARD AVE
Owner City,St,Zip:	PATTERSON, CA 95363
Total Tanks:	0001
Tank Num:	001
Container Num:	1

GEORGE H PEDRONI (Continued) **U001607890**

Year Installed:	Not reported
Tank Capacity:	00000525
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Visual

Click here for Geo Tracker PDF:

---

4 West 1/4-1/2 0.261 mi. 1377 ft.

CAMPBELL RANCH
HYACINTH DRIVE
PATTERSON, CA 95363

CPS-SLIC **S123504441**
CERS **N/A**

Relative: Higher

Actual: 143 ft.

CPS-SLIC:

Name:	CAMPBELL RANCH
Address:	HYACINTH DRIVE
City,State,Zip:	PATTERSON, CA 95363
Region:	STATE
Facility Status:	**Open - Remediation**
Status Date:	07/05/2002
Global Id:	T0609991946
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Lead Agency Case Number:	Not reported
Latitude:	37.4577301619118
Longitude:	-121.148892506668
Case Type:	Cleanup Program Site
Case Worker:	GKR
Local Agency:	STANISLAUS COUNTY
RB Case Number:	500504
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affected:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Other Solvent or Non-Petroleum Hydrocarbon, Benzene, Diesel, Gasoline, Total Petroleum Hydrocarbons (TPH)
Site History:	Open - Remediation

Click here to access the California GeoTracker records for this facility:

CERS:

Name:	CAMPBELL RANCH
Address:	HYACINTH DRIVE
City,State,Zip:	PATTERSON, CA 95363
Site ID:	195448
CERS ID:	T0609991946
CERS Description:	Cleanup Program Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	HORACIO FERRIZ, RG, CEG - STANISLAUS COUNTY
Entity Title:	Not reported
Affiliation Address:	3800 CORNUCOPIA WAY STE# C
Affiliation City:	MODESTO
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

CAMPBELL RANCH (Continued) **S123504441**

Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	GEOFFREY RADER - CENTRAL VALLEY RWQCB (REGION 5S)
Entity Title:	Not reported
Affiliation Address:	11020 Sun Center Drive, Suite 200
Affiliation City:	RANCHO CORDOVA
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9164644707,

5
NE
1/2-1
0.673 mi.
3554 ft.

WESTSIDE CLEANERS
420 DEL PUERTO
PATTERSON, CA 95363

ENVIROSTOR **S102860972**
LUST **N/A**
SWEEPS UST
HIST CORTESE

Relative:
Lower

Actual:
115 ft.

ENVIROSTOR:

Name:	WESTSIDE CLEANERS AND LAUNDRY
Address:	101 S. DEL PUERTO AVENUE
City,State,Zip:	PATTERSON, CA 95363
Facility ID:	50720007
Status:	Refer: RWQCB
Status Date:	04/21/1992
Site Code:	Not reported
Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	1
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Referred - Not Assigned
Division Branch:	Cleanup Sacramento
Assembly:	21
Senate:	12
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	37.46933
Longitude:	-121.1308
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAD983579590
Alias Type:	EPA Identification Number
Alias Name:	SLT5S3183354
Alias Type:	GeoTracker Global ID
Alias Name:	T0609900097
Alias Type:	GeoTracker Global ID
Alias Name:	50720007
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE

WESTSIDE CLEANERS (Continued) **S102860972**

Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 04/21/1992
Comments: A CERCLA Preliminary Assessment was conducted in June 1991 at this dry cleaning facility. A dry cleaning operation has operated for approximately 60 years. The current owners took over in 1978. In 1987 the RWQCB was notified that Perchloroethylene (PCE) and 1,1,1-Trichloroethane (TCA) had been detected in two drinking water wells .33 miles downgradient from the site. The RWQCB has conducted a soil gas survey, sampled soils on-site and issued a Cleanup and Abatement Order (CAO). The owners have not responded and the case has been turned over to the Attorney Generals office for further action as well as the USEPA for further action under CERCLA. There is a documented release of PC to the soil and PCE has been detected in the groundwater. The City of Patterson municipal well is 1 mile down gradient from the site and serves 8,700 people. Screening Site Inspection (SSI) - High priority recommended by Field Inspection Team (FIT). RWQCB remains lead agency.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST REG 5:
Name: WESTSIDE LAUNDRY
Address: 420 DEL PUERTO RD
City: PATTERSON
Region: 5
Status: Preliminary site assessment underway
Case Number: 500113
Case Type: Drinking Water Aquifer affected
Substance: Not reported
Staff Initials: CLC
Lead Agency: Regional
Program: Spills, Leaks, Investigation and Cleanup Program
MTBE Code: N/A

SWEEPS UST:
Name: WESTSIDE CLEANERS
Address: 420 DEL PUERTO
City: PATTERSON
Status: Active
Comp Number: 71031
Number: 9
Board Of Equalization: Not reported
Referral Date: 11-04-88
Action Date: 11-04-88
Created Date: 11-04-88
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported

WESTSIDE CLEANERS (Continued) **S102860972**

Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: Not reported

HIST CORTESE:
edr_fname: WESTSIDE LAUNDRY
edr_fadd1: 420 DEL PUERTO
City,State,Zip: PATTERSON, CA 95363
Region: CORTESE
Facility County Code: 50
Reg By: LTNKA
Reg Id: 500113

---

6 NNW 1/2-1 0.921 mi. 4865 ft. **CREEKSIDE ELEMENTARY SCHOOL SITE**
SHEARWATER DRIVE/HEALEY PARKWAY
PATTERSON, CA 95363

ENVIROSTOR SCH **S105840790 N/A**

Relative: Lower

Actual: 117 ft.

ENVIROSTOR:
Name: CREEKSIDE ELEMENTARY SCHOOL SITE
Address: SHEARWATER DRIVE/HEALEY PARKWAY
City,State,Zip: PATTERSON, CA 95363
Facility ID: 50010014
Status: No Further Action
Status Date: 12/13/2002
Site Code: 104264
Site Type: School Investigation
Site Type Detailed: School
Acres: 12
NPL: NO
Regulatory Agencies: DTSC
Lead Agency: DTSC
Program Manager: Not reported
Supervisor: Juan Koponen
Division Branch: Northern California Schools & Santa Susana
Assembly: 21
Senate: 12
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 37.47019
Longitude: -121.1516
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: Arsenic Chlordane DDD DDE DDT Lead Paraquat
Confirmed COC: 30440-NO 30001-NO 30004-NO 30006-NO 30007-NO 30008-NO 30013-NO
Potential Description: SOIL
Alias Name: CREEKSIDE ELEMENTARY SCHOOL SITE
Alias Type: Alternate Name
Alias Name: PATTERSON UNIFIED SCHOOL DISTRICT
Alias Type: Alternate Name

CREEKSIDE ELEMENTARY SCHOOL SITE (Continued) **S105840790**

Alias Name: PATTERSON USD-CREEKSIDE ELEM
Alias Type: Alternate Name
Alias Name: 104264
Alias Type: Project Code (Site Code)
Alias Name: 50010014
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 04/12/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 01/15/2003
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 04/22/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Public Participation
Completed Date: 12/01/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 12/13/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Workplan
Completed Date: 04/18/2002
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: CREEKSIDE ELEMENTARY SCHOOL SITE

CREEKSIDE ELEMENTARY SCHOOL SITE (Continued) **S105840790**

Address:	SHEARWATER DRIVE/HEALEY PARKWAY
City,State,Zip:	PATTERSON, CA 95363
Facility ID:	50010014
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	12
National Priorities List:	NO
Cleanup Oversight Agencies:	DTSC
Lead Agency:	DTSC
Lead Agency Description:	* DTSC
Project Manager:	Not reported
Supervisor:	Juan Koponen
Division Branch:	Northern California Schools & Santa Susana
Site Code:	104264
Assembly:	21
Senate:	12
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	12/13/2002
Restricted Use:	NO
Funding:	School District
Latitude:	37.47019
Longitude:	-121.1516
APN:	NONE SPECIFIED
Past Use:	AGRICULTURAL - ROW CROPS
Potential COC:	Arsenic, Chlordane, DDD, DDE, DDT, Lead, Paraquat
Confirmed COC:	30440-NO, 30001-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO, 30013-NO
Potential Description:	SOIL
Alias Name:	CREEKSIDE ELEMENTARY SCHOOL SITE
Alias Type:	Alternate Name
Alias Name:	PATTERSON UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	PATTERSON USD-CREEKSIDE ELEM
Alias Type:	Alternate Name
Alias Name:	104264
Alias Type:	Project Code (Site Code)
Alias Name:	50010014
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	04/12/2002
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	01/15/2003
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	04/22/2002
Comments:	Not reported

CREEKSIDE ELEMENTARY SCHOOL SITE (Continued) **S105840790**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Public Participation
Completed Date:	12/01/2002
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	12/13/2002
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	* Workplan
Completed Date:	04/18/2002
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

7
NNE
1/2-1
0.936 mi.
4941 ft.

Relative: Lower

Actual: 107 ft.

PATTERSON HIGH SCHOOL EXPANSION **ENVIROSTOR** **S112937500**
200 N 7TH STREET **SCH** **N/A**
PATTERSON, CA 95363 **HAZNET**
NPDES
CIWQS
CERS
HWTS

ENVIROSTOR:

Name:	PATTERSON HIGH SCHOOL EXPANSION
Address:	200 N 7TH STREET
City,State,Zip:	PATTERSON, CA 95363
Facility ID:	60002878
Status:	Active
Status Date:	09/10/2019
Site Code:	104810
Site Type:	School Investigation
Site Type Detailed:	School
Acres:	1.2
NPL:	NO
Regulatory Agencies:	STANISLAUS COUNTY, SMBRP
Lead Agency:	SMBRP
Program Manager:	Letitia Shen
Supervisor:	Jose Salcedo
Division Branch:	Northern California Schools & Santa Susana
Assembly:	21
Senate:	12
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED

PATTERSON HIGH SCHOOL EXPANSION (Continued) **S112937500**

Funding: School District
Latitude: 37.47249
Longitude: -121.1390
APN: 048-048-001, 131024001000
Past Use: AGRICULTURAL - ROW CROPS, NONE, AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS, UNDERGROUND STORAGE TANKS, PESTICIDE/INSECTIDE/RODENTICIDE STORAGE, AGRICULTURAL - ROW CROPS, FUEL - VEHICLE STORAGE/ REFUELING
Potential COC: Arsenic Arsenic Tetrachloroethylene (PCE DDE Lead Tetrachloroethylene (PCE TPH-diesel TPH-gas Naturally Occurring Asbestos (NOA
Confirmed COC: 30001-NO 40002-NO 30007-NO 30013-NO 30022-NO 30024-NO 30025-NO 30001-NO 30022-NO
Potential Description: SOIL, SOIL, SOIL, SOIL
Alias Name: 048-048-001
Alias Type: APN
Alias Name: 131024001000
Alias Type: APN
Alias Name: 104810
Alias Type: Project Code (Site Code)
Alias Name: 60002878
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pre-HARP Form
Completed Date: 03/06/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 10/31/2019
Comments: Fully Executed EOA on 10/31/2019

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 09/02/2020
Comments: 2020 CEQA Responsible Agency Review

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 10/08/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement Application
Completed Date: 10/08/2019
Comments: EOA emailed to District Steven Ruiz

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 02/27/2020

PATTERSON HIGH SCHOOL EXPANSION (Continued) **S112937500**

Comments:	2/27/2020 DTSC approved the PEA Workplan dated 2/19/2020 prepared by Chico Environmental S&P (Chico).<----------
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	06/22/2021
Comments:	#8 DTSC emailed approval letter 06-22-2021 <----------
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Supplemental Site Investigation Report
Completed Date:	07/07/2021
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Supplemental Site Investigation Tech Memo
Completed Date:	12/28/2020
Comments:	#6 DTSC approved tech memo (12/28/2020)<----------
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	01/28/2021
Comments:	DTSC received Other report for excavation (DR 01/28/2021)
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

SCH:

Name:	PATTERSON HIGH SCHOOL EXPANSION
Address:	200 N 7TH STREET
City,State,Zip:	PATTERSON, CA 95363
Facility ID:	60002878
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	1.2
National Priorities List:	NO
Cleanup Oversight Agencies:	STANISLAUS COUNTY, SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Letitia Shen
Supervisor:	Jose Salcedo
Division Branch:	Northern California Schools & Santa Susana
Site Code:	104810
Assembly:	21
Senate:	12

PATTERSON HIGH SCHOOL EXPANSION (Continued) **S112937500**

Special Program Status:	Not reported
Status:	Active
Status Date:	09/10/2019
Restricted Use:	NO
Funding:	School District
Latitude:	37.47249
Longitude:	-121.1390
APN:	048-048-001, 131024001000
Past Use:	AGRICULTURAL - ROW CROPS, NONE, AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS, UNDERGROUND STORAGE TANKS, PESTICIDE/INSECTIDE/RODENTICIDE STORAGE, AGRICULTURAL - ROW CROPS, FUEL - VEHICLE STORAGE/ REFUELING
Potential COC:	Arsenic, Arsenic, Tetrachloroethylene (PCE, DDE, Lead, Tetrachloroethylene (PCE, TPH-diesel, TPH-gas, Naturally Occurring Asbestos (NOA
Confirmed COC:	30001-NO, , , 40002-NO, 40002-NO, , , 30007-NO, 30007-NO, 30013-NO, 30022-NO, 30024-NO, 30025-NO, , 30001-NO, 30001-NO, 30022-NO
Potential Description:	SOIL, SOIL, SOIL, SOIL
Alias Name:	048-048-001
Alias Type:	APN
Alias Name:	131024001000
Alias Type:	APN
Alias Name:	104810
Alias Type:	Project Code (Site Code)
Alias Name:	60002878
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Pre-HARP Form
Completed Date:	03/06/2020
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	10/31/2019
Comments:	Fully Executed EOA on 10/31/2019
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	09/02/2020
Comments:	2020 CEQA Responsible Agency Review
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	10/08/2019
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement Application
Completed Date:	10/08/2019
Comments:	EOA emailed to District Steven Ruiz

PATTERSON HIGH SCHOOL EXPANSION (Continued) **S112937500**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 02/27/2020
Comments: 2/27/2020 DTSC approved the PEA Workplan dated 2/19/2020 prepared by Chico Environmental S&P (Chico).<----------

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/22/2021
Comments: #8 DTSC emailed approval letter 06-22-2021 <----------

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Report
Completed Date: 07/07/2021
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Supplemental Site Investigation Tech Memo
Completed Date: 12/28/2020
Comments: #6 DTSC approved tech memo (12/28/2020)<----------

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/28/2021
Comments: DTSC received Other report for excavation (DR 01/28/2021)

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

HAZNET:
Name: PATTERSON UNIFIED SCHOOL DISTRICT /PATTERSON HIGH SCHOOL
Address: 200 N 7TH ST
Address 2: Not reported
City,State,Zip: PATTERSON, CA 95363
Contact: JIM SHARP
Telephone: 2098923700
Mailing Name: Not reported
Mailing Address: PO BOX 547

Year: 2004
Gepaid: CAC002577466
TSD EPA ID: CAL000190080
CA Waste Code: 151 - Asbestos containing waste
Disposal Method: D80 - Disposal, Land Fill
Tons: 8.428

PATTERSON HIGH SCHOOL EXPANSION (Continued) **S112937500**

Additional Info:

Year:	2004
Gen EPA ID:	CAC002577466
Shipment Date:	20040604
Creation Date:	10/15/2004 15:16:06
Receipt Date:	20040618
Manifest ID:	23396455
Trans EPA ID:	CAT982507154
Trans Name:	PARC ENVIRONMENTAL
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAL000190080
Trans Name:	FORWARD INC
TSDF Alt EPA ID:	CAL000190080
TSDF Alt Name:	Not reported
Waste Code Description:	151 - Asbestos-containing waste
RCRA Code:	Not reported
Meth Code:	D80 - Disposal, Land Fill
Quantity Tons:	8.428
Waste Quantity:	10
Quantity Unit:	Y
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

NPDES:

Name:	PATTERSON HIGH SCHOOL THEATER BUILDING
Address:	200 N 7TH STREET
City,State,Zip:	PATTERSON, CA 95363
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	5S50C392436
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	01/04/2021
Operator Name:	Patterson Unified School District
Operator Address:	510 Keystone Blvd
Operator City:	Patterson

PATTERSON HIGH SCHOOL EXPANSION (Continued) **S112937500**

Operator State:	California
Operator Zip:	95363
Name:	PATTERSON HIGH SCHOOL THEATER BUILDING
Address:	200 N 7TH STREET
City,State,Zip:	PATTERSON, CA 95363
Facility Status:	Active
NPDES Number:	CAS000002
Region:	5S
Agency Number:	0
Regulatory Measure ID:	529772
Place ID:	Not reported
Order Number:	2009-0009-DWQ
WDID:	5S50C392436
Regulatory Measure Type:	Enrollee
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	01/04/2021
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	510 Keystone Blvd
Discharge Name:	Patterson Unified School District
Discharge City:	Patterson
Discharge State:	California
Discharge Zip:	95363
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

CIWQS:

Name:	PATTERSON HIGH SCHOOL THEATER BUILDING
Address:	200 N 7TH STREET
City,State,Zip:	PATTERSON, CA 95363
Agency:	Patterson Unified School District
Agency Address:	510 Keystone Blvd, Patterson, CA 95363
Place/Project Type:	Construction - Other: School
SIC/NAICS:	Not reported
Region:	5S
Program:	CONSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	5S50C392436
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	01/04/2021
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0

PATTERSON HIGH SCHOOL EXPANSION (Continued) **S112937500**

Violations within 5 years: 0
Latitude: 37.471254
Longitude: -121.140338

CERS:
Name: PATTERSON HIGH SCHOOL THEATER BUILDING
Address: 200 N 7TH STREET
City,State,Zip: PATTERSON, CA 95363
Site ID: 586911
CERS ID: 888893
CERS Description: Construction Storm Water

Evaluation:
Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-16-2021
Violations Found: No
Eval Type: Industrial Storm Water Compliance Evaluation
Eval Notes: On 16 November 2021, Regional Water Quality Control Board staff (Staff) conducted a construction inspection of the Patterson Unified School District (Discharger) Patterson High School Theater Building project (Project). During the inspection, Staff observed that exterior work on the building was underway. The parking areas were covered with base rock and overall the project had good sediment control BMPs.
Eval Division: Water Boards
Eval Program: CONSTW
Eval Source: SMARTS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-09-2021
Violations Found: No
Eval Type: Industrial Storm Water Compliance Evaluation
Eval Notes: On 9 March 2021, Regional Water Quality Control Board staff (Staff) conducted an inspection of the Patterson High School Theater Building project. During the inspection, Staff observed that footing work was underway and the project had good permitter control BMPs.
Eval Division: Water Boards
Eval Program: CONSTW
Eval Source: SMARTS,

Affiliation:
Affiliation Type Desc: Owner/Operator
Entity Name: Patterson Unified School District
Entity Title: Operator
Affiliation Address: 510 Keystone Blvd
Affiliation City: Patterson
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95363
Affiliation Phone: ,

HWTS:
Name: PATTERSON UNIFIED SCHOOL DISTRICT /PATTERSON HIGH SCHOOL
Address: 200 N 7TH ST
Address 2: Not reported
City,State,Zip: PATTERSON, CA 95363

PATTERSON HIGH SCHOOL EXPANSION (Continued) **S112937500**

EPA ID:	CAC002577466
Inactive Date:	12/28/2004
Create Date:	05/11/2004
Last Act Date:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 547
Mailing Address 2:	Not reported
Mailing City,State,Zip:	PATTERSON, CA 95363
Owner Name:	PATTERSON UNIFIED SCHOOL DISTRICT
Owner Address:	PO BOX 547
Owner Address 2:	Not reported
Owner City,State,Zip:	PATTERSON, CA 95363
Contact Name:	JIM SHARP
Contact Address:	PO BOX 547
Contact Address 2:	Not reported
City,State,Zip:	PATTERSON, CA 95363
Facility Status:	Inactive
Facility Type:	TEMPORARY
Category:	STATE
Latitude:	37.471615
Longitude:	-121.136612

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

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: 04/27/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 06/01/2022
Next Scheduled EDR Contact: 07/11/2022
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 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

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: 04/27/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 06/01/2022
Next Scheduled EDR Contact: 07/11/2022
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: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

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: 04/27/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 06/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 06/24/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 26

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/01/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 26

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/01/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

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: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
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: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/11/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 88

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/05/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/21/2022
Date Data Arrived at EDR: 02/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/24/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/21/2022
Date Data Arrived at EDR: 02/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/04/2022
Next Scheduled EDR Contact: 09/05/2022
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: 12/31/2021
Date Data Arrived at EDR: 03/01/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 9

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/22/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

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: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/26/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

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: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/26/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

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: 02/07/2022
Date Data Arrived at EDR: 02/08/2022
Date Made Active in Reports: 05/05/2022
Number of Days to Update: 86

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/09/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

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: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 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: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
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: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
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: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
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: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
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: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
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: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
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: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
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: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 88

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/07/2022
Date Data Arrived at EDR: 03/08/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 86

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/07/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/07/2022
Date Data Arrived at EDR: 03/08/2022
Date Made Active in Reports: 06/03/2022
Number of Days to Update: 87

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/06/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
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: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
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: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

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: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/26/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/15/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/10/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 0

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/15/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

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: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/07/2022
Date Data Arrived at EDR: 03/08/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 86

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/07/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 02/15/2022
Date Data Arrived at EDR: 02/24/2022
Date Made Active in Reports: 05/25/2022
Number of Days to Update: 90

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/19/2022
Next Scheduled EDR Contact: 08/22/2022
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: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/22/2022
Date Data Arrived at EDR: 02/23/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 76
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/24/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 78
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/26/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78
Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27
Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/22/2022
Date Data Arrived at EDR: 02/23/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 76

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/24/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Quarterly

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 12/10/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 03/11/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 03/07/2022
Date Data Arrived at EDR: 03/08/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 86

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/07/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 02/03/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 05/02/2022
Number of Days to Update: 87

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/24/2022
Date Data Arrived at EDR: 02/25/2022
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 12

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/25/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 06/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 02/28/2022
Date Made Active in Reports: 05/25/2022
Number of Days to Update: 86

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 05/31/2022
Next Scheduled EDR Contact: 09/12/2022
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: 12/15/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 84

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 79

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 1

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 02/15/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 84

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/17/2022
Next Scheduled EDR Contact: 08/29/2022
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: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
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: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/06/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/13/2021
Date Data Arrived at EDR: 12/17/2021
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/06/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/18/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/20/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/19/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/20/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 26

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/01/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/04/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 22

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 06/01/2022
Next Scheduled EDR Contact: 08/15/2022
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: 01/20/2022
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 64

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
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: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
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: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/29/2021
Date Data Arrived at EDR: 08/24/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 87

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 84
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/02/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 05/25/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 05/06/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/28/2022
Next Scheduled EDR Contact: 07/11/2022
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

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/26/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 70

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 23

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/16/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/05/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/01/2022
Date Data Arrived at EDR: 02/23/2022
Date Made Active in Reports: 05/24/2022
Number of Days to Update: 90

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/25/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 03/21/2022
Date Data Arrived at EDR: 03/22/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 3

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 05/26/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/14/2021
Date Data Arrived at EDR: 12/15/2021
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 85

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/02/2022
Next Scheduled EDR Contact: 09/19/2022
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: 05/13/2022
Date Data Arrived at EDR: 05/18/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 13

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 05/18/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 01/10/2022
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites
A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 34
Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/17/2022
Date Data Arrived at EDR: 02/17/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 82
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/17/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/16/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 77
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 12/07/2021
Date Data Arrived at EDR: 05/09/2022
Date Made Active in Reports: 05/17/2022
Number of Days to Update: 8
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 05/09/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021
Date Data Arrived at EDR: 09/01/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 79

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 06/01/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 02/17/2022
Date Data Arrived at EDR: 02/24/2022
Date Made Active in Reports: 05/18/2022
Number of Days to Update: 83

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/24/2022
Date Data Arrived at EDR: 02/25/2022
Date Made Active in Reports: 05/18/2022
Number of Days to Update: 82

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 05/25/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 78

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/18/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/12/2022
Date Data Arrived at EDR: 04/19/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 42

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 84

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 02/24/2022
Date Made Active in Reports: 05/18/2022
Number of Days to Update: 83

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 05/19/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/14/2022
Date Data Arrived at EDR: 02/15/2022
Date Made Active in Reports: 05/12/2022
Number of Days to Update: 86

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/17/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/14/2022
Date Data Arrived at EDR: 02/15/2022
Date Made Active in Reports: 05/12/2022
Number of Days to Update: 86

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/17/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/07/2022
Date Data Arrived at EDR: 03/08/2022
Date Made Active in Reports: 06/01/2022
Number of Days to Update: 85

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/07/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/17/2022
Date Data Arrived at EDR: 02/28/2022
Date Made Active in Reports: 05/25/2022
Number of Days to Update: 86

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 05/31/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/07/2022
Date Data Arrived at EDR: 02/08/2022
Date Made Active in Reports: 05/05/2022
Number of Days to Update: 86

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/09/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 02/28/2022
Date Made Active in Reports: 05/25/2022
Number of Days to Update: 86

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 05/31/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/07/2022
Date Data Arrived at EDR: 03/08/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 86

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/07/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/13/2021
Date Data Arrived at EDR: 12/14/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/09/2022
Next Scheduled EDR Contact: 06/26/2022
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/07/2022
Date Data Arrived at EDR: 03/08/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 86

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/07/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

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: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
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: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/07/2022
Date Data Arrived at EDR: 03/08/2022
Date Made Active in Reports: 06/03/2022
Number of Days to Update: 87

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 06/07/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 02/28/2022
Date Made Active in Reports: 05/25/2022
Number of Days to Update: 86

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 05/31/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 79

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/19/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 05/23/2022
Date Data Arrived at EDR: 05/23/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 10

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 05/23/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/05/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 04/26/2022
Number of Days to Update: 21

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/27/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List
The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank
The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites
A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 12/28/2021
Date Data Arrived at EDR: 12/28/2021
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 80

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 02/04/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 05/02/2022
Number of Days to Update: 87

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/28/2021
Date Data Arrived at EDR: 12/28/2021
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 80

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/17/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 01/24/2022
Date Data Arrived at EDR: 01/25/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 79

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/26/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 05/04/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/16/2022
Date Data Arrived at EDR: 02/17/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 82

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 06/02/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/06/2022
Number of Days to Update: 82

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 02/10/2022
Date Data Arrived at EDR: 02/11/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 82

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 02/10/2022
Date Data Arrived at EDR: 02/11/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 82

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/25/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 02/10/2022
Date Data Arrived at EDR: 02/11/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 82

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/11/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/04/2022
Date Data Arrived at EDR: 04/05/2022
Date Made Active in Reports: 04/13/2022
Number of Days to Update: 8

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 83

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 01/21/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 80

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/12/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 82

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 04/13/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 11

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 09/14/2021
Number of Days to Update: 89

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/26/2021
Date Data Arrived at EDR: 07/09/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 82

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/15/2022
Date Data Arrived at EDR: 02/17/2022
Date Made Active in Reports: 05/11/2022
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 05/25/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 01/26/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 78

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 01/14/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 70

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/02/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 01/14/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 05/02/2022
Number of Days to Update: 87

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/02/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/14/2022
Date Data Arrived at EDR: 02/01/2022
Date Made Active in Reports: 04/18/2022
Number of Days to Update: 76

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/03/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 05/25/2022
Date Data Arrived at EDR: 05/26/2022
Date Made Active in Reports: 06/01/2022
Number of Days to Update: 6

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 05/25/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 03/31/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 8

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 03/31/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 8

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 06/18/2021
Date Data Arrived at EDR: 09/28/2021
Date Made Active in Reports: 12/14/2021
Number of Days to Update: 77

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 11/02/2021
Number of Days to Update: 90

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 04/29/2022
Date Data Arrived at EDR: 04/29/2022
Date Made Active in Reports: 05/05/2022
Number of Days to Update: 6

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/12/2022
Date Data Arrived at EDR: 05/12/2022
Date Made Active in Reports: 05/18/2022
Number of Days to Update: 6

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 02/28/2022
Date Made Active in Reports: 05/25/2022
Number of Days to Update: 86

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 05/31/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/27/2021
Date Data Arrived at EDR: 03/04/2022
Date Made Active in Reports: 05/31/2022
Number of Days to Update: 88

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 05/25/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/03/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 7

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

LUST SAN FRANCISCO: 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: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 02/03/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 05/02/2022
Number of Days to Update: 87

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 04/27/2022
Number of Days to Update: 97

Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 05/06/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/15/2022
Date Data Arrived at EDR: 02/16/2022
Date Made Active in Reports: 05/13/2022
Number of Days to Update: 86

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/11/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/02/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 02/14/2022
Date Data Arrived at EDR: 02/16/2022
Date Made Active in Reports: 05/12/2022
Number of Days to Update: 85

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/19/2022
Next Scheduled EDR Contact: 09/05/2022
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/12/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/25/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/25/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/11/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 11/23/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 05/25/2022
Next Scheduled EDR Contact: 09/12/2022
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/06/2022
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 04/26/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/15/2022
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/14/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 78

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 05/04/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 81

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/18/2022
Next Scheduled EDR Contact: 08/01/2022
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/08/2022
Date Made Active in Reports: 06/02/2022
Number of Days to Update: 86

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/07/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 73

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/24/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/26/2022
Date Data Arrived at EDR: 01/27/2022
Date Made Active in Reports: 04/14/2022
Number of Days to Update: 77

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/21/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/03/2021
Date Data Arrived at EDR: 02/11/2022
Date Made Active in Reports: 05/06/2022
Number of Days to Update: 84

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/09/2022
Next Scheduled EDR Contact: 08/22/2022
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/07/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/28/2022
Next Scheduled EDR Contact: 08/08/2022
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/16/2022
Next Scheduled EDR Contact: 08/29/2022
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/03/2022
Next Scheduled EDR Contact: 09/19/2022
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PROPOSED ELEMENTARY SCHOOL
1000 CALVISON PARKWAY
PATTERSON, CA 95363

TARGET PROPERTY COORDINATES

Latitude (North):	37.457422 - 37ˆ 27' 26.72''
Longitude (West):	121.142306 - 121ˆ 8' 32.30''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	664306.5
UTM Y (Meters):	4147033.5
Elevation:	137 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	12008770 PATTERSON, CA
Version Date:	2018
East Map:	12008702 CROWS LANDING, CA
Version Date:	2018

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).

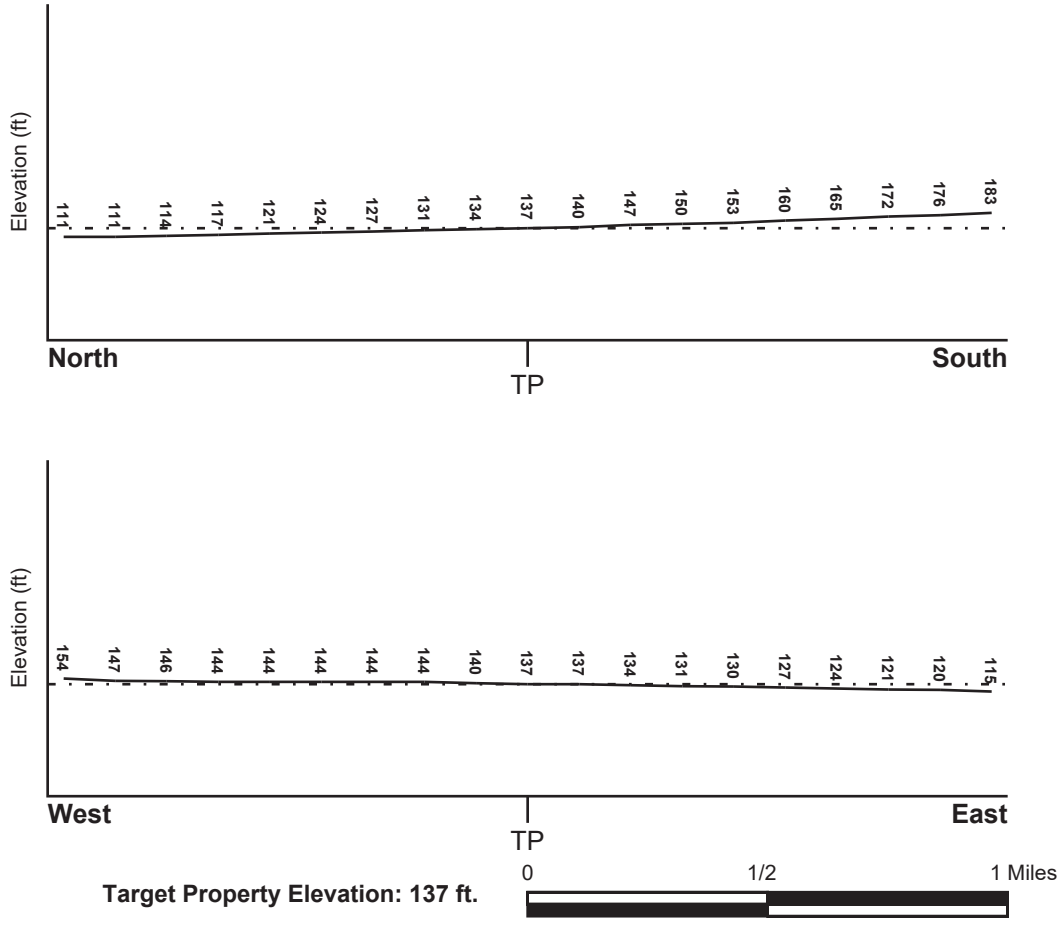
TOPOGRAPHIC INFORMATION

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 NNE

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

Flood Plain Panel at Target Property	FEMA Source Type
06099C0734E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06099C0755E	FEMA FIRM Flood data
06099C0732E	FEMA FIRM Flood data
06099C0733E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
PATTERSON	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

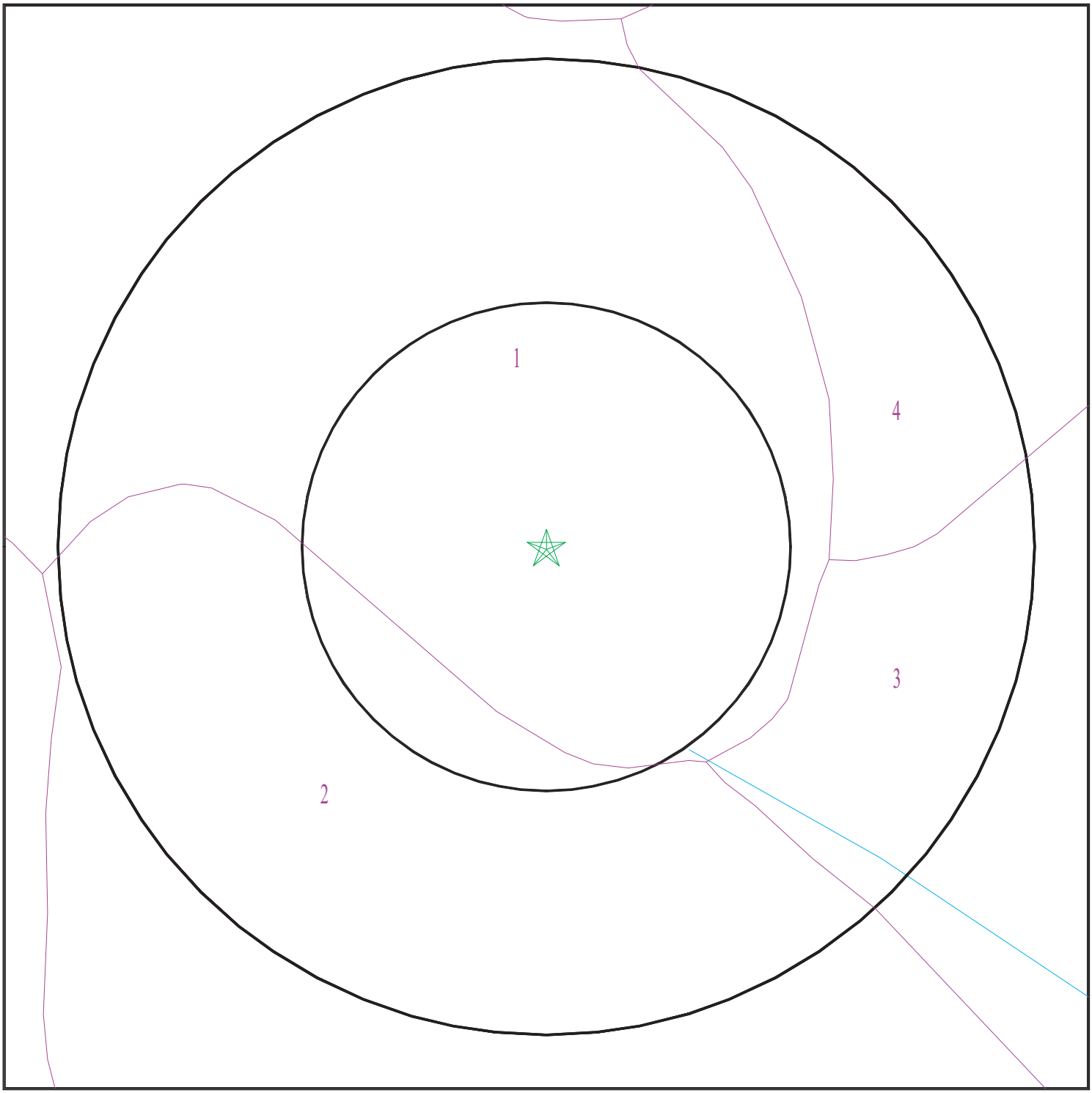
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

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 - 7011484.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Proposed Elementary School	CLIENT:	Condor Earth Technologies, Inc
ADDRESS:	1000 Calvison Parkway Patterson CA 95363	CONTACT:	Rebecca Selvage
LAT/LONG:	37.457422 / 121.142306	INQUIRY #:	7011484.2s
		DATE:	June 08, 2022 6:07 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.

Soil Map ID: 1

Soil Component Name: Vernalis

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 8.4 Min: 6.6
2	20 inches	61 inches	clay loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 8.4 Min: 6.6

Soil Map ID: 2

Soil Component Name: Elsalado

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 8.4 Min: 7.4
2	5 inches	25 inches	loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 8.4 Min: 7.4
3	25 inches	59 inches	loam	Not reported	Not reported	Max: 14.11 Min: 4.23	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: Stomar

Soil Surface Texture: clay loam

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

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

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	11 inches	clay loam	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4
2	11 inches	38 inches	clay loam	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	38 inches	59 inches	clay loam	Not reported	Not reported	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4

Soil Map ID: 4

Soil Component Name: Capay

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	clay	Not reported	Not reported	Max: 1.41 Min: 0.42	Max: 8.4 Min: 6.6
2	20 inches	59 inches	clay	Not reported	Not reported	Max: 1.41 Min: 0.42	Max: 8.4 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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	USGS40000183290	1/8 - 1/4 Mile WSW
2	USGS40000183280	1/8 - 1/4 Mile SSE
3	USGS40000183295	1/4 - 1/2 Mile West
A7	USGS40000183303	1/4 - 1/2 Mile East
B9	USGS40000183327	1/2 - 1 Mile ENE
B10	USGS40000183328	1/2 - 1 Mile ENE
E30	USGS40000183237	1/2 - 1 Mile SE
F34	USGS40000183347	1/2 - 1 Mile NE

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

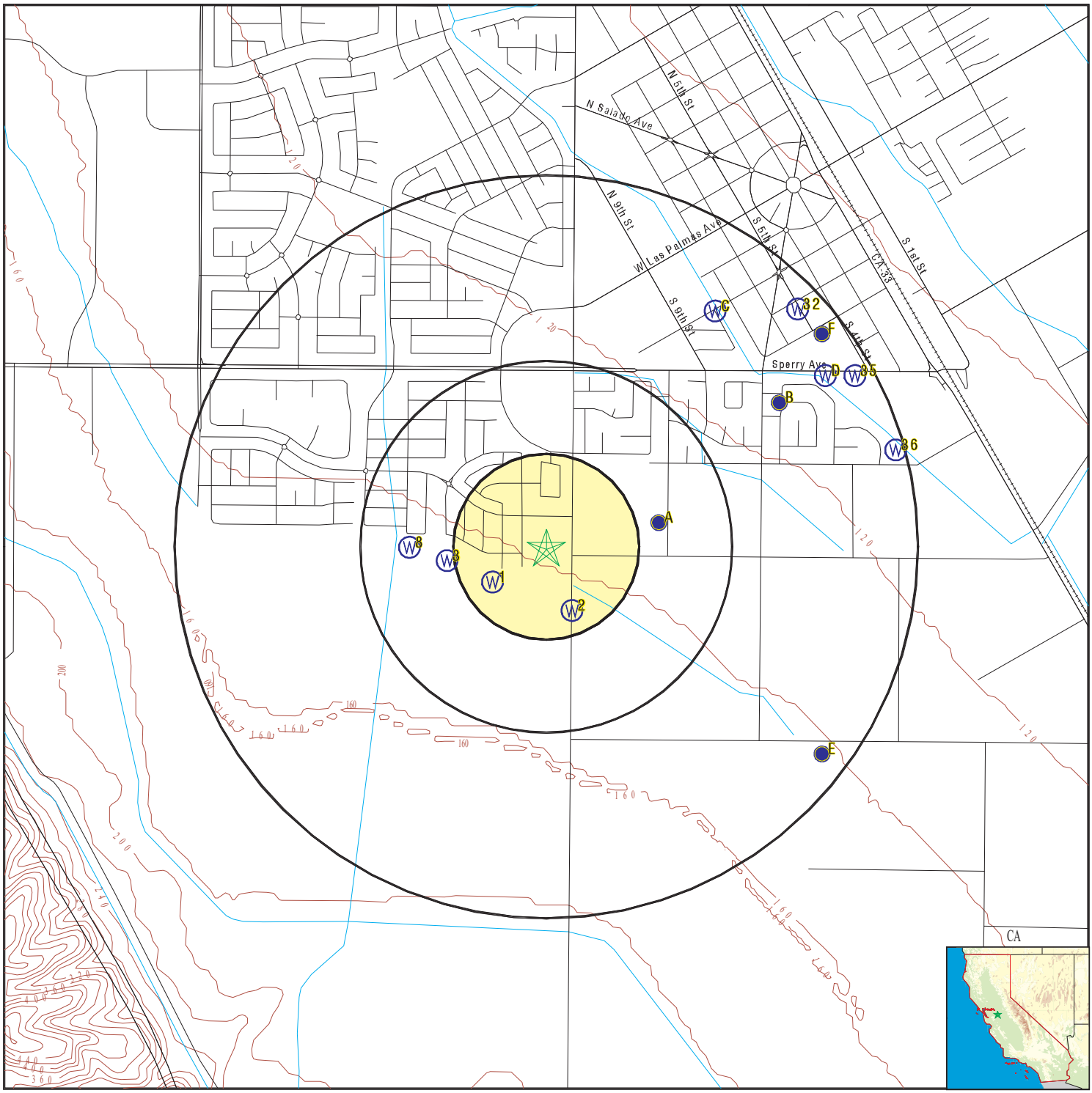
MAP ID	WELL ID	LOCATION FROM TP
A4	CADWR9000035861	1/4 - 1/2 Mile ENE
A5	CADWR0000013855	1/4 - 1/2 Mile ENE
A6	CAUSGSN00008513	1/4 - 1/2 Mile East
8	CADWR9000035855	1/4 - 1/2 Mile West
B11	CAUSGSN00005829	1/2 - 1 Mile ENE
B12	CAUSGSN00006511	1/2 - 1 Mile ENE
B13	CADWR9000035876	1/2 - 1 Mile ENE
B14	CADWR0000016397	1/2 - 1 Mile ENE
B15	CADWR9000035877	1/2 - 1 Mile NE
B16	CADWR0000024558	1/2 - 1 Mile NE
C17	21018	1/2 - 1 Mile NE
C18	21017	1/2 - 1 Mile NE
C19	6095	1/2 - 1 Mile NE
C20	6098	1/2 - 1 Mile NE
C21	6096	1/2 - 1 Mile NE
B22	CADWR0000010123	1/2 - 1 Mile ENE
C23	CADWR0000034202	1/2 - 1 Mile NE
C24	CADWR0000026733	1/2 - 1 Mile NE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C25	CADDW0000015775	1/2 - 1 Mile NE
C26	CADDW0000003303	1/2 - 1 Mile NE
D27	21020	1/2 - 1 Mile ENE
D28	21022	1/2 - 1 Mile ENE
D29	6101	1/2 - 1 Mile ENE
E31	CAUSGSN00004259	1/2 - 1 Mile SE
32	CADWR0000035196	1/2 - 1 Mile NE
F33	CAUSGSN00006478	1/2 - 1 Mile NE
35	CADDW0000001038	1/2 - 1 Mile ENE
36	CADDW0000012282	1/2 - 1 Mile ENE

PHYSICAL SETTING SOURCE MAP - 7011484.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Proposed Elementary School	CLIENT:	Condor Earth Technologies, Inc
ADDRESS:	1000 Calvison Parkway Patterson CA 95363	CONTACT:	Rebecca Selvage
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		DATE:	June 08, 2022 6:07 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
WSW
1/8 - 1/4 Mile
Higher

FED USGS **USGS40000183290**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S007E36J002M	Type:	Well
Description:	Not Reported	HUC:	18040005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19490101	Well Depth:	608
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

2
SSE
1/8 - 1/4 Mile
Higher

FED USGS **USGS40000183280**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S007E36J001M	Type:	Well
Description:	Not Reported	HUC:	18040005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19490101	Well Depth:	807
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

3
West
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000183295**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S007E36K001M	Type:	Well
Description:	Not Reported	HUC:	18040005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19500101	Well Depth:	640
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A4
ENE
1/4 - 1/2 Mile
Lower

CA WELLS **CADWR9000035861**

State Well #:	05S08E31E001M	Station ID:	4922
Well Name:	Not Reported	Basin Name:	Delta-Mendota
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

A5
ENE
1/4 - 1/2 Mile
Lower

CA WELLS **CADWR0000013855**

Well ID:	05S08E31E001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S08E31E001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S08E31E001M&store_num=		
GeoTracker Data:	Not Reported		

A6
East
1/4 - 1/2 Mile
Lower

CA WELLS **CAUSGSN00008513**

Well ID:	USGS-372730121080801	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-372730121080801	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-372730121080801&store_num=		
GeoTracker Data:	Not Reported		

A7
East
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000183303**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S008E31E001M	Type:	Well
Description:	Not Reported	HUC:	18040005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvium Above E-Clay	Aquifer Type:	Not Reported
Construction Date:	19430101	Well Depth:	201
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1967-08-01
Feet below surface:	31.00	Feet to sea level:	Not Reported

Note: Not Reported

8
West
1/4 - 1/2 Mile
Higher

CA WELLS **CADWR9000035855**

State Well #:	05S07E36K001M	Station ID:	7033
Well Name:	Not Reported	Basin Name:	Delta-Mendota
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

B9
ENE
1/2 - 1 Mile
Lower

FED USGS **USGS40000183327**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S008E31B001M	Type:	Well
Description:	Not Reported	HUC:	18040005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvium Above E-Clay	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	92
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1967-08-01
Feet below surface:	22.00	Feet to sea level:	Not Reported
Note:	Not Reported		

B10
ENE
1/2 - 1 Mile
Lower

FED USGS **USGS40000183328**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S008E31B002M	Type:	Well
Description:	Not Reported	HUC:	18040005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvium Above E-Clay	Aquifer Type:	Not Reported
Construction Date:	19410101	Well Depth:	208
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1967-08-01
Feet below surface:	53.00	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B11
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAUSGSN00005829**

Well ID:	USGS-372746121074801	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-372746121074801	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-372746121074801&store_num=		
GeoTracker Data:	Not Reported		

B12
ENE
1/2 - 1 Mile
Lower

CA WELLS **CAUSGSN00006511**

Well ID:	USGS-372746121074802	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-372746121074802	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-372746121074802&store_num=		
GeoTracker Data:	Not Reported		

B13
ENE
1/2 - 1 Mile
Lower

CA WELLS **CADWR9000035876**

State Well #:	05S08E31B001M	Station ID:	4921
Well Name:	Not Reported	Basin Name:	Delta-Mendota
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

B14
ENE
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000016397**

Well ID:	05S08E31B001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S08E31B001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S08E31B001M&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B15
NE
1/2 - 1 Mile
Lower

CA WELLS **CADWR9000035877**

State Well #:	05S08E31B002M	Station ID:	28151
Well Name:	Not Reported	Basin Name:	Delta-Mendota
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

B16
NE
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000024558**

Well ID:	05S08E31B002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S08E31B002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S08E31B002M&store_num=		
GeoTracker Data:	Not Reported		

C17
NE
1/2 - 1 Mile
Lower

CA WELLS **21018**

Seq:	21018	Prim sta c:	5010017-007
Frds no:	5010017007	County:	50
District:	10	User id:	PTA
System no:	5010017	Water type:	G
Source nam:	WELL 03 - TREATED	Station ty:	WELL/AMBNT
Latitude:	372800.0	Longitude:	1210800.0
Precision:	4	Status:	AT
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5010017	System nam:	Patterson, City Of
Hqname:	Not Reported	Address:	P. O. BOX 667
City:	PATTERSON	State:	CA
Zip:	95363	Zip ext:	Not Reported
Pop serv:	9577	Connection:	2660
Area serve:	PATTERSON		

C18
NE
1/2 - 1 Mile
Lower

CA WELLS **21017**

Seq:	21017	Prim sta c:	5010017-006
Frds no:	5010017006	County:	50
District:	10	User id:	PTA
System no:	5010017	Water type:	G

Source nam:	WELL 02 - TREATED	Station ty:	WELL/AMBNT
Latitude:	372800.0	Longitude:	1210800.0
Precision:	4	Status:	AT
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5010017	System nam:	Patterson, City Of
Hqname:	Not Reported	Address:	P. O. BOX 667
City:	PATTERSON	State:	CA
Zip:	95363	Zip ext:	Not Reported
Pop serv:	9577	Connection:	2660
Area serve:	PATTERSON		

C19
NE
1/2 - 1 Mile
Lower

CA WELLS 6095

Seq:	6095	Prim sta c:	05S/08E-30K01 M
Frds no:	5010017001	County:	50
District:	10	User id:	PTA
System no:	5010017	Water type:	G
Source nam:	WELL 01 - SOUTH 5TH STREET	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372800.0	Longitude:	1210800.0
Precision:	4	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5010017	System nam:	Patterson, City Of
Hqname:	Not Reported	Address:	P. O. BOX 667
City:	PATTERSON	State:	CA
Zip:	95363	Zip ext:	Not Reported
Pop serv:	9577	Connection:	2660
Area serve:	PATTERSON		

C20
NE
1/2 - 1 Mile
Lower

CA WELLS 6098

Seq:	6098	Prim sta c:	05S/08E-30Q01 M
Frds no:	5010017003	County:	50
District:	10	User id:	PTA
System no:	5010017	Water type:	G
Source nam:	WELL 03 - C STREET	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372800.0	Longitude:	1210800.0
Precision:	4	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5010017	System nam:	Patterson, City Of
Hqname:	Not Reported	Address:	P. O. BOX 667
City:	PATTERSON	State:	CA
Zip:	95363	Zip ext:	Not Reported

Pop serv:	9577	Connection:	2660
Area serve:	PATTERSON		

C21
NE
1/2 - 1 Mile
Lower

CA WELLS 6096

Seq:	6096	Prim sta c:	05S/08E-30L01 M
Frds no:	5010017002	County:	50
District:	10	User id:	PTA
System no:	5010017	Water type:	G
Source nam:	WELL 02 - NORTH 5TH STREET	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	372800.0	Longitude:	1210800.0
Precision:	5	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		

System no:	5010017	System nam:	Patterson, City Of
Hqname:	Not Reported	Address:	P. O. BOX 667
City:	PATTERSON	State:	CA
Zip:	95363	Zip ext:	Not Reported
Pop serv:	9577	Connection:	2660
Area serve:	PATTERSON		

Sample date:	12-DEC-17	Finding:	8.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	12-SEP-17	Finding:	17.5
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		

Sample date:	12-SEP-17	Finding:	7.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	06-JUN-17	Finding:	19.7
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		

Sample date:	06-JUN-17	Finding:	6.9
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	14-MAR-17	Finding:	18.6
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		

Sample date:	14-MAR-17	Finding:	7.8
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		

Sample date:	14-DEC-16	Finding:	17.6
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		

Sample date:	06-DEC-16	Finding:	8.4
Chemical:	NITRATE (AS N)	Report units:	MG/L

Dlr:	0.4		
Sample date:	21-SEP-16	Finding:	17.7
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	20-SEP-16	Finding:	7.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	12-JUL-16	Finding:	0.3
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	12-JUL-16	Finding:	2.1
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	12-JUL-16	Finding:	0.923
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	12-JUL-16	Finding:	2.49
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dlr:	1.		
Sample date:	12-JUL-16	Finding:	2.48
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	12-JUL-16	Finding:	5.14
Chemical:	GROSS ALPHA	Report units:	PCI/L
Dlr:	3.		
Sample date:	21-JUN-16	Finding:	1420.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	7.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	150.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	190.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	7.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-JUN-16	Finding:	410.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	67.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		

Sample date:	21-JUN-16	Finding:	59.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	129.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	2.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	131.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	329.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	21-JUN-16	Finding:	0.3
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	21-JUN-16	Finding:	22.3
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	21-JUN-16	Finding:	500.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	21-JUN-16	Finding:	17.9
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	21-JUN-16	Finding:	20.
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	21-JUN-16	Finding:	7.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	21-JUN-16	Finding:	7.
Chemical:	SELENIUM	Report units:	UG/L
Dlr:	5.		
Sample date:	21-JUN-16	Finding:	930.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	11.4
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	7.4
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	15-MAR-16	Finding:	6.3
Chemical:	NITRATE (AS N)	Report units:	MG/L

Dlr:	0.4		
Sample date:	08-MAR-16	Finding:	17.4
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	08-DEC-15	Finding:	16.9
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	08-DEC-15	Finding:	7.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	22-SEP-15	Finding:	18.4
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	15-SEP-15	Finding:	7.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	28-JUL-15	Finding:	21.1
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	12-MAR-15	Finding:	37.9
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-MAR-15	Finding:	15.3
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	09-DEC-14	Finding:	18.7
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	09-DEC-14	Finding:	34.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-SEP-14	Finding:	32.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-JUN-14	Finding:	31.7
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-MAR-14	Finding:	35.9
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	17-DEC-13	Finding:	35.
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	24-SEP-13	Finding:	29.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

Sample date:	11-JUN-13	Finding:	8.
Chemical:	SELENIUM	Report units:	UG/L
Dlr:	5.		
Sample date:	11-JUN-13	Finding:	960.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	0.6
Chemical:	LANGELIER INDEX AT SOURCE TEMP.	Report units:	Not Reported
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	33.6
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JUN-13	Finding:	12.5
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	7600.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	11-JUN-13	Finding:	6.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	11-JUN-13	Finding:	17.
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	11-JUN-13	Finding:	600.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	11-JUN-13	Finding:	19.9
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	11-JUN-13	Finding:	0.3
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	11-JUN-13	Finding:	350.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	11-JUN-13	Finding:	148.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	3.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	146.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	61.
Chemical:	MAGNESIUM	Report units:	MG/L

Dlr:	0.		
Sample date:	11-JUN-13	Finding:	75.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	438.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	220.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	180.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	8.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	1460.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	36.4
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-JUN-12	Finding:	32.4
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

B22
ENE
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000010123**

Well ID:	05S08E30Q001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S08E30Q001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S08E30Q001M&store_num=		
GeoTracker Data:	Not Reported		

C23
NE
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000034202**

Well ID:	05S08E30L001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S08E30L001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S08E30L001M&store_num=		
GeoTracker Data:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C24
NE
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000026733**

Well ID:	05S08E30L002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S08E30L002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S08E30L002M&store_num=		
GeoTracker Data:	Not Reported		

C25
NE
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000015775**

Well ID:	5010017-003	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 03 - DESTROYED	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5010017-003&store_num=		
GeoTracker Data:	Not Reported		

C26
NE
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000003303**

Well ID:	5010017-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01 - DESTROYED	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5010017-001&store_num=		
GeoTracker Data:	Not Reported		

D27
ENE
1/2 - 1 Mile
Lower

CA WELLS **21020**

Seq:	21020	Prim sta c:	5010017-009
Frds no:	5010017009	County:	50
District:	10	User id:	PTA
System no:	5010017	Water type:	G
Source nam:	WELL 06	Station ty:	WELL/AMBNT
Latitude:	372751.0	Longitude:	1210740.0
Precision:	4	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5010017	System nam:	Patterson, City Of

Hqname:	Not Reported	Address:	P. O. BOX 667
City:	PATTERSON	State:	CA
Zip:	95363	Zip ext:	Not Reported
Pop serv:	9577	Connection:	2660
Area serve:	PATTERSON		
Sample date:	13-MAR-18	Finding:	6.
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	13-FEB-18	Finding:	7.e-003
Chemical:	1,2,3-TRICHLOROPROPANE	Report units:	UG/L
Dlr:	5.e-003		
Sample date:	12-DEC-17	Finding:	6.1
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	12-SEP-17	Finding:	6.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	12-SEP-17	Finding:	19.8
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	06-JUN-17	Finding:	21.8
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	06-JUN-17	Finding:	6.2
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	14-MAR-17	Finding:	7.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	14-MAR-17	Finding:	19.1
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	14-DEC-16	Finding:	19.5
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	06-DEC-16	Finding:	6.5
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-SEP-16	Finding:	20.3
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	20-SEP-16	Finding:	6.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	26-JUL-16	Finding:	8.e-003
Chemical:	1,2,3-TRICHLOROPROPANE	Report units:	UG/L
Dlr:	5.e-003		

Sample date:	21-JUN-16	Finding:	16.1
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	21-JUN-16	Finding:	19.4
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	21-JUN-16	Finding:	20.
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	21-JUN-16	Finding:	7.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	21-JUN-16	Finding:	8.
Chemical:	SELENIUM	Report units:	UG/L
Dlr:	5.		
Sample date:	21-JUN-16	Finding:	930.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	0.2
Chemical:	TURBIDITY, LABORATORY	Report units:	NTU
Dlr:	0.1		
Sample date:	21-JUN-16	Finding:	11.5
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	6.7
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-JUN-16	Finding:	3.
Chemical:	ARSENIC	Report units:	UG/L
Dlr:	2.		
Sample date:	21-JUN-16	Finding:	0.3
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	21-JUN-16	Finding:	351.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	21-JUN-16	Finding:	112.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	2.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	140.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	54.
Chemical:	MAGNESIUM	Report units:	MG/L

Dlr:	0.		
Sample date:	21-JUN-16	Finding:	70.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	397.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	6.4
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	21-JUN-16	Finding:	200.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	170.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	7.
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	1420.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	21-JUN-16	Finding:	500.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	15-MAR-16	Finding:	5.3
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	08-MAR-16	Finding:	19.
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	08-DEC-15	Finding:	18.5
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	08-DEC-15	Finding:	6.7
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	22-SEP-15	Finding:	19.8
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	15-SEP-15	Finding:	6.6
Chemical:	NITRATE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	16-JUN-15	Finding:	19.5
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		

Sample date:	02-JUN-15	Finding:	27.7
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-MAR-15	Finding:	27.7
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-MAR-15	Finding:	18.
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	09-DEC-14	Finding:	29.1
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	09-DEC-14	Finding:	21.1
Chemical:	CHROMIUM, HEXAVALENT	Report units:	UG/L
Dlr:	1.		
Sample date:	09-SEP-14	Finding:	29.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-JUN-14	Finding:	30.2
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-MAR-14	Finding:	27.3
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	23-DEC-13	Finding:	30.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	10-SEP-13	Finding:	29.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JUN-13	Finding:	0.3
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)	Report units:	MG/L
Dlr:	0.1		
Sample date:	11-JUN-13	Finding:	30.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JUN-13	Finding:	6700.
Chemical:	NITRATE + NITRITE (AS N)	Report units:	MG/L
Dlr:	0.4		
Sample date:	11-JUN-13	Finding:	12.5
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)	Report units:	Not Reported
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	29.8
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-JUN-13	Finding:	0.5
Chemical:	LANGELIER INDEX AT SOURCE TEMP.	Report units:	Not Reported

Dlr:	0.		
Sample date:	11-JUN-13	Finding:	980.
Chemical:	TOTAL DISSOLVED SOLIDS	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	9.
Chemical:	SELENIUM	Report units:	UG/L
Dlr:	5.		
Sample date:	11-JUN-13	Finding:	7.
Chemical:	VANADIUM	Report units:	UG/L
Dlr:	3.		
Sample date:	11-JUN-13	Finding:	19.
Chemical:	CHROMIUM (TOTAL)	Report units:	UG/L
Dlr:	10.		
Sample date:	11-JUN-13	Finding:	600.
Chemical:	BORON	Report units:	UG/L
Dlr:	100.		
Sample date:	11-JUN-13	Finding:	1460.
Chemical:	SPECIFIC CONDUCTANCE	Report units:	US
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	7.9
Chemical:	PH, LABORATORY	Report units:	Not Reported
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	190.
Chemical:	ALKALINITY (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	230.
Chemical:	BICARBONATE ALKALINITY	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	422.
Chemical:	HARDNESS (TOTAL) AS CACO3	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	75.
Chemical:	CALCIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	57.
Chemical:	MAGNESIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	155.
Chemical:	SODIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	3.
Chemical:	POTASSIUM	Report units:	MG/L
Dlr:	0.		
Sample date:	11-JUN-13	Finding:	134.
Chemical:	CHLORIDE	Report units:	MG/L
Dlr:	0.		

Sample date:	11-JUN-13	Finding:	390.
Chemical:	SULFATE	Report units:	MG/L
Dlr:	0.5		
Sample date:	11-JUN-13	Finding:	15.5
Chemical:	BARIUM	Report units:	UG/L
Dlr:	100.		
Sample date:	12-MAR-13	Finding:	37.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	11-DEC-12	Finding:	35.2
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	18-SEP-12	Finding:	29.9
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-JUN-12	Finding:	29.5
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		
Sample date:	12-JUN-12	Finding:	2.e-002
Chemical:	DIBROMOCHLOROPROPANE (DBCP)	Report units:	UG/L
Dlr:	1.e-002		
Sample date:	27-MAR-12	Finding:	1.25
Chemical:	URANIUM COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	27-MAR-12	Finding:	2.36
Chemical:	URANIUM (PCI/L)	Report units:	PCI/L
Dlr:	1.		
Sample date:	27-MAR-12	Finding:	2.44
Chemical:	GROSS ALPHA COUNTING ERROR	Report units:	PCI/L
Dlr:	0.		
Sample date:	27-MAR-12	Finding:	0.473
Chemical:	URANIUM MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	27-MAR-12	Finding:	3.09
Chemical:	GROSS ALPHA MDA95	Report units:	PCI/L
Dlr:	0.		
Sample date:	13-MAR-12	Finding:	32.7
Chemical:	NITRATE (AS NO3)	Report units:	MG/L
Dlr:	2.		

D28
ENE
1/2 - 1 Mile
Lower

CA WELLS **21022**

Seq:	21022	Prim sta c:	5010017-011
Frds no:	5010017011	County:	50
District:	10	User id:	PTA
System no:	5010017	Water type:	G

Source nam:	WELL 06 - TREATED	Station ty:	WELL/AMBNT/MUN/SUPPLY
Latitude:	372751.0	Longitude:	1210740.0
Precision:	3	Status:	AT
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	5010017	System nam:	Patterson, City Of
Hqname:	Not Reported	Address:	P. O. BOX 667
City:	PATTERSON	State:	CA
Zip:	95363	Zip ext:	Not Reported
Pop serv:	9577	Connection:	2660
Area serve:	PATTERSON		

D29
ENE
1/2 - 1 Mile
Lower

CA WELLS 6101

Seq:	6101	Prim sta c:	05S/08E-31B03 M
Frds no:	5000337001	County:	50
District:	80	User id:	50C
System no:	5000337	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	372751.0	Longitude:	1210738.0
Precision:	3	Status:	AR
Comment 1:	PATTERSON	15	
Comment 2:	Not Reported	Comment 3:	Not Reported
Comment 4:	Not Reported	Comment 5:	Not Reported
Comment 6:	Not Reported	Comment 7:	Not Reported
System no:	5000337	System nam:	Buehner Trailer Ct.
Hqname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Pop serv:	0	Connection:	0
Area serve:	Not Reported		

E30
SE
1/2 - 1 Mile
Higher

FED USGS USGS40000183237

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	006S008E06B002M	Type:	Well
Description:	Not Reported	HUC:	18040005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvium Above E-Clay	Aquifer Type:	Not Reported
Construction Date:	19110101	Well Depth:	215
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		
Ground water levels,Number of Measurements:	2	Level reading date:	1967-06-27
Feet below surface:	74.50	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1967-06-01	Feet below surface:	73.00
Feet to sea level:	Not Reported	Note:	Not Reported

E31
SE
1/2 - 1 Mile
Higher

CA WELLS **CAUSGSN00004259**

Well ID:	USGS-372658121074001	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-372658121074001	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-372658121074001&store_num=		
GeoTracker Data:	Not Reported		

32
NE
1/2 - 1 Mile
Lower

CA WELLS **CADWR0000035196**

Well ID:	05S08E30K001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05S08E30K001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=05S08E30K001M&store_num=		
GeoTracker Data:	Not Reported		

F33
NE
1/2 - 1 Mile
Lower

CA WELLS **CAUSGSN00006478**

Well ID:	USGS-372757121074001	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-372757121074001	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-372757121074001&store_num=		
GeoTracker Data:	Not Reported		

F34
NE
1/2 - 1 Mile
Lower

FED USGS **USGS40000183347**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S008E30Q001M	Type:	Well
Description:	Not Reported	HUC:	18040005
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Alluvium Above and Below E-Clay (Miocene-Pleistocene)		
Aquifer Type:	Not Reported	Construction Date:	19540101
Well Depth:	405	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

35
ENE
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000001038**

Well ID:	5000337-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01 - ABANDONED	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5000337-001&store_num=		
GeoTracker Data:	Not Reported		

36
ENE
1/2 - 1 Mile
Lower

CA WELLS **CADDW0000012282**

Well ID:	5010017-009	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL NO. 06 - STANDBY	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=5010017-009&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95363	1	0

Federal EPA Radon Zone for STANISLAUS County: 3

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

Federal Area Radon Information for Zip Code: 95363

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.100 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

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

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

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

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

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

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

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

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

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

STREET AND ADDRESS INFORMATION

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APPENDIX D

Proposed Elementary School
1000 Calvison Parkway
Patterson, CA 95363

Inquiry Number: 7011484.4
June 08, 2022

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

06/08/22

Site Name:

Proposed Elementary School
1000 Calvison Parkway
Patterson, CA 95363
EDR Inquiry # 7011484.4

Client Name:

Condor Earth Technologies, Inc
188 Frank West Circle
Stockton, CA 95206
Contact: Rebecca Selvage

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Condor Earth Technologies, Inc were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# 8874
Project: Proposed Elementary School E

Coordinates:

Latitude:	37.457422 37° 27' 27" North
Longitude:	-121.142306 -121° 8' 32" West
UTM Zone:	Zone 10 North
UTM X Meters:	664302.47
UTM Y Meters:	4147237.88
Elevation:	137.00' above sea level

Maps Provided:

2018	1919
2015	1916
2012	
1978, 1980	
1971	
1952, 1953	
1947	
1941	

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Topo Sheet Key

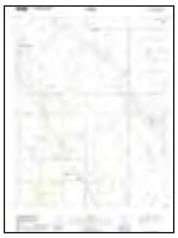
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets



Patterson

7.5-minute, 24000



Crows Landing

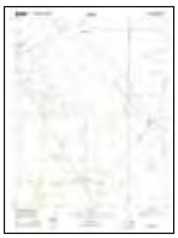
7.5-minute, 24000

2015 Source Sheets



Patterson

7.5-minute, 24000



Crows Landing

7.5-minute, 24000

2012 Source Sheets



Patterson

7.5-minute, 24000



Crows Landing

7.5-minute, 24000

1978, 1980 Source Sheets



Patterson

7.5-minute, 24000
Aerial Photo Revised 1971



Crows Landing

7.5-minute, 24000
Aerial Photo Revised 1978

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1971 Source Sheets



Crows Landing

7.5-minute, 24000
Aerial Photo Revised 1971



Patterson

7.5-minute, 24000
Aerial Photo Revised 1971

1952, 1953 Source Sheets



Crows Landing

7.5-minute, 24000
Aerial Photo Revised 1949



Patterson

7.5-minute, 24000

1947 Source Sheets



ORESTIMBA

15-minute, 50000

1941 Source Sheets



Orestimba

15-minute, 62500
Aerial Photo Revised 1939

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1919 Source Sheets



Orestimba

15-minute, 62500

1916 Source Sheets



Patterson

7.5-minute, 31680

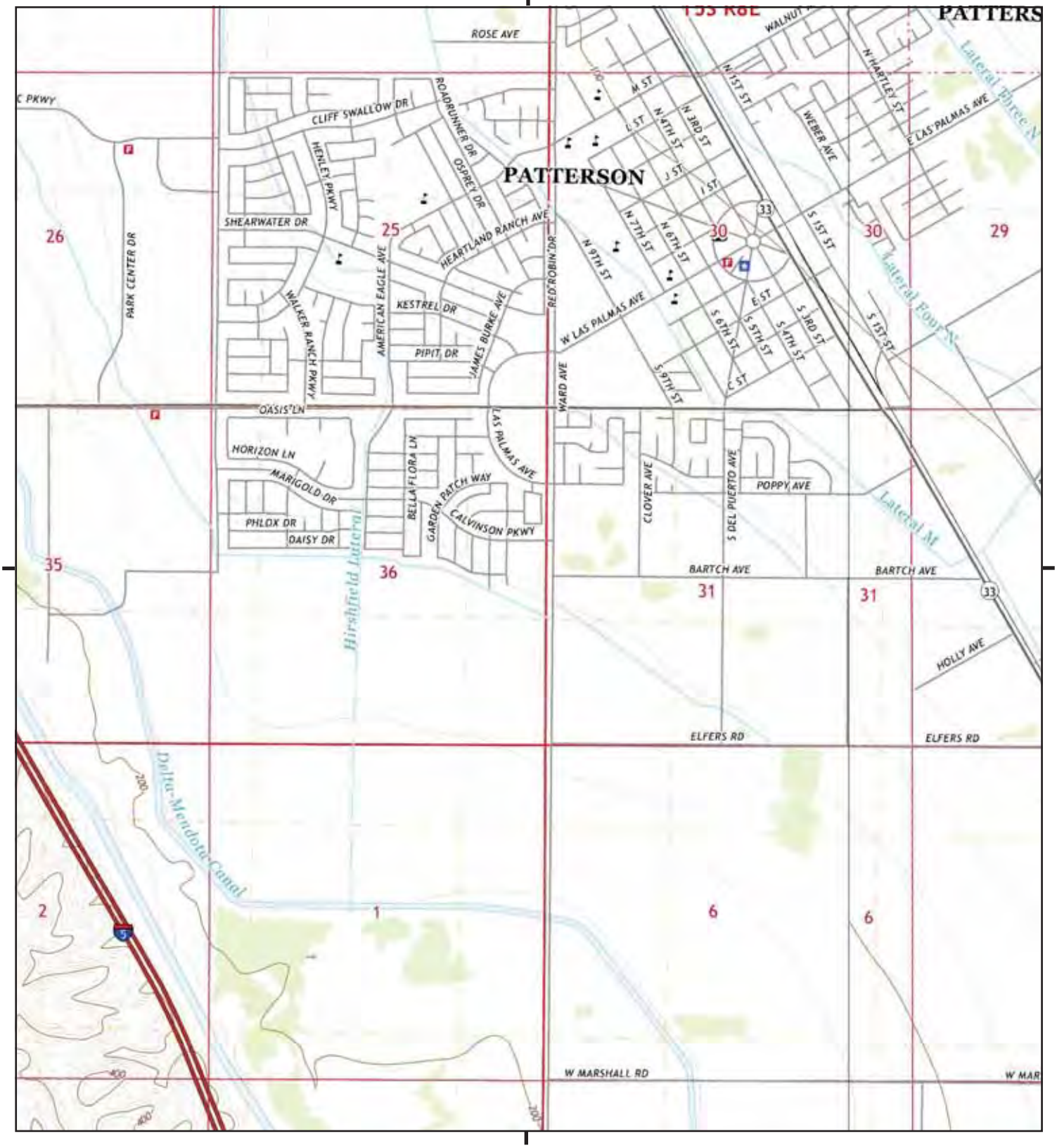


Crows Landing

7.5-minute, 31680

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Patterson, 2018, 7.5-minute
E, Crows Landing, 2018, 7.5-minute

SITE NAME: Proposed Elementary School
ADDRESS: 1000 Calvison Parkway
Patterson, CA 95363
CLIENT: Condor Earth Technologies, Inc

N

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

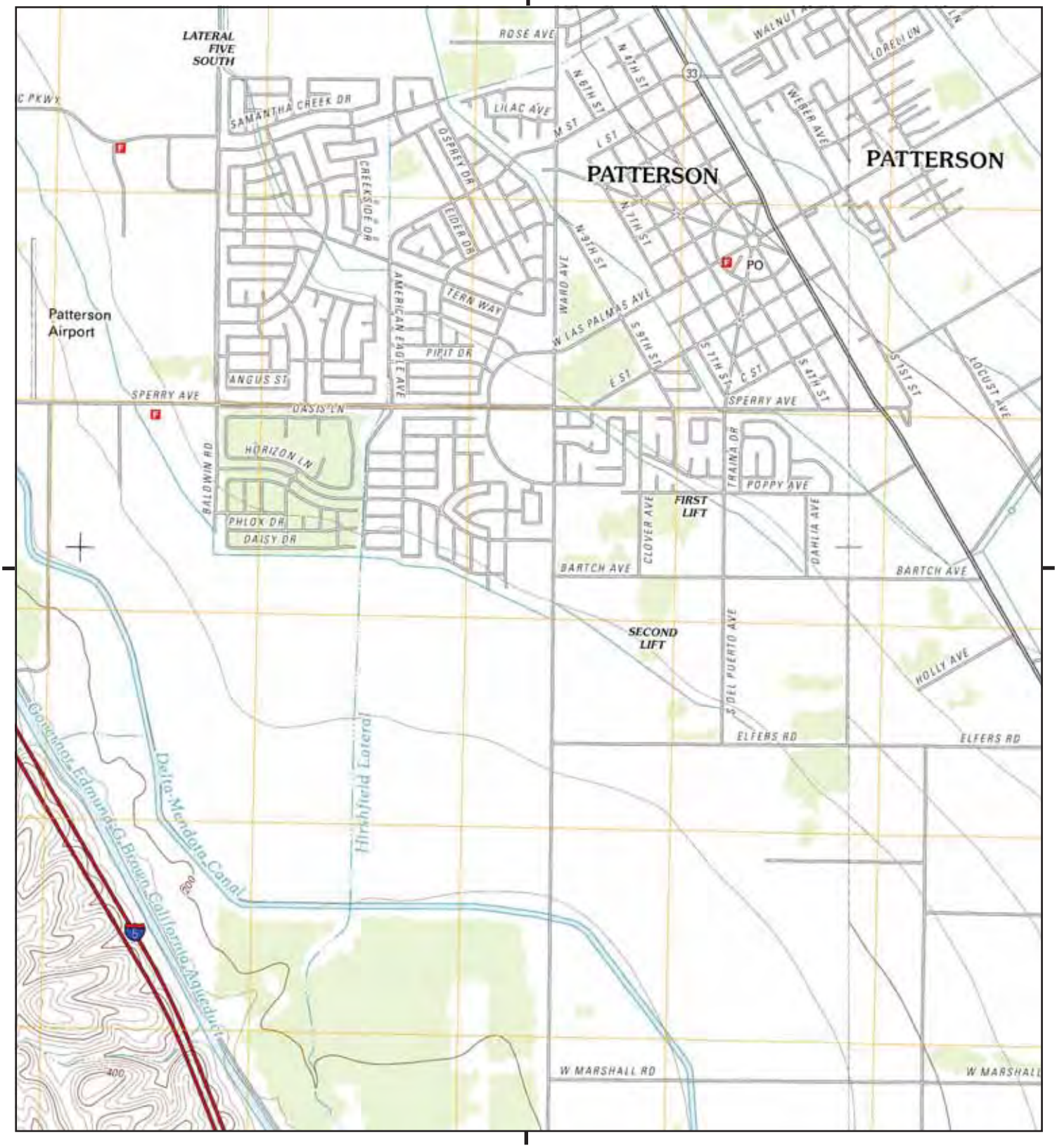
TP, Patterson, 2015, 7.5-minute
E, Crows Landing, 2015, 7.5-minute

SITE NAME: Proposed Elementary School
ADDRESS: 1000 Calvison Parkway
Patterson, CA 95363
CLIENT: Condor Earth Technologies, Inc

N

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

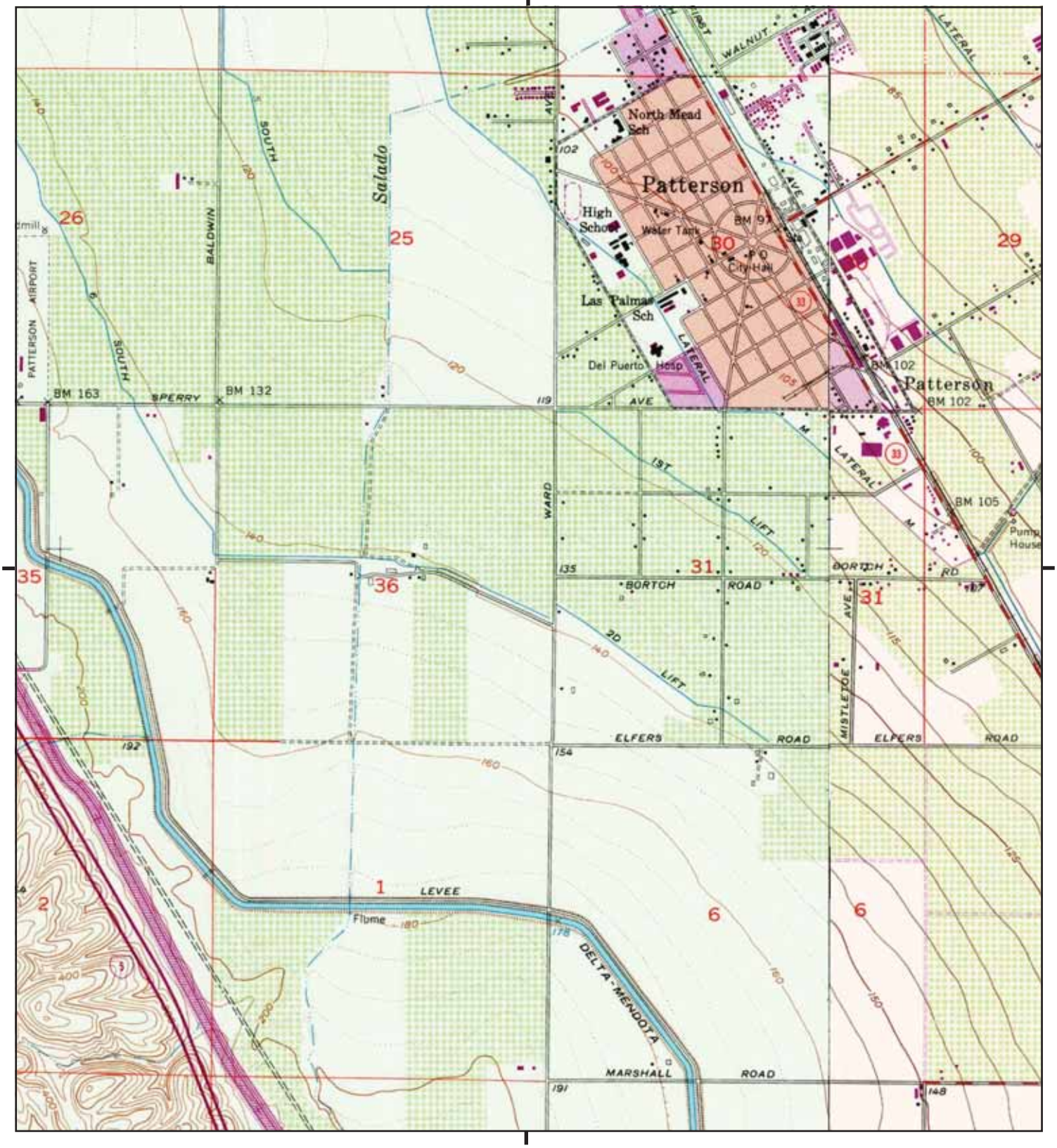
TP, Patterson, 2012, 7.5-minute
E, Crows Landing, 2012, 7.5-minute

SITE NAME: Proposed Elementary School
ADDRESS: 1000 Calvison Parkway
Patterson, CA 95363
CLIENT: Condor Earth Technologies, Inc

N

Historical Topo Map

1978, 1980



This report includes information from the following map sheet(s).

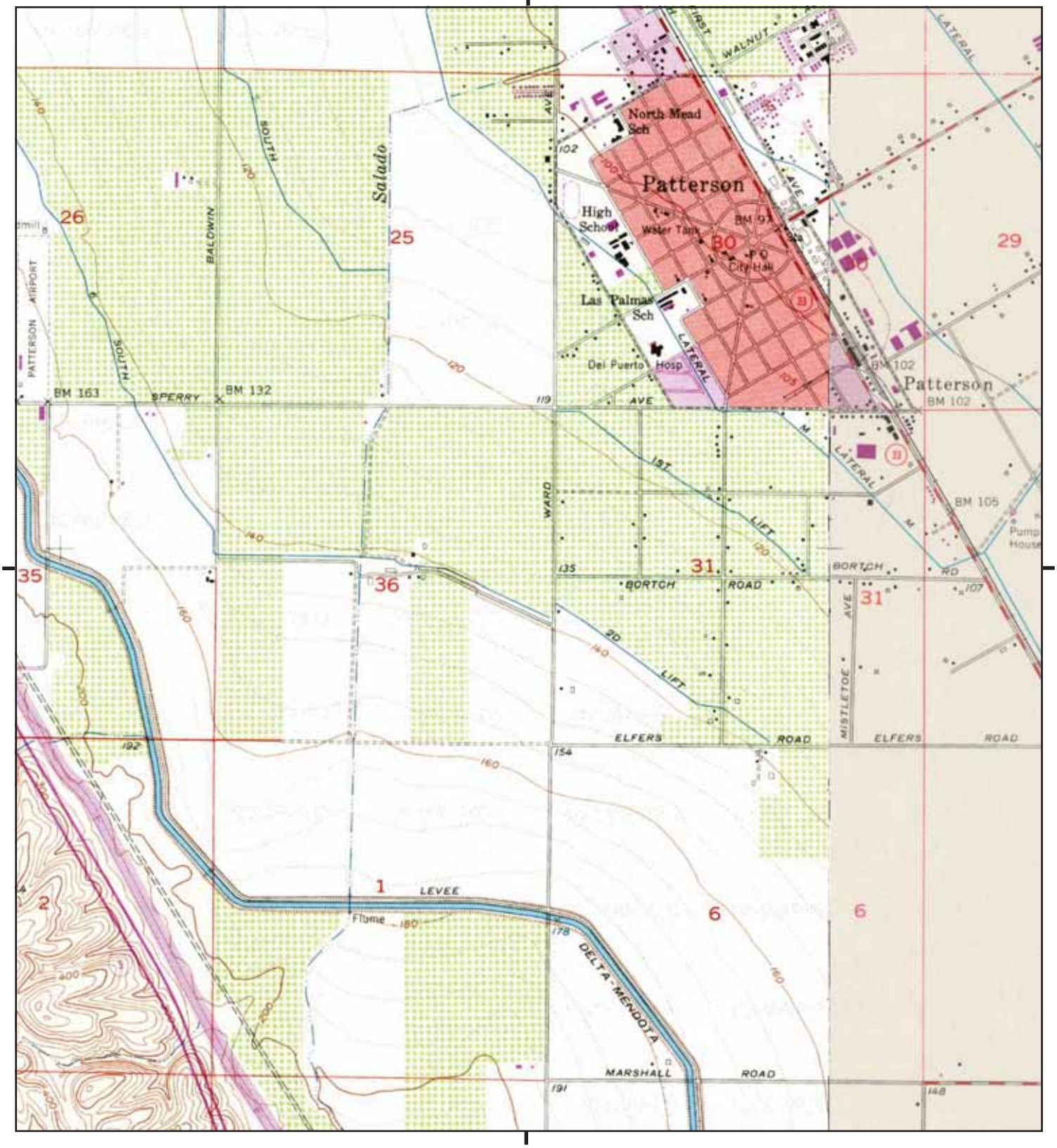
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Patterson, 1978, 7.5-minute
E, Crows Landing, 1980, 7.5-minute

SITE NAME: Proposed Elementary School
ADDRESS: 1000 Calvison Parkway
Patterson, CA 95363
CLIENT: Condor Earth Technologies, Inc

N



This report includes information from the following map sheet(s).

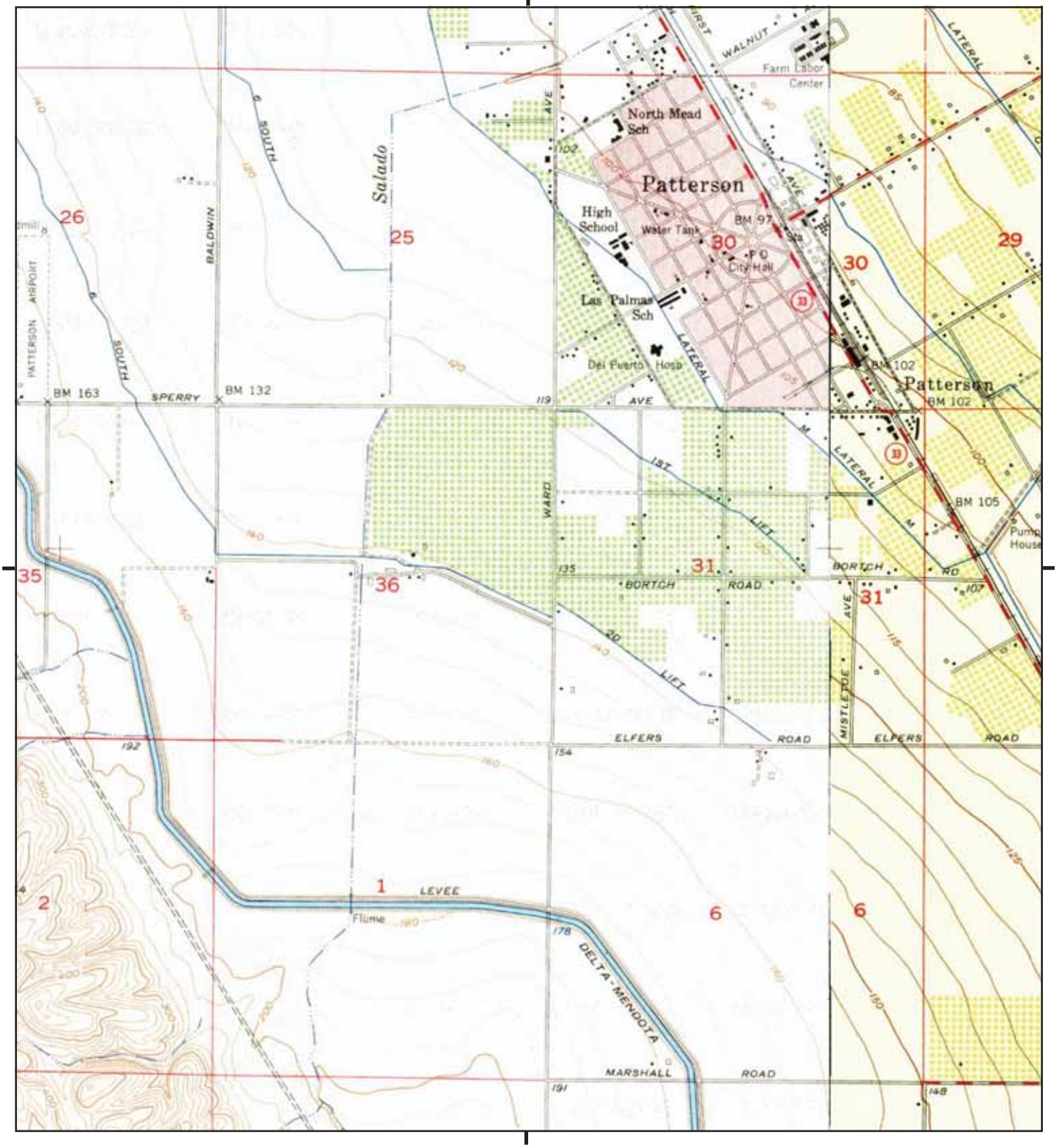
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Patterson, 1971, 7.5-minute
E, Crows Landing, 1971, 7.5-minute

SITE NAME: Proposed Elementary School
ADDRESS: 1000 Calvison Parkway
Patterson, CA 95363
CLIENT: Condor Earth Technologies, Inc

N



This report includes information from the following map sheet(s).

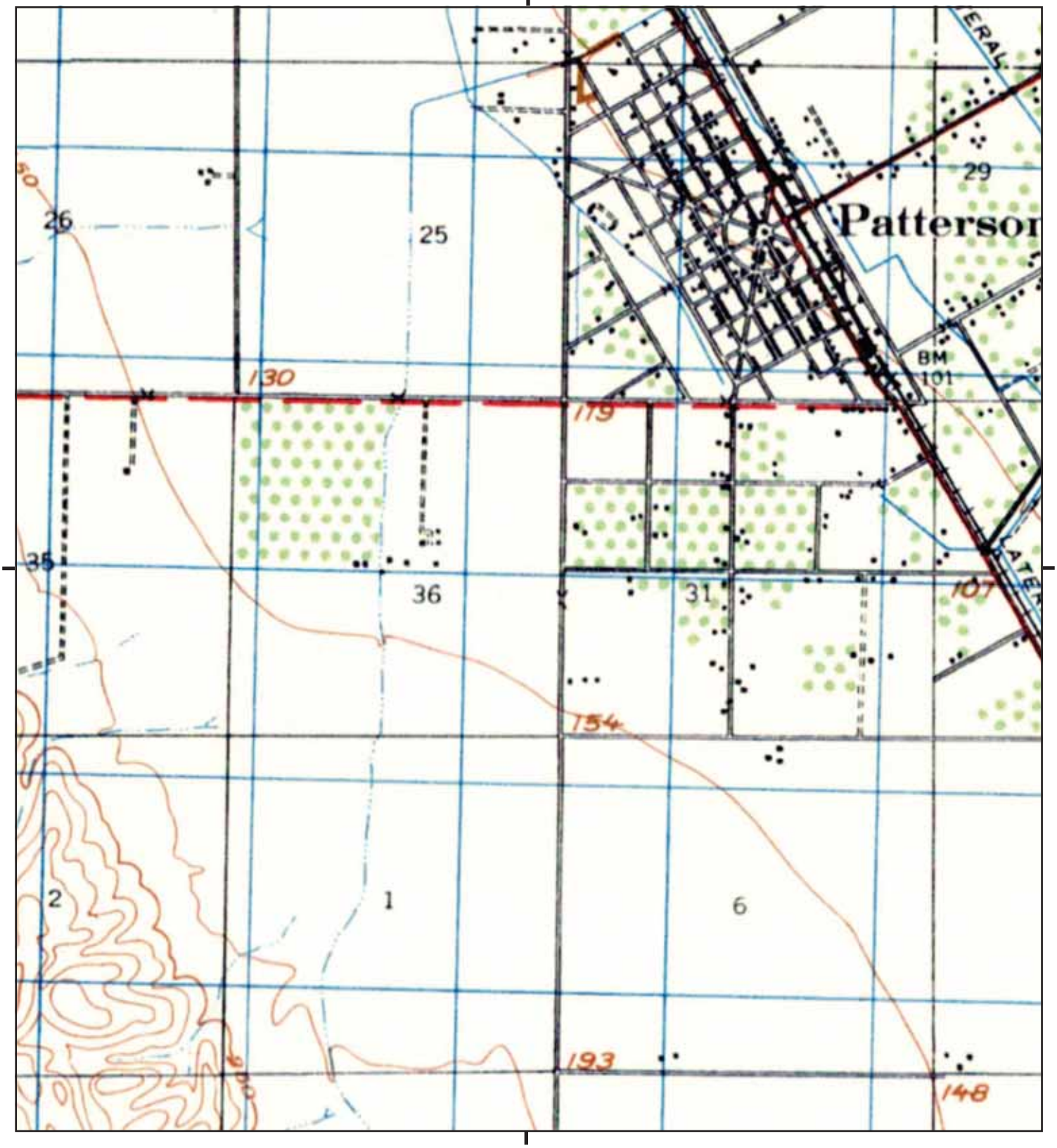
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Patterson, 1953, 7.5-minute
E, Crows Landing, 1952, 7.5-minute

SITE NAME: Proposed Elementary School
ADDRESS: 1000 Calvison Parkway
Patterson, CA 95363
CLIENT: Condor Earth Technologies, Inc

N



This report includes information from the following map sheet(s).

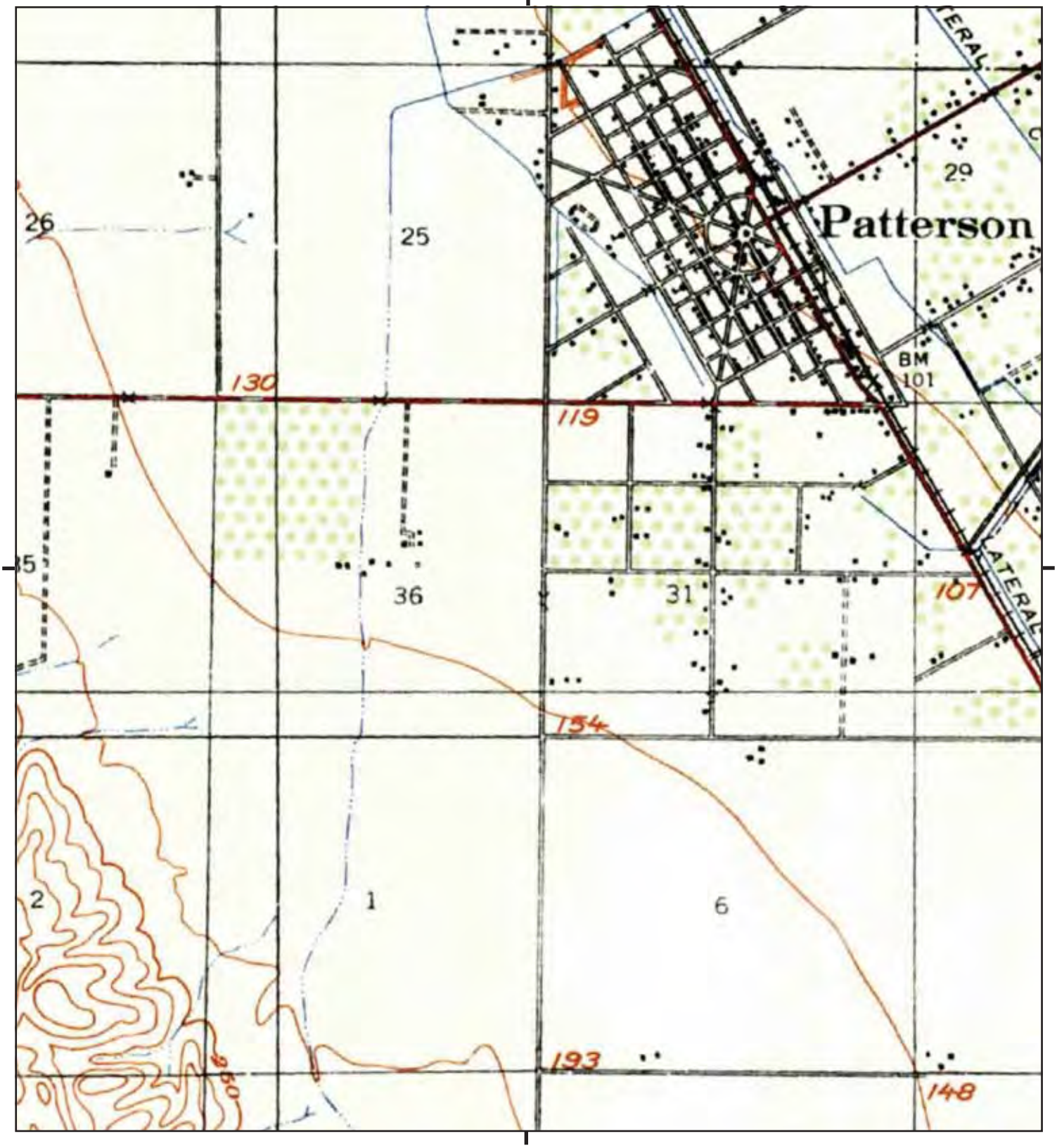
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, ORESTIMBA, 1947, 15-minute

SITE NAME: Proposed Elementary School
ADDRESS: 1000 Calvison Parkway
Patterson, CA 95363
CLIENT: Condor Earth Technologies, Inc

N



This report includes information from the following map sheet(s).

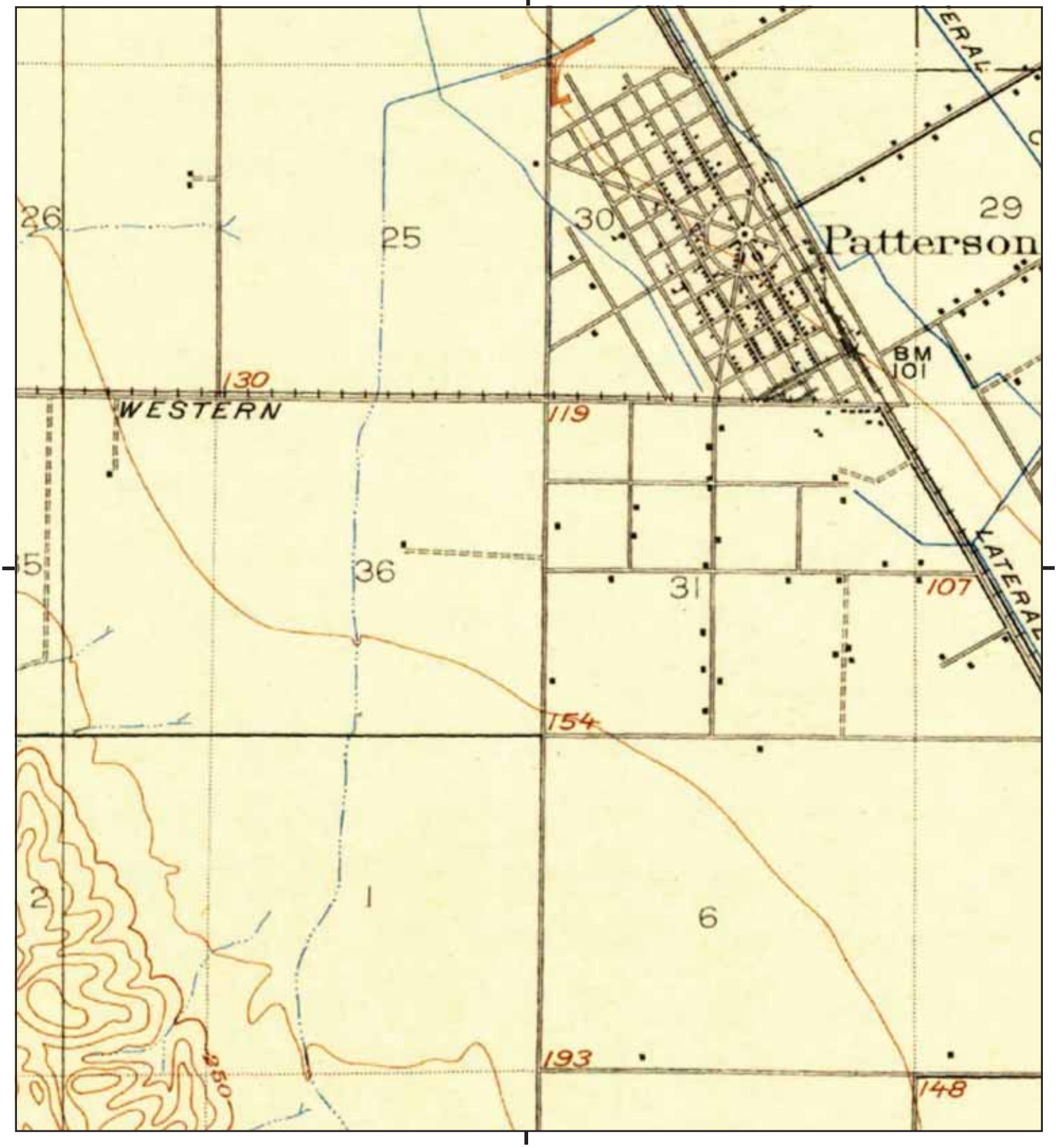
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Orestimba, 1941, 15-minute

SITE NAME: Proposed Elementary School
ADDRESS: 1000 Calvison Parkway
Patterson, CA 95363
CLIENT: Condor Earth Technologies, Inc

N



This report includes information from the following map sheet(s).

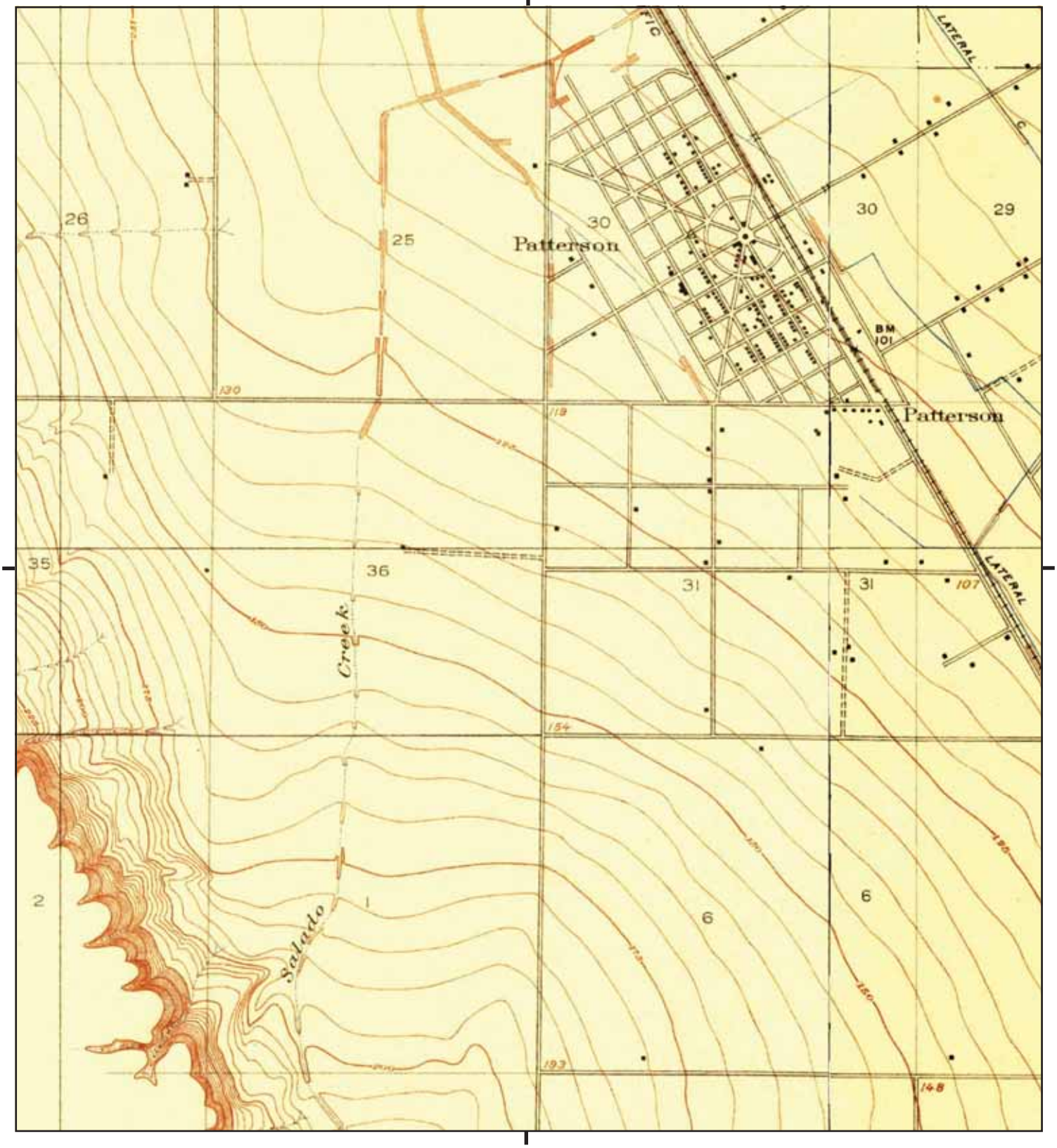
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Orestimba, 1919, 15-minute

SITE NAME: Proposed Elementary School
ADDRESS: 1000 Calvison Parkway
Patterson, CA 95363
CLIENT: Condor Earth Technologies, Inc

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Patterson, 1916, 7.5-minute
E, Crows Landing, 1916, 7.5-minute

SITE NAME: Proposed Elementary School
ADDRESS: 1000 Calvison Parkway
Patterson, CA 95363
CLIENT: Condor Earth Technologies, Inc

N

Proposed Elementary School

1000 Calvison Parkway

Patterson, CA 95363

Inquiry Number: 7011484.8

June 08, 2022

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

06/08/22

Site Name:

Proposed Elementary School
1000 Calvison Parkway
Patterson, CA 95363
EDR Inquiry # 7011484.8

Client Name:

Condor Earth Technologies, Inc
188 Frank West Circle
Stockton, CA 95206
Contact: Rebecca Selvage

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Search Results:

Year	Scale	Details	Source
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1998	1"=500'	Acquisition Date: August 16, 1998	USGS/DOQQ
1982	1"=500'	Flight Date: June 14, 1982	USDA
1977	1"=500'	Flight Date: June 26, 1977	USGS
1971	1"=500'	Flight Date: July 04, 1971	USGS
1957	1"=500'	Flight Date: April 04, 1957	USGS
1950	1"=500'	Flight Date: March 03, 1950	USDA
1937	1"=500'	Flight Date: August 10, 1937	USDA

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INQUIRY #: 7011484.8
YEAR: 2016
= 500'
N
EDR


INQUIRY #: 7011484.8
YEAR: 2012
= 500'
N
EDR



INQUIRY #: 7011484.8

YEAR: 2009

= 500'

N

EDR



INQUIRY #: 7011484.8

YEAR: 2006

= 500'

N

EDR


INQUIRY #: 7011484.8
YEAR: 1998
= 500'
N
EDR

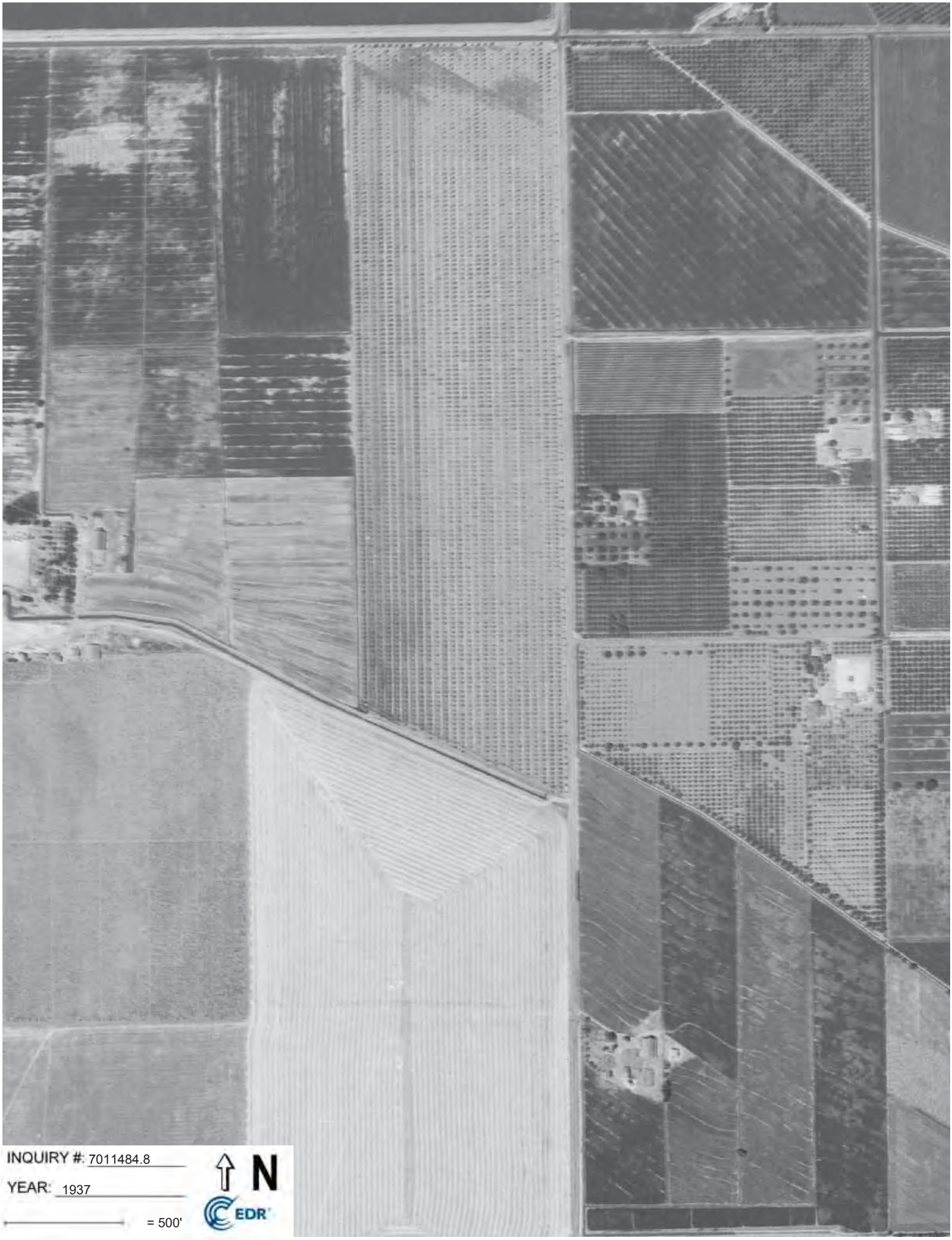

INQUIRY #: 7011484.8
YEAR: 1982
= 500'
N
EDR


INQUIRY #: 7011484.8
YEAR: 1977
= 500'
N
EDR


INQUIRY #: 7011484.8
YEAR: 1971
= 500'
N
EDR


INQUIRY #: 7011484.8
YEAR: 1957
= 500'
N
EDR


INQUIRY #: 7011484.8
YEAR: 1950
= 500'
N
EDR


INQUIRY #: 7011484.8
YEAR: 1937
= 500'
N
EDR

Proposed Elementary School
1000 Calvison Parkway
Patterson, CA 95363

Inquiry Number: 7011484.3
June 08, 2022

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

06/08/22

Site Name:

Proposed Elementary School
1000 Calvison Parkway
Patterson, CA 95363
EDR Inquiry # 7011484.3

Client Name:

Condor Earth Technologies, Inc
188 Frank West Circle
Stockton, CA 95206
Contact: Rebecca Selvage

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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 18D0-4999-8C22

PO # 8874

Project Proposed Elementary School ESA

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.

Sanborn® Library search results

Certification #: 18D0-4999-8C22

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Proposed Elementary School
1000 Calvison Parkway
Patterson, CA 95363

Inquiry Number: 7011484.5
June 13, 2022

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2017	☑	☑	EDR Digital Archive
2014	☑	☑	EDR Digital Archive
2010	☑	☑	EDR Digital Archive
2005	☐	☑	EDR Digital Archive
2000	☐	☑	EDR Digital Archive
1995	☐	☑	EDR Digital Archive
1992	☐	☑	EDR Digital Archive
1985	☐	☑	Haines Criss-Cross Directory
1981	☐	☑	Haines Criss-Cross Directory
1977	☐	☑	Haines Criss-Cross Directory
1974	☐	☑	Haines Criss-Cross Directory
1971	☐	☑	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

1000 Calvison Parkway
Patterson, CA 95363

Year	*CD Image*	*Source*	
CALVINSON PKWY			
2017	pg A1	EDR Digital Archive	
2014	pg A3	EDR Digital Archive	
2010	pg A6	EDR Digital Archive	
2005	-	EDR Digital Archive	Target and Adjoining not listed in Source
2000	-	EDR Digital Archive	Target and Adjoining not listed in Source
1995	-	EDR Digital Archive	Target and Adjoining not listed in Source
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source
1985	-	Haines Criss-Cross Directory	Street not listed in Source
1981	-	Haines Criss-Cross Directory	Street not listed in Source
1977	-	Haines Criss-Cross Directory	Street not listed in Source
1974	-	Haines Criss-Cross Directory	Street not listed in Source
1971	-	Haines Criss-Cross Directory	Street not listed in Source

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*
WARD AVE		
2017	pg. A2	EDR Digital Archive
2014	pg. A4	EDR Digital Archive
2010	pg. A7	EDR Digital Archive
2005	pg. A8	EDR Digital Archive
2000	pg. A9	EDR Digital Archive
1995	pg. A10	EDR Digital Archive
1992	pg. A11	EDR Digital Archive
1985	pg. A12	Haines Criss-Cross Directory
1985	pg. A13	Haines Criss-Cross Directory
1981	pg. A14	Haines Criss-Cross Directory
1977	pg. A15	Haines Criss-Cross Directory
1974	pg. A16	Haines Criss-Cross Directory
1971	pg. A17	Haines Criss-Cross Directory

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

CALVINSON PKWY 2017

1001	CHAND, DINESH
1005	VASQUEZ, REFUGIO
1009	DEAVELLAR, JAMES R
1013	MORA, LUIS J
1017	ALLEN, TYLER
1021	MULLER, JAMES W
1025	SINGH, HARMESH
1029	BULLERI, JACQUELINE C

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

WARD AVE 2017

397	FELIX, HARRY G
401	SALAMANCA, RAUL
407	SCHOENHARDT, BRAD A
429	OLSON, BERNIECE P
501	F D E S HALL
535	PHILLIPS, MICHAEL D
539	ORTIZ, SAN J
543	MELO, BEATRICE D
547	FANT, KENNETH
551	PEREZ, MANUEL A
600	BETANCOURT, MICHAEL
643	CARRALEZ, LEEROY R
647	DEOLIVEIRA, HENRY L
650	DAVID, SUBHIKSHA
	MAGANA, ADRIAN
	WATKINS, DEBORAH
651	WHITE, JERRY W
655	CORDERO, ALEX
701	CARMEAN, ROBERT M
720	CASILLAS, JEREMIAH J
1108	ALI WAHID DR MD
	JAS GREWAL DDS
	PHYSICAL THERAPYMARILYN PAUL
	SMILE SHINE DENTAL
	SMILE SHINE FAMILY DENTAL
	STANISLAUS CARDIOLOGY GROUP
	WAHID MEDICAL
	WAHID, ALI
14125	MEDINA, FAJARDO J
14219	CALDERON, ENRIQUE
14307	TORRISON, KARL L
14619	WAHID, ALI A
14701	GONZALES, CARLOS M
14719	LEDFORD, DONNA
14851	GARCIA, MICHELLE
16212	BROOKS, STEPHEN D
16306	MOERMAN, IDA
16318	BROOKS, WAYNE M
16500	ADDINGTON, ROGER N
17831	SALADO CREEK RANCH
17837	SUNFLOWER RANCH CO
	VOGEL, FREDERICK

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

CALVINSON PKWY 2014

1001	NILSON, SERGIO
1005	GORDON, KENNETH D
1009	DEAVELLAR, JAMES R
1013	TORRES, MARTHA M
1017	CARDENAS, RICHARD
1021	OCCUPANT UNKNOWN,
1025	SINGH, HARMESH
1029	OCCUPANT UNKNOWN,
1033	VU, VAN H
1037	OCCUPANT UNKNOWN,
1232	OCCUPANT UNKNOWN,
1236	OCCUPANT UNKNOWN,
1240	OCCUPANT UNKNOWN,
1244	OCCUPANT UNKNOWN,
1248	OCCUPANT UNKNOWN,
1252	OCCUPANT UNKNOWN,
1256	OCCUPANT UNKNOWN,
1260	OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

WARD AVE 2014

393	OCCUPANT UNKNOWN,
397	OCCUPANT UNKNOWN,
401	HERRERA, EVELYN J
407	SCHOENHARDT, BRAD A
501	F D E S HALL
530	HERNANDEZ, HECTOR C
535	PHILLIPS, MICHAEL D
539	ORTIZ, SAN
543	FLOWERS, TIMOTHY G
547	FANT, BARRY B
550	OCCUPANT UNKNOWN,
551	PEREZ, MANUEL A
600	BETANCOURT, MICHAEL
643	OCCUPANT UNKNOWN,
647	DEOLIVEIRA, HENRY L
650	LEZA, LEEANN M
	ORTIZ, DEBBIE
651	ORTIZ, MANUEL
655	ARRAMBIDE, ARMIN A
720	CASILLAS, JEREMIAH J
1108	BRAGNO JAMES F OD
	BRAGNO, JAMES
	ENVISION
	GREWAL JAS DDS
	PATTERSON OPTIMETRIC GROUP
	PHYSICAL THERAPYMARILYN PAUL
	SMILE SHINE DENTAL
	STANISLAUS CARDIOLOGY GROUP
	WAHID MEDICAL
14125	SANDOVAL, VINCENT
14219	HERRERA, COURTNEY
14243	OCCUPANT UNKNOWN,
14307	TORRISON, KARL L
14336	OCCUPANT UNKNOWN,
14437	OCCUPANT UNKNOWN,
14543	SULFLOW, CINDY L
14619	OCCUPANT UNKNOWN,
14701	GONZALES, CARLOS M
14719	DANIELSON, MICHAEL E
14831	VARGAS, NICOLDINEZ
14851	GARCIA, MICHELLE
16212	BROOKS, STEPHEN D
16306	MOERMAN, IDA
16318	BROOKS, WAYNE M
16500	OCCUPANT UNKNOWN,
16718	DALLIMORE, DAVID G
17831	SALADO CREEK RANCH
17837	REYNOSO, CECILIA R
	SUNFLOWER RANCH CO
17840	DEL PUERTO WATER DIST

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

WARD AVE 2014 (Cont'd)

17840 HANSEN, JOHN
OAK FLAT WATER DISTRICT

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

CALVINSON PKWY 2010

1001	NILSON, PARIS J
1009	DEAVELLAR, JAMES R
1013	MELCHER, BRIAN J
1017	ZAVALA, LOPEZ
1021	OCCUPANT UNKNOWN,
1025	SINGH, HARMESH
1029	BUTCHER, JOANN
1033	PABIA, KRISTINE
1037	OCCUPANT UNKNOWN,
1232	OCCUPANT UNKNOWN,
1236	OCCUPANT UNKNOWN,
1240	OCCUPANT UNKNOWN,
1244	OCCUPANT UNKNOWN,
1248	OCCUPANT UNKNOWN,
1252	OCCUPANT UNKNOWN,
1256	OCCUPANT UNKNOWN,
1260	OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

WARD AVE 2010

393	OCCUPANT UNKNOWN,
397	DAYS, NORMA G
407	SCHOENHARDT, N
501	FDES HALL
530	MARTINEZ, JUAN
535	PHILLIPS, MIKE
539	ORTIZ, JOSE M
543	FLOWERS, TIMOTHY G
547	FANT, BARRY B
550	RAFFERTY, BENJAMIN J
551	PEREZ, MANUEL A
600	BETANCOURT, ANGIE S
643	CARRALEZ, LEROY R
647	DEOLIVEIRA, HENRY L
650	GARCIA, NORMA W
	WATKINS, TRACEE
651	WHITE, JERRY W
655	OCCUPANT UNKNOWN,
720	OCCUPANT UNKNOWN,
1108	COLLINS KATHLYNN
	DEL PUERTO HEALTH CTR
	ENVISION OPTICAL PERFECTION
	ORANGEBURG MEDICAL GROUP
	QUEST DIAGNOSTICS
	SANTOS LIGAYA D
	SHERGILL MANMEET S MD
	SMILE SHINE DENTAL
14125	SANDOVAL, VINCENT M
14219	HERRERA, MARIA E
14243	CORREIA, MADELINE
14307	TORRISON, WENDOL L
14336	OCCUPANT UNKNOWN,
14437	OCCUPANT UNKNOWN,
14543	OCCUPANT UNKNOWN,
14701	APLAND, BETTE L
14705	GONZALES, CARLOS
14719	RENFROW, KEN L
14851	GARCIA, MICHELLE
16212	BROOKS, STEPHEN D
16306	MOERMAN, IDA
16318	BROOKS, WAYNE M
16500	BOS, LISA K
16531	RODRIGUEZ, MARTIN
16718	PEDRONI, GEORGE H
17831	SALADO CREEK RANCH
17837	VOGEL, FREDERICK

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

WARD AVE 2005

393	WILLIAMS, WENDELL W
397	DAYS, TONY J
401	OCCUPANT UNKNOWN,
405	DIAZ, ANNA
407	SCHOENHARDT, BRAD A
429	PEDRINI, RALPH C
530	OCCUPANT UNKNOWN,
535	PHILLIPS, MICHAEL D
539	ORTIZ, JOSE M
543	MELO, MANUEL N
547	FANT, BARRY B
550	SANCHEZ, JOSE
551	PEREZ, MANUEL A
600	OCCUPANT UNKNOWN,
620	WARD AVENUE BAPTIST CHURCH
643	CARRALEZ, LEROY R
647	DEOLIVEIRA, HENRY L
650	LARA, ERICA
651	WHITE, JERRY W
655	OCCUPANT UNKNOWN,
14125	SANDOVAL, VINCENT M
14219	HERRERA, COURTNEY
14243	CORREIA, MADELINE
14307	OCCUPANT UNKNOWN,
14336	OCCUPANT UNKNOWN,
14437	LOUIE BARLETTA
	OCCUPANT UNKNOWN,
14543	TORRISON, WENDOL L
	WENDEL L TORRISON
14619	ARENDSEE, ROBERT E
14701	GONZALES, CARLOS G
14719	RENFROW, KEN L
14831	LOPEZ, RAMON M
14851	OCCUPANT UNKNOWN,
16212	BROOKS, STEPHEN D
16306	MOERMAN, IDA
16318	BROOKS, WAYNE M
16500	PEDRONI, ADOLPH E
16521	CAMPBELL RANCH CO
16531	RODRIGUEZ, MARTIN
16718	PEDRONI, GEORGE H
17835	REYES, ROMAN

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

WARD AVE 2000

429	PEDRINI, RALPH
501	F D E S HALL
	FDES HALL
515	OCCUPANT UNKNOWN,
530	GIBLIN, JOHN
535	PHILLIPS, MICHAEL D
539	OCCUPANT UNKNOWN,
543	RUIZ, ROBERT J
547	FANT, BARRY
551	PEREZ, MANUEL A
600	DOMINGUEZ, M B
620	WARD AVENUE BAPTIST CHURCH
643	HERNANDEZ, RUDY A
647	DEOLIVEIRA, HENRY
650	ORTIZ, HECTOR
651	CUELLAR, J O
655	WILSON, W G
701	OCCUPANT UNKNOWN,
720	OCCUPANT UNKNOWN,
14125	OCCUPANT UNKNOWN,
14219	HERRERA, MARIA E
14243	CORREIA, TONY S
14306	VALLEY CABINET REFACING
14307	TORRISON, W L
14437	BARLETTA, DELORES
	PATTERSON CABINETS
14543	OCCUPANT UNKNOWN,
14619	JOHNSON, HOMER
14701	APLAND, MARY N
14719	RENFROW, KEN
14851	CARLOS, FIDELA
	GOMEZ, EDUARDO
15137	ROMAN, OSCAR
15143	DAYS, TONY
15161	WILLIAMS, WENDELL
16212	BROOKS, STEVE
16306	OCCUPANT UNKNOWN,
16318	BROOKS, WAYNE
16500	PEDRONI, ADOLPH
16521	CAMPBELL RANCH COMPANY
	DEL PUERTO SUPPLY COMPANY
16531	OCCUPANT UNKNOWN,
16718	PEDRONI, GEORGE

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

WARD AVE 1995

429	CARROLL, MARTA J
501	FDES HALL
515	SORENSEN, M M
530	MULLIGAN, BERNICE L
535	PHILLIPS, MICHAEL D
539	ORTIZ, JOSE M
543	MELO, BEATRIZ
547	FANT, BARRY
550	OCCUPANT UNKNOWNN
551	REICH, GAY N
560	OCCUPANT UNKNOWNN
600	TAPIA, JUAN
620	WARD AVE BAPTIST CHURCH
643	CARRALEZ, LEEROY
647	DEOLIVEIRA, HENRY
650	CALDERON, JEHU
	GALLARDO, ARTURO
	ORTIZ, E
	WATKINS, MARIAMA P
651	WHITE, JERRY W
655	WILSON, W G
720	SPERRY, DANIEL
14125	SANDOVAL, V
14219	HERRERA, C
14243	CORREIA, TONY S
14307	TORRISON, W L
14336	GONZALEZ, DORA
14437	BARLETTA, FRANK
14543	TORRISON, WENDOL
14619	JOHNSON, HOMER
14701	APLAND, MARY N
14719	RENFROW, KEN
15137	GONZALEZ, G G
15143	OCCUPANT UNKNOWNN
15161	WILLIAMS, WENDELL
16212	BROOKS, STEVE
16306	OCCUPANT UNKNOWNN
16318	BROOKS, WAYNE
16500	PEDRONI, ADOLPH
16515	OCCUPANT UNKNOWNN
16521	CAMPBELL RANCH CO
	REYES, ROMAN
	SAMANO, RAMON
16525	OCCUPANT UNKNOWNN
16718	PEDRONI, GEORGE
17831	SALDO CREEK RANCH
17837	SUNFLOWER RANCH

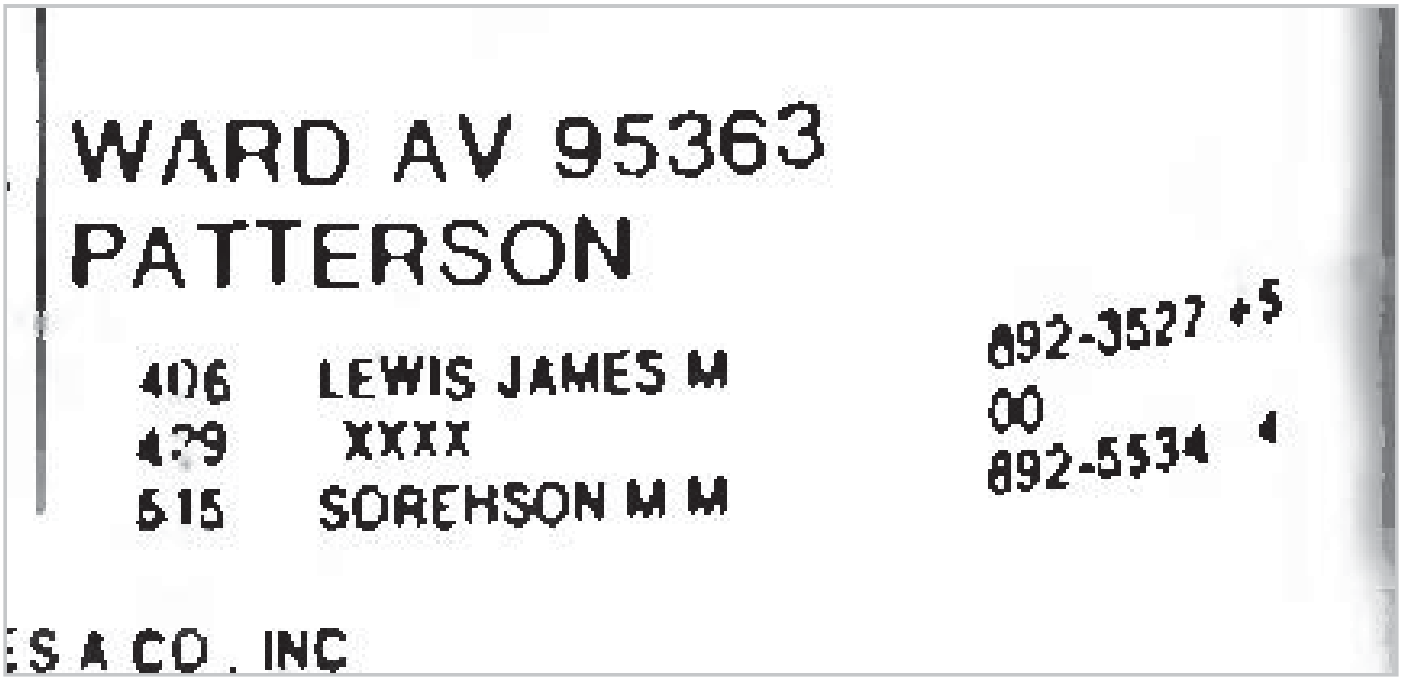
Target Street	Cross Street	Source
-	✓	EDR Digital Archive

WARD AVE 1992

501	F D E S HALL
515	SORENSON, M M
535	PHILLIPS, MICHAEL D
539	ORTIZ, JOSE M
543	MELO, BEATRIZ
547	FANT, BARRY
551	PEREZ, MANUEL A
620	WARD AVE BAPT CH
647	DEOLIVIERA, HENRY
650	MIRANDA, PEDRO E
720	SPERRY, DANIEL
14125	SANDOVAL, V
14243	CORREIA, TONY S
14306	VALLEY CABINT RFCNG
14437	BARLETTA, LOUIE
14543	TORRISON, WENDOL
14619	JOHNSON, HOMER
14701	APLAND, MARY N
14719	COLLIER, DAN
15137	GONZALEZ, G G
15143	DAYS, TONY
16212	BROOKS, STEVE
16318	BROOKS, WAYNE
16500	PEDRONI, ADOLPH
16521	CAMPBELL RNCH OFC
	REYES, ROMAN
	SAMANO, RAMON
16525	ALANIZ, W
16718	PEDRONI, GEORGE

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

WARD AVE 1985



WARD AV 95363
PATTERSON

406 LEWIS JAMES M 892-3527 +5
479 XXXX 00
515 SORENSON M M 892-5534 4

ES A CO., INC

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

WARD AVE 1985



WARD AV		95363 CONT	
630	XXXX	00	
635	PHILLIPS MICHAEL D	892-8991	
639	DRTIZ JOSE M	892-8456	
643	XXXX	UO	
647	FANT BARRY	892-8683	+5
658	JOHNSON TIM	892-2168	0
651	PEREZ M A	892-6724	
800	XXXX	00	
820	WARD AVE BAPT CH	B92-2510	+S
847	DEOLIVEIRA HENRY	892-6144	
651	XXXX	00	
866	XXXX	UO	
701	CA SC EMPLYS ASSN	B92-822D	4
720	SCHEEL JOHN	B92-2865	+S
14126	SANDOVAL VINCENTE	892-8812	7
14243	CORREIA TONY S	392-6454	
14308	XXXX	UO	
14307	TORRISON SIGURD B	892-8070	
	TORRISON W L FARMS	892-8419	7
14338	XXXX	00	
14437	BARLETTA LOUIE	892-3103	
14543	TORRISON W L FARMS	992-8733	3
14619	JOHNSON HOMER	892-8582	
14701	APLANO M N	892-2669	4
14719	MCGUIRE JERRY	892-6109	+S
16137	DANNA NANCI	892-3381	4
15143	DAYS TONY	892-8587	
16181	AZEVEDO MIKE	892-3193	9
18212	XXXX	00	
16308	BROOKS JAY	892-3043	+S
	BROOKS STEVE	892-5181	
16318	BROOKS WAYNE	892-6304	
16500	PEDRONI ADOLPH	892-8255	
16613	XXXX	00	
16616	OUZMAN LEOPOLDO	892-6041	
18519	XXXX	00	
16521	CAMPBELL RNCH OPC	B92-8211	
	CAMPBELL RNCH SHOP	B92-8849	
	DELPUERTO SUPPLY CO	892-8212	
	SAMANO RAMON	892-8315	7
16625	ALANIZ WILFREDO	892-3444	1
16718	PEDRONI GEORGE	892-6160	+S
NO #	CAMPBELL DON	892-6668	2
NO #	F O E 8 HALL	B92-9001	7
NO #	REYES ROMAN	892-8873	
NO #	SALADO CREEK RANCH	B92-B528	2
NO #	SUNFLOWER RANCH	892-B020	4
*	10 BUS 40 RES	7 NEW	

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

WARD AVE 1981

WARD AV 95363
PATTERSON

	405	PEARSON RICHARD	892-6438 +1
1	407	CORRAL WAYNE	892-5167 9
0	429	MOYE JEFF	892-6808 +1
	530	HALE ROY	892-6071 +1
	535	PHILLIPS MICHAEL D	892-8991 5
0	539	ORTIZ JOSE M	892-8456 5
5	543	XXXX	00
	547	FANT BARRY	892-8683 5
4	550	JOHNSON TIM	892-2166 0
	551	PEREZ M A	892-6724 5
	600	XXXX	00
	647	DEOLIVEIRA HENRY	892-6144 2
	651	CUELLAR NARCISO	892-8258 2
	655	WIISON JOSEPH	892-2170 +1
	701	MAYA JOE	892-8870
	720	XXXX	00
5	14125	SANDOVAL VINCENTE	892-8812 7
8	14219	CORDOVA JESS	892-8676 5
	14243	CORREIA TONY S	892-6454
	14306	XXXX	00
	14307	TORRISON SIGURD B	892-8670 5
		TORRISON W L FARMS	892-6419 7
	14336	XXXX	00
	14437	BARLETTA LOUIE	892-3103 2
	14543	TORRISON W L FARMS	892-6733 3
5	14619	JOHNSON HOMER	892-6582
3	14701	PROFESSIONAL CREDTR	892-2199 +1
6	14719	MITCHELL ETHEL	892-6547
1	14831	XXXX	00
8	14900	XXXX	00
	14936	XXXX	00
	15031	XXXX	00
	15049	SORENSEN WALTER	892-6534
	15107	XXXX	00
	15130	XXXX	00
	15137	FREITAS L	892-6139 8
	15143	DAYS TONY	892-6567
0	15161	AZEVEDO MIKE	892-3193 9
	16212	HENSON STEVE	892-8586 0
	16306	BROOKS LLOYD MRS	892-5181
1	16318	BROOKS WAYNE	892-6304
4	16500	PEDRONI ADOLPH	892-8255
8	16513	XXXX	00
1	16515	GUZMAN LEOPOLDO	892-6041 5
	16519	XXXX	00
	15521	CAMPBELL RNCH OFC	892-6211
		CAMPBELL RNCH SHOP	892-6549
		DELPUERTO SUPPLY CO	892-6212 2
		SAMANO RAMON	892-8315 7
	16525	ALANIZ WILFREDO	892-3444 +1
	16718	PEDRONI GEORGE	892-6160
1	NO #	ELANTOJITO	892-6816 9
	NO #	F D E S HALL	892-9001 7
	NO #	REYES ROMAN	892-8873
	NO #	SUNFLOWER RANCH CO	892-8814 +1

* 10 BUS 45 RES 7 NEW

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

WARD AVE 1977

WARD AV 95363 PATTERSON

405	DRAPER PAUL	892-8453+7
407	WELLS J KEITH	892-3409+7
535	PHILLIPS MICHAEL D	892-8991 5
539	ORTIZ JOSE M	892-8456 5
543	SILVERIA JOHN	892-8713 5
547	FANT BARRY	892-8683 5
551	PEREZ M A	892-6724 5
600	BETTENCOURT ISMAEL	892-6494 6
647	DEOLIVIERA HENRY	892-6144 2
651	CUELLAR NARCISO	892-8258 2
701	MAYA JOE	892-8870
720	KOLDING NEVA MRS	892-9411+7
1412	XXXX	00
14125	SANDOVAL VINCENTE	892-8812+7
14219	CORDOVA JESS	892-8676 5
14243	CORREIA TONY S	892-6454
14306	KENT DALE	892-6681 6
14307	TORRISON SIGURD B	892-8670 5
	*TORRISON W L FARMS	892-6419+7
14336	RESEIGH PAUL	892-8162+7
14437	BARLETTA LOUIE	892-3103 2
14543	*TORRISON W L FARMS	892-6733 3
14619	JOHNSON HOMER	892-6582
14701	APLAND MARY	892-6482
14719	MITCHELL ETHEL MRS	892-6547
14831	XXXX	00
14900	XXXX	00
14936	XXXX	00
15031	XXXX	00
15049	SORENSEN WALTER	892-6534
15107	XXXX	00
15130	XXXX	00
15137	XXXX	00
15143	DAYS TONY	892-6567
15161	TESTERMAN CHUCK	892-8142 2
16212	XXXX	00
16306	BROOKS LLOYD MRS	892-5181
16318	BROOKS WAYNE	892-6304
16500	PEDRONI ADOLPH	892-8255
16513	XXXX	00
16515	GUZMAN LEOPOLDO	892-6041 5
16519	XXXX	00
16521	*CAMPBELL RANCH CO	892-6211
	*CAMPBELL RANCH SHOP	892-6549
	*DELPUERTO SUPPLY CO	892-6212 2
	*PATTERSON GOLD INC	892-6211 5
	SAMANO RAMON	892-8315+7
16525	XXXX	00
16718	PEDRONI GEORGE	892-6160
NO	#*FDES HALL	892-9001+7
NO	# REYES ROMAN	892-8873
NO	# SAMANO RAMON	892-8825 6
NO	#*SHOEMAKE&GNESA	892-8814
	* 8 BUS 45 RES	8 NEW

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

WARD AVE 1974

WARD AV 95363 PATTERSON

4	600	RENFROW KENNETH L	892-8486+4
	643	DAVIS ROBERT	892-5031 2
	647	DEOLIVIERA HENRY	892-6144 2
	651	CUELLAR NARCISO	892-8258 2
	701	MAYA JOE	892-8870
	1412	XXXX	OO
	14125	MCDOWELL JAMES L	892-8557+4
	14219	XXXX	OO
	14243	CORREIA TONY S	892-6454
4	14306	BROWN BUTCH	892-3238+4
		KRAUSE LEE ANN	892-3283+4
	14307	*TORRISON JOHNSON	892-6419
		TORRISON SIGURD B	892-6419
	14336	XXXX	OO
4	14437	BARLETTA LOUIE	892-3103 2
	14543	*TORRISON W L FARMS	892-6733 3
	14619	JOHNSON HOMER	892-6582
	14701	APLANO MARY	892-6482
	14719	MITCHELL ETHEL MRS	892-6547
	14831	MUNIZ BONNIE	892-6006
2	14900	KOLDING NEVA MRS	892-9411
4	14936	XXXX	OO
2	15031	XXXX	OO
	15049	SORENSEN WALTER	892-6534
	15107	XXXX	OO
	15130	XXXX	OO
	15137	SMITH FRANK	892-6139
	15143	DAYS TONY	892-6567
	15161	TESTERMAN CHUCK	892-8142 2
3	16212	HALSETH KEN	892-8835 2
	16306	BROOKS LLOYD MRS	892-5181
	16318	BROOKS WAYNE	892-6304
	16500	PEDRONI ADOLPH	892-8255
	16513	CARLSON EARL	892-6514
	16519	XXXX	OO
	16521	*CAMPBELL RANCH CO	892-6211
4		*CAMPBELL RANCH SHOP	892-6549
3		*DELPUERTO SUPPLY CO	892-6212 2
3	16718	PEDRONI GEORGE	892-6160
4	NO #	REYES ROMAN	892-8873
3	NO #	*SHOEMAKE&GNESA	892-8814
3		* 6 BUS 35 RES 4 NEW	
3			

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

WARD AVE 1971

WARD AV 95363 PATTERSON

7D1	MAYA JOE	892-887D
14125	APLAND TOM	892-8676
14219	MEZA VENTURA	892-8193
14243	CORREIA TONY S	892-6454
14306	8ENTO KATHY	892-8867
	CALLAHAN 8AR8ARA	892-8867
143D7*	TORRISON JOHNSON	892-6419
	TORRISON SIGURD 8	892-6419
14619	JOHNSON HOMER	892-65E2
147D1	APLAND MARY	892-6482
14719	M1TCHELL ETHEL MRS	892-6547
14831	MUNIZ 8ONNIE	892-6DD6
I490D	KOLDING NEVA MRS	892-9411
14936	HERTZEL CLARENCE L	892-8141
15D31	GUSSMAN JOE	892-8459
15D49	SORENSEN WALTER	892-6534
151D7	S1LVER1A L1NDA	892-6383
15137	SM1TH FRANK	892-6139
15143	OAYS TONY	892-6567
15161	8REWER OON	892-6779
16212	KOLDING RO8ERT	892-6D45
163D6	8ROOKS LLOYD MRS	892-518I
16318	8ROOKS WAYNE	892-63D4
1650D	PEDRON1 ADOLPH	892-8255
16513	CARLSON EARL	892-6514
16519	SCHALI FRITZ	892-897D
16521*	CAMP8ELL RANCH CO	892-6211
	*CAMP8ELL RANCH SHOP	892-6549
	*DELPUERTO SUPPLY CO	892-6211
16718	PEDRONI GEORGE	892-616D
NO #	REYES ROMAN	892-8873
NO #*	SHOEMAKE&GNESA	892-8814
*	5 8US 27 RES	

APPENDIX E

ALL APPROPRIATE INQUIRY (AAI)
PHASE I ENVIRONMENTAL SITE ASSESSMENT (ESA)
USER QUESTIONNAIRE

To qualify for one of the *Landowner Liability Protections* (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"), the *user* of the Phase 1 ESA must conduct the following inquiries required by 40 C.F.R. Section 312.25, 312.28, 312.29, 312.30, and 312.31. The *user* should provide the following information to the *environmental professional*. Failure to conduct these inquiries could result in determination that "*all appropriate inquiries*" is not complete.

I. GENERAL INFORMATION

Site Name: Proposed Elementary School

Address: 1000 Calvison Parkway, Patterson, CA

Person Completing Questionnaire: Jeffrey Menge

Company Name/Title: Patterson Joint Unified School District/Assistant Superintendent, Administrative Services

Telephone Number: (209) 895-7700

Date of Completion:

II. REQUIRED INFORMATION

1. Environmental liens that are filed or recorded against the *subject property* (40 C.F.R. 312.25)

Did a search *of land title records* (or judicial records where appropriate, see Note 1) identify any *environmental liens* filed or recorded against the *subject property* under federal, tribal, state, or local law? Note 1: In certain jurisdictions, federal, tribal, state, or local statutes, or regulations specify that *environmental liens* and *Activity Use Limitations* (*AULs*) be filed in judicial records rather than in *land title records*. In such cases judicial records must be searched for *environmental liens* and *AULs*.

None.

2. Activity and use limitation that are in place on the *subject property* or that have been filed or recorded against the *subject property*.

Did a search of *land title records* (or judicial records where appropriate, see Note 1 above) identify any *AULs*, such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the *subject property* and/or have been filed or recorded against the *subject property* under federal, tribal, state or local law?

None.

3. **Specialized knowledge or experience of the person seeking to qualify for the LLP (40 C.F.R. 312.28).**
Do you have any specialized knowledge or experience related to the *subject property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *subject property* or an *adjoining property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?

None other than noted by Environmental Professional.

4. **Relationship of the purchase price to the fair market value of the *subject property* if it were not contaminated (40 C.F.R. 312.29).**
Does the purchase price being paid for this *subject property* reasonably reflect the fair market value of the *property*? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *subject property*?

Yes, there is no reduction in price due to environmental concerns.

5. **Commonly known or *reasonably ascertainable* information about the *subject property* (40 C.F.R. 312.30).**
Are you aware of commonly known or *reasonably ascertainable* information about the *subject property* 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 *subject property*?
(b.) Do you know of specific chemicals that are present or once were present at the *subject property*?
(c.) Do you know of spills or other chemical releases that have taken place at the *subject property*?
(d.) Do you know of any environmental cleanups that have taken place at the *subject property*?

None other than noted by Environmental Professional.

6. **The degree of obviousness of the presence or likely presence of contamination at the *subject property*, and the ability to detect the contamination by appropriate investigation (40 C.F.R. 312.31).**
Based on your knowledge and experience related to the *subject property* are there any *obvious* indicators that point to the presence or likely presence of *releases* at the *subject property*?

None.

III. ADDITIONAL REQUESTED INFORMATION

The following information is intended to assist the *environmental professional* in preparing the Phase 1 ESA but is not necessarily required to qualify for one of the *LLPs*.

1. State the reason why this Phase 1 ESA is required/requested:

   School construction.

2. State the type of *property* and type of *property* transaction, for example, sale, purchase, exchange, etc.

   Vacant property construction.

3. State the complete and correct address for the *property* (a map or other documentation showing *subject property* location and boundaries is helpful, if not already provided):

   1000 Calvison Parkway, Patterson CA 95363 (APN 021-027-038)

4. State the scope of services desired for the Phase 1 ESA, including whether any parties to the *property* transaction may have a required standard scope of services on whether any considerations beyond the requirements of an AAI Phase 1 ESA are to be considered:

   None other than ASTM 1527-21 Phase I ESA

5. Identify all parties, if known, who will rely on the Phase 1 *report*:

   Patterson Joint Unified School District

6. Identify the site contact and how the contact can be reached:

   Jeffrey Menge (209) 895-7700

7. List any special terms and conditions which must be agreed upon by the *environmental professional*:

   None.

8. Provide any other knowledge or experience with the *property* that may be pertinent to the *environmental professional*, for example, copies of any available prior *environmental site assessment reports*, documents, correspondence, etc., concerning the *subject property* and its environmental condition:

None.

Please return your completed questionnaire to:

Alex Dewitt, PG
Condor Earth Technologies, Inc.
188 Frank West Circle, Suite I
Stockton, CA 95206
209-234-0518
adewitt@condorearth.com

APPENDIX F

Scope of Work
ENVIRONMENTAL HAZARDS ASSESSMENT
for
PROPOSED ELEMENTARY SCHOOL
1000 Calvison Parkway
Patterson, Stanislaus County, California

Prepared for
Patterson Joint Unified School District
510 Keystone Blvd
Patterson, CA 95363

Condor Project No. 8874
May 12, 2022

INTRODUCTION

Condor Earth Technologies, Inc. (Condor) will perform an Environmental Hazards Assessment for the proposed Elementary School located at 1000 Calvison Parkway in Patterson, California, for the Patterson Joint Unified School District (Client). The subject property is designated as Assessor's Parcel Number (APN) 021-027-038, comprising approximately 12.11 acres (Site). Condor will follow the guidelines set forth in Practice E 1527-21, *Standard of Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process,* published November 2021, by the American Society for Testing and Materials (ASTM), hereinafter referred to as "the Standard." Condor will also perform activities that address requirements of the California Education Code, the Public Resources Code, and State policies as detailed below. After completion, Condor will deliver an Environmental Hazards Assessment Report to the Client.

PHASE I ENVIRONMENTAL SITE ASSESSMENT (ESA)

The objective of the Phase I ESA process is to identify *Recognized Environmental Conditions* (RECs) at the Site that may present a material risk of harm to public health or the environment. Condor will perform three tasks that include the historical research and records review, Site reconnaissance, and interviews. Condor will also perform a fourth task as noted below in order to identify hazardous facilities or activities within the immediate area of the Site.

If a potential environmental hazard is encountered in the Phase I ESA, a Preliminary Environmental Assessment (PEA) may be required by the California Environmental Protection Agency, Department of Toxic Substance Control (DTSC). Prior to performing a PEA, DTSC must approve a PEA Work Plan. A PEA and a PEA Work Plan are not included in this scope of work; however, the results of the Phase I ESA would be used to determine the need for, and scope of, a PEA.

Task 1 – Historical Records Review

Condor will review the history of the Site to learn about permits granted, citations issued, prior uses of the Site and properties immediately adjacent to the Site, and local geologic and hydrogeologic data. Reasonably obtainable topographic maps, real estate maps, and historical aerial photos will also be reviewed to assess historical land uses at and near the Site. If the above records are not obtainable at a reasonable cost, Condor will inform the Client of their unavailability.

Records retained by Federal, State, and local agencies for properties within an approximate minimum search distance (MSD) will be reviewed for potential environmental liability. Parallel with ASTM standards, only non-confidential, reasonably obtainable, and practically reviewable records will be reviewed.

Task 2 – Site Reconnaissance

A visit to the Site will be made and a general description of the Site, including existing observable structures, roads, potable water supply system, sewage disposal system, and present and past uses of the Site (if ascertainable) will be developed. Observations will be made on the Site, along the periphery of the Site, along the periphery of all structures on the Site, and in all areas common to the Site and adjacent properties to assess if conditions suggest that hazardous substances are present on, or might migrate to, the Site. Obvious terrain characteristics of concern, such as areas of distressed vegetation, ground stains, landfills, depressions, or evidence of any below-grade tanks will be identified. If accessible, the interior of any non-residential structures on the Site will also be inspected. Observations of the properties located immediately adjacent to the Site will be made from the Site and from public rights-of-way to assess whether there exists on such properties potential sources of regulated materials that could lead to adverse environmental impacts to the Site.

Task 3 – Limited Interviews

A limited number of interviews will be conducted, if reasonably possible, with individuals familiar with the Site, to evaluate the nature and extent of current and past activities on the Site and on the properties in the vicinity of the Site. The Client will be responsible for securing permission for Condor to interview the aforementioned persons. If Condor is unable to contact the aforementioned persons, Condor will contact the Client for further direction. If obtainable, interviews will also be held with representatives of local regulatory agencies. The attached cost estimate limits the amount of time to be spent conducting interviews to an appropriate and reasonable amount of effort.

Task 4 – Requirements of the California Education and Public Resources Codes, and State Policies

Task 4 is a group of activities that address the requirements of the California Education and Public Resources Codes not included in the scope of a typical ASTM Phase I ESA. Task 4 will include review of records to identify facilities within ¼-mile of the Site that could emit hazardous air emissions (California Education Code § 39003 and California Public Resources Code § 21151.8) and existing and proposed airports within two nautical miles of the Site (California Education Code § 39005, 39007). Task 1 will also satisfy many of the requirements of the California Education and Public Resources Codes (Education Code § 39003 and Public Resources Code § 21151.8, except hazardous air emissions). In accordance with State policies, and additionally include Site observations to determine the relative locations of high voltage power lines, high-pressure gas lines, and railroad tracks.

Task 5 – Report Preparation

Condor will provide a summary of the key issues and observations to the Client in the form of an oral report upon request. A written report of the findings of the assessment will be prepared upon completion of Tasks 1 through 4. The report will include information to support the conclusions reached by Condor that relate to the environmental condition of the Site, and to the potential environmental liability, if any, imposed by the Site or by neighboring properties within the search area. This Task includes three hardcopies of the Report and one electronic copy.

EXCLUSIONS FROM SCOPE OF WORK

Chain of Title

The scope of work for this assignment excludes research into the title history of the Site. Condor has learned that our clients are better served by engaging a professional title company to complete research into the title history of a property. Condor will review the title history of the Site, if provided by the Client, as part of the Site use history.

Other Non-CERCLA Considerations

There may be risks associated with some potential hazards at some properties that parties to a real estate transaction may elect to assess, even though the hazards are not included in CERCLA's definitions of hazardous substances and are not subject to incurrence of response costs under CERCLA. Those substances include, but are not necessarily limited to:

1. Asbestos,
2. Radon,
3. Mold,
4. Lead-based paint, and
5. Wetlands.

The Scope of Work for this assessment specifically recognizes that evaluation of these non-CERCLA substances is excluded from consideration. Condor is, however, willing to negotiate a modified scope of work and cost for this investigation if an evaluation for any of these issues is required.

SITE ACCESS AND SITE CONDITIONS

The Client will grant or obtain free access to the Site for all equipment and personnel necessary for Condor to perform the work set forth in this scope of work. The Client will notify any and all possessors of the project Site that the Client has granted Condor free access to the Site. Condor will take reasonable precautions to minimize damage to the Site, but it is understood by the Client that, in the normal course of work, some damage may occur and the correction of such damage is not part of this Scope of Work.

DISCOVERY OF UNANTICIPATED HAZARDOUS MATERIALS

Condor agrees to notify the Client when unanticipated hazardous materials or suspected hazardous materials are encountered. The Client agrees to make any disclosures required by law to the appropriate governing agencies. The Client also agrees to hold Condor harmless for any and all consequences of disclosures made by Condor or the Client, which are required by governing law. In the event the Client does not own the project Site, the Client recognizes that it is the Client's responsibility to inform the property owner of the discovery of unanticipated hazardous materials or suspected hazardous materials.

Notwithstanding any other provision of this scope of work, the Client waives any claim against Condor and, to the maximum extent permitted by law, agrees to defend, indemnify, and save Condor harmless from any claim, liability, and/or defense costs for injury or loss arising from Condor's discovery of unanticipated hazardous materials or suspected hazardous materials, including, but not limited to, any costs created by delay of the project and any cost associated with possible reduction of the property's value.

LIMITATIONS

The purpose of a Phase I ESA is not to prove that no hazardous materials are present at the Site; it is only necessary to complete "appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" (42 USC Sec. 9601[35][B]). The use of an environmental professional will minimize and manage environmental risk, but it cannot completely eliminate the risk.

Condor will not warrant or certify that the Site is free of contaminants because it is impossible to know if such a condition exists. Contaminants may be present in areas that are not accessible for inspection or sampling. Contaminants can migrate later into areas that are inspected or sampled during an ESA. A prudent and professional consultant can only supply an opinion and cannot certify that certain conditions exist when it is impossible to know with absolute certainty that such conditions exist.

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APPENDIX G

GLOSSARY OF TERMS AND ACRONYMS

abandoned property, n – *property* that can be presumed to be deserted, or an intent to relinquish possession or control can be inferred from the general disrepair or lack of activity thereon such that a reasonable person could believe that there was an intent on the on the part of the current *owner* to surrender rights to the *property*.

Activity and use limitations (AULs), n – legal or physical restrictions or limitations on the use of, or access to, a site or facility: (1) to reduce or eliminate potential exposure to *hazardous substances* or *petroleum products* in the soil or groundwater on the *property*, or (2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or *engineering controls*, are intended to prevent adverse impacts to individuals or populations that may be exposed to *hazardous substances* and *petroleum products* in the soil, soil vapor, groundwater, and/or surface water on a *property.*

actual knowledge, n - knowledge actually possessed by an individual who is a real person, rather than an entity. Actual knowledge is to be distinguished from constructive knowledge, that is, knowledge imputed to an individual or entity.

adjoining properties, n - any real *property* or properties the border of which is contiguous or partially contiguous with that of the *subject property*, or that would be contiguous or partially contiguous with that of the *subject property* but for a street, road, or other thoroughfare separating them.

aerial photographs, n – photographs taken from an aerial platform with sufficient resolution to allow identification of development and activities.

all appropriate inquiries, n – that inquiry constituting *all appropriate inquiries* into the previous ownership and uses of the *subject property* consistent with good commercial or customary practice as defined in CERCLA, 42 U.S.C. § 9601(35)(B) and 40 C.F.R. Part 312, that will qualify a party to a *commercial real estate transaction* for one of the threshold criteria for satisfying the *LLPs* to CERCLA liability (42 U.S.C. § 9601(35)(A) & (B), § 9607(b)(3), § 9607(q); and § 9607(r)) assuming compliance with other elements of the defense.

approximate minimum search distance, n – the area for which records must be obtained and reviewed pursuant to Section 8 subject to the limitations provided in that section. This may include areas outside the *subject property* and shall be measured from the nearest *subject property* boundary. This term is used in lieu of radius to include irregularly shaped *properties*.

bona fide prospective purchaser [42 U.S.C. § 9607(r)], n – a person may qualify as a *bona fide prospective purchaser* if, among other requirements, such person made "*all appropriate inquiries* into the previous ownership and uses of the facility in accordance with generally accepted good commercial and customary standards and practices." Knowledge of contamination resulting from *all appropriate inquiries* would not generally preclude this liability protection. A person must make *all appropriate inquiries* on or before the date of purchase. The facility must have been purchased after January 11, 2002.

Brownfields Amendments, n – amendments to CERCLA pursuant to the Small Business Liability Relief and Brownfields Revitalization Act, Pub. L. No. 107-118 (2002), 42 U.S.C. § 9601 *et seq*.

building department records, n – those records of the local government in which the *subject property* is located indicating permission of the local government to construct, alter, or demolish improvements on a *property*.

business environmental risk (BER), n – a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of *commercial real estate*, not necessarily related to those environmental issues required to be investigated.

commercial real estate, n - any real *property* except a *dwelling* or *property* with no more than four *dwelling* units exclusively for residential use (except that a *dwelling* or *property* with no more than four *dwelling* units exclusively for residential use is included in this term when it has a commercial function, as in the construction of such *dwellings* for profit). The term includes but is not limited to undeveloped real *property* and real *property* used for industrial, retail, office, agricultural, other commercial, medical, or educational purposes; *property* used for residential purposes that has more than four residential *dwelling* units; and *property* with no more than four *dwelling* units for residential use when it has a commercial function, as in the building of such *dwellings* for profit.

commercial real estate transaction, n – a transfer of title to or possession of real *property* or receipt of a security interest in real *property*, except that it does not include transfer of title to or possession of real *property* with respect to an individual *dwelling* or building containing fewer than five *dwelling* units, nor does it include the purchase of a lot or lots to construct a *dwelling* for occupancy by a purchaser, but a *commercial real estate* transaction does include real *property* purchased or leased by persons or entities in the business of constructing or developing *dwelling* units.

construction debris, n – concrete, brick, asphalt, and other such building materials discarded in the construction of a building or other improvement to *property*.

contaminated public wells, n – public wells used for drinking water that have been designated by a government entity as contaminated by *hazardous substances* (for example, chlorinated *solvents*) or *petroleum products*, or as having water unsafe to drink without treatment.

contiguous property owner liability protection [42 U.S.C. § 9607(q)], n – a person may qualify for the *contiguous property owner liability protection* if, among other requirements, such person owns real *property* that is contiguous to, and that is or may be contaminated by *hazardous substances* from real *property* that is not owned by that person. Furthermore, such person conducted *all appropriate inquiry* at the time of acquisition of the *subject property* and did not know or have reason to know that the *subject property* was or could be contaminated by a release or threatened release from the contiguous *property*. The *all appropriate inquires* must not result in knowledge of contamination. If it does, then such person did "know" or "had reason to know" of contamination and would not be eligible for the *contiguous property owner liability protection*.

controlled recognized environmental condition n – *recognized environmental condition* affecting the *subject property* that has been addressed to the satisfaction of the applicable regulatory authority or authorities with *hazardous substances* or *petroleum products* allowed to remain in place subject to implementation of required controls (for example, *activity and use limitations* or *other property use limitations*).

data failure, n – failure to achieve the historical research objective even after reviewing the *standard historical resources* that are *reasonably ascertainable* and likely to be useful. *Data failure* is one type of *data gap*.

data gap, n – a lack or inability to obtain information required despite *good faith* efforts by the *environmental professional* to gather information. *Data gaps* may result from incompleteness in and of the activities required by this practice, including, but not limited to, *site reconnaissance* (for example, an inability to conduct the *site visit*), and *interviews* (for example, an inability to interview the *key site manager*, regulatory officials, etc.).

de minimis condition, n – a condition related to a *release* that generally does not present a threat to human 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. A condition determined to be a *de minimis condition* is not a *recognized environmental condition* nor a *controlled recognized environmental condition.*

demolition debris, n – concrete, brick, asphalt, and other such building materials discarded in the demolition of a building or other improvement to a *property*.

drum, n – a container (typically, but not necessarily, holding 55 gal (208 L) of liquid) that may be used to store *hazardous substances* or *petroleum products*.

dry wells, n – underground areas where soil has been removed and replaced with pea gravel, coarse sand, or large rocks. *Dry wells* are used for drainage, to control storm runoff, for the collection of spilled liquids (intentional and non-intentional), and *wastewater* disposal (often illegal).

due diligence, n - the process of inquiring into the environmental characteristics of *commercial real estate* or other conditions, usually in connection with a *commercial real estate* transaction. The degree and kind of *due diligence* vary for different properties and differing purposes.

dwelling, n – structure or portion thereof used for residential habitation.

engineering controls, n – physical modifications to a site or facility (for example, capping, slurry walls, or point of use water treatment) to reduce or eliminate the potential for exposure to *hazardous substances* or *petroleum products* in the soil or groundwater on a *property*. *Engineering controls* are a type of activity and use limitation (AUL).

environment, n – environment shall have the same meaning as the definition of environment in CERCLA 42 U.S.C. § 9601(8).

environmental compliance audit, n – the investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations. This term should not be used to describe this practice, although an *environmental compliance audit* may include an *environmental site assessment* or, if prior audits are available, may be part of an *environmental site assessment*.

environmental lien, n – a charge, security, or encumbrance upon title to a *property* to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of *hazardous substances* or *petroleum products* upon a *property*, including (but not limited to) liens imposed pursuant to CERCLA 42 U.S.C. §§9607(l) & 9607(r) and similar state or local laws.

environmental professional, n – a person meeting the education, training, and experience requirements as set forth in 40 C.F.R. § 312.10(b). The person may be an independent contractor or an employee of the *user*.

environmental site assessment (ESA), n - the process by which a person or entity seeks to determine if a *subject property* is subject to *recognized environmental conditions*. At the option of the *user*, an *environmental site assessment* may include more inquiry than that constituting *all appropriate inquiry* or, if the *user* is not concerned about qualifying for the *LLPs*, less inquiry than that constituting *all appropriate inquiries*. An *environmental site assessment* is both different from, and less rigorous than, an *environmental compliance audit*.

ERNS list, n – EPA's emergency response notification system list of reported CERCLA *hazardous substance releases* or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. Notification requirements for such *releases* or spills are codified in 40 C.F.R. Parts 302 and 355.

fill dirt, n – dirt, soil, sand, or other earth, that is obtained off-site, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real *property*. It does not include material that is used in limited quantities for normal landscaping activities.

Fire insurance maps, n – maps originally produced for fire insurance purposes that indicate uses of *properties* at specified dates.

good faith, n – absence of any intention to seek an unfair advantage or to defraud another party; an honest and sincere intention to fulfill one's obligations in the conduct or transaction concerned.

hazardous substance, n - a substance defined as a hazardous substance pursuant to CERCLA 42 U.S.C. § 9601(14), as interpreted by EPA regulations and the courts: "(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to 9602 of this title, (C) any *hazardous waste* having the characteristics identified under or listed pursuant to section 3001 of the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, (42 U.S.C. § 6921) (but not including any waste the regulation of which under RCRA (42 U.S.C. § 6901 *et seq.*) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 U.S.C. § 7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a *hazardous substance* under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

hazardous waste, n - any *hazardous waste* having the characteristics identified under or listed pursuant to Section 3001 of RCRA, as amended, (42 U.S.C. § 6921) (but not including any waste the regulation of which under RCRA (42 U.S.C. §§ 6901 – 6992k) has been suspended by Act of Congress). RCRA is sometimes also identified as the Solid Waste Disposal Act. RCRA defines *hazardous waste*, at 42 U.S.C. § 6903, as: "a solid waste, or combination of solid wastes, which because of it's quantity, concentration, or physical, chemical, or infectious characteristics may: (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating illness, or (B) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed of, or otherwise managed."

hazardous waste/contaminated sites, n – sites on which a release has occurred, or is suspected to have occurred, of any *hazardous substance*, *hazardous waste*, or *petroleum products*, and that *release* or suspected *release* has been reported to a government entity.

historical recognized environmental condition, n **–** a previous *release* of *hazardous substances* or *petroleum products* affecting the *subject property* that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the *subject property* to any controls (for example, *activity and use limitations* or other *property use limitations*). A *historical recognized environmental condition* is not a *recognized environmental condition*.

IC/EC registries, n – databases of *institutional controls* or *engineering controls* that may be maintained by a federal, state, or local environmental agency for purposes of tracking sites that may contain residual contamination and AULs. The names of these may vary from program to program and state to state, and include terms such as, but not limited to the following: Declaration of Environmental Use Restriction database (Arizona), Land Use Restriction Sites (California Department of Toxic Substances Control), Sites with Deed Restrictions (California State Water Resources Control Board), Environmental Covenant List (Washington), Sites With Environmental Covenants and Use Restrictions (Colorado), Institutional Control Registry (Indiana), Environmental Site Tracking and Research Tool (Missouri), and the Pennsylvania Activity and Use Limitation (PA *AUL*) Registry.

innocent landowner [42 U.S.C. §§ 9601(35) &9607(b)(3)], n – a person may qualify as one of three types of innocent landowners: (1) a person who "did not know and had no reason to know" that contamination existed on the *subject property* at the time the purchaser acquired the *subject property*; (2) a government entity which acquired the *subject property* by escheat, or through any other involuntary transfer of acquisition, or through the exercise of eminent domain authority by purchase or condemnation; or (3) a person who "acquired the facility by inheritance or bequest." To qualify for the innocent landowner defense, such person must have made *all appropriate inquiries* on or before the date of purchase. Furthermore, the *all appropriate inquiries* must not have resulted in knowledge of the contamination. If it does, then such person did "know" or "had reason to know" of contamination and would not be eligible for the *innocent landowner defense*. There are other necessary requirements that are beyond the scope of ASTM E1527-13.

institutional controls (IC), n – a legal or administrative mechanism (for example, "deed restrictions," restrictive covenants, easements, or zoning) on the use of, or access to, a site or facility to *(1)* reduce or eliminate potential exposure to *hazardous substances* or *petroleum products* in the soil or groundwater on the property, or *(2)* to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. An *institutional control* is a type of *activity and use limitation (AUL).*

interviews, n – those portions of this practice that are conducted to gather information from an individual or individuals in person, by telephone, in writing, or via other electronic media to meet the objectives of this practice.

key site manager, n – the person identified by the *owner* or *operator* of a *subject property* as having good knowledge of the uses and physical characteristics of the *subject property*.

land title records, n – records that affect the title of real estate, which may include, among other things, deeds, mortgages, leases, land contracts, court orders, easements, liens, and *AULs* recorded within the recording systems or land registration systems created by state statute in every state and ordinarily administered in the local jurisdiction (usually the county) in which the *subject property* is located, and available by performing a title search. Such records are publicly accessible, though the process of performing a title search to find *land title records* often requires specialized expertise or knowledge of the local system. Information about the title to the *subject property* that is filed or stored in any place other than

where *land title records* are, by law or custom, recorded for the local jurisdiction in which the *subject property* is located, are not considered *land title records*.

landfill, n - a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *solid waste disposal site* and is also known as a garbage dump, trash dump, or similar term.

landowner liability protections (LLPs), n – a defense to CERCLA available to *bona fide prospective purchasers, contiguous property owners*, and *innocent landowners*. See 42 U.S.C. §§ 9601(35)(A), 9601(40), 9607(q), and 9607(r).

local government agencies, n – those agencies of municipal or county government having jurisdiction over the *subject property*. Municipal and county governments include but are limited to cities, parishes, townships, and similar entities.

local street directories, n – directories published by private or government entities that list the occupant(s) of a specific address at the time the occupant data were collected, typically within a year of the publication date of the directory.

major occupants, n – those tenants, subtenants, or other persons or entities each of which uses at least 40% of the leasable area of the *subject property* or any anchor tenant when the *subject property* is a shopping center.

material safety data sheets (MSDS), n – see *safety data sheet*.

material threat, n –*obvious* threat which is likely to lead to a *release* and that, in the opinion of the *environmental professional*, would likely result in impact to public health or the environment. An example might include an aboveground storage tank system that contains a *hazardous substance* and which shows evidence of damage. The damage would represent a *material threat* if it is deemed serious enough that it may cause or contribute to tank integrity failure with a *release* of contents to the *environment*.

migrate/migration, v/n – for the purposes of ASTM E1527-13 "*migrate*" and "*migration*" refers to the movement of *hazardous substances* or *petroleum products* in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in subsurface.

National Priorities List (NPL), n – list compiled by the EPA pursuant to CERCLA 42 U.S.C. § 9605(a)(8)(B) of sites with the highest priority for cleanup pursuant to EPA's Hazard Ranking System (40 CFR Part 300).

obvious, adj – that which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer.

occupants, n - those tenants, subtenants, or other persons or entities using a *property* or a portion of a *property*.

operator, n –person responsible for the overall operation of a facility.

other historical resources, n – any resources that are credible to a reasonable person and that identify past uses of the *properties*.

owner, n - generally the fee *owner* of record of a *property*.

petroleum exclusion, n – the exclusion from CERCLA liability provided in 42 U.S.C. § 9601(14), as interpreted by the courts and EPA: "the term (*hazardous substance*) does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as the *hazardous substance* under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

petroleum products, n - those substances included within the meaning of the *petroleum exclusion* to CERCLA, 42 U.S.C. § 9601(14), as interpreted by the courts and the EPA, that is: petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a *hazardous substance* under the Subparagraphs (A) through (F) of 42 U.S.C. § 9601(14), natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). (The word fraction refers to certain distillates of crude oil, including gasoline, kerosene, diesel oil, jet fuels, and fuel oil, pursuant to Standard Definitions of Petroleum Statistics) (American Petroleum Institute, Fourth Edition, 1995.)

physical setting sources, n – resources that provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of the area that includes the *subject property*.

pits, ponds, or lagoons, n – manmade or natural depressions in a ground surface that are likely to hold liquids or sludge containing *hazardous substances* or *petroleum products*. The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an *obvious wastewater* discharge.

practically reviewable, adj - information that is *practically reviewable* means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the *subject property* without the need for extraordinary analysis of irrelevant data. The form of the information shall be such that the *user* can review the records for a limited geographic area. Records that cannot be feasibly retrieved by reference to the location of the *subject property* or a geographic area in which the *subject property* is located are not generally *practically reviewable*. Most databases of public records are *practically reviewable* if they can be obtained from the source agency by the county, city, zip code, or other geographic area of the facilities listed in the record system. Records that are sorted, filed, organized, or maintained by the source agency only chronologically are not generally *practically reviewable*. Listings in *publically available* records which do not have adequate address information to be located geographically are not generally considered *practically reviewable*. For large databases with numerous records (such as RCRA hazardous waste generators and registered *underground storage tanks*), the records are not *practically reviewable* unless they can be obtained from the source agency in the smaller geographic area of zip codes. Even when information is provided by zip code for some large databases, it is common for an unmanageable number of sites to be identified within a given zip code. In these cases, it is not necessary to review the impact of all of the sites that are likely to be listed in any give zip code because that information would not be *practically reviewable.* In other words, when so much information is generated that it cannot be feasibly reviewed regarding its impact on the *subject property*, it is not *practically reviewable*.

property, n - real *property,* t including buildings and other fixtures and improvements located on and affixed to the land.

property use limitation, n – limitation or restriction on current or future use of a property in connection with a response to a *release*, in accordance with the applicable regulatory authority or authorities that allows *hazardous substances* or *petroleum products* to remain in place at concentrations exceeding unrestricted use criteria.

property tax files, n –files kept for *property* tax purposes by the local jurisdiction which may include records of past ownership, appraisals, maps, sketches, photographs, or other information.

publicly available, adj – information that is *publicly available* means that the source of information allows access to the information by anyone upon request.

RCRA generators, n – those persons or entities that generate *hazardous wastes*, as defined and regulated by RCRA.

RCRA TSD facilities, n –those facilities on which treatment, storage, and/or disposal of *hazardous wastes* takes place, as defined and regulated by RCRA.

reasonably ascertainable, adj - information that is *(1) publicly available*, *(2)* obtainable from its source within reasonable time and cost restraints, and *(3) practically reviewable*.

recognized environmental conditions, n – (1) the presence of *hazardous substances* or *petroleum products* in, on, or at the *subject property* due to a *release* to the *environment*; (2) the likely presence of *hazardous substances* or *petroleum products* in, on, or at the *property* due to a *release* or likely *release* to the *environment*; or (3) the presence of *hazardous substances* or *petroleum products* in, on, or at the *subject property* under conditions that pose a *material threat* of future *release* to the *environment.*

records review, n – that part that is contained in Section 8 of ASTM E1527-21 that addresses which records shall or may be reviewed.

report, n –written *report* prepared by the *environmental professional* and constituting part of a "*Phase I Environmental Site Assessment*," as required by this practice.

safety data sheets, n – written or printed material that is prepared by chemical manufacturers and importers for distributors' and employers' use that provides comprehensive information regarding a hazardous chemical pursuant to OSHA's Hazard Communication Standard (HCS), 29 C.F.R. § 1910.1200.

significant data gap, n – a *data gap* that affects the ability of the *environmental professional* to identify a *recognized environmental condition*.

site reconnaissance, n – in connection with the *site visit*. The *site reconnaissance* includes, but is not limited to, the *site visit* done in connection with such a *Phase I Environmental Site Assessment*.

site visit, n – the visit to the *subject property* during which observations are made constituting the *site reconnaissance*.

solid waste disposal site, n – a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term *landfill* and is also known as a garbage dump, trash dump, or similar term.

solvent, n – a chemical compound that is capable of dissolving another substance and may itself be a *hazardous substance*, used in a number of manufacturing/industrial processes including but not limited to the manufacture of paints and coatings for industrial and household purposes, equipment clean-up, and surface degreasing in metal fabricating industries.

standard environmental record sources, n – those records specified in 8.2.1 of ASTM E1527-21.

standard historical resources, n - those resources of information about the history of uses of properties specified in the Records Review Section of the *Phase I Environmental Site Assessment* report.

standard physical setting resource, n – recent *USGS 7.5 Minute Topographic Map* (or equivalent) showing contour lines and the area on which the *subject property* is located, and site-specific physical setting information obtained pursuant to agency file reviews.

standard practice, n – the activities set forth in ASTM E1527-13.

Standard sources, n – sources of environmental, physical setting, or historical records.

subject property, n – the property that is the subject of the *environmental site assessment* described in this practice.

sump, n – a pit, cistern, cesspool, or similar receptacle where liquids drain, collect, or are stored.

topographic map, n – graphic representation delineating natural and man-made features of an area or region in a way that shows their relative positions and elevations.

TSD facility, n – treatment, storage, or disposal facility.

underground injection, n – the emplacement or discharge of fluids into the subsurface by means of a well, improved sinkhole, sewage drain hole, subsurface fluid distribution system or other system, or groundwater point source.

underground storage tank (UST), n – any tank, including underground piping connected to the tank, that is or has been used to contain *hazardous substances* or *petroleum products* and the volume of which is 10% or more beneath the surface of the ground.

user, n – the party seeking to use Practice E1527 to complete an *environmental site assessment* of the *subject property.*

USGS 7.5 Minute Topographic Map, n –USGS Topographic Map, including the current US Topo 7.5-Minute Series or the historical 7.5-Minute Topographic Series, which is available from the United States Geologic Survey and showing the *subject property*.

visually and/or physically observed, v – during a *site visit* pursuant to this practice, this term means observations made by visual, auditory, or olfactory means while performing the *site reconnaissance*.

wastewater, n - water that *(1)* is or has been used in an industrial or manufacturing process, *(2)* conveys or has conveyed sewage, or *(3)* is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. *Wastewater* does not include water originating on or passing through or adjacent to a site, such as stormwater flows, that has not been used in industrial or manufacturing processes, has not been

combined with sewage, or is not directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

zoning/land use records, n – those records of the local government of areas encompassing the *subject property* indicating the uses permitted by the local government in particular zones within its jurisdiction. The records may consist of maps or written records.

Other Acronyms:

AST – Aboveground Storage Tank

AULs – *Activity and Use Limitations*

CERCLA - Comprehensive Environmental Response Compensation and Liability Act of 1980 (as amended, 42 U.S.C. § 9601 *et seq.*)

C.F.R. – Code of Federal Regulations

CREC – *Controlled Recognized Environmental Condition*

DTSC – Department of Toxic Substances Control – California EPA

EC – *Engineering Control*

EPA – United States Environmental Protection Agency

EPCRA – Emergency Planning and Community Right to Know Act (also known as SARA Title III), 42 U.S.C. §§11001-11050 *et seq.*

ERNS – emergency response notification system

ESA – environmental site assessment (different than an *environmental compliance audit*)

FR – Federal Register

HREC – *Historical Recognized Environmental Condition*

IC – *Institutional Control*

LLP – Landowner Liability Protections under the *Brownfields Amendments*

LUST – Leaking underground storage tank

NCP – National Contingency Plan

NFRAP –Sites where no further remedial action is planned under CERCLA

NPDES – National Pollutant Discharge Elimination System

NPL – National Priorities List

PCBs – Polychlorinated biphenyls

RCRA – Resource Conservation and Recovery Act (as amended, 42 U.S.C. § 6901 *et seq.*)

REC – *Recognized Environmental Condition*

SARA – Superfund Amendments and Reauthorization Act of 1986 (amendment to CERCLA)

TSDF – *hazardous waste* treatment, storage or disposal facility

U.S.C. – United States Code

USGS – United States Geological Survey

UST – Underground Storage Tank

APPENDIX H

Rebecca Selvage

From: Theresa Haywood <Theresa.Haywood@valleyair.org>
Sent: Tuesday, June 14, 2022 11:44 AM
To: Rebecca Selvage
Subject: Public Records Request C-2022-6-44 @ 1000 Calvison Parkway, Patterson

June 14, 2022

Rebecca Selvage
Condor Earth Technologies, Inc.
188 Frank West Circle, Suite 1
Stockton, CA 95206

SUBJECT: Public Records Request
LOCATION: 1000 Calvison Parkway, Patterson

Dear Rebecca Selvage:

The District has processed your request for information regarding the above mentioned site address/location. A search of the District's databases has returned no records on file for this location.

If you have any questions, or need additional information, please contact me at the number below.

Respectfully,

Theresa Haywood
Senior Office Assistant
San Joaquin Valley
Air Pollution Control District
4800 Enterprise Way
Modesto, CA 95356.8718
Phone: (209) 557.6406
Fax: (209) 557.6475
Theresa.Haywood@valleyair.org Service * Teamwork * Attitude * Respect

PRELIMINARY ENVIRONMENTAL ASSESSMENT
WORK PLAN
PROPOSED PATTERSON GARDENS ELEMENTARY SCHOOL
APN 021-027-038

1000 CALVISON PARKWAY
PATTERSON, STANISLAUS COUNTY, CALIFORNIA

Prepared for
Patterson Joint Unified School District
510 Keystone Blvd
Patterson, CA 95363
(209) 895-7700

Prepared by
Condor Earth
188 Frank West Circle, Suite I
Stockton, California 95206
(209) 234-0518

November 16, 2022
Condor Project No. 8874A
DTSC Project No. 104857
EnviroStor No. 60003392

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PRELIMINARY ENVIRONMENTAL ASSESSMENT
WORK PLAN
PROPOSED PATTERSON GARDENS ELEMENTARY SCHOOL
APN 021-027-038

1000 CALVISON PARKWAY
PATTERSON, STANISLAUS COUNTY, CALIFORNIA

November 16, 2022
Condor Project No. 8874A

1.0 INTRODUCTION

This is a work plan for conducting a Preliminary Environmental Assessment (PEA) at the Proposed Patterson Gardens Elementary School (Site) in Patterson, Stanislaus County, California. The 12.11-acre Site designated as Assessor's Parcel Number (APN) 021-027-038. The Site is located at 1000 Calvison Parkway, Patterson, Stanislaus County, California and is under consideration by Patterson Joint Unified School District (District) for school site development (Figures 1 through 3, **Appendix A**). Condor Earth (Condor) will perform the PEA at the request of the District.

The objective of the work described in this work plan is to evaluate potential contamination issues and contaminant exposure levels associated with historical agricultural land use practices at the Site. This work plan was developed using information contained in the Department of Toxic Substances Control (DTSC) *Preliminary Endangerment Assessment Guidance Manual*, dated January 1994 (Revised, October 2015), the *Interim Guidance for Sampling Agricultural Properties (Third Revision)*, dated April 30, 2008, and Site-specific DTSC guidance. This work plan includes Site background information, health and safety requirements, and descriptions of the proposed fieldwork, laboratory analyses, and human health screening evaluation methods.

2.0 PROJECT BACKGROUND

The District is seeking matching funds from the State of California to construct a new school on the Site. Pursuant to regulatory requirements, DTSC approval of the Site is required and the District entered into an Environmental Oversight Agreement with DTSC to oversee the PEA process. The purpose of the PEA is to determine whether a release or threatened release of hazardous substances may pose a threat to human health or the environment.

2.1 SITE DESCRIPTION

The Site is located at 1000 Calvison Parkway in Patterson, California and is shown on the Patterson, California, U.S. Geological Survey (USGS) 7.5-Minute Topographic Map, dated 2018, in the eastern portion of Section 36, Township 5 South, Range 7 East of the Mount Diablo Base and Meridian, at approximately North Latitude 37.4575 and West Longitude -121.1422.

The Site is located in the northern portion of the San Joaquin Valley in the City of Patterson. Downtown Patterson is located approximately 1.1 miles northeast of the Site. Calvison Parkway adjoins the northern Site boundary, Ward Avenue adjoins the eastern Site boundary, and Wolfpack Court adjoins the western Site boundary. The Delta-Mendota and California Aqueducts are located approximately 1.1 and 1.5 miles southwest of the Site and Interstate 5 is located approximately 1.5 miles southwest of the Site. Highway 33 and the Southern Pacific Railroad are located approximately 1.1 miles northeast of the Site. The San Joaquin

River is approximately 4.5 miles northeast of the Site. The current owner of the Site is Patterson Unified School District. The Site is currently vacant and without any physical structures. The new school is planned to accommodate 800 students in 32 classrooms. The contact person for the District is Michelle Spragg, Construction Program Consultant.

2.2 SITE BACKGROUND

The Site comprises 12.11 acres of agricultural land. The Site and adjacent properties were historically used as agricultural land from the early 20th century until the early 2000s. Agricultural uses of the Site included orchards, irrigated row crops, and feed crops. The Site is vacant and unpaved, with no existing or previous structures. Based on review of publicly available information, none of the properties listed in the environmental database search appear to pose a risk to the Site and no nearby or on-Site sources of contamination were identified that would pose a subsurface vapor intrusion risk to future occupants of the Site.

2.2.1 Condor Environmental Site Assessment (Phase I ESA)

Condor prepared a *Phase I Environmental Hazards Assessment Report* (Phase I ESA) dated June 29, 2022 per ASTM E 1527-21 requirements. The Site and adjacent properties were historically used as agricultural land from the early 20th century until the early 2000s. Agricultural uses of the Site included orchards, irrigated row crops, and feed crops. The Site is vacant and unpaved, with no existing or previous structures. Based on review of publicly available information, none of the properties listed in the environmental database search appear to pose a risk to the Site and no nearby or on-Site sources of contamination were identified that would pose a subsurface vapor intrusion risk to future occupants of the Site.

Additional services included the review of other information resources. Based on historical use review, file review, and the Site reconnaissance, the following information was obtained:

- There are no railroad tracks within 1,500 feet of the Site (the nearest are 5,600 feet northeast).
- There are no major roadways within 1,500 feet of the Site (the nearest is one mile northeast).
- There are 115kV (single phase) electrical transmission lines located along the southeastern portion of the Site along Ward Avenue operated by PG&E. There are no other high voltage electrical transmission lines within 0.5 mile of the Site.
- There are no high-pressure pipelines within 1,500 feet of the Site. Natural gas transmission lines are located less than 0.5 mile from the Site (the nearest is 0.4 miles north).
- According to DOGGR, no active gas or oil wells are located within 0.5 mile of the Site (the nearest well is over 8,000 feet southwest of the Site), and the Site is not within a known oil or gas field.
- According to information received from SJVAPCD, no hazardous air emissions facilities were identified within 0.25 mile of the Site.
- There are no active airports within 2 nautical miles of the Site (the nearest is 2.6 nautical miles).
- According to published geologic maps, the nearest ultramafic rocks are approximately 9 miles west of the Site in Del Puerto Canyon but not hydraulically connected to the Site. Therefore, naturally occurring asbestos (NOA) is not likely present and does not appear to pose a risk to the Site.

It was Condor's opinion that the past agricultural use and likely historical application of agricultural chemicals to the Site constitutes a *recognized environmental condition* pursuant to the ASTM E 1527-21. Agricultural chemicals, including organochlorine pesticides (OCPs) have been extensively used in the Central Valley and are likely residual in the soil.

It was Condor's opinion that there are no factors relating to the Site that could be considered *historical or controlled recognized environmental conditions* pursuant to the ASTM Standard and there are no significant data gaps.

2.2.2 DTSC Review and PEA Required Determination

DTSC reviewed Condor's Phase I ESA on September 15, 2022 during the PEA Scoping meeting and concurred with Condor's findings that *recognized environmental conditions* include the potential presence of pesticides and metals in the soils from agricultural-chemical use; therefore, OCPs and arsenic are considered constituents of potential concern (COPC).

Additionally, according to Condor's Phase I ESA published geologic maps, the nearest ultramafic rocks are approximately nine (9) miles west of the Site in Del Puerto Canyon but not hydraulically connected to the Site. It was Condor's opinion that NOA is not likely present and does not appear to pose a risk to the Site. DTSC concurred with Condor's opinion during the PEA Scoping meeting on September 15, 2022. As a result, NOA is not a COPC.

3.0 SCOPE AND OBJECTIVES

This section includes a description of proposed soil sampling plan, procedures, and the proposed health and safety procedures.

3.1 CONCEPTUAL SITE MODEL

The conceptual site model diagram is presented in **Appendix B**. All soil pathways for humans discussed in the DTSC PEA Guidance Manual will be evaluated for residential exposure as mandated by DTSC for school assessment. The primary chemicals of potential concern are OCPs and arsenic in surficial soil. Exposure routes are ingestion, dermal absorption, and inhalation. Possible "Site Resident" receptors include future School site occupants (staff and students) and possible "Site Worker" receptors are construction workers.

3.2 DATA QUALITY OBJECTIVES

The objective of the data quality is to assess human health risk at chemical concentrations at or below appropriate screening levels. The quantity and quality of the data will be at acceptable and appropriate quantities to evaluate the potential health risks of contaminants at the Site. For this PEA, the quantity of samples and laboratory detection limits will be in accordance with the current DTSC guidance cited in Section 1.0. Laboratory detection limits and method detection limits are presented in **Appendix B**.

3.3 SAMPLING STRATEGY AND RATIONALE

The soil sampling plan described in this section is based on information contained in the DTSC guidance documents previously cited in Section 1.0. Proposed sample designations and locations are shown in Figure 3, **Appendix A**. The Site will be evaluated for OCPs and arsenic.

One sampling scheme will be employed to investigate the following environmental concerns: hand-augered soil samples in the agricultural field to evaluate OCPs and arsenic where potential presence of pesticides and metals may exist in the soils from ag-chemical use. This includes background sampling for establishing background arsenic levels.

3.3.1 Number, Type, and Analyses of Samples

A total of 28 soil samples are proposed to be collected and analyzed for various constituents in specific areas of the Site. Additional samples may be collected in consultation with DTSC at the time of the fieldwork. The general sample locations, sample types, and associated analyses are listed in Table 1 in Section 3.3.1.1. Quality control samples are presented at the end of Section 3.3. The laboratory analytical methods and reporting limits are presented in **Appendix B**.

3.3.1.1 Agricultural Field Sampling

The agricultural field is approximately 12.11 acres of relatively flat land. Twenty-four (24) sampling locations are evenly spaced across the Site with four (4) background samples near each corner of the Site (Figure 3, **Appendix A**).

Surface soil samples will be collected from the 24 locations at a depth of 0-0.5 feet below ground surface (bgs) using stainless steel hand sampling equipment. The analytical laboratory will conduct subsequent compositing at a 4:1 ratio for OCP analyses by EPA Method 8081A. Six (6) of the 24 samples will be analyzed discretely for arsenic by EPA Method 6020.

Four (4) background samples are to be collected near each corner of the property at a depth of 4.5-5.0 feet bgs to be analyzed for background conditions of arsenic by EPA Method 6020 (Table 1, below). Surface soils and soils at 4.5 feet bgs will be verified by a qualified professional or by a qualified individual under the direct supervision of a registered professional as being of the same or similar geologic formations.

Table 1 – Sampling and Analyses – Agricultural Field

Location	Depth	Number of Samples	Sampling Type	Analytes	EPA Methods
Agricultural Field	0-0.5 feet bgs	24 Soil (surface)	Composite 4:1 (6)	OCPs	8081A
			Discrete (6)	Arsenic	6020A
Background	4.5-5.0 feet bgs	4 Soil (subsurface)	Discrete (4)	Arsenic	6020A

bgs: below ground surface. OCPs: Organochlorine pesticides.

3.3.1.2 QA/QC Samples

A total of 28 soil samples will be collected using hand-sampling equipment. The sampling will be conducted using stainless-steel hand augers and hand trowels which will require field decontamination. Two (2) duplicate analyses are proposed for quality assurance/quality control (QA/QC) per the DTSC PEA Guidance, and one (1) equipment blank (water) will also be collected. The two (2) duplicate analyses will necessitate collection of four (4) duplicate soil samples, one of which will be analyzed for discretely for arsenic and composited 4:1 for OCPs. Additional QA/QC analyses may be conducted in consultation with DTSC. Table 2, below, summarizes the proposed QA/QC sampling plan. Please see Section 4.0 for additional discussion.

Table 2 – Quality Control Sampling and Analyses

Location	Depth	Number of Samples	Sampling Type	Analytes	EPA Methods
Agricultural Field	0-0.5 feet bgs	4 Soil (surface)	Composite 4:1 (1)	OCPs	8081A
			Discrete (1)	Arsenic	6020A
Equipment Blank	N/A	3 Water (equipment blank)	Discrete (3)	OCPs	8081A/ 8082
				Arsenic	6020A

N/A = Not Applicable. bgs: below ground surface. OCPs: Organochlorine pesticides.

3.4 FIELD ACTIVITIES: HEALTH AND SAFETY REQUIREMENTS

Prior to initiating fieldwork at the Site, all field personnel will familiarize themselves with the Site-specific health and safety plan. The health and safety plan pertain to field activities and includes information such as potential hazards encountered at the Site, personal protective equipment, and directions and telephone numbers to the nearest hospital. A copy of the site-specific health and safety plan is included in **Appendix C**. All personnel working at the Site will have completed 40 hours of classroom training and 24 hours of supervised field training concerning hazards that may be encountered at hazardous waste sites. Additionally, all Condor field personnel working at the Site will participate in a medical monitoring program.

4.0 FIELD OPERATIONS

4.1 SAMPLING METHODS

4.1.1 Soil Sampling Using Hand Equipment

Hand auger borings will be advanced using a stainless-steel hand auger at the designated sampling locations indicated on Figure 3, **Appendix A**. Surface samples may also be collected using stainless-steel trowels. Exact sample locations may be adjusted in consultation with DTSC. When the hand auger reaches the specified sample depth, stainless steel sampling equipment will be used to collect soil from the bottom of the auger into laboratory-supplied glass sample containers. Observations will be made to determine odor or soil staining during sampling activities. Each sample container will be immediately sealed, labeled, and placed in chilled coolers.

4.1.2 Equipment Blanks

Following soil sample collection of approximately 10 samples collected with hand-sampling equipment, an equipment blank rinsate sample (equipment blank) will be collected by running deionized water through the decontaminated sampling equipment and collecting the water in appropriate sample containers. The equipment blank samples will be analyzed for the respective analytes depending on the collection area.

4.2 SURVEYING

Sample locations will be recorded on Site maps in the field based on measurements relative to existing Site features. In some instances, a hand-held global positioning system (GPS) device may be used to capture coordinates.

4.3 DECONTAMINATION

4.3.1 Soil Sampling Using Hand Equipment

Prior to use at each sampling location, the non-dedicated sampling equipment will be decontaminated in the field by washing in deionized water and non-phosphate detergent, followed by double rinsing in deionized water.

4.4 WASTE MANAGEMENT

Excess soil will be returned to sample boring locations. Decontamination fluids will be disposed of on vegetated areas of the Site and not poured into storm drains.

4.5 SAMPLE HANDLING

4.5.1 Sample Containers

Laboratory-supplied glass jars will be utilized for containing soil samples collected on Site. Laboratory-supplied amber 1-liter containers will be used for collecting equipment rinsate samples.

4.5.2 Sample Volumes and Preservation Requirements

For the laboratory analyses required, up to 40 grams of sample are needed. Samples will be placed in chilled coolers immediately upon collection, labeling, and sealing. Coolers will be chilled to ≤4° Fahrenheit and maintained chilled until arriving at the laboratory. A maximum 14-day hold time applies to organic constituent analytes (OCPs). Samples will be analyzed within EPA-recommended hold times. Equipment blank samples will be preserved in the field using 250 milliliter (mL) bottles with HNO3 and 43 mL amber VOA and will be analyzed by the laboratory within 7 days of sample receipt.

4.5.3 Sample Identification

Samples will be labeled according to either collection tool type and depth, or sample type. For example, each sampling scheme will begin with an abbreviation as follows: hand augered samples will be labeled HA for hand auger, followed by a number, and samples will be labeled by depth in feet bgs. For example, a sample from the agricultural field boring number one collected at 0 to 0.5 feet bgs will be labeled HA-1-0.5. If the sample is collected to obtain background data, that sample will be labeled with the abbreviation BG for background followed by a number and the depth the sample was collected. For example, if a background sample number one was collected at 5.0 feet bgs, it will be labeled BG-1-5.0.

4.5.4 Packaging and Shipping

Samples will be packaged in chilled coolers to avoid breakage in transit. Either a laboratory courier will pick up the samples from Condor or a Condor technician will directly deliver them to the analytical laboratory.

4.5.5 Field Quality Control

QA/QC procedures will be employed in both the field and by the analytical laboratory. Field QA/QC samples include equipment blank samples and duplicate soil samples.

4.5.5.1 Equipment Blank Rinsate Samples

An equipment blank sample will be collected from the final water rinsed over non-dedicated hand-sampling equipment after decontamination activities have been performed, at a frequency of once for every approximately 10 samples to be analyzed. The equipment blank will be collected from decontaminated sampling equipment such as the hand auger bits and the stainless-steel spoon/trowels. To collect an equipment blank sample, deionized water will be poured over and through the decontaminated equipment and will be collected directly into laboratory-supplied containers. Equipment blank water samples will be stored and processed in the same manner as the soil samples.

4.5.5.2 Field Duplicate Samples

Duplicate soil samples will be collected in the same manner as primary counterparts to evaluate the data quality generated by the analytical laboratory and the repeatability of results. A total of two (2) duplicate surface soil samples will be collected for QA/QC and analyzed for the same constituents as their primary counterparts. One duplicate sample will be collected and analyzed for arsenic and one duplicate sample will be collected and analyzed for OCPs.

4.5.6 Sample Custody

Upon completion of the fieldwork, the soil samples and the equipment blank sample will be delivered under chain-of-custody procedures to a laboratory accredited by the State Water Resources Control Board's Environmental Laboratory Accreditation Program (ELAP). All submitted samples will be archived and refrigerated by the laboratory. All samples will be extracted by the laboratory within Environmental Protection Agency (EPA) recommended holding times for requested analytical methods. The EPA-recommended holding times for sample analyses are 14 days. The laboratory turnaround time will be 10 business days. Example copies of a chain-of-custody and sample labels are included in **Appendix D**.

4.5.7 Background Samples

Four (4) background samples will be collected from each corner of the agricultural field at a depth of 4.5-5.0 feet bgs. These samples will be used to compare to arsenic levels within the property boundary.

If warranted, additional arsenic data will be included in the PEA from other PEAs conducted within the vicinity of the District. These data will only include sampled soil that remains on the various sites. The soil types at the other local school sites where PEAs have been completed [Patterson High School Expansion (DTSC site code #104810), El Solyo Elementary (#104811), Proposed Special Education and Alternative Education School Site (#104635), Walnut Middle School (#104484), and Walnut Middle School Addition (#104484)] are identical to the soil types at the Site and all share the same geologic provenance.

5.0 RECORD KEEPING

- Chain-of-custody forms will be used when submitting samples to the laboratory and a copy of the form will be retained after samples are relinquished. A final copy of the chain-of-custody form will be included in the final laboratory analytical report.

- Daily information regarding soil sample collection will be recorded in a field logbook or 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.

- A photographic log will be kept documenting field activities during execution of the PEA field work.

6.0 PUBLIC PARTICIPATION AND REPORTING

The District has elected to conduct the public review of the PEA separate from the public review of the California Environmental Quality Act (CEQA) documents (Option A) and concurrently with DTSC review of the draft PEA Report. Upon DTSC approval of this work plan, public notices of the planned fieldwork will be sent to all neighbors within visibility of Site activities and notices will be posted around the Site in plain view at least three days prior to the initiation of fieldwork. Notification will also be provided to DTSC 48 hours in advance of any planned fieldwork.

A PEA Report will be prepared for submittal to the DTSC describing the results of the investigation. The *Preliminary Endangerment Assessment Guidance Manual* will be used for final evaluation of the Site. At a minimum the report will include: (1) an executive summary, (2) introduction, (3) Site description, (4) background information, (5) apparent problem statement, (6) environmental setting, (7) sampling activities and results, (8) human health screening evaluation, and (9) conclusions and recommendations.

6.1 FIELDWORK NOTICE

In accordance with Education Code section 17120.1(b), the District must provide written notice to residents and businesses in the immediate area, in a DTSC approved form, at least five days in advance of field investigation activities. In addition, the District shall post the fieldwork notice at various locations around the Site, visible from public rights-of-way. The intent of this requirement is to provide notice of fieldwork such as sampling and other environmental data collection activities to anyone who lives or works in line-of-sight to the Site. A copy of the fieldwork notice is included in **Appendix E**.

6.2 PEA REPORT

A PEA Report will be prepared for submittal to the DTSC describing the results of the investigation. The *Preliminary Endangerment Assessment Guidance Manual* will be used for final evaluation of the Site. At a minimum the report will include: (1) an executive summary, (2) introduction, (3) Site description, (4) background information, (5) apparent problem statement, (6) environmental setting, (7) sampling activities and results, (8) human health screening evaluation, and (9) conclusions and recommendations. The laboratory analytical report will also be attached.

6.2.1 Laboratory Analytical Report

The PEA Report will include signed copies of the laboratory analytical report. For the OCP analyses, the dilution factors will be included along with the final analytical results. Laboratory QA/QC procedures include the following:

- Laboratory analyses will be performed within the required holding time for samples submitted for initial analysis and for samples being held for analysis based on the results of the initial analyses. Equipment blank samples will be preserved in the field using 250 milliliter (mL) bottles with HNO3 and 43 mL amber VOA and will be analyzed by the laboratory within 7 days of sample receipt.

- Appropriate minimum reporting limits will be used for each analysis. The reporting limits will be sufficient for the Human Health Risk Assessment (HHRA). Laboratory reporting limits are included in **Appendix B**.

- The laboratory will report the following information for each sample delivery group:
  - a discussion of how QA/QC criteria were met by the laboratory
  - a discussion of hold times
  - matrix spike/matrix spike duplicate samples
  - relative percent difference
  - method blank data
  - surrogate recovery, instrumental tuning, and calibration data
  - exceptions or data flags
  - 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)

The data will be qualified in accordance with the National Functional Guidelines (EPA540/R-94/012 and -013). The laboratory Quality Assurance Procedures (QAP) manual or equivalent documents are maintained by the laboratory and are available upon request.

6.2.2 Human Health Risk Screening Methods

The PEA Report will include human health risk screening methods presented in the most recent DTSC PEA Guidance Manual. There are four components to the human health screening evaluation: exposure pathways, exposure concentrations of chemicals of concern, toxicity values, and risk characterization.The PEA Report will also include Human and Ecological Risk Office (HERO) HHRA Note 4 (dated May 29, 2022) in addition to DTSC's Preliminary Endangerment Assessment (PEA) Guidance Manual as sources for the screening level risk assessment methodology.

6.2.2.1 Exposure Pathways and Media of Concern

The Conceptual Site Model (CSM) presented in **Appendix B** will be used to develop a final CSM in the PEA Report and will show potentially complete exposure pathways. If there are several distinct areas of contamination, presentation of separate CSMs for each area may be necessary. If the pathways of exposure are the same for each area, then one CSM is sufficient and a statement to that fact will be included. A statement supporting the approach that the default exposure pathways embedded in the screening levels are considered complete and reasonable to assume at the Site.

6.2.2.2 Exposure Concentrations and Chemicals

For each area of contamination, separate tables will be included that identify the chemicals of concern, their physical constants, and the concentrations in each medium that will be used as input for the screening evaluation. The exposure point concentration for COPC will be the maximum detected concentration for each COPC. If a particular chemical is to be excluded from the evaluation, a rationale will be provided. Background arsenic data will be included in this section.

6.2.2.3 Human Health Screening Levels

The table of human health screening levels provided in **Appendix B** will be used to perform the human health screening evaluation. The lower of the most recent DTSC HHRA Note 3 (June 2020 – Revised May 2022), or the most recent USEPA Regional Screening Levels (May 2022 RSLs) will be used. The table will identify each chemical as being evaluated as a carcinogen, non-carcinogen, or both. Arsenic will be evaluated against the background arsenic data set in accordance with DTSC guidance.

6.2.2.4 Toxicity Values

Toxicity values are inherent in the derivation of screening levels for each chemical. Screening levels included in the table in **Appendix B** will be used.

6.2.2.5 Risk Characterization Summary

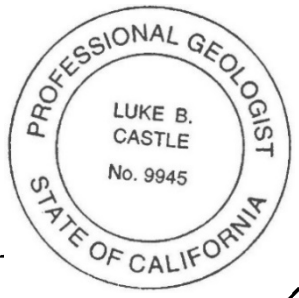
Two separate tables comparing the maximum detected concentration of each chemical of concern to its corresponding screening level will be presented: one for carcinogens and one for non-carcinogens. For carcinogens, a ratio of the detected chemical to its corresponding screening level will be calculated and multiplied by 10^{-6}. A summation of the ratios will be presented representing the cumulative risk from all carcinogens detected at the Site. The summed ratio for non-carcinogens representing the cumulative Hazard Index (HI) will be included in the non-carcinogens table. Conclusions regarding the screening evaluation determination will be included.

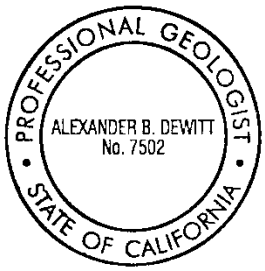
7.0 SCHEDULE

A project schedule is included in **Appendix F**. The field activities outlined above can be completed within two weeks (weather permitting). Condor can provide a draft PEA report approximately two weeks following receipt of the laboratory analytical results. If you have any questions or require additional information, please call Luke Castle at (209) 938-1046.

Respectfully submitted,

CONDOR EARTH





November 16, 2022

Luke Castle, PG No. 9945 — November 16, 2022
Associate Geologist

Alexander B. Dewitt, PG No. 7502
Vice President, Environmental Services

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REFERENCES

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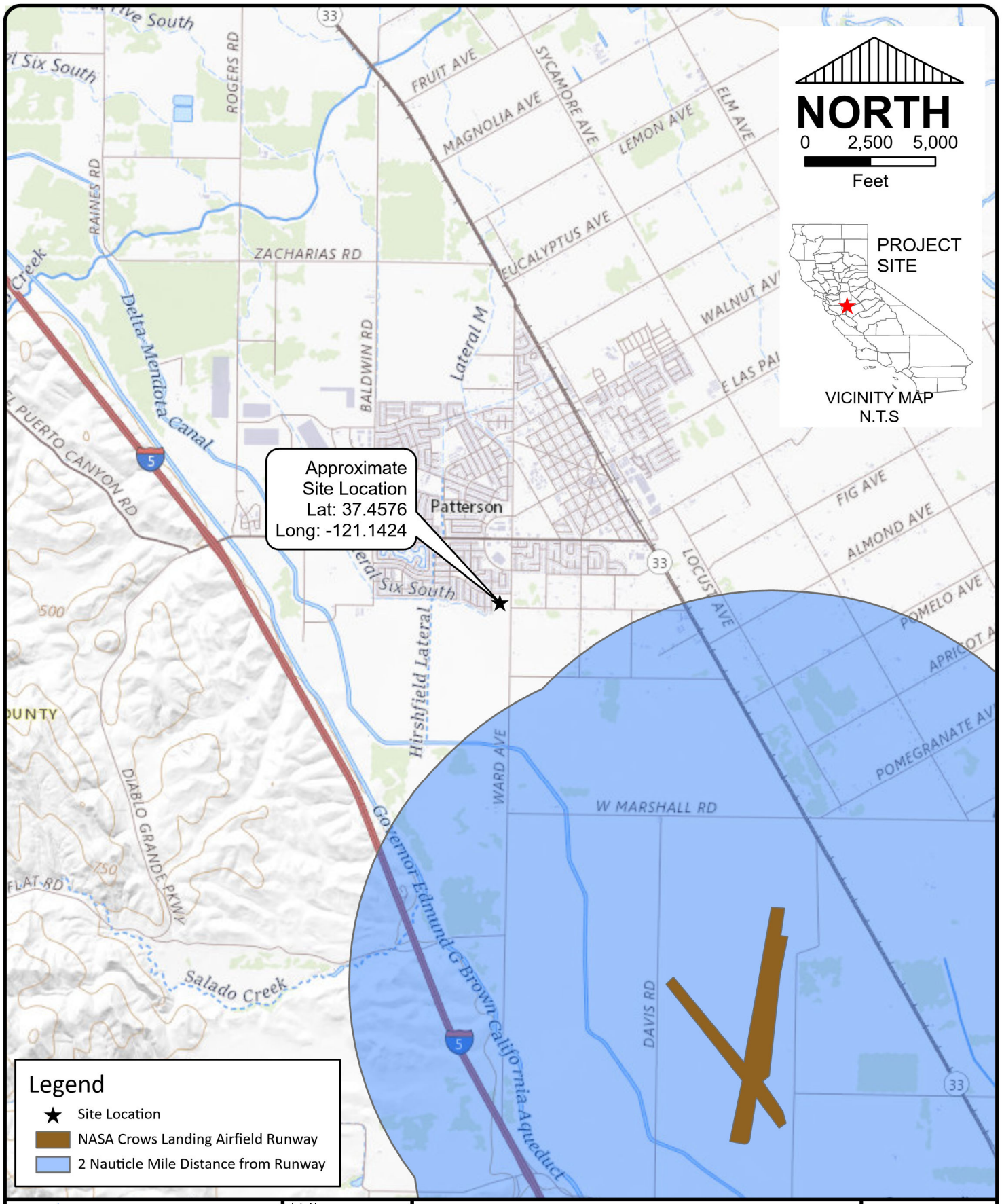
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APPENDIX A



CONDOR EARTH
21663 Brian Lane
P.O. Box 3905
Sonora, CA 95370
(209) 532-0361
fax (209) 532-0773
www.condorearth.com

Job No.	Date	Scale	Drawn	Chk'd
8874A	16 Sep 2022	AS SHOWN	JW	LC

VICINITY MAP
AG FIELD SAMPLING SCHEME
PATTERSON GARDENS SCHOOL SITE
PATTERSON JOINT UNIFIED SCHOOL DISTRICT
PATTERSON, CA

FIGURE 1

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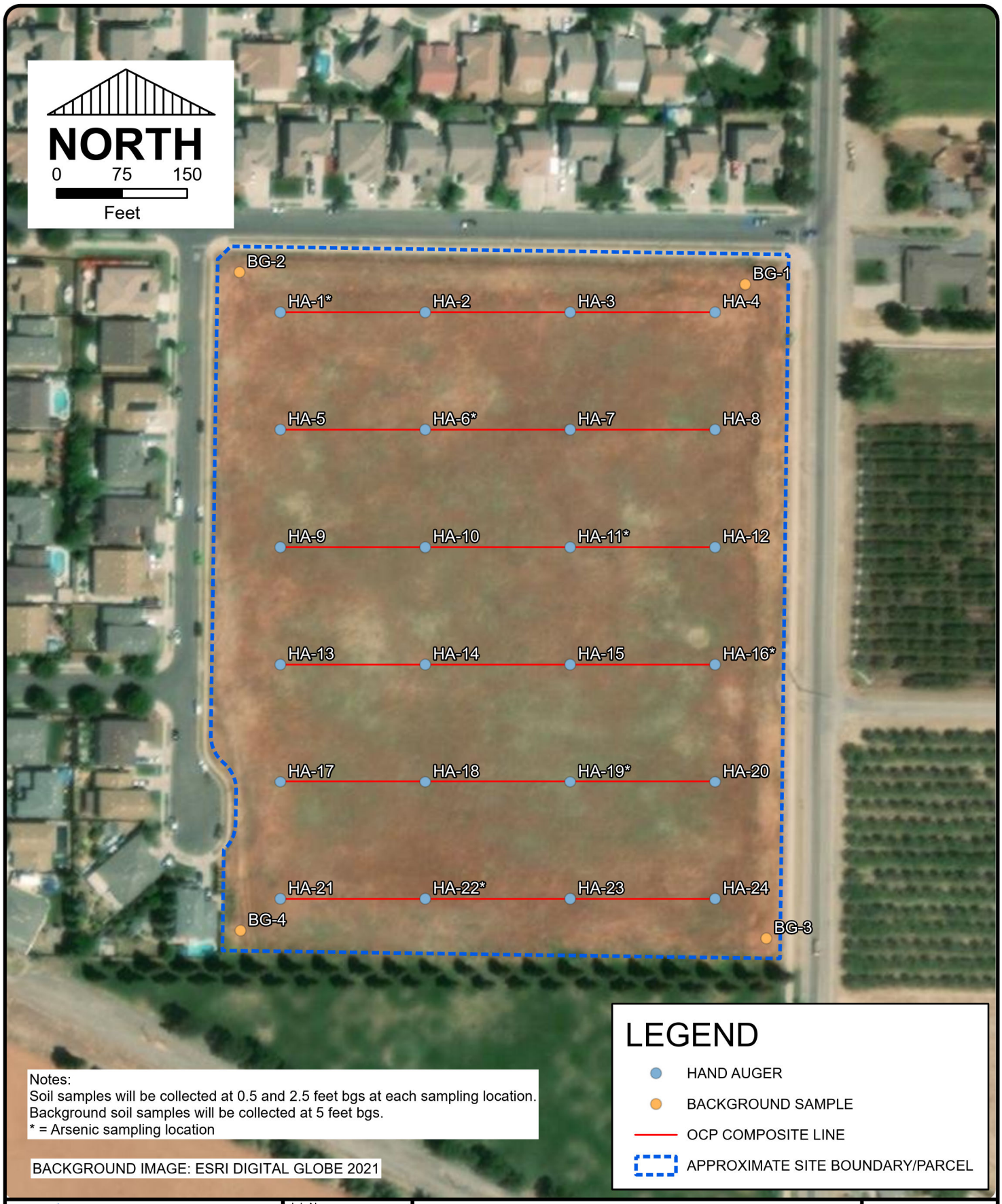
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Date	16 Sep 2022
Scale	AS SHOWN
Drawn	JW
Chk'd	LC

SITE MAP
AG FIELD SAMPLING SCHEME
PATTERSON GARDENS SCHOOL SITE
PATTERSON JOINT UNIFIED SCHOOL DISTRICT
PATTERSON, CA

FIGURE 2

8874A_PEA.aprx

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Notes:
Soil samples will be collected at 0.5 and 2.5 feet bgs at each sampling location.
Background soil samples will be collected at 5 feet bgs.
* = Arsenic sampling location

BACKGROUND IMAGE: ESRI DIGITAL GLOBE 2021

LEGEND

- HAND AUGER
- BACKGROUND SAMPLE
- OCP COMPOSITE LINE
- APPROXIMATE SITE BOUNDARY/PARCEL

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AG FIELD SAMPLING SCHEME
PATTERSON GARDENS SCHOOL SITE
PATTERSON JOINT UNIFIED SCHOOL DISTRICT
PATTERSON, CA

FIGURE 3

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APPENDIX B

Proposed Elemantary School
1000 Calvison Parkway
Patterson, CA
Project Number 8874A

Analytical Methods, Laboratory Detection Limits, and Screening Levels - Organochlorine Pesticides and Arsenic (mg/kg)

METHOD	CONSTITUENT	METHOD DETECTION LIMIT (mg/kg)	REPORTING LIMIT (mg/kg)	DTSC-Screening Levels (mg/kg) cancer	DTSC-Screening Levels (mg/kg) noncancer	
8081A*	Aldrin	3.9E-04	1.0E-03	3.9E-02	2.3E+00	N3
	alpha-BHC	4.9E-04	1.0E-03	8.6E-02	5.1E+02	R
	beta-BHC	2.7E-04	1.0E-03	3.0E-01	NL	R
	delta-BHC	3.3E-04	1.0E-03	NL	NL	
	gamma-BHC	3.3E-04	1.0E-03	5.7E-01	7.1E-01	R
	Chlordane (technical)	1.2E-02	2.5E-02	1.7E+00	3.5E+01	N3
	p,p-DDD	4.1E-04	1.0E-03	2.3E+00	1.9E+00	N3
	p,p-DDE	2.9E-04	1.0E-03	2.0E+00	2.3E+01	N3
	p,p-DDT	3.9E-04	1.0E-03	1.9E+00	3.7E+01	N3
	Dieldrin	3.8E-04	1.0E-03	3.4E-02	3.2E+00	N3
	Endosulfan I	3.5E-04	1.0E-03	NL	4.5E+02	N3
	Endosulfan II	3.3E-04	1.0E-03	NL	NL	
	Endosulfan sulfate	4.0E-04	1.0E-03	NL	3.8E+02	N3
	Endrin	3.8E-04	1.0E-03	NL	1.9E+01	N3
	Endrin aldehyde	4.4E-04	1.0E-03	NL	NL	
	Heptachlor	3.0E-04	1.0E-03	1.3E-01	3.8E+01	N3
	Heptachlor epoxide	3.0E-04	1.0E-03	7.0E-02	9.9E-01	N3
	Methoxychlor	4.5E-04	1.0E-03	NL	3.2E+02	N3
	Toxaphene	3.3E-02	2.0E-02	4.5E-01	5.7E+00	N3
6020*	Arsenic**	1.1E-01	5.0E-01	4.1E-01	1.1E-01	N3

mg/kg: milligrams per kilogram, parts per million

NL: Not listed

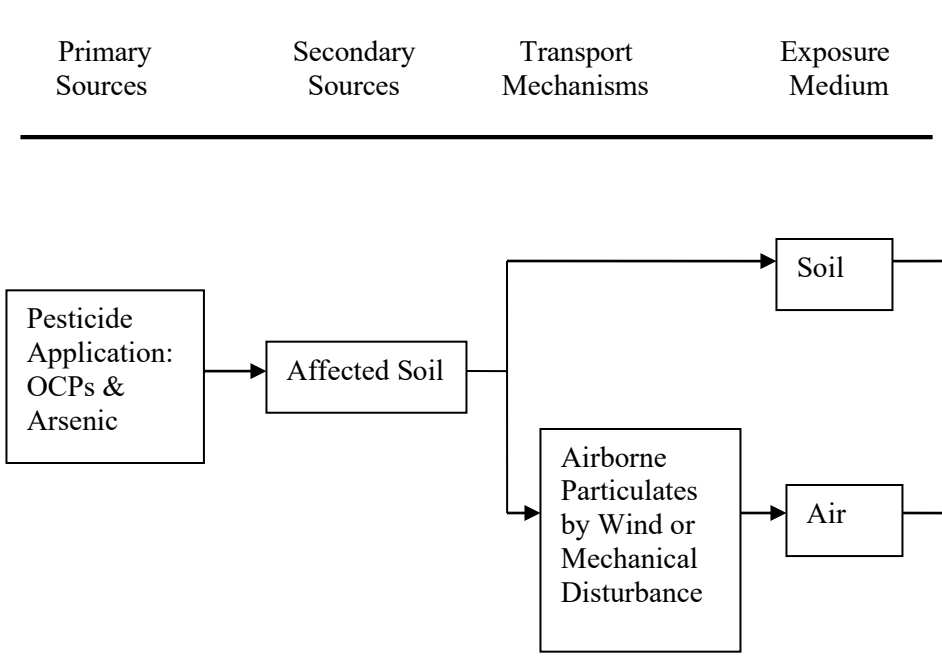
c = cancer; n = noncancer

R = US EPA Regional Screen Levels (RSL) resident Soil Table May 2022 Update. N3 = Human Health Risk Assessment (HHRA) Note 3, June 2020 Update - revised May 2022

* Reporting limits provided by McCampbell Analytical of Pittsburg, CA (2022).

** 2 The screening numbers for arsenic are for contamination resulting from human activity. Concentrations of naturally occurring arsenic may be far above the screening number. When levels of arsenic at a site are a concern, the agency with authority over remediation decisions should be consulted. DTSC recommends site specific background arsenic comparison.

CONCEPTUAL SITE MODEL



Exposure Route	Receptor			
	Human		Biota	
	Residents	Site Work	Terrestrial	Aquatic
Ingestion	**X**		**X**	
Inhalation				
Dermal Contact	**X**	**X**	**X**	
Ingestion				
Inhalation	**X**	**X**	**X**	
Dermal Contact				

APPENDIX C

SITE SPECIFIC HEALTH AND SAFETY PLAN

SITE: Proposed Patterson Gardens Elementary School Site, Patterson, CA
DATE: September 29, 2022
CET# 8874A
PROJECT MANAGER: Luke Castle, Associate Geologist
CLIENT: Patterson Joint Unified School District
CLIENT CONTACT:
Michelle Spragg
PO Box 77981
Stockton, CA 95267
(209) 603-5603

PREPARED BY:
CONDOR EARTH
188 Frank West Circle, Suite I
Stockton, CA 95206
Phone: (**209) 234-0518**
FAX: (209) 234-0538
Division Manager: Alex Dewitt
E-mail: adewitt@condorearth.com
Cellular: (209) 601-4631

CORPORATE HEALTH AND SAFETY OFFICER:
Ron Skaggs
188 Frank West Circle, Suite I
Stockton, CA 95206
Phone: (**209) 938-1040**
FAX: (209) 234-0538
Cellular: (209) 601-2460
E-mail: rskaggs@condorearth.com

SITE SAFETY OFFICER:
Luke Castle
Cellular: **(209) 513-7634**
E-mail: lcastle@condorearth.com

SUSPECTED CONTAMINANTS AT THE SITE:
Residual pesticides in soil
Arsenic

EMERGENCY CONTACT INFORMATION
In the event of a major on-site medical emergency the Site Safety Officer shall call 911 for emergency medical services.

Any Emergency 911
Location of Nearest Telephone:
1. Condor vehicle

Nearest Medical Treatment Center
Emanuel Medical Center: Emergency Room
825 Delbon Ave
Turlock, CA 95382
Phone: **(209) 664-2790**
*****Street map with directions to the hospital is attached.

Local Contacts
1. Patterson Fire Dept. (**209) 895-8130**
2. Patterson Police Dept. (**209) 892-5071**
3. Stanislaus County Public Health Services
   (209) 558-7700
   820 Scenic Drive
   Modesto, CA 95350

State Contacts
1. Cal/OSHA (Modesto Office)
   (209) 545-7310
   4206 Technology Dr #3
   Modesto, CA 95356
2. Stanislaus County Office of Emergency Services
   (209) 552-3700

Federal Contacts
1. Environmental Protection Agency
   (866) 372-9378

SITE SAFETY SIGNATURE SHEET

The following site personnel have read the Health and Safety Procedures attached and are familiar with its provisions:

NAME (print)	SIGNATURE	DATE
Site Safety Officer		
Other Site Personnel		

Plan prepared by: _____ _____
(date)

Plan reviewed by: _____ _____
(Project Manager) (date)

Plan reviewed by: _____ _____
(Corporate Safety Officer or Assistant) (date)

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ATTACHMENTS

Map To Nearest Medical Treatment Center From The Site
Map To The Site From The Nearest Medical Treatment Center

CONDOR EARTH GENERAL HEALTH & SAFETY PLAN

1.0 INTRODUCTION

Condor Earth has adopted the following Health & Safety Plan. The purpose of this plan is to provide health and safety precautions for the initial and subsequent site visits during work operations.

All work will be done in general accordance with current OSHA regulations. A tailgate safety meeting will be held prior to commencement of work each day and a Health & Safety Plan will be discussed with and presented to all crewmembers for their signatures.

This Health & Safety Plan is limited to provisions for safe work practices related to potential exposure to unknown contaminants, as well as machinery employed during drilling operations.

2.0 GENERAL SAFETY MEASURES

All Condor personnel, subcontractors, and consultants shall adhere to the provisions of the Condor Site Safety Plan including all applicable elements of the Condor Illness and Injury Prevention Program (IIPP).

All of the above personnel who participate in fieldwork at the site will attend a safety indoctrination provided by the Condor Site Safety Officer. The Condor Site Safety Plan is maintained in this work plan. Copies of this work plan shall be available to all working units of Condor, its subcontractors and consultants.

2.1 SITE SAFETY OFFICER RESPONSIBILITIES

The Site Safety Officer shall monitor all activities of equipment and personnel at the project site. Site Safety Officer responsibilities will include the following:

1. Limiting access to the exclusion zone to authorized personnel.
2. Providing written log of on-site activities and events.
3. Notification of regulatory agencies during emergency procedures.
4. Enforcement of contaminant exposure site safety precautions.
5. Document all injuries and safety incidents.

During investigation in soils containing residual pesticide contaminants and petroleum hydrocarbons, all personnel shall undertake the following precautions, Sections 2.2 – 2.5:

2.2 COVID-19

Due to the rapidly changing nature of best practices for enhanced protect from infectious transmission of COVID-19, the recommendations provided are guidelines and should be revised as-needed at the tailgate safety meeting prior to start of field activities. Generally, the following shall be followed:

- Maintain a social distance whenever possible during the work.
- Monitor fellow workers for outward signs of symptoms of COVID-19. Workers that are sick or show other visible signs shall be sent home.
- Use gloves when passing equipment between workers.
- Wear cloth or disposable face masks when required to regularly work inside the social distance.

Follow recent guidelines provided by OSHA or other applicable regulatory body for similar work in addition to the above guidelines.

2.3 SKIN/CLOTHES PROTECTION

Disposable nitrile rubber gloves will be worn for sampling (changed after each sample).

Disposable clothing will be discarded to an appropriate storage container as necessary.

2.4 EYE PROTECTION

Safety glasses will be worn during all activities.

2.5 VEHICLE MAINTENANCE AND SAFETY

All Condor vehicles used on site during the course of work shall be equipped with a first aid kit and a dry chemical fire extinguisher (10 BC minimum rating).

All cabs are to be kept free of all non-essential items and all loose items secured.

The rated load capacity of a vehicle is **not** to be exceeded at any time or under any circumstances.

The Site Safety Officer shall review with all personnel and subcontractors the equipment inspection checklist for company vehicles. The Site Safety Officer shall also confirm that adequate water is available at the drill rig for emergency decontamination and washing in case a worker is exposed to contaminated water or soil.

Field vehicles shall park in an area that is a safe distance from operating equipment and vehicle traffic with the location approved by the Site Safety Officer. Care must be given when approaching heavy equipment. Personnel on foot should approach from a direction facing the operator and not a blind side. Eye-to-eye contact should be made before proceeding within the working limits of the operator and their heavy equipment.

3.0 PHYSICAL HAZARDS

3.1 TRIP AND SLIP PROTECTION

Good housekeeping shall be maintained at the site to prevent trip and slip hazards.

3.2 HEAT ILLNESS PREVENTION

Introduction
Condor has instituted a Heat Illness Prevention Program (HIPP) to comply with Cal/OSHA requirements as described in California Code of Regulations (CCR) Title 8 Section 3395. Please refer to Condor's IIPP for the complete HIPP. The following excerpts are intended to use as part of this Site-Specific Safety Plan and does not constitute the entire HIPP.

Provision of Water
Water is a key preventive measure to minimize the risk of heat related illnesses. Employees shall have access to potable drinking water. Where adequate drinking water is not immediately available from a plumbed system, a sufficient quantity of water shall be provided at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift. Two gallons of water shall be available per employee per eight-hour shift. Ice should be added to the water when necessary to keep the water cool. If bottled water is used, a sufficient number of water bottles shall be available to provide two

gallons of water per eight-hour shift for each employee. Individual water bottles shall be labeled with the employee's names at the beginning of the workday to ensure that each employee has two gallons of water available to drink. The water bottles shall be stored in an ice chest with ice to keep the water cool as needed.

Access to Shade
Access to rest and shade or other cooling measures are important preventive steps to minimize the risk of heat related illnesses. Shade is required to be available when the temperature exceeds 85 degrees Fahrenheit. Shade is the blockage of direct sunlight. Blockage is always sufficient when objects don't cast a shadow in the shaded area. The interior of a vehicle may be used to provide shade only if the engine is running and the air conditioner is operating. Pop-up canopies or umbrellas can be used to provide shade. Trees or other vegetation may also be used to provide shade. Employees are encouraged to take a cool-down rest in the shade for a period of no less than five minutes at a time when they feel the need to do so to protect themselves from overheating. When the temperature doesn't exceed 85 degrees Fahrenheit, shade will be provided upon an employee's request.

Weather Monitoring
The Site Safety Officer will check the weather forecast in advance of scheduled outdoor work. To the extent possible, work schedules will be planned in advance, taking into consideration whether high temperatures or a heat wave is expected. A thermometer will be used at the work site to monitor for sudden increases in temperature, and to ensure that once the temperature exceeds 85 degrees Fahrenheit, shade is made available to employees. When the temperature exceeds 95 degrees Fahrenheit, additional preventive measures such as the High Heat Procedures will be implemented.

High Heat Procedures
High heat procedures shall be implemented when the temperature equals or exceeds 95 degrees Fahrenheit. Effective communication by voice, observation, or electronic means shall be established so that employees at the work site can contact a supervisor when necessary. Condor employees should monitor each other for signs of heat illness. Employees working at isolated work sites with no other persons in the immediate area shall contact their supervisor or designee at least once every two hours by cell phone. Supervisors or their designee shall remind employees throughout the work shift to drink plenty of water, and shall observe employees for alertness and signs or symptoms of heat illness.

Responding to Symptoms of Heat Stress
When an appropriately trained and equipped first-aid provider is available at the work site, that provider can determine the appropriate response when an employee experiences possible symptoms of heat illness. When no first-aid trained person is available, any situation in which an employee is showing possible symptoms of heat illness shall require calling for emergency medical services. Employees at the work site will take immediate steps to keep the stricken employee cool and comfortable once emergency service responders have been called. When a Condor employee is working alone, they are responsible for monitoring themselves for potential symptoms of heat illness. The employee will also call their supervisor or designee at least once every two hours. The supervisor or designee will query the employee regarding the symptoms of heat illness (cramps, dizziness, headache, etc.). If the supervisor or designee believes the employee is exhibiting symptoms of possible heat illness, they will direct the employee to find shade, drink water, and call emergency medical services. If the employee doesn't call the supervisor or designee, the supervisor or designee will call the employee. If the employee can't be contacted, the supervisor or designee will call emergency medical services and request they respond to the work site.

Contacting Emergency Medical Services
At many work sites, emergency medical services can be requested by calling 911. The Site Safety Officer shall confirm that the work site is served by the 911 system prior to the start of site work. If the work site is not served by the 911 system, the Site Safety Plan shall include phone numbers for the fire department and nearest hospital and provide that information to the employees assigned to the work site. The co-workers of the employee exhibiting symptoms of possible heat illness will call emergency medical services and provide directions to the work site. If the stricken employee is working alone, they will call and request emergency medical services, or they will call their supervisor or designee and request their assistance with calling emergency medical services.

Sun Burn
UV radiation is a hazard for outdoor workers. Unprotected exposure can damage the skin, eyes, and immune system. Outdoor workers have more accumulated lifetime exposure to the sun, receive up to 8 times more UV exposure, and have a 60 percent greater risk of developing skin cancer than indoor workers. Workers should use sunscreen or sun block to reduce their exposure to UV radiation. Several applications may be required during the course of the day to provide optimum protection.

4.0 BIOLOGICAL HAZARDS

4.1 STINGING INSECTS

Care should be exercised to avoid bees, yellow jackets, or other stinging or biting insects.

4.2 ANIMAL

High-topped boots should be worn when working in tall grass to protect against snakebite.

4.3 PLANT

Poison oak and poison ivy should be avoided when present on the site. If contact is made with poison oak or poison ivy wash the contact area thoroughly with soap and water as soon as possible after contact occurs.

5.0 CHEMICAL HAZARDS

5.1 INHALATION

Care should be exercised to avoid creating excess dust during sampling activities. Personnel will work up-wind of sampling locations.

5.2 DERMAL CONTACT

Care should be exercised to prevent contact of soil with skin. Use of gloves and disposable clothing (if necessary) will reduce skin contact with soil.

5.3 INGESTION

Eating and smoking will not be allowed near known contaminants.

6.0 TRAFFIC HAZARDS

Field activities taking place in public streets or on road shoulders shall use Caltrans approved flagging and traffic control during the duration of activities. While working in public streets with heavy traffic assume that the operator of a motor vehicle is unable to see you and keep a safe distance from moving

traffic. Keep off roadways, when practical, and away from moving traffic. Approved safety vests will be worn by all personnel when working in areas of traffic hazard.

7.0 COMMUNICATION PROCEDURES

The following standard hand signals will be used if and when required.

Hand gripping throat .....Out of air, can't breathe

Grip partner's wrist or
both hands around waist.....Leave area immediately

Hands on top of head.....Need assistance

Thumbs up .....OK, I'm all right, I understand

Thumbs down .....No, negative

8.0 EMERGENCY RESPONSE PLAN

On-site personnel will use the following standard emergency procedures. The Site Safety Officer shall be notified of any on-site emergencies and be responsible for ensuring that the appropriate procedures are followed. Emergency Procedures should be modified as required for the incident.

Personal injury: Upon notification of an injury, the Site Safety Officer will assess the nature of the injury. If the injury is in the area of the drilling equipment, the equipment shall be shut down to eliminate running equipment hazards. Equipment will remain shut down until the Site Safety Officer authorizes work to proceed. If the cause of the injury or loss of the injured person does not affect the performance of site personnel, operations may continue.

Fire/Explosion: In the event of a fire or explosion on site, the Site Safety Officer or alternate shall call 911 (the fire department) and all personnel shall be moved to a safe distance from the involved area.

Personal Protective Equipment Failure: If any site worker experiences a failure or alteration of protective equipment that affects worker's protection, that person shall immediately proceed to the nearest staging area to repair or replace the damaged equipment. The person shall not return to the work area until the protective equipment is repaired or replaced. If the equipment can not be repaired or replaced, the worker will proceed to the primary staging area specified by the Site Safety Officer or leave the site.

Other Equipment Failure: If any other equipment on site fails to operate properly, the Site Safety Officer shall be notified and then determine the effect of this failure on continuing operations on site. If the failure affects the safety of personnel or prevents completion of the work plan tasks, all personnel shall leave the work area until the situation is evaluated and appropriate actions taken.

8.1 EMERGENCY MEDICAL INFORMATION FOR SPECIFIC HAZARDS PRESENT

8.1.1 Hazard - Heat stress

Symptoms of Exposure - Acute: Dizziness, headache, nausea, dryness of the mouth, reduced mental ability, elevated body temperature, chills, clamminess.

First Aid - Move person to a shaded, cool area. Wet person down with cool water. Wetting the head with quantities of cool water will help reduce body temperature. Have person drink cool water. Seek medical attention for severe cases.

8.2.1 Hazard - Particulate inhalation

Symptoms of Exposure - Acute: Nose and throat irritation, congestion, coughing, shortness of breath, asphyxiation.

First Aid - Remove person to fresh air.

8.3.1 Hazard - Sun burn, eye burn

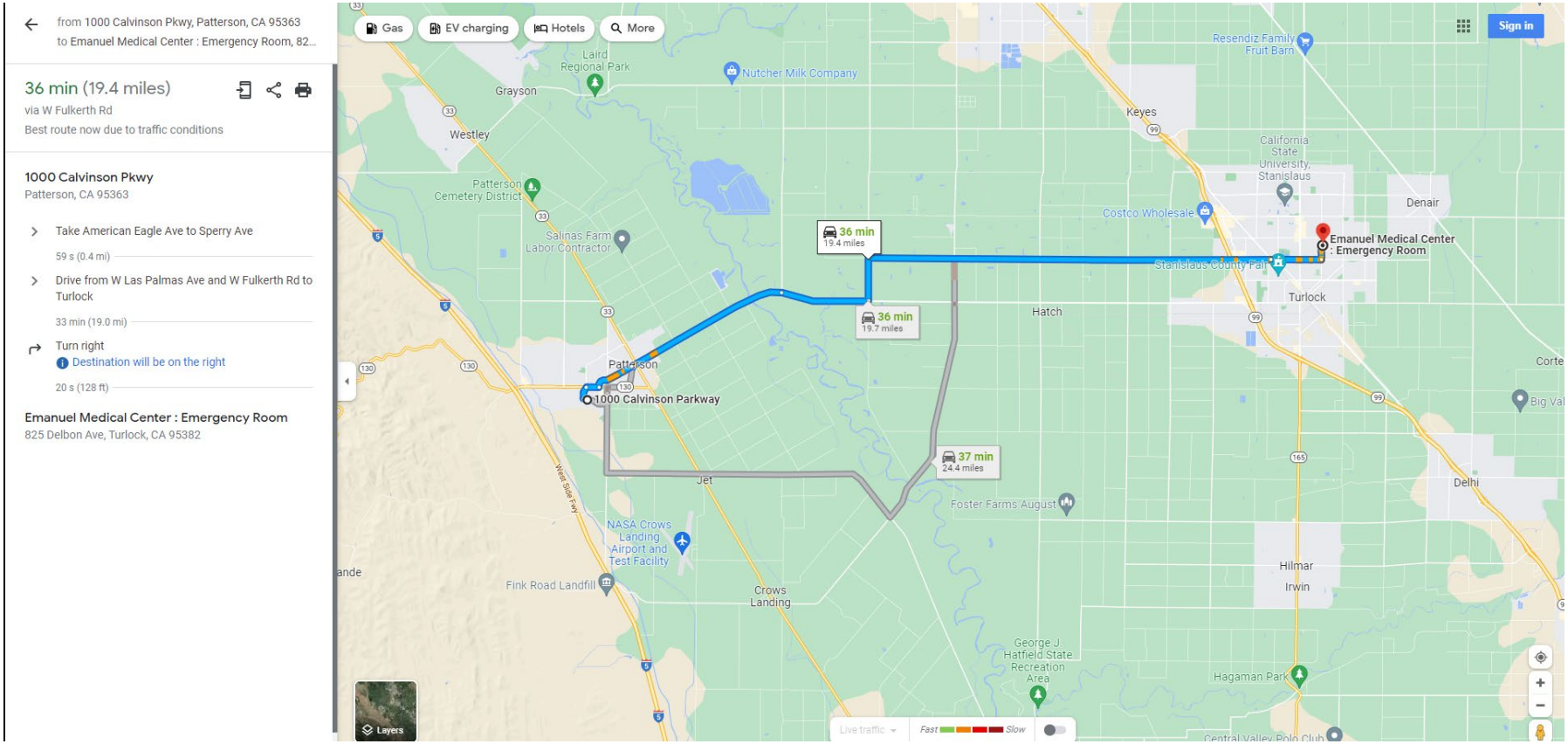
Symptoms of Exposure - Acute: Pain and discomfort of exposed area, eye irritation, leads to heat stress.

First Aid - Remove person from sunlight; flush effected area with cool, clean water. If a minor skin burn, apply first aid cream. If severe, seek medical attention.

In all on-site emergency situations, work shall not resume until:

- The conditions resulting in the emergency have been corrected.
- The hazards have been reassessed.
- The Site Safety Plan has been reviewed.
- Site personnel have been briefed on any changes to the Site Safety Plan.
- The Site Safety Officer shall critique the emergency response and follow-up.

Route to Nearest Medical Treatment Center



APPENDIX D

CONDOR EARTH TECHNOLOGIES, INC.
188 Frank West Circle, Suite I, Stockton, CA 95206

Sample ID_____
Time_____**Sampler**_____
Na2S2O3____ **4°C**___ **HCl**___ **H2SO4**____ **HNO3**_____
Other_____ **Field Filtered**_____
Wastewater - Drinking Water - Sludge - Soil - Air - Biohazard
Comments_____

CONDOR EARTH TECHNOLOGIES, INC.
188 Frank West Circle, Suite I, Stockton, CA 95206

Sample ID_____
Time_____**Sampler**_____
Na2S2O3____ **4°C**___ **HCl**___ **H2SO4**____ **HNO3**_____
Other_____ **Field Filtered**_____
Wastewater - Drinking Water - Sludge - Soil - Air - Biohazard
Comments_____

CONDOR EARTH TECHNOLOGIES, INC.
188 Frank West Circle, Suite I, Stockton, CA 95206

Sample ID_____
Time_____**Sampler**_____
Na2S2O3____ **4°C**___ **HCl**___ **H2SO4**____ **HNO3**_____
Other_____ **Field Filtered**_____
Wastewater - Drinking Water - Sludge - Soil - Air - Biohazard
Comments_____

CONDOR EARTH TECHNOLOGIES, INC.
188 Frank West Circle, Suite I, Stockton, CA 95206

Sample ID_____
Time_____**Sampler**_____
Na2S2O3____ **4°C**___ **HCl**___ **H2SO4**____ **HNO3**_____
Other_____ **Field Filtered**_____
Wastewater - Drinking Water - Sludge - Soil - Air - Biohazard
Comments_____

CONDOR EARTH TECHNOLOGIES, INC.
188 Frank West Circle, Suite I, Stockton, CA 95206

Sample ID_____
Time_____**Sampler**_____
Na2S2O3____ **4°C**___ **HCl**___ **H2SO4**____ **HNO3**_____
Other_____ **Field Filtered**_____
Wastewater - Drinking Water - Sludge - Soil - Air - Biohazard
Comments_____

CONDOR EARTH TECHNOLOGIES, INC.
188 Frank West Circle, Suite I, Stockton, CA 95206

Sample ID_____
Time_____**Sampler**_____
Na2S2O3____ **4°C**___ **HCl**___ **H2SO4**____ **HNO3**_____
Other_____ **Field Filtered**_____
Wastewater - Drinking Water - Sludge - Soil - Air - Biohazard
Comments_____

CONDOR EARTH TECHNOLOGIES, INC.
188 Frank West Circle, Suite I, Stockton, CA 95206

Sample ID_____
Time_____**Sampler**_____
Na2S2O3____ **4°C**___ **HCl**___ **H2SO4**____ **HNO3**_____
Other_____ **Field Filtered**_____
Wastewater - Drinking Water - Sludge - Soil - Air - Biohazard
Comments_____

CONDOR EARTH TECHNOLOGIES, INC.
188 Frank West Circle, Suite I, Stockton, CA 95206

Sample ID_____
Time_____**Sampler**_____
Na2S2O3____ **4°C**___ **HCl**___ **H2SO4**____ **HNO3**_____
Other_____ **Field Filtered**_____
Wastewater - Drinking Water - Sludge - Soil - Air - Biohazard
Comments_____

CONDOR EARTH TECHNOLOGIES, INC.
188 Frank West Circle, Suite I, Stockton, CA 95206

Sample ID_____
Time_____**Sampler**_____
Na2S2O3____ **4°C**___ **HCl**___ **H2SO4**____ **HNO3**_____
Other_____ **Field Filtered**_____
Wastewater - Drinking Water - Sludge - Soil - Air - Biohazard
Comments_____

Condor Earth Technologies, Inc.

☐ PO Box 3905/21663 Brian Lane, Sonora, CA 95370, 209.532.0361, 209.532.0773 fax

☐ 188 Frank West Circle, Suite I, Stockton, CA 95206, 209.234.0518, 209.234.0538 fax

☐ 2941 Sunrise Blvd, Suite 150, Rancho Cordova, CA 95742, 916.783.2060

☐ 1739 Ashby Road, Suite B, Merced, CA 95348, 209.388.9601, 209.388.1778 fax

Sample Results TAT: ☐Rush ☐Standard

SHIPPED TO:

_____

_____

_____

SEND RESULTS TO:

NAME: _____

E-MAIL: _____

E-MAIL: _____

☐ PLEASE FAX/EMAIL RESULTS TO ADDRESS MARKED ABOVE

PROJECT NAME/LOCATION:	EDF RESULTS REQUIRED **YES** **NO**	SITE GLOBAL ID:
PROJECT NO.:		
SAMPLED BY: (Signature)		

Date	Time	Sample Site Name	Sample ID (if different)	Matrix	# of containers	Preservatives (see below)	ANALYSIS /METHOD:	Field Filtered									REMARKS	LAB ID#

Relinquished By: (Signature)	Date:	Time:	Received By: (Signature)	Date:	Time:
Relinquished By: (Signature)			Received By: (Signature)		

Matrix

WW Waste Water

S Soil/Solid

GW Ground Water

DW Drinking Water

HWW Hazardous Waste (Water)

SW Storm Water

Preservative

1 4°C 2 HCL 3 NaOH 4 $Na_2S_2O_3$ 5 HNO_3 6 H_2SO_4 7 Other_____

Original – Send Yellow – File Pink – Log Book

APPENDIX E

(SCHOOL DISTRICT LETTERHEAD)

December 7th, 2022

TO: Neighbors and Community Members

FROM: Patterson Joint Unified School District

RE: Environmental Investigation at 1000 Calvison Parkway, Patterson, CA

We would like to provide you with advance notice of an environmental investigation which will be conducted at 1000 Calvison Parkway in Patterson. The investigation will be performed by a licensed contractor and will consist of the sampling of soils for any hazardous materials. The district is conducting this work with the oversight of the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). Although an assessment will be conducted, this does not mean hazardous substances are located on this property. Recently enacted state laws now require that all proposed new school sites undergo a complete environmental review, and if necessary, a cleanup to protect students, faculty and staff who will occupy the school.

Field work is scheduled to begin on December 12, 2022 and is expected to take approximately two days to complete. All field work will be conducted during normal business hours. It is not expected that any street closures will be necessary during the investigation.

The District will submit the results of this Preliminary Environmental Assessment (PEA) to DTSC for review; DTSC may require the District to modify or revise the PEA or may concur with it as written. The PEA will include an assessment of whether hazardous materials are present and, if so, whether the materials are present in concentrations that would require come type of cleanup before using the site for a school. If the District elects to proceed with school development, the District will hold a public hearing to discuss the investigation results and will take public comment. All comments received in this process shall be forwarded to DTSC for consideration. When the public participation process is complete, DTSC will issue a final determination with regard to the PEA.

If you have any questions concerning the upcoming soil investigation or other activities at the address noted above, please contact Michelle Spragg at 209-603-5603 and at mspragg74@gmail.com.

APPENDIX F

(SCHOOL DISTRICT LETTERHEAD)

December 7th, 2022

TO: Neighbors and Community Members

FROM: Patterson Joint Unified School District

RE: Environmental Investigation at 1000 Calvison Parkway, Patterson, CA

We would like to provide you with advance notice of an environmental investigation which will be conducted at 1000 Calvison Parkway in Patterson. The investigation will be performed by a licensed contractor and will consist of the sampling of soils for any hazardous materials. The district is conducting this work with the oversight of the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). Although an assessment will be conducted, this does not mean hazardous substances are located on this property. Recently enacted state laws now require that all proposed new school sites undergo a complete environmental review, and if necessary, a cleanup to protect students, faculty and staff who will occupy the school.

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If you have any questions concerning the upcoming soil investigation or other activities at the address noted above, please contact Michelle Spragg at 209-603-5603 and at mspragg74@gmail.com.

Department of Toxic Substances Control

Yana Garcia
Secretary for
Environmental Protection

Meredith Williams, Ph.D.
Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

Sent Via Electronic Mail

March 17,2023

Ms. Michelle Spragg
Interim Assistant Superintendent, Administrative Services
Patterson Joint Unified School District
510 Keystone Boulevard
Patterson, California 95363
MSpragg@patterson.k12.ca.us

PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORT – NO FURTHER ACTION DETERMINATION, PATTERSON JOINT UNIFED SCHOOL DISTRICT, PATTERSON GARDENS, 1000 CALVINSON PARKWAY, PATTERSON, STANISLAUS COUNTY, CALIFORNIA (PROJECT CODE: 104857)

Dear Ms. Spragg:

The Department of Toxic Substances Control (DTSC) reviewed the final *Preliminary Environmental Assessment Report* (PEA Report – Condor Earth, March 6, 2023) received on March 6, 2023. The draft PEA Report was revised in response to DTSC comments on the draft version forwarded in a letter dated February 22, 2023. The PEA Report includes project background information as well as environmental investigation results and conclusions based on a health risk screening evaluation for the 12.11-acre property located at 1000 Calvinson Parkway, Patterson, Stanislaus County, California (Site). The Site is further identified by the Stanislaus County Assessor's Office as Assessor's Parcel Number 021-027-038.

On March 6, 2023, DTSC received notification that the Patterson Joint Unified School District (District) complied with all public review and comment requirements for the draft PEA Report pursuant to Education Code section 17213.1(a)(6)(A). The PEA Report was made available for public review and comment from January 26, 2023 through February 25, 2023. A public hearing was held on

February 6, 2023. The District reported that no written comments were received during the comment period or during the public hearing.

According to the PEA Report, the District is proposing to construct a new elementary school that will include 32 classrooms and accommodate up to 800 students. Water and sewer services will be provided by the City of Patterson.

Historically, the Site has been used for agricultural land including orchards, irrigated row crops, and feed crops from the early 1900s until the early 2000s. The Site is currently vacant and unpaved, with no existing or previous structures. The Site is bounded to the north by Calvinson Parkway, beyond which are single-family residences; to the east by Ward Avenue, beyond which are rural residences and agricultural land; to the south by Patterson Dog Park and TW Patterson Sports Complex; and to the west by Wolfpack Court, beyond which are single-family residences.

The PEA Report included activities to investigate the Site for potential impacts from organochlorine pesticides (OCPs) and arsenic from past agricultural chemical use that may pose a threat to human health or the environment.

According to the PEA Report, all OCP results were detected below their respective DTSC screening levels in soil for residential land use scenario. Arsenic concentrations were reported to range from 11 to 13 milligrams per kilogram (mg/kg) which were at or below the highest Site-specific background concentration of 13 mg/kg. Based on the results of the PEA investigation, no indication of impacts to soil due to historical land use activities at the Site would pose a threat to human health or the environment from the chemicals of potential concern identified above when compared to screening levels published by DTSC and USEPA.

DTSC conducted a Site visit on December 14, 2022 to observe PEA field activities. Based on observations during the Site visit and review of the PEA Report, neither a release of hazardous material nor the presence of a naturally occurring hazardous substance which would pose a threat to public health or the environment under unrestricted land use was indicated at the Site. DTSC concurs with the conclusion of the PEA Report which recommends no response action and that the Site is suitable for development for a school. DTSC makes a No Further Action determination and hereby approves the PEA Report.

Pursuant to Education Code section 17213.2, subdivision (e), if a previously unidentified release or threatened release of a hazardous material or the presence of a naturally occurring hazardous substance is discovered anytime during

construction at the Site, the District shall cease all construction activities at the Site and notify DTSC. Additional assessment, investigation, or cleanup may be required.

If you have any questions regarding the project, please contact Lisa Holcomb, Project Manager at (916) 255-6523 or via email at Lisa.Holcomb@dtsc.ca.gov.

Sincerely,



José Salcedo, PE, Chief
Northern California Schools Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (via email)

Mr. Bryan D. Boyd, Ed.D.
California Department of Education
BBoyd@cde.ca.gov

Ms. Kristi Ventura
Construction Coordinator
Patterson Joint Unified School District
KVentura@patterson.k12.ca.us

Mr. Alexander B. Dewitt, PG
Vice President, Environmental Services
Condor Earth
ADewitt@condorearch.com

Mr. Luke Castle, PG
Associate Geologist
Condor Earth
LCastle@condorearth.com

Ms. Lisa Holcomb
Project Manager
Northern California Schools Unit
Department of Toxic Substances Control
Lisa.Holcomb@dtsc.ca.gov

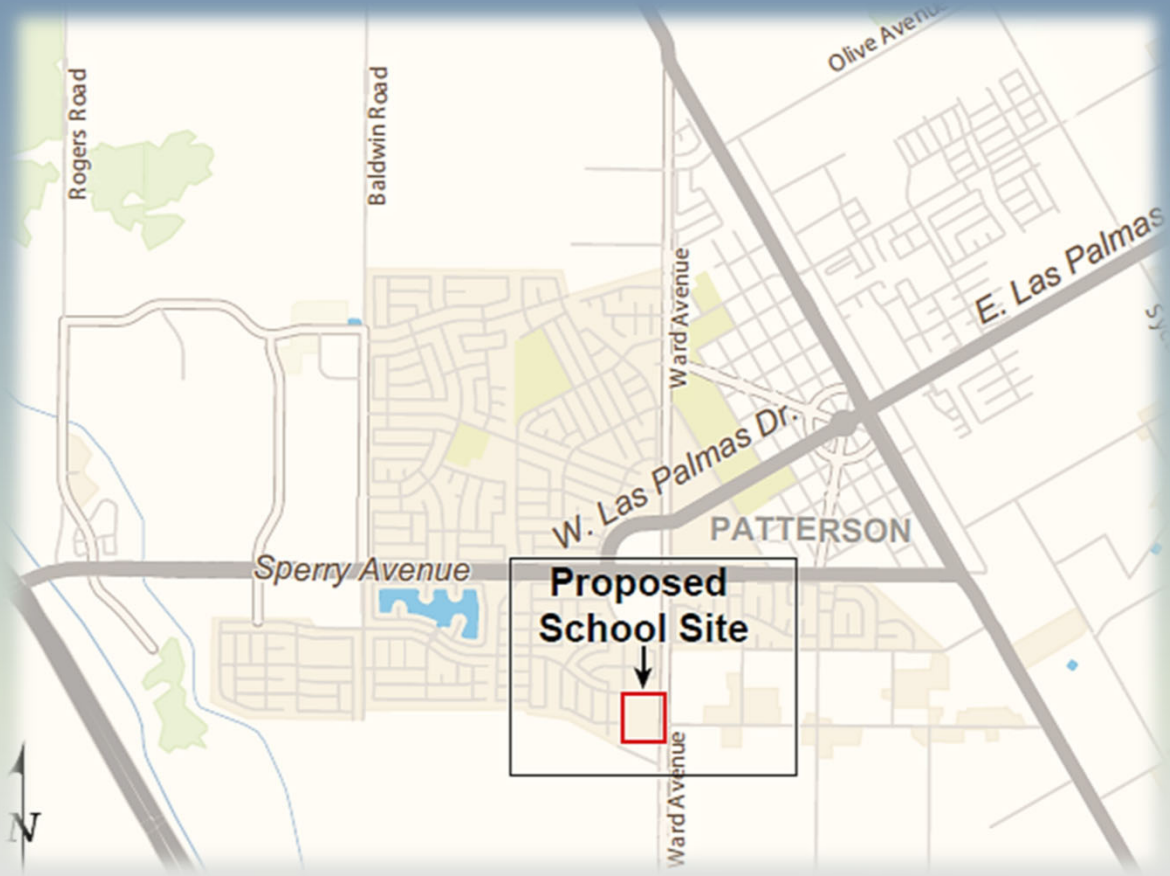
Ms. Farah Esfandiari, Ph.D.
Staff Toxicologist
Human Health and Ecological Risk Office
Department of Toxic Substances Control
Farah.Esfandiari@dtsc.ca.gov

APPENDIX F
TRAFFIC IMPACT STUDY

Traffic Impact Study for the Proposed Patterson JUSD New Elementary, Patterson, California

for the City of Patterson, CA

January 24, 2025



AMG ADVANCED MOBILITY GROUP

Traffic Impact Study for the Proposed Patterson JUSD New Elementary, Patterson, California

Final Report

Prepared for:
The City of Patterson

Prepared by:
Advanced Mobility Group

January 24, 2025

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1.0 INTRODUCTION AND EXECUTIVE SUMMARY

INTRODUCTION

The purpose of this traffic impact study is to evaluate potential impacts of the proposed Patterson JUSD New Elementary. The proposed elementary is estimated to consist of approximately 744 students.

SUMMARY

Based on the results of the analysis, the following is a summary of our findings:

Existing Traffic Conditions

- All the study intersections operate at acceptable LOS D or better.

Existing plus Approved or Pending Projects Traffic Conditions

- All the study intersections operate at acceptable LOS D or better.

Proposed Project Trip Generation

- The proposed elementary school is estimated to consist of approximately 744 students.
- It is estimated that the project will generate approximately 551 and 120 new total trips during the AM and PM peak hours

Existing plus Approved/Pending plus Project Traffic Conditions

- All intersections are estimated to operate at LOS D or better except the intersection of Calvinson Parkway/Ward Avenue which is estimated to operate at LOS E during the AM peak hour
- Peak hour signal warrant is not met for the intersection of Calvinson Parkway/Ward Avenue, so a signal is not warranted.
- Recommendations were made to the site circulation and school area roadway safety improvements were recommended and shown in Figure 10.

Cumulative No Project Traffic Conditions

- All the study intersections operate at acceptable LOS D or better.

Cumulative No Project Traffic Conditions

- All intersections are estimated to operate at LOS D or better except the intersection of Calvinson Parkway/Ward Avenue which is estimated to operate at LOS E during the AM peak hour
- Peak hour signal warrant is not met for the intersection of Calvinson Parkway/Ward Avenue, so a signal is not warranted.

2.0 PURPOSE OF PROJECT AND STUDY APPROACH

PROJECT OBJECTIVES DESCRIPTION

The purpose of this traffic impact study is to evaluate potential impacts of the proposed Patterson JUSD New Elementary. The proposed elementary is estimated to consist of approximately 744 students.

The proposed project site and vicinity map are shown in **Figure 1.**

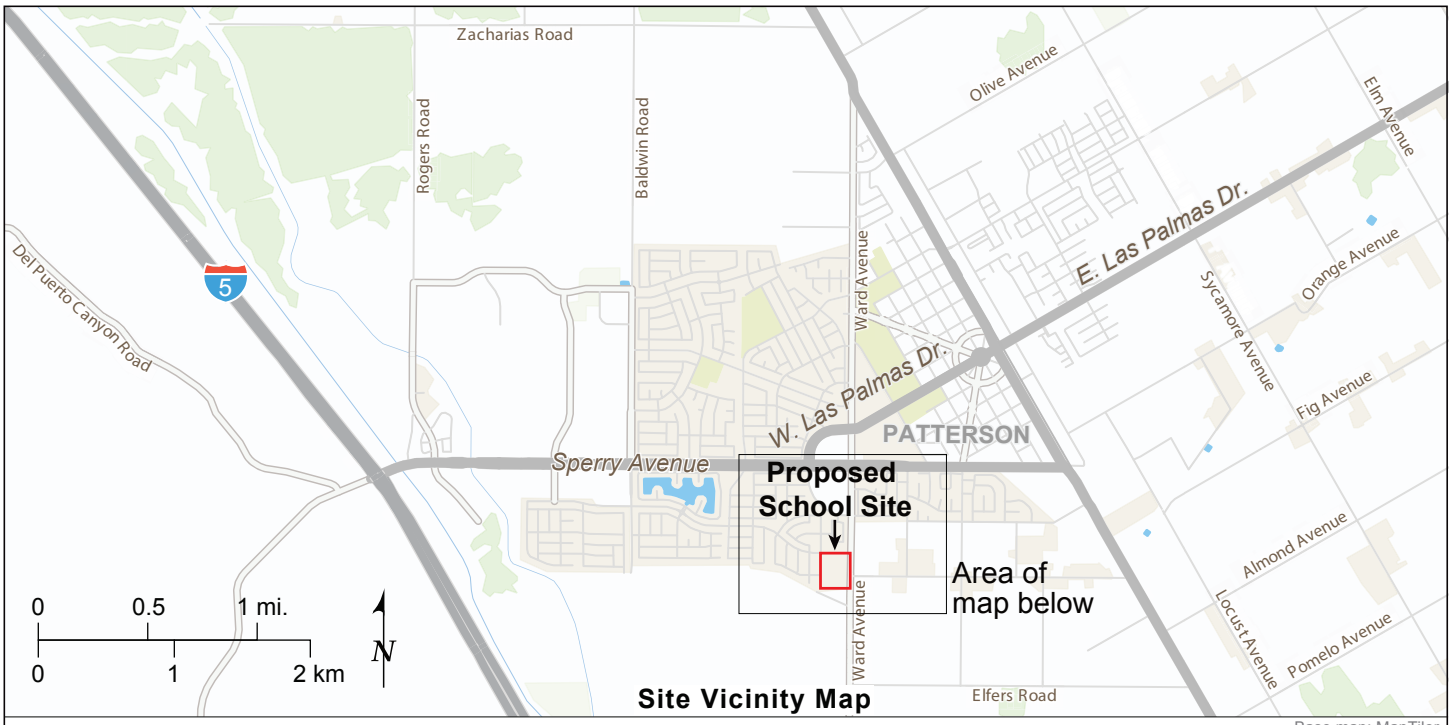
STUDY APPROACH

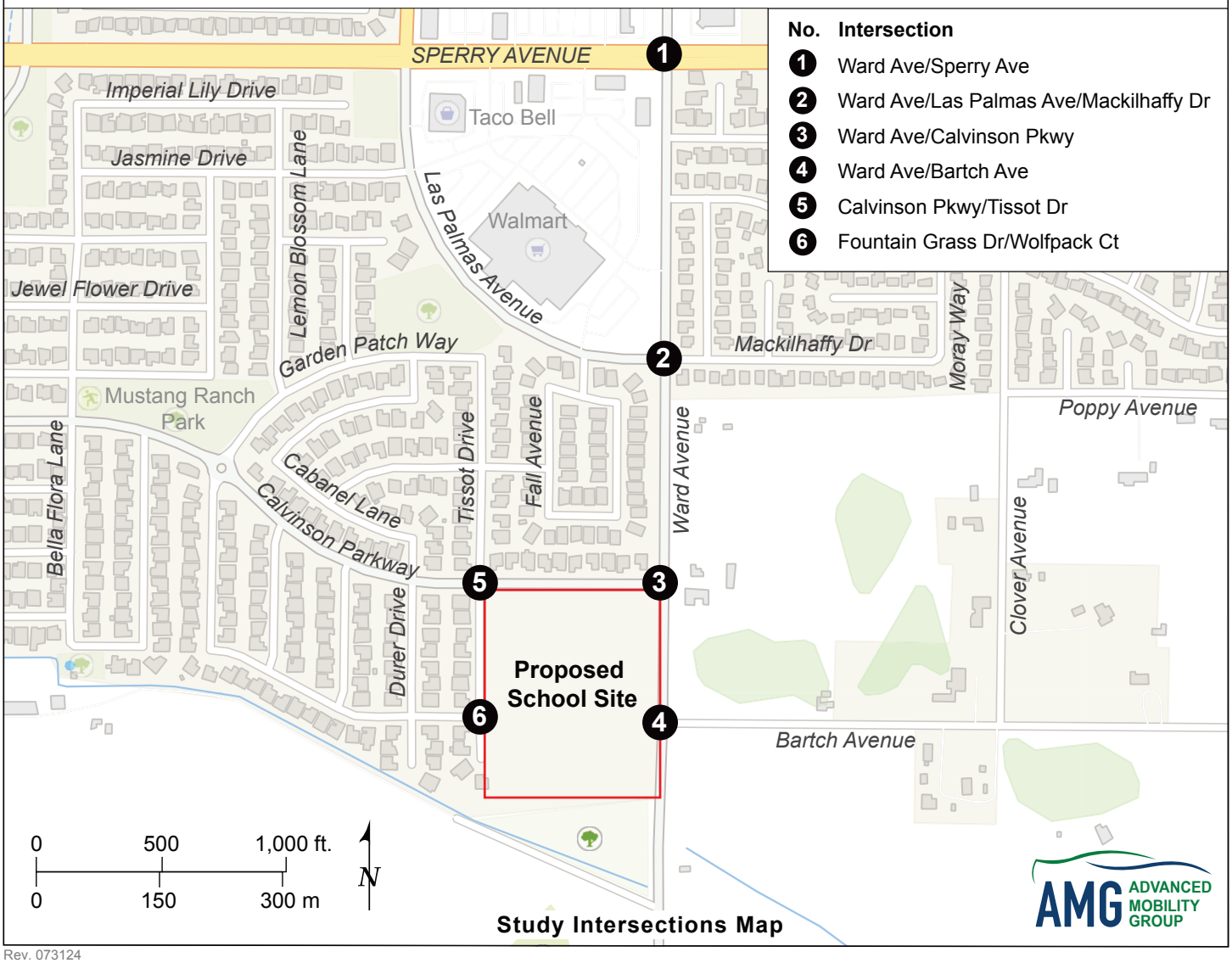
The following are key steps of the study approach:

- Conduct traffic counts to establish baseline traffic conditions
- Conduct trip generation and distribution of project trips
- Determine the Existing plus Previously Approved Projects traffic condition
- Determine the Existing plus Approved Projects plus Proposed Project traffic condition
- Determine impact of project trips based on established Significance Criteria

Site Vicinity & Study Intersections

Figure 1





No.	Intersection
1	Ward Ave/Sperry Ave
2	Ward Ave/Las Palmas Ave/Mackilhaffy Dr
3	Ward Ave/Calvinson Pkwy
4	Ward Ave/Bartch Ave
5	Calvinson Pkwy/Tissot Dr
6	Fountain Grass Dr/Wolfpack Ct

AMG ADVANCED MOBILITY GROUP

Rev. 073124

3.0 SETTING

The following section describes the existing transportation conditions in the vicinity of the study area, including descriptions of the existing street system and intersection operating conditions.

EXISTING STREET SYSTEM

Regional Roadways

Interstate 5 (I-5) is a major north-south freeway connecting San Diego to the south and Seattle to the north. Per the 2021 traffic counts obtained from the Caltrans website, I-5 carries between 45,000 to 52,000 vehicles per day (vpd) in the vicinity of Sperry Avenue. For regional travel, residents rely primarily on I-5, a major north-south freeway to the west of the city limits. I-5 connects to I-580 approximately 13 miles to the north of Patterson. I-5 and I-580 provide access to regional employment centers in Pleasanton, San Ramon, and the rest of the San Francisco Bay Area.

Near the project site, I-5 is a four-lane divided freeway. Primary access to the project site from I-5 is provided via interchange at Sperry Avenue. The interchange of I-5/Sperry Avenue is configured as a tight diamond with a narrow underpass road and a steep drop in grade next to the northbound on-ramp. All ramps have one lane in each direction.

State Route 33 (SR-33) is located approximately three miles to the east of I-5. SR-33 provides north-south access to Westley to the north and the City of Newman to the south. Its ADT is approximately 6,000 vpd. It is the main north-south roadway in Patterson.

Local Roadways

Sperry Avenue is a two to four-lane major arterial roadway that serves as the major route of travel between I-5 to the west and the City of Patterson to the east. Sperry Avenue terminates at SR-33, three miles east of I-5. Near the project site, Sperry Avenue is a three-lane divided roadway with no sidewalk adjacent to the project site. Near the freeway, its ADT ranges between 12,000 to 14,000 vpd[1]. A recent count to the east of Rogers Road showed the ADT to be approximately 15,040 vpd (May 30, 2018).

Ward Avenue is a bi-directional two-lane north-south collector in the City of Patterson from State Route 33 in the north to City limit in the south. The posted speed limit within the study area is 35 miles per hour (mph). The average daily traffic is approximately 2,200 vehicles per day (vpd). There are no bicycle facilities present near the study area. Continuous sidewalks are present in both directions along the north, west and east approaches. Sidewalks are present on the westside along Ward Avenue, south of the intersection of Ward Avenue/Mackilhaffy Drive.

Calvinson Parkway is a two-lane east-west residential collector to the south of Sperry Avenue that connects connect from Baldwin Road in the west to War Avenue to the east for a distance of approximately 1.5 miles. There are three mini-roundabout located along the roadway. Near the proposed future

[1] *I-5/Sperry Avenue PAED Study Report, February 2016*

elementary school site, it is an approximately 34-feet wide two-lane road with residential homes on the northside of the street. The ADT is approximately 1,750 vpd

Las Palmas Avenue is a two-lane east-west circular minor collector in the study area that connects from Ward Avenue in the east to Sperry Avenue to the north. The posted speed limit within the study area is 25 mph. The Walmart Shopping Center is located north of Las Palmas Avenue near the study intersection with an entrance and exit driveway on Las Palmas Avenue. There is no on-street parking on Las Palmas Avenue near the study intersection. There are no bicycle facilities present near the study area. Continuous sidewalks are present in both directions along Las Palmas Avenue.

Mackilhaffy Drive is a two-lane east-west local street from Ward Avenue to Moray Way in the east. The posted speed limit within the study area is 25 mph. There is on-street parking on Mackilhaffy Drive in both directions. There are no bicycle facilities present near the study area. Continuous sidewalks are present in both directions along Mackilhaffy Drive.

EXISTING PEDESTRIAN AND BICYCLE FACILITIES

The existing pedestrian and bicycle facilities near the project site are described below.

Existing Bicycle Facilities

Bicycle facilities are classified by Caltrans into four distinct types of bikeway facilities, as generally described below:

- Class I Bikeway (Bike Path). Provides a separate right-of-way and is designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian crossflow minimized.
- Class II Bikeway (Bike Lane). Provides a restricted right-of-way and is designated for the use of bicycles with a striped lane on a street or highway. Vehicle parking and vehicle/pedestrian crossflow are permitted.
- Class III Bikeway (Bike Route). Provides for a right-of-way designated by signs or pavement markings for shared use with pedestrians or motor vehicles.
- Class IV Bikeway (Separated Bikeway/Cycle Track). Provides a cycle track or protected bike lane, is for the exclusive use of bicycles, physically separated from motor traffic with a vertical feature.

The City of Patterson's Active Transportation Plan[2] indicated a Class I Bike Path on Calvinson Parkway and Ward Avenue near the project site.

Existing Pedestrian Facilities

Pedestrian facilities in the study area include sidewalks that are 6 feet wide. This Existing sidewalk exists on Calvinson Parkway and on the westside of Ward Avenue near the project site.

Near the future school site, crosswalks do not exist at all the cross-street intersections along Calvinson Parkway.

2 City of Patterson Active Transportation Plan, Adopted April 2022

ROADWAY AND INTERSECTION OPERATING CONDITIONS

This section summarizes existing roadway and intersection operating conditions.

Traffic Data Collection

Based on understanding of the area and discussions with City staff[3], the following 6 study intersections as shown in **Exhibit 1** were selected for analysis:

ID	*Intersection*	*Existing Control*
1	Ward Ave/Sperry Ave	Signal
2	Ward Ave/Las Palmas Ave/Mackihaffy Dr	TWSC
3	Ward Ave/Calvinson Pkwy	OWSC
4	Ward Ave/Bartch Ave	OWSC
5	Calvinson Pkwy/Tissot Dr	OWSC
6	Fountain Grass Dr/Wolfpack Ct	Free

Note:
OWSC: One-Way Stop Control
TWSC: Two-Way Stop Control

AMG collected the AM and PM peak hour intersection turning movement counts on April 24, 2024. **Figure 2** shows the turning movement volumes and lane configuration at each study intersection. Traffic count data collected are included in **Appendix A.**



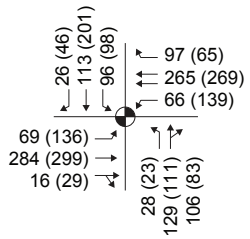
Exhibit 1: Study Intersections

[3] *Staff review of scope, February 22, 2024*

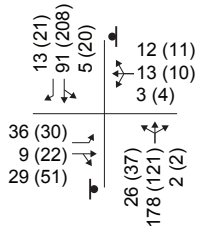
Existing Peak Hour Volumes, Lane Geometry and Controls

Figure 2

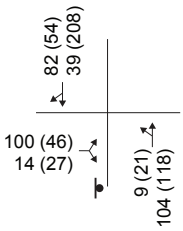
Intersection #1
Ward Ave/Sperry Ave



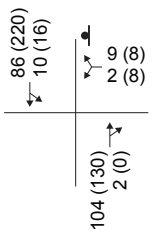
Intersection #2
Ward Ave/Las Palmas Ave/Mackilhaffy Dr



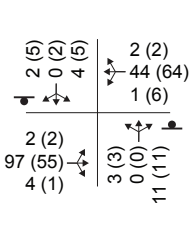
Intersection #3
Ward Ave/Calvinson Pkwy



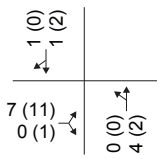
Intersection #4
Ward Ave/Bartch Ave



Intersection #5
Calvinson Pkwy/Tissot Dr



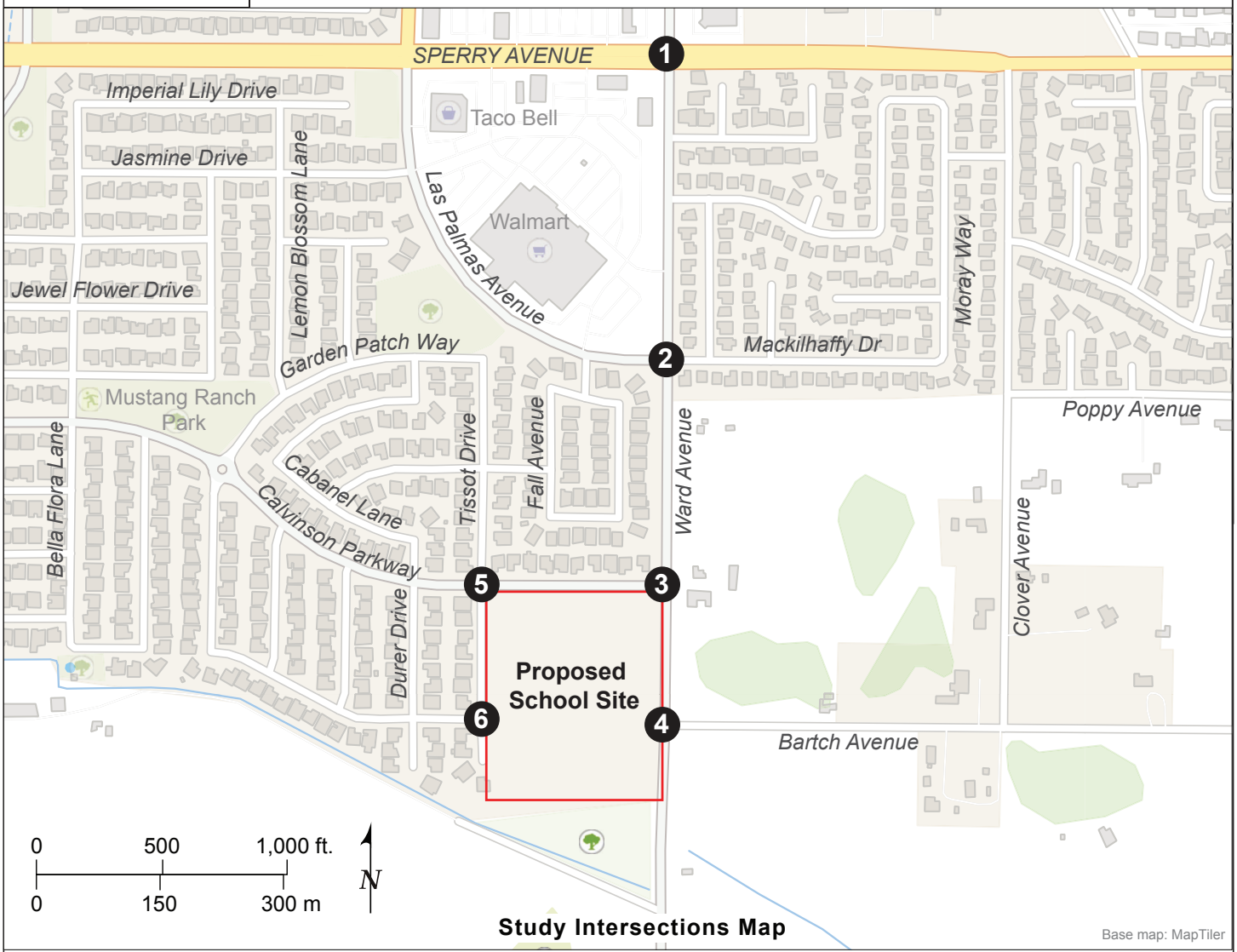
Intersection #6
Fountain Grass Dr/Wolfpack Ct



Legend

- Study Intersection
- Traffic Signal
- Stop Sign
- XX AM Peak Hour Volume
- (XX) PM Peak Hour Volume

No.	Intersection
1	Ward Ave/Sperry Ave
2	Ward Ave/Las Palmas Ave/Mackilhaffy Dr
3	Ward Ave/Calvinson Pkwy
4	Ward Ave/Bartch Ave
5	Calvinson Pkwy/Tissot Dr
6	Fountain Grass Dr/Wolfpack Ct



Study Intersections Map

Base map: MapTiler

AMG ADVANCED MOBILITY GROUP

LEVEL OF SERVICE METHODOLOGY

Level of Service is a qualitative index of the performance of an element of the transportation system. Level of Service (LOS) is a rating scale running from A to F, with A indicating no congestion of any kind, and F indicating intolerable congestion and delays.

The 2010 Highway Capacity Manual (HCM) is the standard reference published by the Transportation Research Board and contains the specific criteria and methods to be used in assessing LOS. There are several software packages that have been developed to implement HCM. In this study the Synchro software was used to calculate the LOS at the study intersections.

Signalized Intersections
The relationship between average control delay, driver's perception of traffic, and LOS for signalized intersections is summarized in **Table 1**.

Unsignalized Intersections
The method of unsignalized intersection capacity analysis used in this study is from Chapter 19, "Two-Way Stop-Controlled Intersections" of the Highway Capacity Manual. This method applies to two-way STOP sign or YIELD sign-controlled intersections (or one-way STOP sign or YIELD sign controlled intersections at three-way intersections). At such intersections, drivers on the minor street are forced to use judgment when selecting gaps in the major flow through which to execute crossings or turning maneuvers. Thus, the capacity of the controlled legs of an intersection is based on three factors:

Table 1: Signalized Intersection LOS Criteria

LOS	Driver's Perception and Traffic Operation Description	Delay in Seconds
A	Operations with very low delay occurring with favorable Progression and/or short cycle length.	< 10
B	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10 – 20
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20 - 35
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop, and individual cycle failures are noticeable.	> 35 – 55
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	> 55 - 80
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	> 80

1. The distribution of gaps in the major street traffic stream.
2. Driver judgment in selecting gaps through which to execute their desired maneuvers.
3. Follow-up time required to move into the front-of-queue position.

The level of service criterion for two-way STOP controlled intersections is somewhat different from the criterion used for signalized intersections. The primary reason for this is the difference that drivers expect a signalized intersection to carry higher traffic volumes than unsignalized intersections. Additionally, several driver behavior conditions combine to make delays at signalized intersections less onerous than at unsignalized intersections.

The HCM provides procedures for calculating LOS on the minor street approaches and individual movements. It does not specify how a City must utilize that information. Depending on the availability of gaps, the minor approach might be operating at LOS D, E, or F while the overall intersection operates at LOS C or better. A minor approach that operates at LOS D, E, or F does not automatically translate into a need for a traffic signal. A signal warrant would still need to be met. There are many instances where only a few vehicles are experiencing LOS D, E, or F on the minor approach while the whole intersection operates at an acceptable LOS. A signal is usually not warranted under such conditions.

Table 2 summarizes the relationship between delay and LOS for unsignalized intersections. At side-street stop-controlled intersections, the delay is calculated for each stop-controlled movement, the left-turn movement from the major street, as well as the intersection average. The intersection average delay and highest movement/approach delay are reported for side street stop-controlled intersections.

Table 2: Unsignalized Intersection LOS Criteria

LOS	Driver's Perception and Traffic Operation Description	Delay in Seconds
A	Little or no delays	< 10
B	Short traffic delays	> 10 – 15
C	Average traffic delays	> 15 - 25
D	Long traffic delays	> 25 - 35
E	Very long traffic delays	> 35 – 50
F	Extreme traffic delays with intersection capacity exceeded	> 50

The City of Patterson Guidelines for Traffic Impact Studies generally defines acceptable citywide unsignalized intersection operations as LOS D (35 seconds of delay per vehicle) or better during the morning and evening peak periods.

SIGNIFICANCE CRITERIA

City Standards

The following is the City's criteria of significance to determine the potential impacts associated with a proposed project or action:

The City's 2010 General Plan, Policy III.A.2 states that "The City shall endeavor to maintain a Level of Service (LOS) "D", as defined by the 2000 Highway Capacity Manual (HCM) or subsequent revisions, on all streets and intersections within the City."

County & Caltrans Standards

The minimum acceptable level of service standard for Stanislaus County roadway segments is LOS C. Therefore, this report uses LOS C as the minimum acceptable standard and mitigation measures are recommended where service levels are below LOS C along roadways within Stanislaus County.

Facilities under the jurisdiction of Caltrans include freeway segments, ramps, ramp terminals, and arterials. Although Caltrans has not designated a LOS standard, Caltrans' Guide for the Preparation of Traffic Impact Studies (December 2002) indicates attempts to maintain LOS of a State highway facility between the LOS "C/D" threshold. When existing State highway facilities are operating at higher levels of service than noted above, 20-year forecasts or general plan build-out analysis for the facility should be considered to establish equitable project contributions to local development impact fee programs that address cumulative traffic impacts.

4.0 EXISTING TRAFFIC CONDITION

This section presents the assessment of traffic conditions without the proposed project.

INTERSECTION LEVEL OF SERVICE

To accurately model the traffic condition, AMG created a Synchro traffic analysis model to determine the intersection LOS. The Existing Conditions traffic operations were evaluated based on levels of service criteria using Synchro. The macroscopic simulation model, Synchro, was used to evaluate several measures (such as lane geometries, signal optimization, signal phasing and traffic control) at the study intersections.

The results of the LOS analysis for the existing intersections are shown in **Table 3**. All the intersections operate at acceptable LOS D or better.

Table 3: Existing LOS of Study Intersections

			Existing			
ID	*Intersection*	*Existing Control*	*A.M.*		*P.M.*	
			Delay (s)	*LOS*	*Delay (s)*	*LOS*
1	Ward Ave/Sperry Ave	Signal	22.8	C	23.3	C
2	Ward Ave/Las Palmas Ave/Mackihaffy Dr	TWSC	12.3	B	12.4	B
3	Ward Ave/Calvinson Pkwy	OWSC	11.4	B	12.3	B
4	Ward Ave/Bartch Ave	OWSC	9.3	A	10.5	B
5	Calvinson Pkwy/Tissot Dr	OWSC	9.7	A	10.0	A
6	Fountain Grass Dr/Wolfpack Ct	Free	0.0	A	0.0	A

Note:
OWSC: One-Way Stop Control
TWSC: Two-Way Stop Control

Detailed level of service worksheets is provided in **Appendix B.**

5.0 EXISTING PLUS PREVIOUSLY APPROVED AND PENDING PROJECTS TRAFFIC CONDITION

This section presents the assessment of potential transportation impacts of adding traffic generated from previously approved and pending projects. Traffic from two projects to the west of the proposed project are considered:

- The Baldwin Ranch Project[4] is located to the south of the intersection of Sperry Avenue and Baldwin Road. It is nearly a mile to the west of the site and is currently being constructed. The project consisted of approximately 445 residential units and 300,000 square feet of retail. It is currently under construction.

- The Sperry Commercial #2 Project[5] is located adjacent to Sperry Avenue and to the west of the new Sperry Avenue and Haggerty Drive intersection. The proposed 94,394 square feet (s.f.) project consists of a gas station, a car wash, three (3) fast food restaurants, a sit-down restaurant, a coffee shop, a grocery store, a pet store, 24,000 square feet of retail, and 14,000 square feet of office space. This is a pending project.

Traffic impact from both projects were obtained from previously completed traffic study and used to estimate the traffic impact for this scenario.

[4] *Traffic Impact Study for the Proposed Baldwin Ranch Project, City of Patterson, CA, September 11, 2020*
[5] *Traffic Impact Study for the Proposed Sperry Commercial 2 Project, City of Patterson, CA, March 1, 2024*

INTERSECTION LEVEL OF SERVICE ANALYSIS

Figure 3 shows the Existing plus Previously Approved and Pending Projects Traffic Conditions peak hour turning movement volumes and lane geometry. **Table 4** shows the LOS under Existing plus Previously Approved Projects Conditions. The LOS of study intersections remains similar to the Existing Conditions and operates at LOS D or better.

Table 4: Existing plus Previously Approved and Pending Projects Intersection LOS

ID	Intersection	Existing Control	Existing				Existing +Approved			
			A.M.		P.M.		A.M.		P.M.	
			Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS
1	Ward Ave/Sperry Ave	Signal	22.8	C	23.3	C	24.2	C	25.2	C
2	Ward Ave/Las Palmas Ave/Mackinatty Dr	TWSC	12.3	B	12.4	B	12.3	B	12.4	B
3	Ward Ave/Calvinson Pkwy	OWSC	11.4	B	12.3	B	11.4	B	12.3	B
4	Ward Ave/Bartch Ave	OWSC	9.3	A	10.5	B	9.3	A	10.5	B
5	Calvinson Pkwy/Tissot Dr	OWSC	9.7	A	10.0	A	9.7	A	10.0	A
6	Fountain Grass Dr/Wolfpack Ct	Free	0.0	A	0.0	A	0.0	A	0.0	A

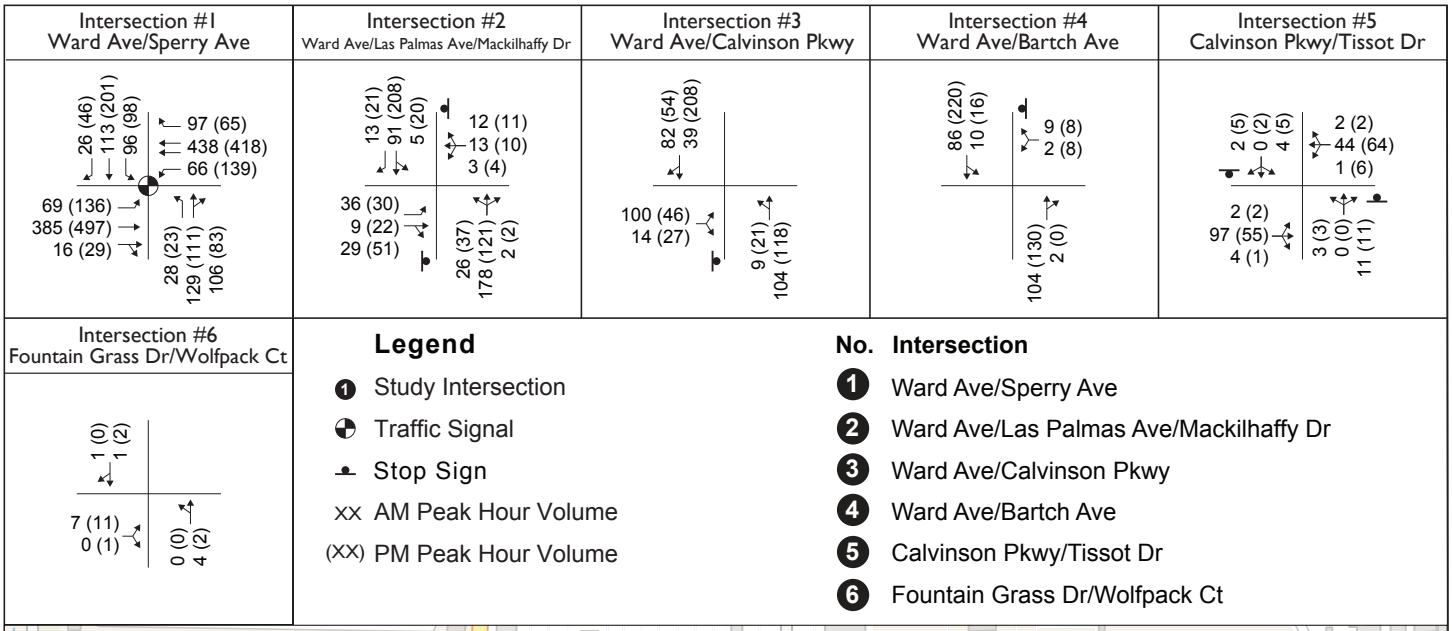
Note:
OWSC: One-Way Stop Control
TWSC: Two-Way Stop Control

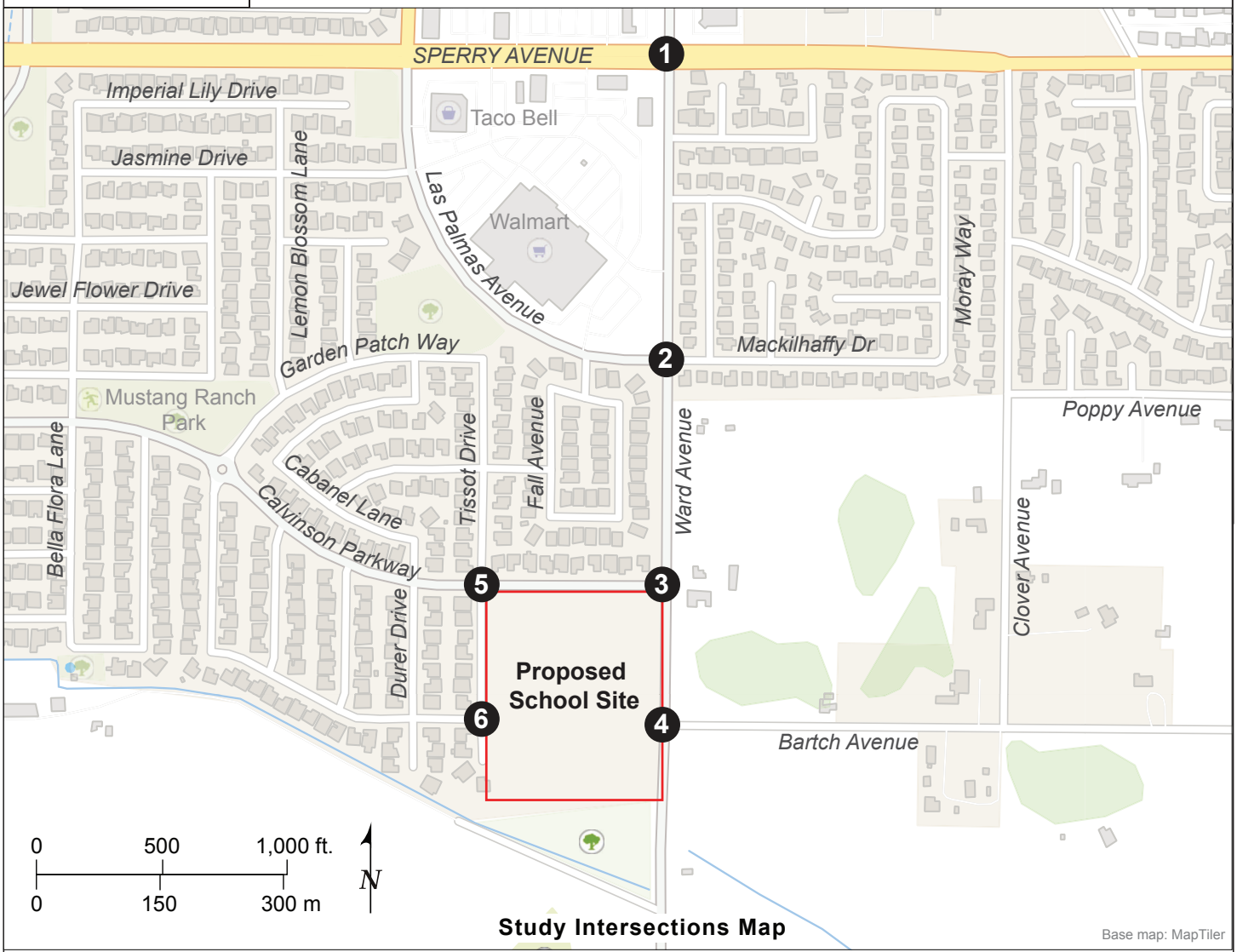
**HCM 2000 Analysis used due to exclusive pedestrian phase*

Detailed level of service worksheets is provided in **Appendix C**.

Figure 3

Existing Plus Previously Approved/Pending Projects Peak Hour Volumes, Lane Geometry and Controls





Study Intersections Map

Base map: MapTiler

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6.0 TRIP GENERATION AND DISTRIBUTION METHODOLOGY

The proposed elementary is estimated to consist of approximately 744 students[6]. The proposed project site plan is shown in **Figure 4**.

TRIP GENERATION

Trip generation is defined as the number of "vehicle trips" produced by a particular land use or project. A trip is defined as a one-direction vehicle movement. The total number of trips generated by each land use includes the inbound and outbound trips.

Typically, trip generation data based on actual or similar types of land use are not easily available. This is the reason trip generation estimates of most traffic impact study is based on using the standard reference Trip Generation, 11th Edition, published by the Institute of Transportation Engineers (ITE).

It is estimated that the proposed project is estimated to generate approximately 551 and 120 new total trips during the AM and PM peak hours, respectively, as shown in **Table 5**.

Table 5: Proposed Project Trip Generation

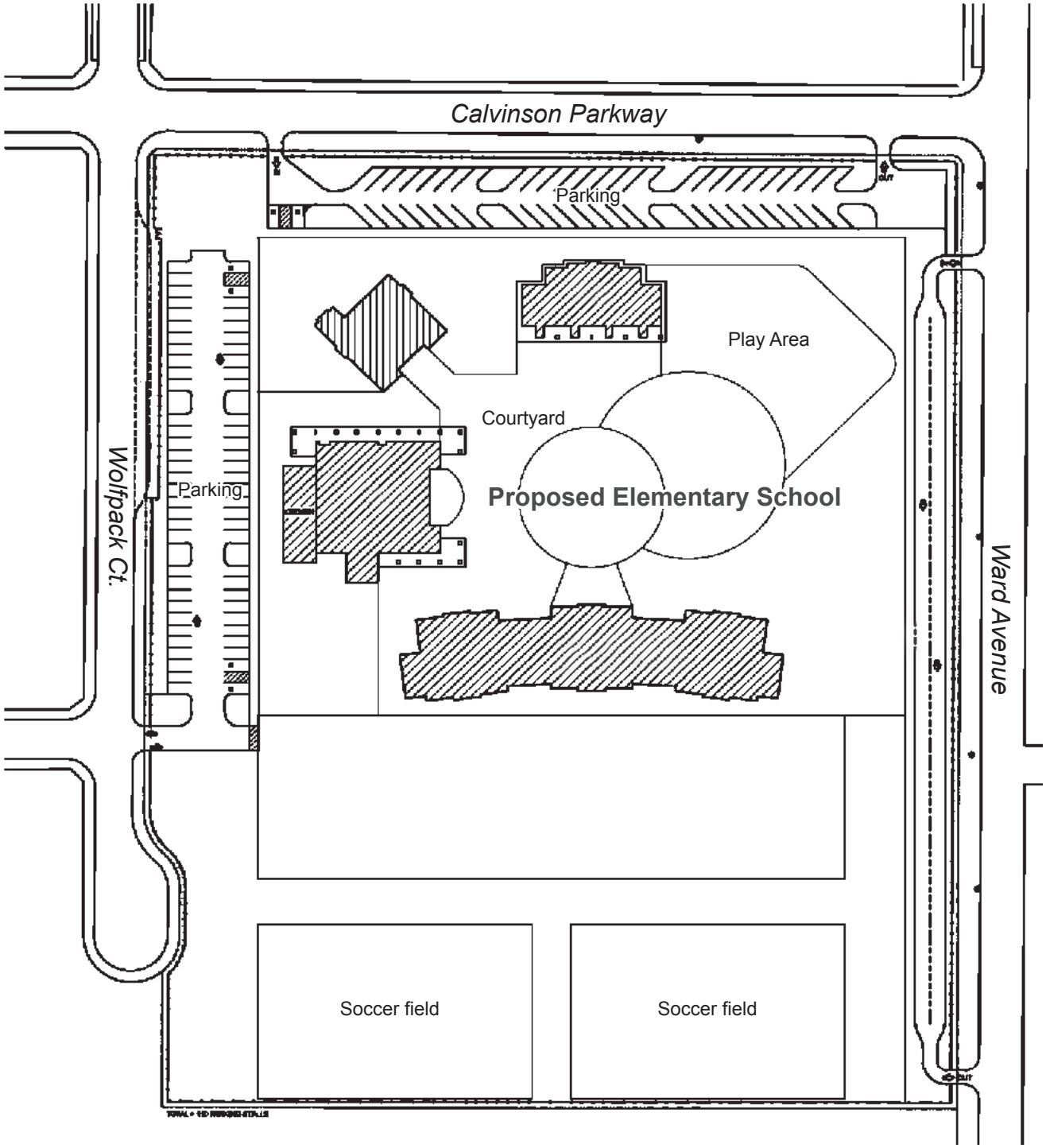
Land Use	*ITE Code*	*Size*		*A.M. Peak*				*P.M. Peak*				**Daily**	
				Rate	*In*	*Out*	*Total*	*Rate*	*In*	*Out*	*Total*	**Rate**	**Total**
Proposed Project													
Patterson JUSD Elem Sch	520	744	Student	0.74	298	253	551	0.16	55	65	120	2.27	1,689

Note:
ITE Source: ITE Trip Generation Manual 11th Edition, 2021

[6] *Information provided by school district, May 14, 2024*

Project Site Plan

Figure 4



Site Plan

TRIP DISTRIBUTION

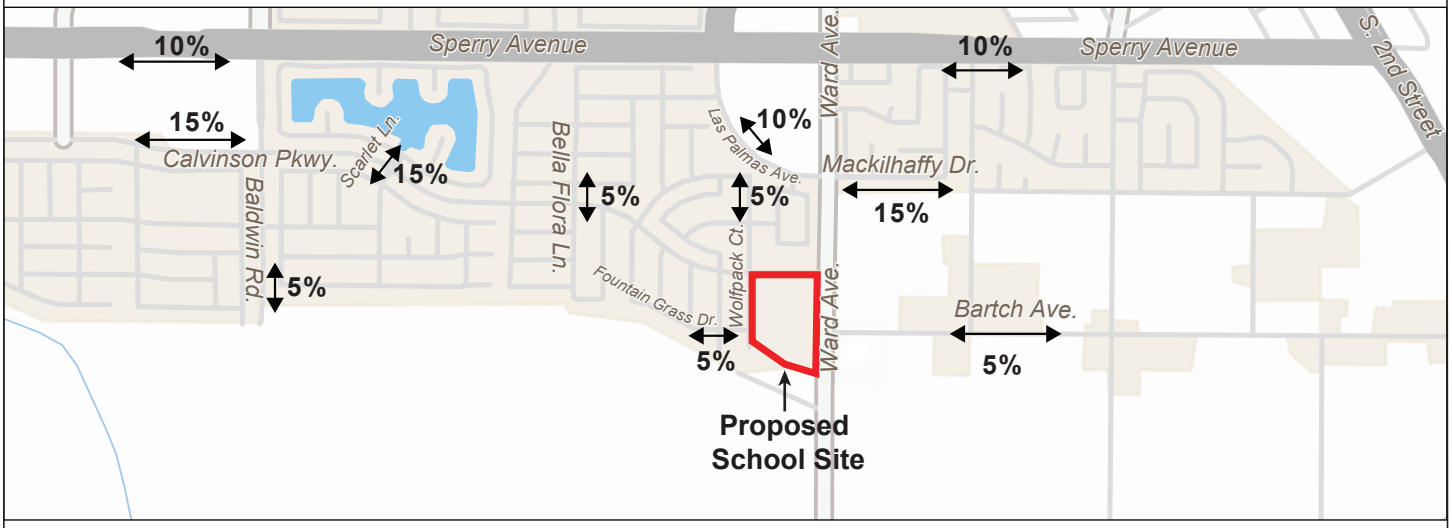
Trip distribution is a process that determines in what proportion vehicles would be expected to travel between a project site and various destinations outside the project study area. The process of trip assignment determines the various routes that vehicles would take from the project site to each destination using the estimated trip distribution.

The project is expected to "generate" and "attract" trips throughout the City and from other locations throughout the area. Directional trip distribution for project generated trips was estimated based on existing traffic flow patterns, geographic location of the project site, and location of other similar destinations.

The estimated trip distribution patterns are shown on **Figure 5** and project only trips are shown on **Figure 6**

Project Trip Distribution

Figure 5



Base map modified from MapTiler

0 0.5 mi.
0 1 km
N

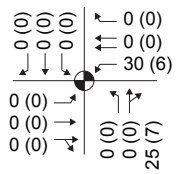
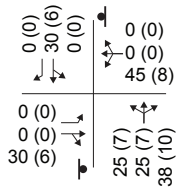
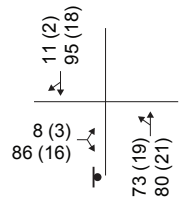
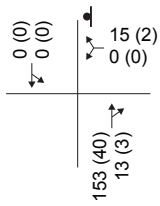
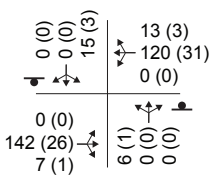
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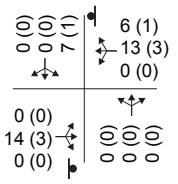
↔ Primary Distribution

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Project Only Peak Hour Volumes, Lane Geometry and Controls

Figure 6

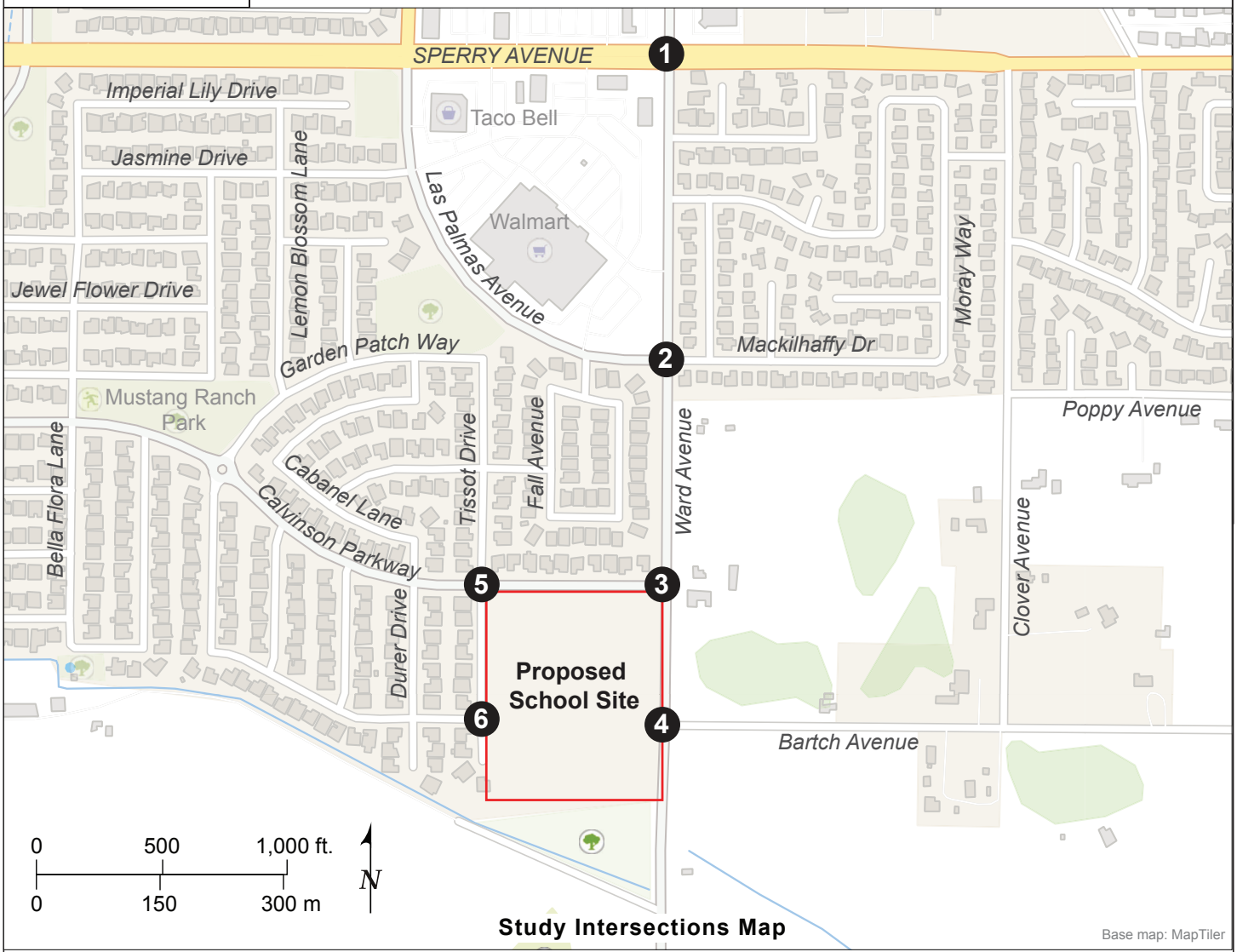
Intersection #1 Ward Ave/Sperry Ave	Intersection #2 Ward Ave/Las Palmas Ave/Mackilhaffy Dr	Intersection #3 Ward Ave/Calvinson Pkwy	Intersection #4 Ward Ave/Bartch Ave	Intersection #5 Calvinson Pkwy/Tissot Dr
				

Intersection #6 Fountain Grass Dr/Wolfpack Ct


Legend

- ❶ Study Intersection
- Traffic Signal
- Stop Sign
- XX AM Peak Hour Volume
- (XX) PM Peak Hour Volume

No.	Intersection
1	Ward Ave/Sperry Ave
2	Ward Ave/Las Palmas Ave/Mackilhaffy Dr
3	Ward Ave/Calvinson Pkwy
4	Ward Ave/Bartch Ave
5	Calvinson Pkwy/Tissot Dr
6	Fountain Grass Dr/Wolfpack Ct



Study Intersections Map

Base map: MapTiler

AMG ADVANCED MOBILITY GROUP

7.0 EXISTING PLUS PREVIOUSLY APPROVED AND PENDING PROJECTS PLUS PROPOSED PROJECT TRAFFIC CONDITION

This section presents the assessment of potential transportation impacts of the proposed Elementary School project.

INTERSECTION LEVEL OF SERVICE ANALYSIS

Figure 7 shows the Existing plus Previously Approved and Pending Projects Plus Proposed Project peak hour turning movement volumes and lane geometry. All intersections are estimated to operate at LOS D or better except the intersection of Calvinson Parkway/Ward Avenue which is estimated to operate at LOS E during the AM peak hour as shown in **Table 6.** This is due to the slightly higher eastbound traffic on Calvinson Parkway heading towards Ward Avenue as shown in **Figure 7**.

Table 6: Existing plus Previously Approved and Pending Projects plus Project Intersection LOS

			Existing +Approved					Existing + App. + Project			
			A.M.		P.M.			A.M.		P.M.	
ID	Intersection	Existing Control	Delay (s)	LOS	Delay (s)	LOS	Proposed Control	Delay (s)	LOS	Delay (s)	LOS
1	Ward Ave/Sperry Ave	Signal	24.2	C	25.2	C	Signal	25.5	C	25.5	C
2	Ward Ave/Las Palmas Ave/Mackihaffy Dr	TWSC	12.3	B	12.4	B	TWSC	20.7	C	14.4	B
3	Ward Ave/Calvinson Pkwy	OWSC	11.4	B	12.3	B	OWSC	47.3	E	13.5	B
4	Ward Ave/Bartch Ave	OWSC	9.3	A	10.5	B	OWSC	10.6	B	10.8	B
5	Calvinson Pkwy/Tissot Dr	OWSC	9.7	A	10.0	A	OWSC	14.6	B	10.8	B
6	Fountain Grass Dr/Wolfpack Ct	Free	0.0	A	0.0	A	TWSC	9.2	A	8.9	A

Note:
OWSC: One-Way Stop Control
TWSC: Two-Way Stop Control

**HCM 2000 Analysis used due to exclusive pedestrian phase*

SIGNAL WARRANT

A peak hour signal warrant was conducted for the intersection of Calvinson Parkway/Ward Avenue which is currently stop control on the minor Calvinson Parkway. As shown in **Figure 7,** the eastbound left-turn traffic volume is approximately 100 vehicles per hour (vph) while the right-turn traffic is approximately 100 vph. However, the total volumes on Ward Avenue of slightly less than 500 vph is less than half of the total volumes for mainline roadway to meet the minimum signal warrant threshold. Peak hour signal warrant is not met for the intersection. Signal warrant sheets and detailed level of service worksheets are provided in **Appendix D**.

City of Patterson - Traffic Impact Study for the Proposed Patterson JUSD New Elementary School in Patterson, CA

Existing Plus Previously Approved/Pending Projects Plus Project Peak Hour Volumes, Lane Geometry and Controls

Figure 7

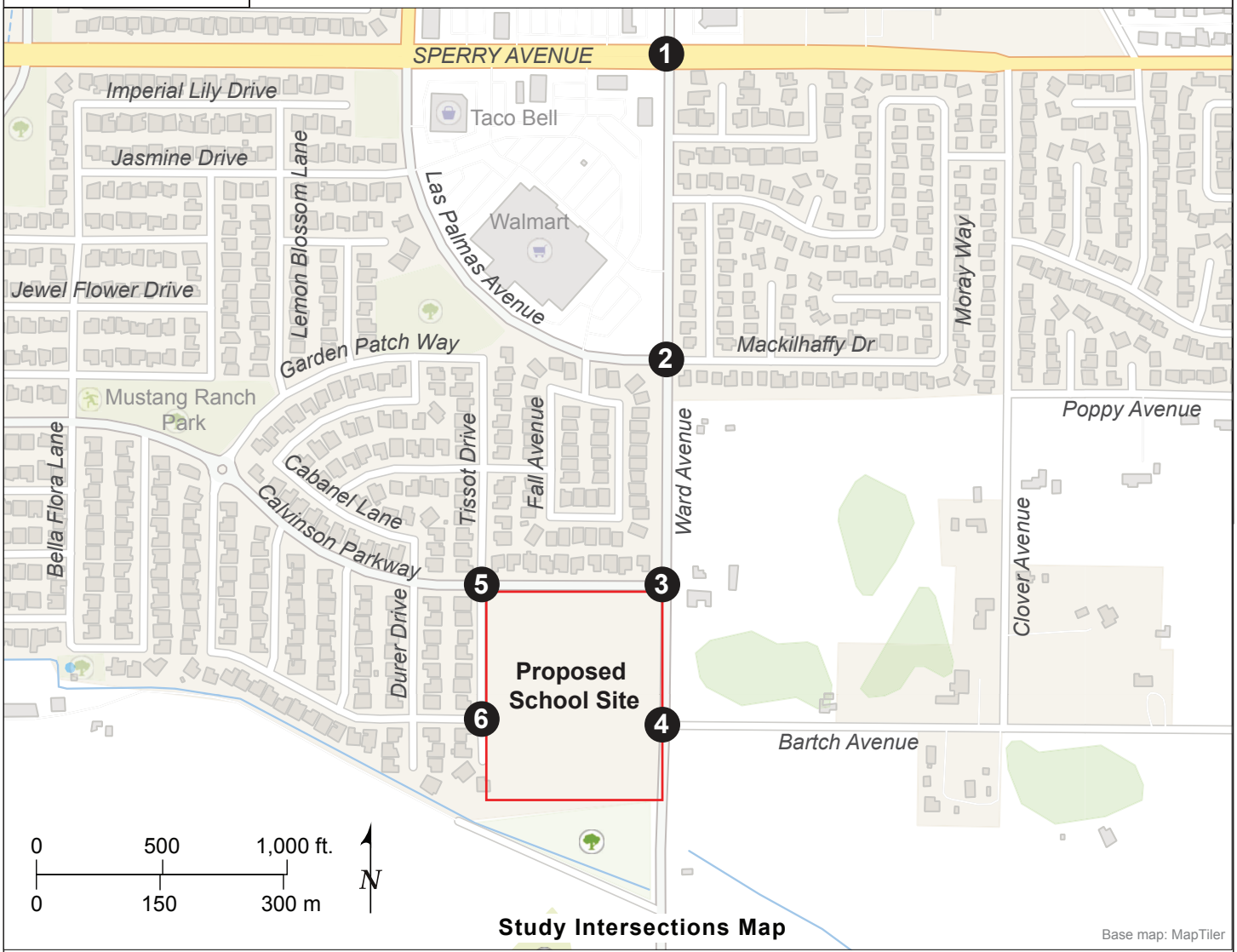
Intersection #1 Ward Ave/Sperry Ave	Intersection #2 Ward Ave/Las Palmas Ave/Mackilhaffy Dr	Intersection #3 Ward Ave/Calvinson Pkwy	Intersection #4 Ward Ave/Bartch Ave	Intersection #5 Calvinson Pkwy/Tissot Dr
26 (46) 113 (201) 96 (98) 97 (65) 438 (418) 96 (145) 69 (136) 385 (497) 16 (29) 28 (23) 129 (111) 131 (90)	13 (21) 121 (214) 5 (20) 12 (11) 13 (10) 48 (12) 36 (30) 9 (22) 59 (57) 51 (44) 203 (128) 40 (12)	93 (56) 134 (226) 108 (49) 100 (43) 82 (40) 184 (139)	86 (220) 10 (16) 24 (10) 2 (8) 257 (170) 15 (3)	2 (5) 0 (2) 19 (8) 15 (5) 164 (95) 1 (6) 2 (2) 239 (81) 11 (2) 9 (4) 0 (0) 11 (11)

Intersection #6 Fountain Grass Dr/Wolfpack Ct
1 (0) 1 (2) 7 (1) 6 (1) 13 (3) 0 (0) 7 (11) 14 (3) 0 (1) 0 (0) 4 (2) 0 (0)

Legend

- Study Intersection
- Traffic Signal
- Stop Sign
- XX AM Peak Hour Volume
- (XX) PM Peak Hour Volume

No.	Intersection
1	Ward Ave/Sperry Ave
2	Ward Ave/Las Palmas Ave/Mackilhaffy Dr
3	Ward Ave/Calvinson Pkwy
4	Ward Ave/Bartch Ave
5	Calvinson Pkwy/Tissot Dr
6	Fountain Grass Dr/Wolfpack Ct



Study Intersections Map

Base map: MapTiler

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Rev. 073124

8.0 CUMULATIVE NO PROJECT TRAFFIC CONDITION

This section details expected traffic conditions at the study intersections under Cumulative (No Project) Conditions. This analysis scenario is defined as Cumulative conditions without the proposed Project. The scenario is similar to the Existing Conditions, but with a projected growth rate of one percent per year applied over 20 years to project traffic demands for approximately the Year 2044.

INTERSECTION LEVEL OF SERVICE - CUMULATIVE NO PROJECT CONDITIONS

It is estimated all the intersection will operate at LOS D or better as shown in **Table 7**.

Table 7: Cumulative (No Project) Peak Hour LOS

			Existing				Cumulative No Project			
			A.M.		P.M.		A.M.		P.M.	
ID	Intersection	Existing Control	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS
1	Ward Ave/Sperry Ave	Signal	22.8	C	23.3	C	25.4	C	26.3	C
2	Ward Ave/Las Palmas Ave/Mackihaffy Dr	TWSC	12.3	B	12.4	B	13.8	B	13.9	B
3	Ward Ave/Calvinson Pkwy	OWSC	11.4	B	12.3	B	12.6	B	13.9	B
4	Ward Ave/Bartch Ave	OWSC	9.3	A	10.5	B	9.5	A	11.2	B
5	Calvinson Pkwy/Tissot Dr	OWSC	9.7	A	10.0	A	10.0	A	10.2	B
6	Fountain Grass Dr/Wolfpack Ct	Free	0.0	A	0.0	A	0.0	A	0.0	A

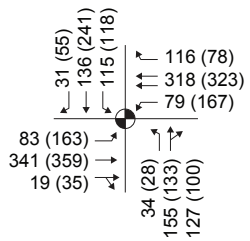
Note:
OWSC: One-Way Stop Control
TWSC: Two-Way Stop Control

Detailed level of service worksheets is provided in **Appendix E.**

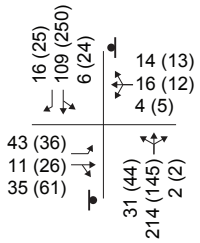
Cumulative No Project Peak Hour Volumes, Lane Geometry and Controls

Figure 8

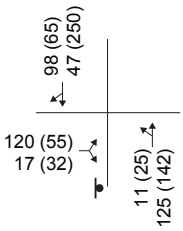
Intersection #1
Ward Ave/Sperry Ave



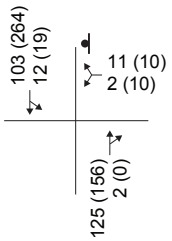
Intersection #2
Ward Ave/Las Palmas Ave/Mackilhaffy Dr



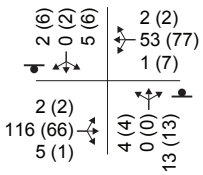
Intersection #3
Ward Ave/Calvinson Pkwy



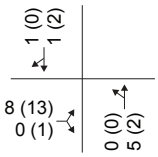
Intersection #4
Ward Ave/Bartch Ave



Intersection #5
Calvinson Pkwy/Tissot Dr



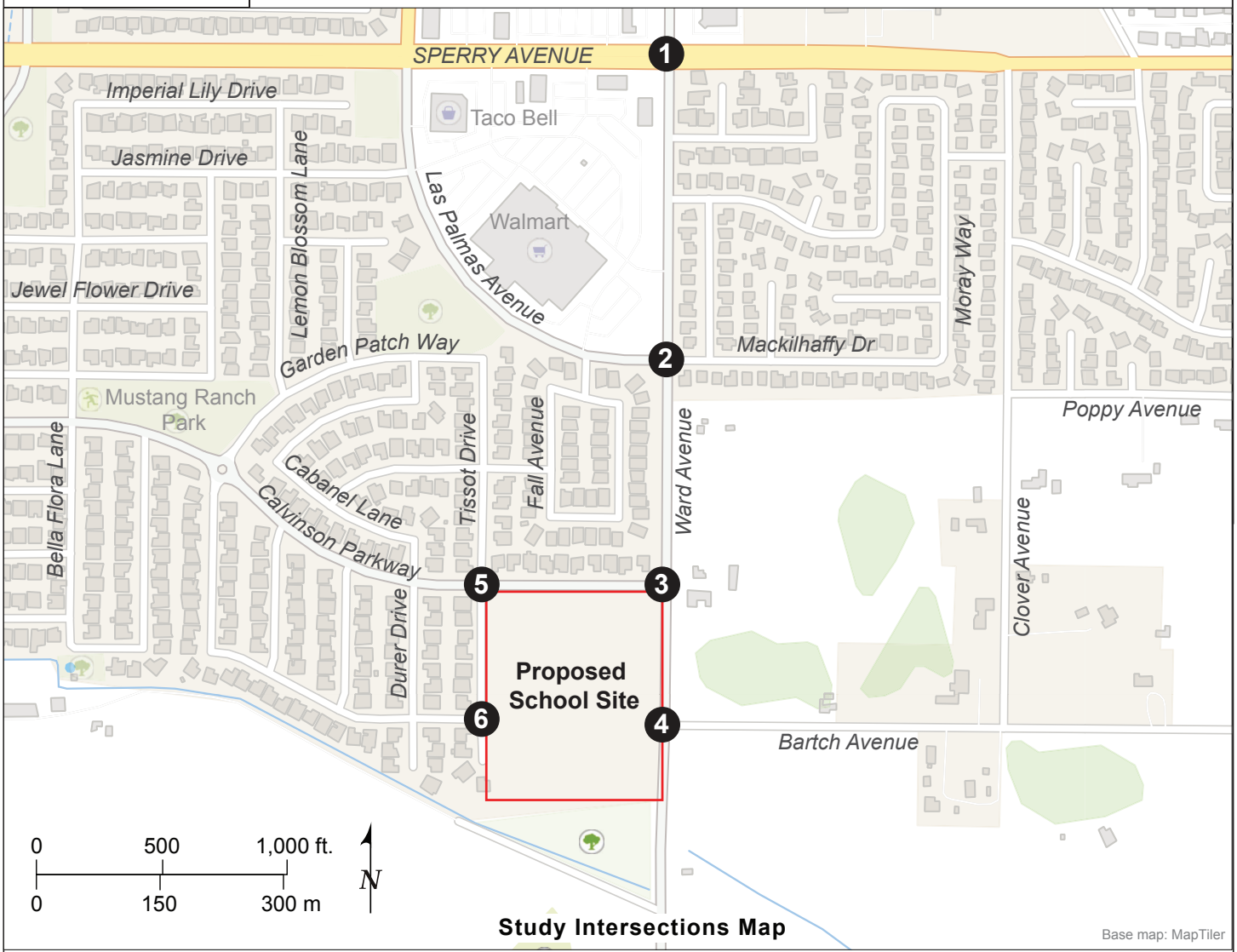
Intersection #6
Fountain Grass Dr/Wolfpack Ct



Legend

- Study Intersection
- Traffic Signal
- Stop Sign
- XX AM Peak Hour Volume
- (XX) PM Peak Hour Volume

No.	Intersection
1	Ward Ave/Sperry Ave
2	Ward Ave/Las Palmas Ave/Mackilhaffy Dr
3	Ward Ave/Calvinson Pkwy
4	Ward Ave/Bartch Ave
5	Calvinson Pkwy/Tissot Dr
6	Fountain Grass Dr/Wolfpack Ct



Study Intersections Map

Base map: MapTiler

AMG ADVANCED MOBILITY GROUP

9.0 CUMULATIVE PLUS PROJECT TRAFFIC CONDITION

This scenario is identical to Cumulative Conditions, with the addition of projected traffic from the proposed development of the Project. Trip generation, distribution, and assignment for the proposed Project are identical to that assumed under Existing plus Approved plus Project Conditions. **Figure 9** shows projected turning movement volumes at the study intersection for Cumulative plus Project Conditions.

INTERSECTION LEVEL OF SERVICE ANALYSIS – CUMULATIVE PLUS PROJECT CONDITIONS

The intersection LOS analysis results for Cumulative plus Project Conditions are summarized in **Table 8**. All intersections are estimated to operate at LOS D or better except the intersection of Calvinson Parkway/Ward Avenue which is estimated to operate at LOS F during the AM peak hour as shown in **Table 8**. It is anticipated that with a signal, the LOS would operate at LOS D or better.

Table 8: Cumulative plus Project Intersection LOS

			Cumulative No Project					Cumulative + Project			
			A.M.		P.M.			A.M.		P.M.	
ID	Intersection	Existing Control	Delay (s)	LOS	Delay (s)	LOS	Proposed Control	Delay (s)	LOS	Delay (s)	LOS
1	Ward Ave/Sperry Ave	Signal	25.4	C	26.3	C	Signal	26.7	C	26.7	C
2	Ward Ave/Las Palmas Ave/Mackihaffy Dr	TWSC	13.8	B	13.9	B	TWSC	25.7	D	16.9	C
3	Ward Ave/Calvinson Pkwy	OWSC	12.6	B	13.9	B	OWSC	91.4	F	15.6	C
4	Ward Ave/Bartch Ave	OWSC	9.5	A	11.2	B	OWSC	10.9	B	11.5	B
5	Calvinson Pkwy/Tissot Dr	OWSC	10.0	A	10.2	B	OWSC	15.5	C	10.9	B
6	Fountain Grass Dr/Wolfpack Ct	Free	0.0	A	0.0	A	TWSC	9.2	A	8.9	A

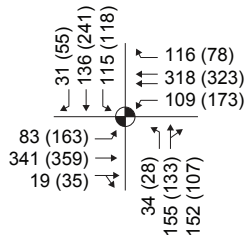
Note:
OWSC: One-Way Stop Control
TWSC: Two-Way Stop Control

Peak hour signal warrant is not met for the intersection of Calvinson Parkway/Ward Avenue. Signal warrant sheets and detailed level of service worksheets are provided in **Appendix F**.

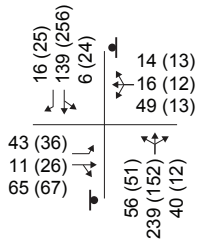
Figure 9

Cumulative Plus Proposed Project Peak Hour Volumes, Lane Geometry and Controls

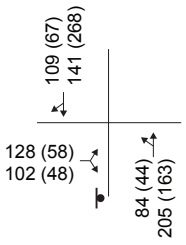
Intersection #1
Ward Ave/Sperry Ave



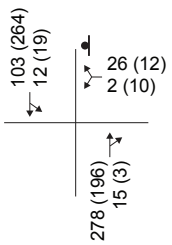
Intersection #2
Ward Ave/Las Palmas Ave/Mackilhaffy Dr



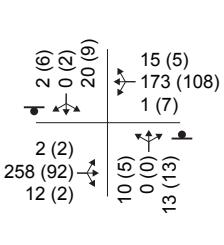
Intersection #3
Ward Ave/Calvinson Pkwy



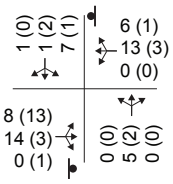
Intersection #4
Ward Ave/Bartch Ave



Intersection #5
Calvinson Pkwy/Tissot Dr



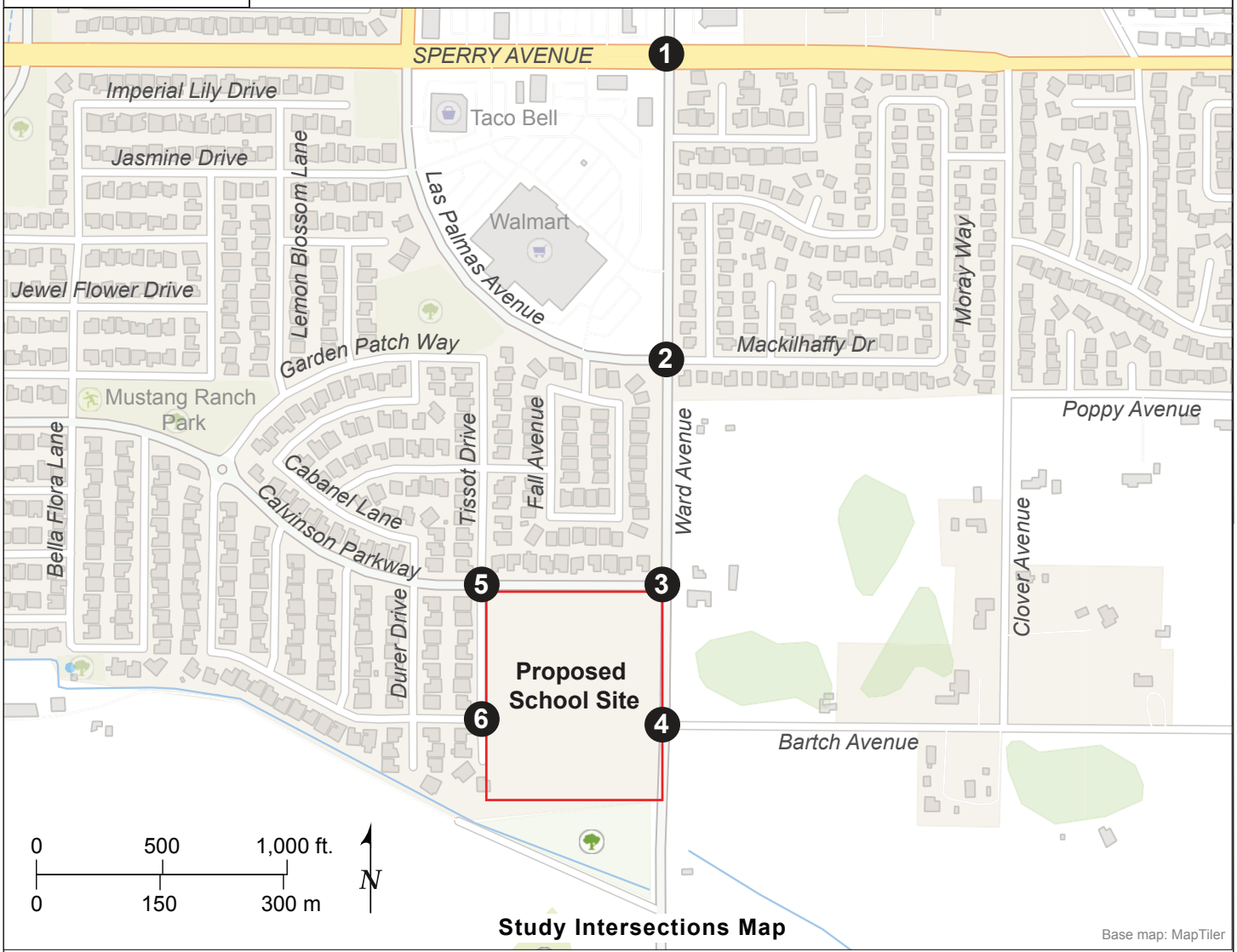
Intersection #6
Fountain Grass Dr/Wolfpack Ct



Legend

- Study Intersection
- Traffic Signal
- Stop Sign
- XX AM Peak Hour Volume
- (XX) PM Peak Hour Volume

No.	Intersection
1	Ward Ave/Sperry Ave
2	Ward Ave/Las Palmas Ave/Mackilhaffy Dr
3	Ward Ave/Calvinson Pkwy
4	Ward Ave/Bartch Ave
5	Calvinson Pkwy/Tissot Dr
6	Fountain Grass Dr/Wolfpack Ct



Study Intersections Map

Base map: MapTiler

AMG ADVANCED MOBILITY GROUP

PROPOSED ACCESS, PARKING AND CIRCULATION

The site plan showed access points on three roadways: Calvinson Parkway, Ward Avenue and Wolfpack Court.

It is anticipated that many students would be accessing the school from the immediate neighborhoods north and south of Calvinson Parkway. Since this is an established neighborhood near the school, it is estimated that some students could walk to the school primarily through Calvinson Parkway. It is anticipated that more students could be expected on Calvinson Parkway from future residential units at Baldwin Ranch which is currently under construction.

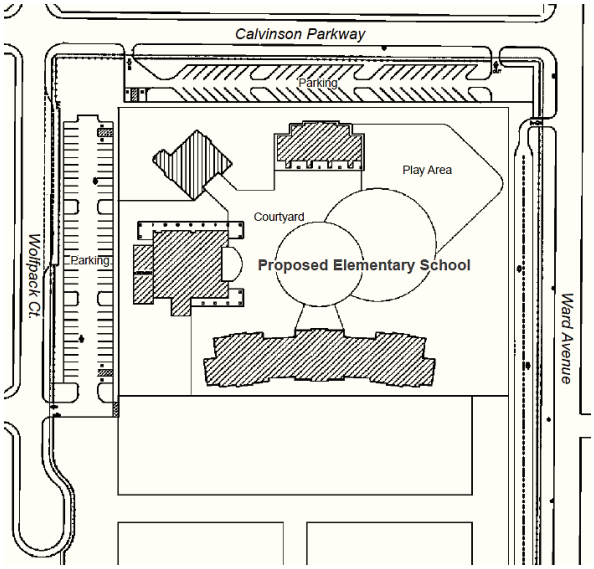


Exhibit 2: Site Plan

Two driveways which will serve a 45-parking stalls lot are depicted on Calvinson Parkway as shown in **Exhibit 2**. This is designed to be a one-way in and out lot with the inbound located approximately 100-feet to the east of Wolfpack Court and exit approximately 75-feet west of Ward Avenue. The eastbound AM peak hour volumes at the intersection of Calvinson Prkwy/Ward Ave is quite high. It is likely vehicle queue that backup from the intersection could block exiting traffic from the proposed driveway

Please consider reversing the entry/exit driveways so that the entry is closer to the intersection. This will ensure exiting vehicles would not be blocked by vehicle queue at Ward Avenue that overflows on Calvinson Parkway.

Additional comments on the site plan is provided in **Appendix G**.

SCHOOL SAFETY IMPROVEMENTS

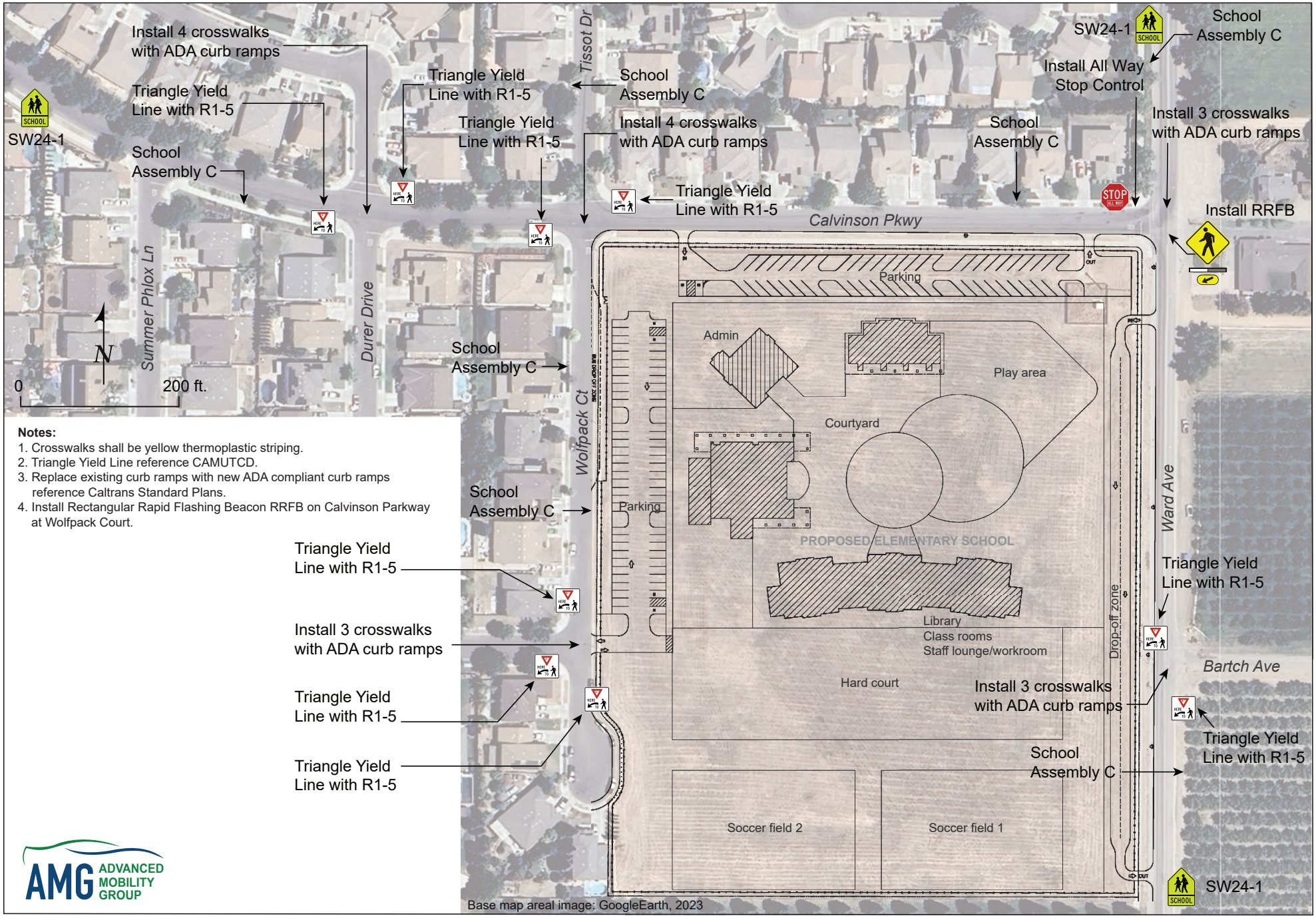
It is common to find that many school zones can be unsafe for students. Issues with drivers dropping off or picking up students, or drivers doing something unsafe, like driving while on the phone, double parking or not following the rules of the road could all contribute to an unsafe school environment.

To ensure a safer environment, clearly marked advance signing and striping of key roadways that leads to the school should be considered. AMG recommends that signing and striping based on the California Manual on Uniform Traffic Control Devices (MUTCD)[7] should be included as part of the project. Recommended school safety improvements are shown in **Figure 10**. As appropriate consider speed limits of 20 mph (within 1,320 feet of the school)[8] of roadways adjacent to the school. It is important for the school to establish a safer route to and from school map and guidance for schoolchildren.

[7] *California MUTCD 2014 Edition, Part 7 Traffic Control for School Areas*
[8] *2014 CA MUTCD Revision 7*

School Safety Improvements

Figure 10



Notes:

1. Crosswalks shall be yellow thermoplastic striping.
2. Triangle Yield Line reference CAMUTCD.
3. Replace existing curb ramps with new ADA compliant curb ramps reference Caltrans Standard Plans.
4. Install Rectangular Rapid Flashing Beacon RRFB on Calvinson Parkway at Wolfpack Court.

Base map areal image: GoogleEarth, 2023

AMG ADVANCED MOBILITY GROUP

VMT EVALUATION

The passage of Senate Bill (SB) 743 requires jurisdictions to identify new Vehicle Miles Travelled (VMT) metrics for identifying and mitigating transportation impacts within CEQA. Our understanding is that the City has yet to adopt official VMT guidelines. So, each project has been evaluated based on the general guidelines contained in the technical advisory in one of a series of advisories provided by the Governor's Office of Planning and Research (OPR)[9].

The OPR indicated that "Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact."

In addition, some project types are presumed to have a less than significant transportation impact absent substantial evidence to the contrary as their uses are local serving in nature. Local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel.

Local-serving K-12 public schools can also be screened from project-level assessment as they are presumed to have a less than significant impact due to their local serving nature unless there is evidence to the contrary[10]. Therefore, the proposed Patterson JUSD New Elementary can be screened from project-level assessment as they are presumed to have a less than significant impact due to their local serving nature.

[9] *Technical Advisory on Evaluating Transportation Impacts in CEQA, Office of Planning and Research (OPR), April 2018*
[10] *An Example included in the City of Anaheim TIA Guidelines for CEQA, June 2020*

10.0 CONCLUSION

Based on the results of the analysis, the following is a summary of our findings:

Existing Traffic Conditions

- All the study intersections operate at acceptable LOS D or better.

Existing plus Approved or Pending Projects Traffic Conditions

- All the study intersections operate at acceptable LOS D or better.

Proposed Project Trip Generation

- The proposed elementary school is estimated to consist of approximately 744 students.
- It is estimated that the project will generate approximately 551 and 120 new total trips during the AM and PM peak hours

Existing plus Approved/Pending plus Project Traffic Conditions

- All intersections are estimated to operate at LOS D or better except the intersection of Calvinson Parkway/Ward Avenue which is estimated to operate at LOS E during the AM peak hour
- Peak hour signal warrant is not met for the intersection of Calvinson Parkway/Ward Avenue, so a signal is not warranted.
- Recommendations were made to the site circulation and school area roadway safety improvements were recommended and shown in Figure 10.

Cumulative No Project Traffic Conditions

- All the study intersections operate at acceptable LOS D or better.

Cumulative No Project Traffic Conditions

- All intersections are estimated to operate at LOS D or better except the intersection of Calvinson Parkway/Ward Avenue which is estimated to operate at LOS E during the AM peak hour
- Peak hour signal warrant is not met for the intersection of Calvinson Parkway/Ward Avenue, so a signal is not warranted.

REFERENCES

1. *Traffic Impact Study for Proposed Baldwin Ranch Development in Patterson, CA, September 11,2020*
2. *Traffic Impact Study for Proposed Sperry Commercial Park - Tri Tex Development in Patterson, CA, October 30, 2019*
3. *City of Patterson Transportation Infrastructure Master Plan, March 6, 2020*

Advanced Mobility Group

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Andrea Flores	Project Engineer

Persons Consulted

Fernando Ulloa, PE	City Manager/Engineer
Joel Andrews	City Planner

Appendix A **TRAFFIC VOLUME COUNTS**

Appendix B INTERSECTION LOS ANALYSIS: EXISTING CONDITIONS LOS CALCULATION SHEETS

Appendix C INTERSECTION LOS ANALYSIS: EXISTING PLUS APPROVED & PENDING PROJECTS CONDITIONS LOS CALCULATION SHEETS

Appendix D INTERSECTION ANALYSIS: EXISTING PLUS APPROVED & PENDING PLUS PROJECT CONDITIONS LOS CALCULATION SHEETS

Appendix E INTERSECTION ANALYSIS: CUMULATIVE NO PROJECT CONDITIONS LOS CALCULATION SHEETS

Appendix F INTERSECTION ANALYSIS: CUMULATIVE PLUS PROJECT CONDITIONS LOS CALCULATION SHEETS

Appendix G **COMMENTS OF SITE PLAN**

TRAFFIC IMPACT STUDY FOR THE PROPOSED PATTERSON JUSD NEW ELEMENTARY, PATTERSON, CALIFORNIA

Appendix G comments of site plaN
January 24, 2025