April 2025 | Initial Study and Mitigated Negative Declaration

GRANITE HILLS HIGH SCHOOL ATHLETICS PROJECT

Apple Valley Unified School District

Prepared for:

Apple Valley Unified School District
Contact: Matthew Schulenberg, Assistant Superintendent, Administrative Services
12555 Navajo Road
Apple Valley, California 92308
760.247.8001

Prepared by:

PlaceWorks
Contact: Malia Durand, Associate Principal
3 MacArthur Place, Suite 1100
Santa Ana, California 92707
714.966.9220
info@placeworks.com
www.placeworks.com

PLACEWORKS

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Abbreviations and Acronyms

AAQS	ambient air quality standards
AB	Assembly Bill
AQMP	air quality management plan
AVMC	Apple Valley Municipal Code
AVUSD	Apple Valley Unified School District
BMP	best management practices
CAFE	corporate average fuel economy
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources, Recycling, and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CDCA	California Desert Conservation Area
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Commission
CGP	Construction General Permit
CH_4	methane
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
dB	decibel
dBA	A-weighted decibel
DOC	California Department of Conservation
DRECP	Desert Renewable Energy Conservation Plan
DSA	Division of State Architect
EOP	emergency operations plan
EPA	United States Environmental Protection Agency
fc	foot-candle
FHSZ	fire hazard severity zone (CAL FIRE)
FMMP	Farmland Mapping and Monitoring Program
GEHA	Geologic and Environmental Hazards Assessment
GHG	greenhouse gases

Abbreviations and Acronyms

gpd	gallons per day
GSP	groundwater sustainability plan
HS	high school
IPCC	Intergovernmental Panel on Climate Change
IS	initial study
L_{dn}	day-night noise level
L_{eq}	equivalent continuous noise level
LHMP	local hazard mitigation plan
LRA	local responsibility area
MBTA	Migratory Bird Treaty Act
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
mgd	million gallons per day
MND	mitigated negative declaration
MRZ	Mineral Resource Zone
MT	metric ton
N_2O	nitrous oxide
NCCP/HCP	Natural Community Conservation Plan / Habitat Conservation Plan
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
O_3	ozone
PA	public address
PM	particulate matter
ppm	parts per million
PPV	peak particle velocity
PRD	permit registration document
RCNM	Roadway Construction Noise Model
REC	recognized environmental condition
RPS	renewable portfolio standard
RTP/SCS	Regional Transportation Plan / Sustainable Communities Strategy
SB	Senate Bill
SCAG	Southern California Association of Governments

Abbreviations and Acronyms

SCE	Southern California Edison
SO_2	sulfur dioxide
SO_X	sulfur oxides
SRA	state responsibility area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
UWMP	urban water management plan
VMT	vehicle miles traveled
VOC	volatile organic compound
VVWRA	Victor Valley Wastewater Reclamation Authority
WJT	western Joshua tree
WUI	wildland-urban interface

Abbreviations and Acronyms

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1. Introduction

1.1 PROJECT OVERVIEW

The Apple Valley Unified School District (AVUSD or District) proposes to construct a new athletic complex with associated facilities on district owned parcels adjacent to Granite Hills High School (HS) and within a portion of the Granite Hills HS campus. The athletic complex would include the installation of a sports field made of artificial turf and a synthetic track that would include football and soccer goal posts and sports equipment, stadium lights, a scoreboard, home and visitor bleachers, a teams building, a concessions building, a public address (PA) system, parking, walkways, fencing, and ornamental landscaping (proposed project).

In addition to the proposed improvements to the new athletic complex, the District also intends to install new access improvements to the eastern portion of the project site which would connect the eastern side of the adjacent undeveloped District parcels and the western side of the campus. These improvements would consist of pedestrian path and vehicle access road.

In compliance with the California Environmental Quality Act (CEQA), the Apple Valley Unified School District, as lead agency, is preparing the environmental documentation for the proposed project to determine if approval of the requested discretionary actions and subsequent development would have a significant impact on the environment. As defined by Section 15063 of the CEQA Guidelines, an initial study (IS) is prepared primarily to provide the lead agency with information to use as the basis for determining whether an environmental impact report, negative declaration, or mitigated negative declaration (MND) would provide the necessary environmental documentation and clearance for the proposed project. This IS has been prepared to support the adoption of an MND.

1.2 PURPOSE OF CEQA AND THE INITIAL STUDY

CEQA (Public Resources Code Section 21000 et seq.) requires that before a lead agency[1] makes a decision to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about and consider the project's potential environmental impacts, inform members of the public about the project's potential environmental impacts and provide them an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment.

The District—in its capacity as lead agency pursuant to CEQA Guidelines Section 15050—is responsible for preparing environmental documentation in accordance with CEQA to determine if approval of the discretionary actions and subsequent development associated with the proposed project would have a significant impact on the environment. As part of the project's environmental review, the District authorized

[1] Pursuant to Public Resources Code Section 21067, lead agency refers to the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect on the environment.

preparation of this IS in accordance with the provisions of CEQA Guidelines Section 15063. Pursuant to Section 15063, purposes of an IS are to:

- Provide the lead agency information as the basis for deciding whether to prepare an EIR or ND.
- Enable an applicant or lead agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for an ND.
- Assist in the preparation of an EIR, if one is required.
- Facilitate environmental assessment early in the design of a project.
- Provide documentation of the factual basis for the finding in an ND that a project will not have a significant effect on the environment.
- Eliminate unnecessary EIRs.
- Determine whether a previously prepared EIR could be used with the project.

As further defined by Section 15063, an IS is prepared to provide the District with information as the basis for determining whether an EIR, negative declaration, or MND would be appropriate for providing the necessary environmental documentation and clearance for the proposed project.

In its preparation of this document, the District determined that the IS supports the adoption of an MND. An MND is a written statement by the lead agency that briefly describes why a project that is not exempt from the requirements of CEQA will not have a significant effect on the environment and therefore does not require preparation of an EIR (CEQA Guidelines Section 15371). The CEQA Guidelines require preparation of an MND if the IS prepared for a project identifies potentially significant effects, but 1) revisions in the project plans or proposals made or agreed to by the applicant before a proposed MND and IS are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and 2) there is no substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment (CEQA Guidelines Section 15070[b]).

The District has considered the information in this IS in its decision-making processes. Although the IS was prepared with consultant support, the analysis, conclusions, and findings made as part of its preparation fully represent the independent judgment and analysis of the District.

1.3 PROJECT LOCATION

Granite Hills High School (Granite Hills HS) is at 22900 Esaws Avenue in the Town of Apple Valley, California (Assessor Parcel Number [APN] 043901218). The project site would include multiple undeveloped parcels to the west of the Granite Hills HS campus (APNs 043901219, 043901220, 043901221, 043901222, 043901223, and 043901224) and a small portion of the Granite Hills HS (see Figure 1, *Site Plan Location with APNs*). The project site would be developed on approximately 20.7 acres of the eastern portion of the undeveloped parcels adjacent to the Granite Hills HS campus and on approximately 0.23 acres of the western portion of Granite

Hills HS campus (APN 043901218). The proposed project would not impact other areas of the campus (see Figure 2, *Aerial View*).

The Town of Apple Valley is bordered by unincorporated San Bernardino County to the north, east, and south and the cities of Victorville and Hesperia to the west. Regional access to the project site is provided by Interstate 15 (I-15), approximately 7.60 miles to the northwest, and State Route 18 (SR-18), approximately 0.60 mile to the south (see Figure 3, *Regional Location*). The project site is bounded by undeveloped parcels to the north, the Granite Hills HS campus to the east, Esaws Avenue to the south, and Central Road to the west. Land uses to the north, east, and west of the project site beyond Ramona Avenue, Ocotilla Road, and Central Road include residential, and uses to the south beyond Esaws Avenue include residential and institutional (see Figure 4, *Local Vicinity*).

1.4 ENVIRONMENTAL SETTING

1.4.1 Existing Land Use

The Granite Hills HS campus is approximately 36 acres in size and is part of the Apple Valley Unified School District. The northern portion of the campus includes the existing track and soccer field, a softball field, a baseball field, practice fields, and six full basketball courts. The southeastern portion of campus includes parking lot #1, #2, #3, #4, and #5; Buildings A (a classroom, admin and gymnasium), B, C, D, E, and G (classroom buildings); and remaining academic-related structures, including a bakery building, a kitchen building, a shower and locker room, 22 portable classrooms, a portable restroom, a student quad area with an amphitheater, grass open space, 2 shade structures, and various storage containers. The southwest portion of the campus consists of parking lot #4 and #5 and eight tennis courts. The tennis courts, track and soccer field, and baseball/softball fields with dugouts are enclosed with chain-link fencing and gates that limit access.

The project site is on the undeveloped District-owned parcels directly west of and adjacent to the Granite Hills HS campus. A small portion of the Granite Hills HS campus would be included in the project site to accommodate the proposed pedestrian path and vehicle access road (see Figure 5, *Site Plan*). The project site is currently undeveloped.

1.4.2 Parking and Access

The Granite Hills HS campus has five vehicle access points. One ingress driveway and two egress driveways are provided along Esaws Avenue, and one ingress driveway and one ingress/egress driveway are provided along Ocotilla Road. The project site does not include any parking or access infrastructure.

1.4.3 Athletic Fields

The Granite Hills HS campus currently has a track and soccer field, a softball field, a baseball field, and practice fields. The track and field contains portable bleachers for up to 100 spectators, three long jump areas, a scoreboard, and four stadium lights, and a chain-link fence encloses the area. the freshman and junior varsity football teams and the junior varsity girls and boys soccer teams use the existing track and field for home games throughout the week. Additionally, the track and field team uses other athletic facilities for their events, and the

varsity football team plays home games at Newton T Bass Stadium on the Apple Valley High School campus in Apple Valley.

1.4.4 General Plan Land Use and Zoning

The existing Granite Hills HS campus has a general plan and zoning designation of Public Facility (P-F) (Apple Valley 2023, 2024a). The project site has a general plan land use designation of Single Family Residential (R-SF), and its zoning is Equestrian Residential (R-EQ). The R-SF land use designation and R-EQ zoning allow for public facilities/school uses.

1.4.5 Surrounding Land Use

The surrounding uses of the project site include single-family residential to the north and west. Surrounding uses to the east are the Granite Hills HS campus' track and field, tennis courts, and parking lot #4 as well as single-family residential uses. Uses to the south are single-family residential and the offices of the Mojave Water Agency, the Apple Valley Fire District Station 331, and the San Bernardino County Transitional Assistance Department (see Figure 2).

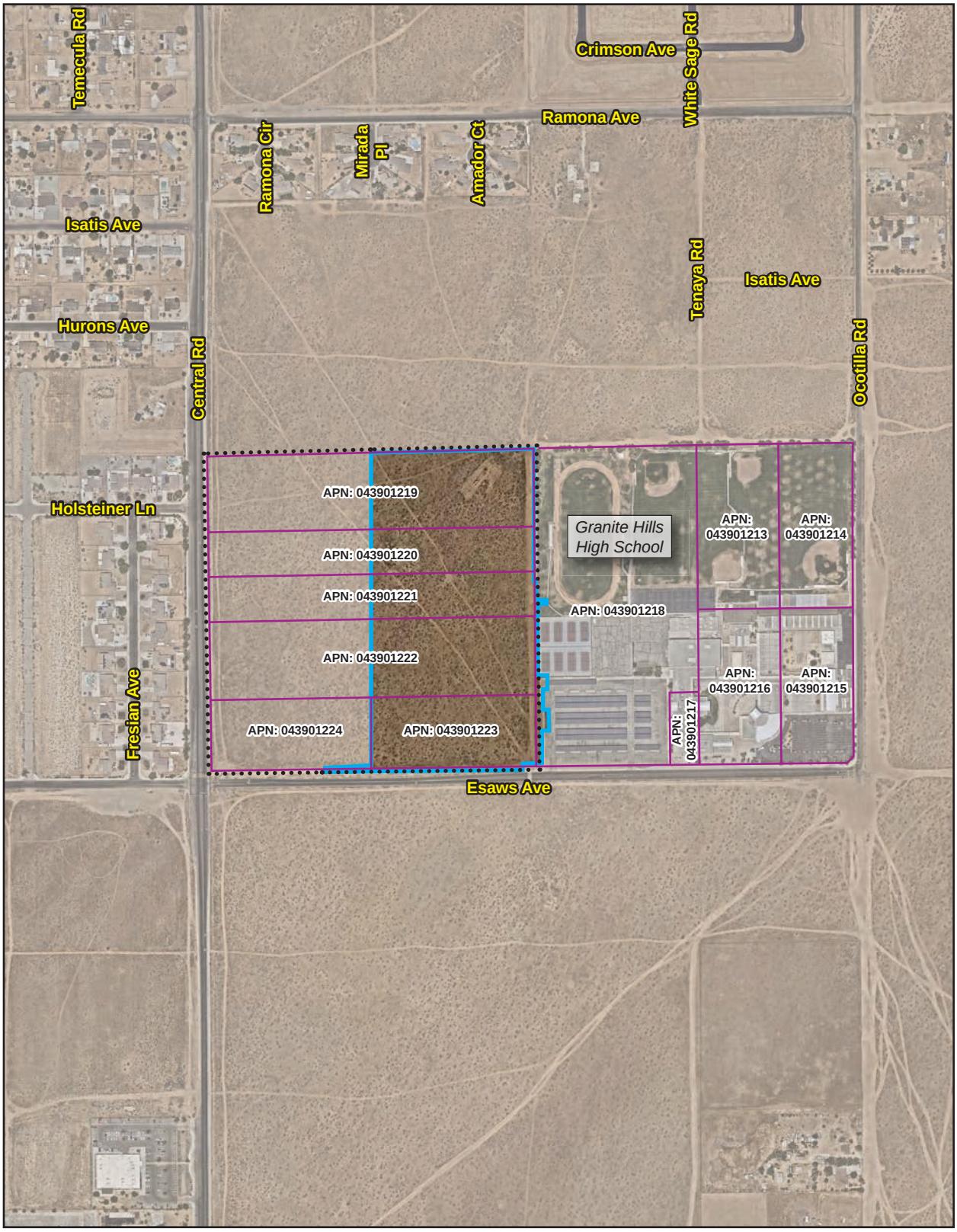
1.5 PROJECT DESCRIPTION

1.5.1 Proposed Project

The AVUSD is proposing to construct a new athletic complex with associated facilities on the project site, directly adjacent to Granite Hills HS and within a portion of the western side of the campus. The proposed project would disturb a total of approximately 20.7 acres west of the campus and approximately 0.23 acres of the Granite Hills HS campus.

The proposed project would install a new track and field with artificial turf, four stadium lights, two football field goal posts, a scoreboard, permanent bleachers to the west and east of the track and field, a concessions building, a teams building, a trash enclosure, a PA system, four parking lots, a flood control basin, walkways, and ornamental landscaping design features and vegetation. The proposed project would also include track event infrastructure, including a long jump area. New chain-link fencing with gates would be installed around the perimeter of the track and field and project site. Chain-link fencing and a pedestrian access gate would be installed between the project site and the campus (see Figure 5). The proposed project would construct athletic facilities for Granite Hills HS student and staff use and allow for sports practices and nighttime games and other school events. The proposed project would not increase student capacity nor the number of staff at Granite Hills HS.

Figure 1 - Site Plan Locations with APNs

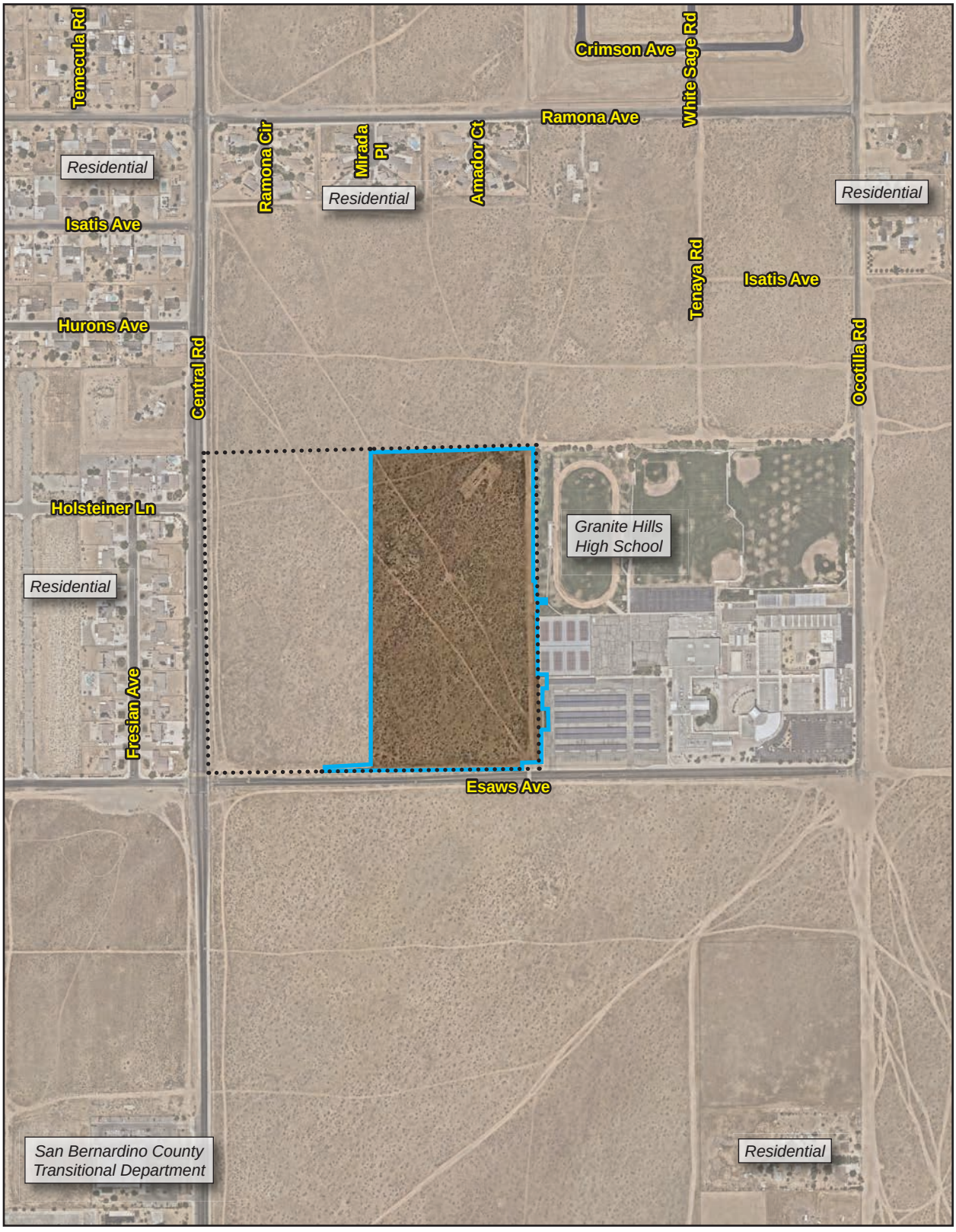


Source: Nearmap 2024; PlaceWorks 2024.

1. Introduction

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Figure 2 - Aerial View



Project Boundary

District-owned Parcels

0 600

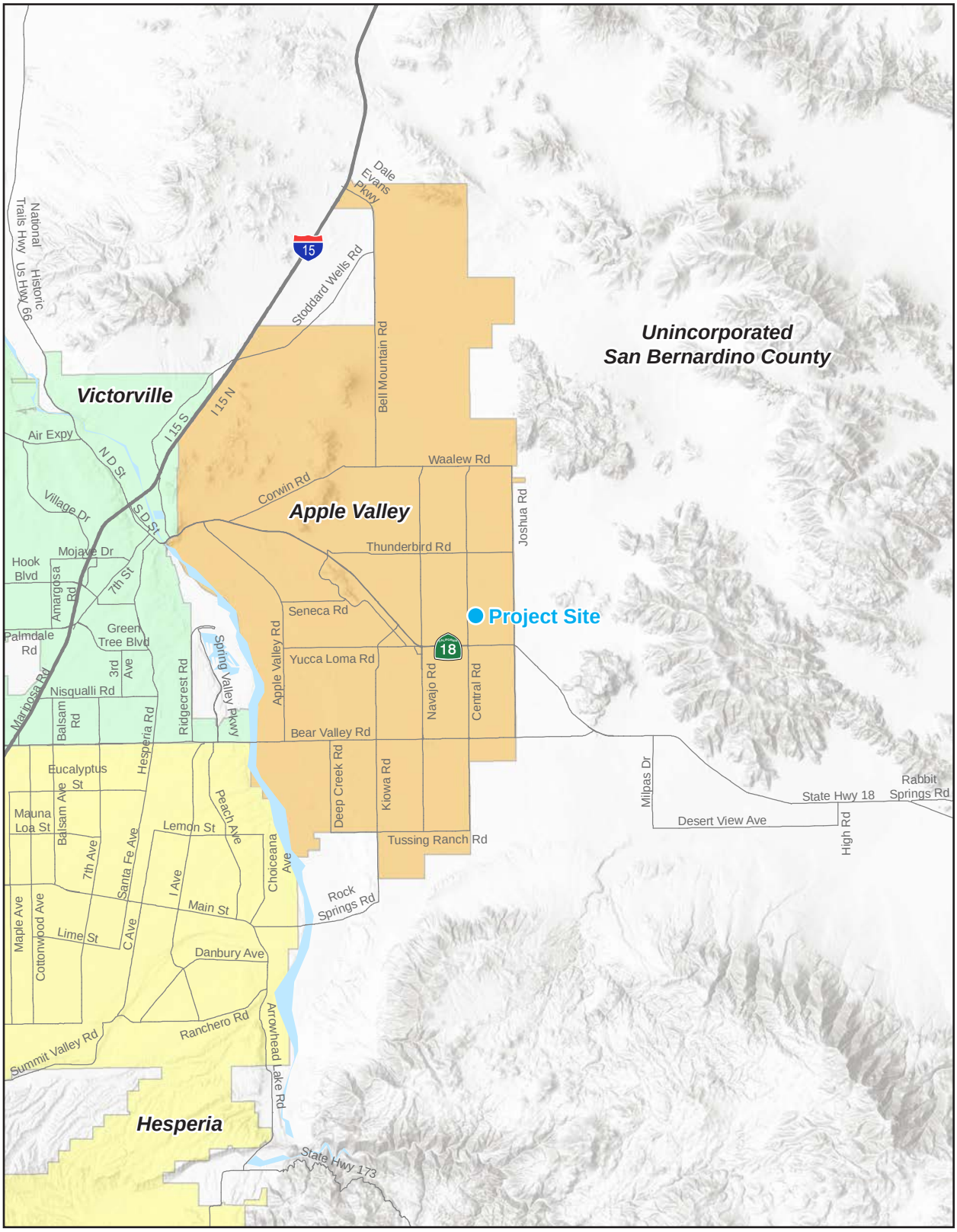
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1. Introduction

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Figure 3 - Regional Location



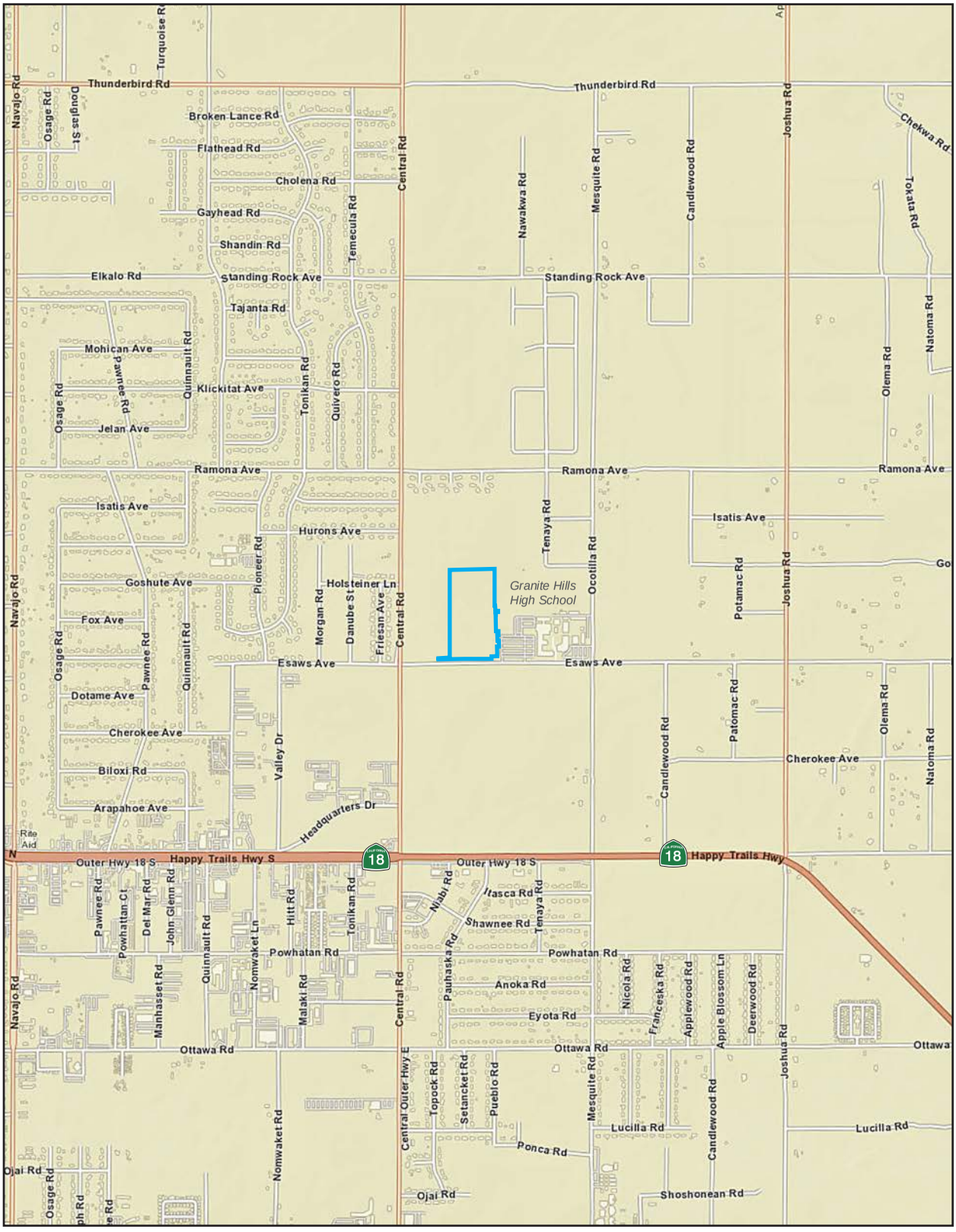
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Note: Unincorporated county areas are shown in white.
Source: Generated using ArcMap 2025.

1. Introduction

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Figure 4 - Local Vicinity



Project Boundary

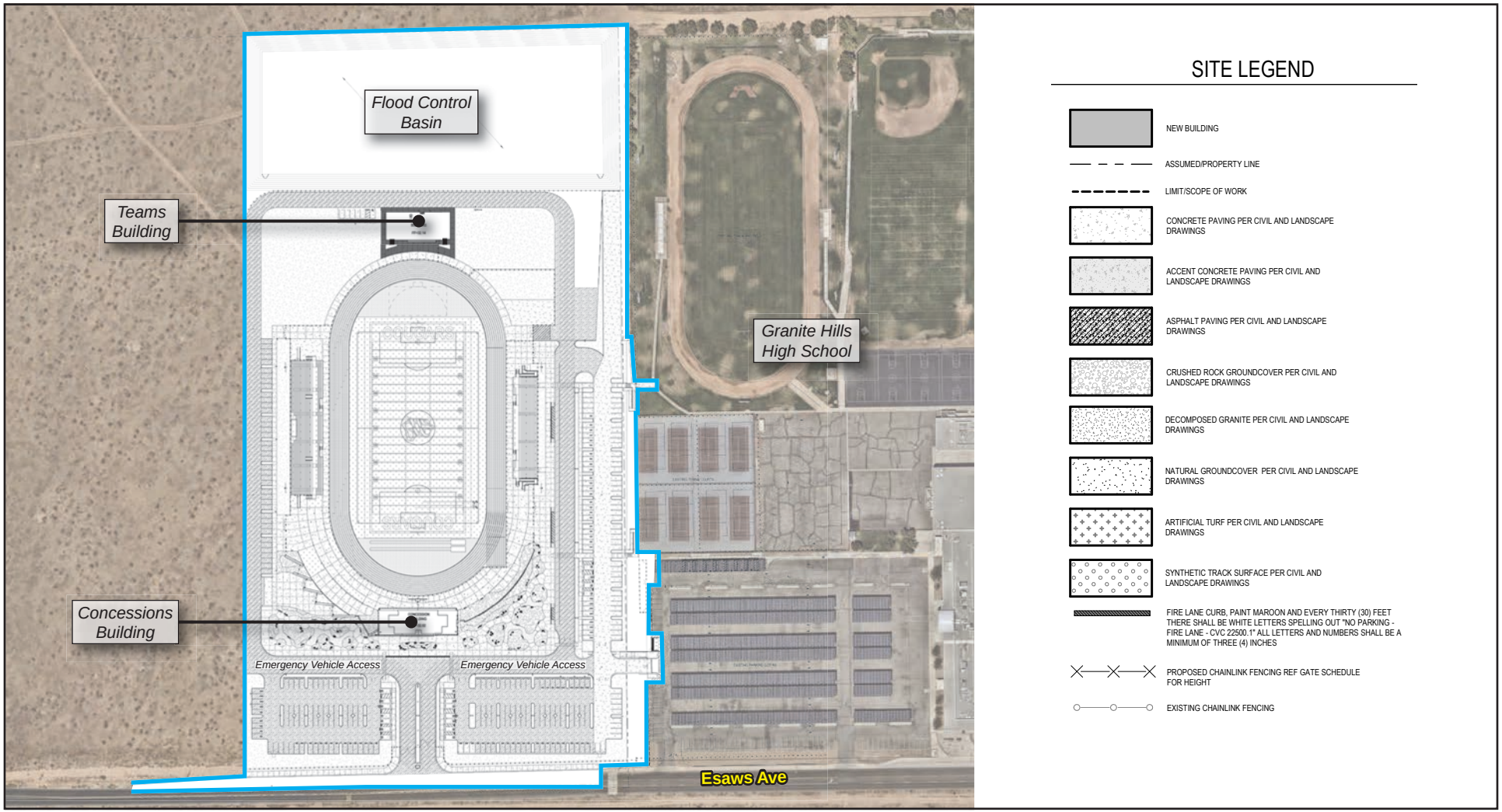
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Source: Generated using ArcMap 2025.

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Figure 5 - Site Plan



Project Boundary

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Scale (Feet)

Source: Nearmap 2024; SGH Architects 2024.

1. Introduction

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1.5.1.1 TRACK AND FIELD

The track and field would be in the center of the proposed athletic complex. The track would consist of a synthetic track surface, approximately 70,379 square feet in size, and would have nine running lanes with a two-inch stripe separating each lane. The field would also have synthetic track surface for two long jump areas in the southern portion of the track and a high jump area in the northern portion of the track and field. The synthetic track would include an area for sprinting and running events.

The field would include a standard-sized football field with approximately 89,824 square feet of artificial turf, striped football and soccer markings (i.e., yard lines, and hashmarks), and football field goal posts. The field would be used for football games, soccer games, other Granite Hills HS athletic team games and practices, and other school events.

1.5.1.2 CONCESSIONS BUILDING AND TEAMS BUILDING

The proposed project would include the construction of two permanent buildings—a 5,733-square-foot concessions building and a 5,409-square-foot teams building. The concessions building would be at the southern end of the of the athletic complex adjacent to the parking lots. The concessions building would consist of two outdoor concessions areas, three storage areas, a riser room, a custodial room, an electrical room, and home and visitor men's and women's restrooms. The proposed teams building would be in the northern part of the project site. The teams room would have home and visitor locker rooms, restrooms, three restrooms for staff, two offices, a riser room, a training room, a weight room, a laundry room, an electrical room, and a custodial room.

1.5.1.3 TRACK AND FIELD AMENITIES AND LIGHTING

The proposed project's track and field amenities would include permanent bleachers, a scoreboard, stadium lighting, and a new PA system. The permanent bleachers would be on the east and west sides of the track and field—the home bleachers on the east and the visitor bleachers on the west. The home bleachers would be 34 feet high with a seating capacity of 2,476 seats, and the visitor bleachers would be 25 feet, 3 inches high with a seating capacity of 1,552 seats. The bleachers would have a total seating capacity of 4,028 seats. The home bleachers would have a 240-square-foot press box in the upper middle portion. The scoreboard would be installed south of the track and field and would have the PA system's speakers, two ad banners, an LED screen, and a scoreboard. The proposed scoreboard would be approximately 32 feet in length and 40 feet in height.

The proposed stadium lighting would consist of four pole-mounted sports lighting systems with concrete footings. Two light poles would be installed at the rear corners of the home bleachers and two behind the visitor bleachers (see Figure 6, *Granite Hills High School Stadium Western Light Spill*, and Figure 7, *Granite Hills High School Stadium Southern Light Spill*). The stadium lighting would provide lighting for sports and school events that use the track and field at night. Additionally, the proposed project would include parking and walkway lighting throughout the project site.

The PA system's speakers would be on top of the proposed scoreboard south of the track and field. The system's three speakers would be housed in a speaker cabinet approximately 40 feet above the ground. The

speaker's audio would project north toward the bleachers and field. The PA would be used during various athletic and school events and during school hours for emergency announcements.

1.5.1.4 ACCESS AND CIRCULATION

Vehicular Access

The proposed project would include the construction of four parking lots throughout the project site. Two parking lots would be constructed in the southern portion of the project site adjacent to Esaws Avenue, one parking lot would be on the eastern edge of the project site, and one parking lot would be on the western edge of the project site. The project site would have internal drive aisles to all four parking lots and would provide access to an existing parking lot in the southwest corner of the Granite Hills HS campus. The proposed project would provide a total of 357 parking spaces, including 9 Americans with Disabilities Act (ADA) accessible standard stalls, 3 accessible van stalls, 70 EV-capable spaces, 18 EV-ready spaces, and 18 EV-charging spaces. Additionally, three separate unloading and loading zones would be in the eastern parking lot area.

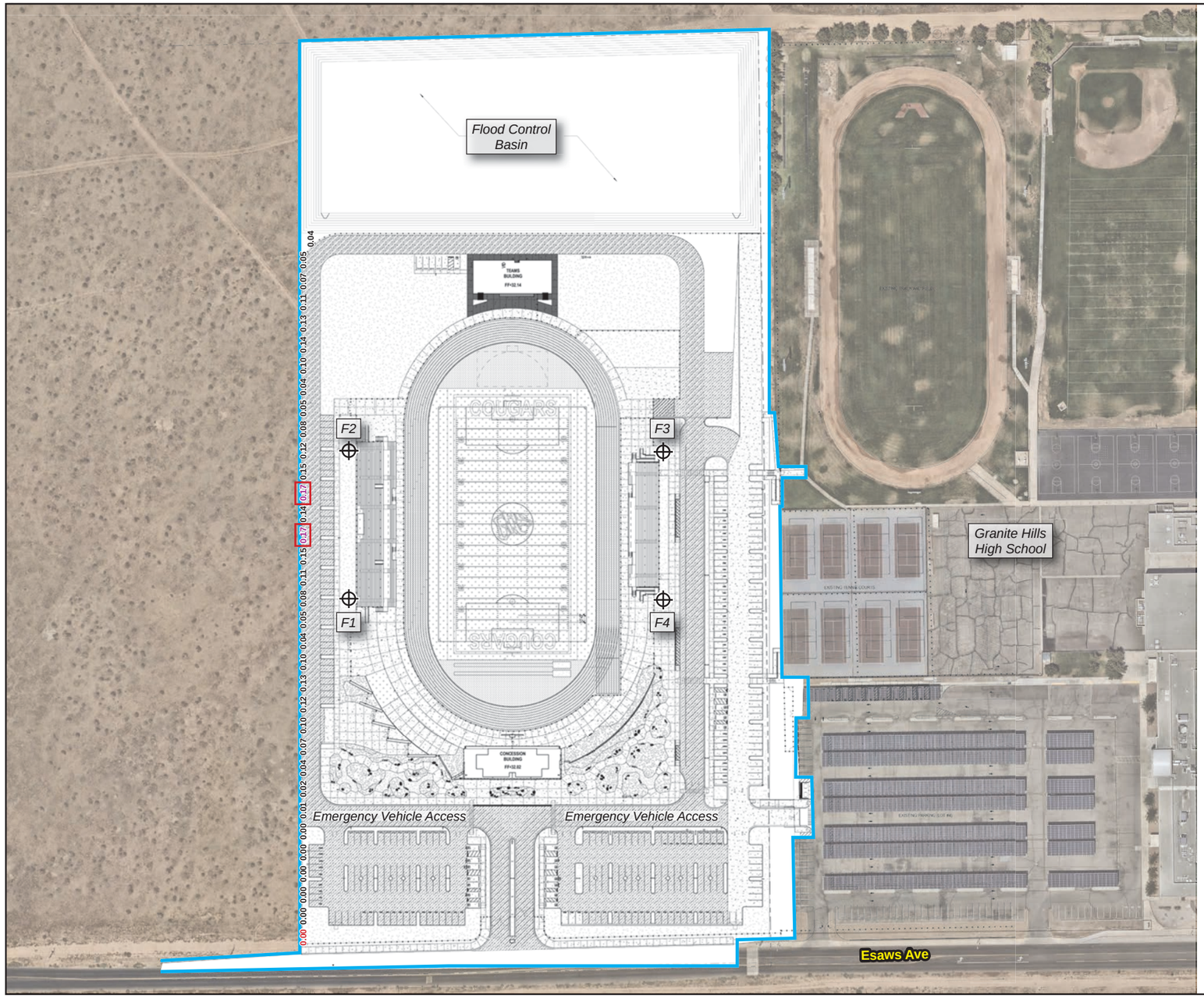
Pedestrian Access

The proposed project would construct sidewalks along the south boundary of the project site connecting to the existing sidewalk along Esaws Avenue. The project site would construct concrete-paved walkways and five striped crosswalks connecting the new parking lots to the proposed athletic complex. Concrete-paved walkways would be constructed within the proposed athletic complex around the track and field and around the perimeter of the athletic complex. Additionally, the proposed project would construct two new concrete-paved walkways, a pedestrian gate, and a vehicular access gate connecting the new athletic complex to the Granite Hills HS campus.

Emergency Access

Emergency access to the proposed project would be provided via the new ingress-egress driveway along Esaws Avenue. The proposed project would have an internal roadway that loops around the athletic complex to provide emergency access to the entire project site. The internal roadway would have a pipe traffic barrier on the northeastern portion of the looped emergency access roadway to limit access to the public in the event of an emergency. The existing emergency access routes and parking lot at the Granite Hills HS would continue to be used for emergency access.

Figure 6 - Granite Hills High School Stadium Western Light Spill



Equipment List For Areas Shown

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	F1-F2	90'	-	90'	TLC-LED-1200	2	2	0
				90'	TLC-LED-1500	10	10	0
				70'	TLC-LED-900	2	0	2
				30'	TLC-BT-575	2	2	0
2	F3-F4	90'	-	90'	TLC-LED-1200	1	1	0
				90'	TLC-LED-1500	10	10	0
				70'	TLC-LED-900	2	0	2
				25'	TLC-BT-575	2	2	0
4	Totals					62	54	8

*Above Grade level relative to the field

Granite Hills High School Athletic Complex

Apple Valley, CA

Grid Summary

Name	**West Propery Line Spill Vertical Fc**
Spacing	30.0'
Height	5.0' above grade

Illumination Summary

	INITIAL MAX VERTICAL FOOTCANDLES
	Entire Grid
Scan Average	**0.0754**
Maximum	0.17
Minimum	0.00
CU	0.00
No. of Points	34
LUMINAIRE INFORMATION	
Applied Circuits	A
No. of Luminaires	**54**
Total Load	68.02 kW

Project Boundary

F1 Field Lights (4)

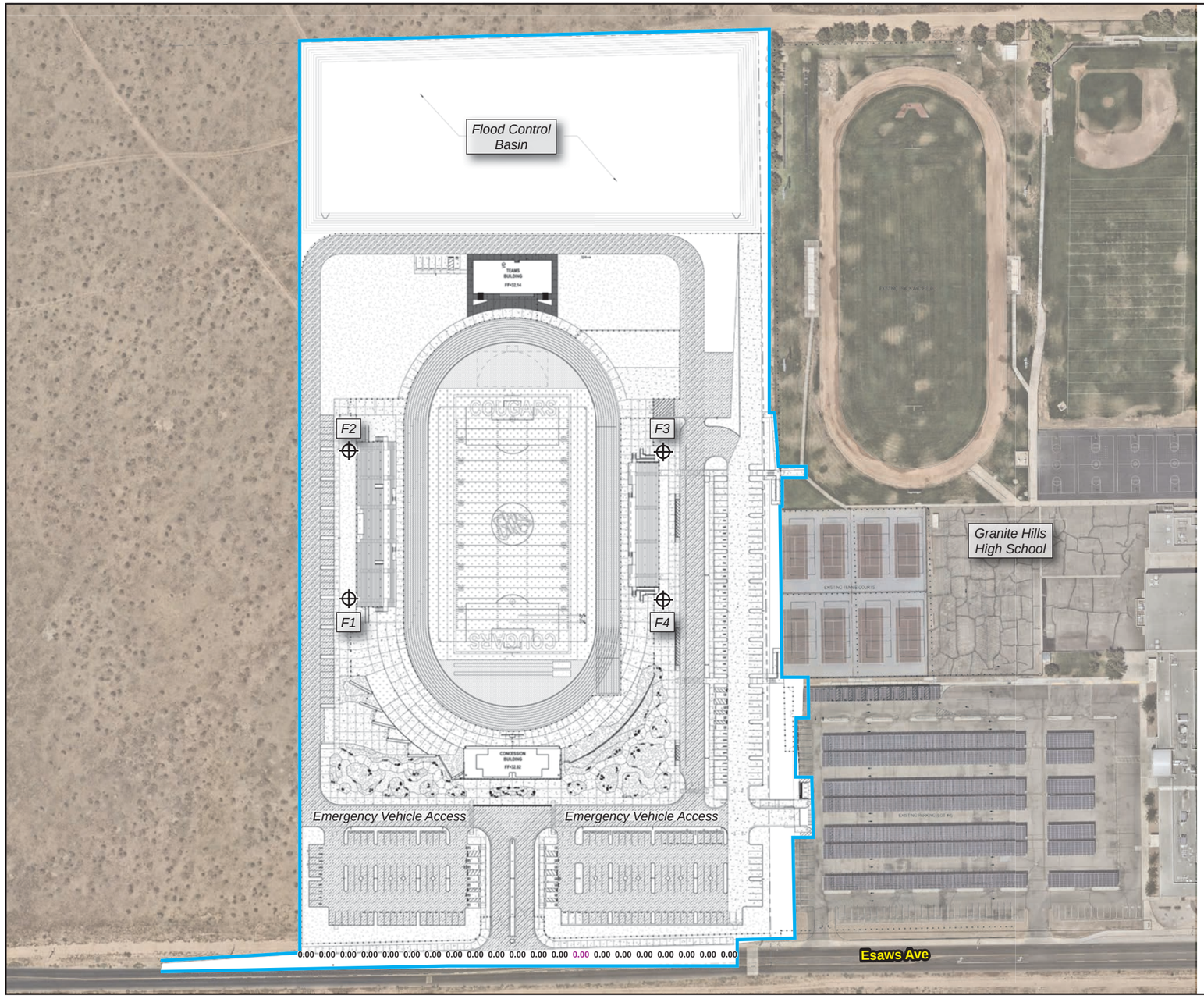
Source: Nearmap 2024; SGH Architects 2024.

0 165
Scale (Feet)

1. Introduction

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Figure 7 - Granite Hills High School Stadium Southern Light Spill



Equipment List For Areas Shown

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
2	F1-F2	90'	-	90'	TLC-LED-1200	2	2	0
				90'	TLC-LED-1500	10	10	0
				70'	TLC-LED-900	2	0	2
				30'	TLC-BT-575	2	2	0
2	F3-F4	90'	-	90'	TLC-LED-1200	1	1	0
				90'	TLC-LED-1500	10	10	0
				70'	TLC-LED-900	2	0	2
				25'	TLC-BT-575	2	2	0
4	Totals					62	54	8

*Above Grade level relative to the field

Granite Hills High School Athletic Complex

Apple Valley, CA

Grid Summary

Name	**South Propery Line Spill Vertical Fc**
Spacing	30.0'
Height	5.0' above grade

Illumination Summary

	INITIAL MAX VERTICAL FOOTCANDLES
	Entire Grid
Scan Average	**0.0001**
Maximum	0.00
Minimum	0.00
CU	0.00
No. of Points	21
LUMINAIRE INFORMATION	
Applied Circuits	A
No. of Luminaires	**54**
Total Load	68.02 kW

Project Boundary

F1 Field Lights (4)

Source: Nearmap 2024; SGH Architects 2024.

0 165
Scale (Feet)

1. Introduction

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Off-Site Improvements

The proposed project would also consist of off-site improvements. As part of the proposed project, a new driveway would be constructed on Esaws Avenue. The proposed driveway would allow for ingress and egress onto and off the project site. The proposed project would construct curb-and-gutter infrastructure and sidewalks along Esaws Avenue. These would extend along Esaws Avenue for the length of the project site, connecting to the existing sidewalks east of the project and continuing approximately 300 feet west of the project site.

Additionally, the existing overhead power lines south of the project site along Esaws Avenue would be installed underground and underneath Esaws Avenue.

1.5.1.5 HARDSCAPING

The proposed project would include hardscaping throughout the project site. Types of hardscaping would include concrete, asphalt for non-parking areas and the proposed parking lots, and decomposed granite. The non-parking hardscaped surfaces would total approximately 292,649 square feet, and the parking lot hardscaping would total approximately 106,441 square feet.

1.5.1.6 LANDSCAPING

The proposed project would have ornamental landscaping and vegetation across the entirety of the project site, with the majority of the landscaping in the southern portion of the project site at the entrance of the athletic complex. Ornamental features would include various colors of crushed rock, landscape boulders, and a mascot sculpture at the entrance of the athletic complex. The project features would provide seating opportunities for pedestrians along the entrance sidewalks. The proposed project would have an irrigation system for various drought-tolerant trees, shrubs, and ground cover . Trees would also be planted throughout the four parking lots on the project site.

1.5.1.7 STORM DRAINAGE SYSTEM

A flood control basin would be designed to receive stormwater flows from the athletic complex and the surrounding areas and would be constructed directly north of the athletic complex. Three catch basins would also be installed around the project site to collect and hold stormwater runoff. The proposed storm drains would connect to the existing stormwater infrastructure on the Granite Hills HS campus.

1.5.2 Use and Scheduling

The proposed sports complex would be primarily used for sporting activities that are currently being held off-site. The three main sports that would use the new sports complex are football, soccer, and track and field, but sports complex use would also include other field events. Currently, the varsity football team uses the Newton T Bass Stadium at Apple Valley High School for home games, and the track and field team competes off-site. Freshman and junior varsity football and junior varsity and varsity girls and boys soccer currently play their games at Granite Hills HS. The sports complex would also be used for other school events.

1. Introduction

The proposed schedule for sports events at the new sports complex would be similar to the current sports schedule. The football season for the freshman, junior varsity, and varsity teams is during the fall and would begin in August and end in November. The freshman football team would play three home games per season on Wednesdays and Thursdays, with games beginning at 4:00 pm and ending at around 6:00 pm. The junior varsity football team would play six home games per season on Wednesdays and Thursdays, with games beginning at 4:00 pm and ending at around 6:00 pm. The varsity football team would play four home games per season on Fridays, with games beginning at 7:00 pm and ending at approximately 10:30 pm.

The soccer season for the junior varsity and varsity girls and boys soccer teams is during the winter and would begin in November and end in February. The junior varsity girls team would play seven home games per season on Tuesdays through Fridays, with games beginning at 3:00 pm and ending at 6:00 pm. The junior varsity boys team would play eight home games per season on Tuesdays through Fridays, with games beginning at 3:00 pm and ending at 6:00 pm. The varsity girls team would play nine home games per season on Tuesdays through Fridays, with games beginning at 4:30 pm and ending at 6:00 pm. The varsity boys team would play eight home games per season on Tuesdays through Fridays, with games beginning at 3:00 pm and ending at 6:00 pm. The track and field season is during the spring and would begin in February and end in May. The track and field team would have four home meets per season on Monday through Friday from 2:00 pm to 7:00 pm.

Non-sports events would also use the proposed sports complex and would occur throughout the year. Table 1, *Granite Hills High School Sports Complex Proposed Event Schedule,* shows the proposed sports activities, days, and times.

Table 1 Granite Hills High School Sports Complex Proposed Event Schedule

Activity/Use	Anticipated Number of Home Events	Days of Week	Time		Outdoor Lighting?
			Start	End	
Football (Fall: August to November)					
Freshman Football	3 per year	Wednesday/Thursday	4:00 pm	6:00 pm	Yes
Junior Varsity	6 per year	Wednesday/Thursday	4:00 pm	6:00 pm	Yes
Varsity Football	4 per year	Thursday/Friday	7:00 pm	10:30 pm	Yes
Soccer (Winter: November to February)					
Girls JV Soccer	7 per year	Tuesday – Friday	3:00 pm	7:00 pm	Yes
Girls Varsity Soccer	9 per year	Tuesday – Friday	4:30 pm	7:00 pm	Yes
Boys JV Soccer	8 per year	Tuesday – Friday	3:00 pm	7:00 pm	Yes
Boys Varsity Soccer	8 per year	Tuesday – Friday	3:00 pm	7:00 pm	Yes
Track and Field (Spring: February to May)					
Track and Field	4 per year	Monday – Friday	2:00 pm	7:00 pm	Yes

Source: AVUS 2025.

The proposed project would be available for community-sponsored events after school hours in accordance with the Civic Center Act (Education Code Sections 38130–38139) and District policy. The project site can also be rented for events.

1.5.3 Project Construction

Project construction would occur in two phases. The first phase would have a tentative start date of summer 2027 and would conclude in summer 2028. Phase two would start in the fall of 2028 and would conclude in the spring of 2029. Phase one would consist of constructing the concessions building, the track and field, the retention basin, a portion of the parking areas, and landscaping. Phase two would consist of constructing the teams building and the remaining parking areas.

1.6 DISCRETIONARY APPROVALS

1.6.1 Lead Agency

The District is the lead agency under CEQA and is carrying out the proposed project. The District Board of Trustees (Board) must approve the proposed project and adopt the IS/MND and Mitigation Monitoring and Reporting Program. The Board will consider the information in the IS/MND when making its decision to approve or deny the proposed project, or in directing modifications to the proposed project in response to the IS/MND's findings and mitigation measures. The IS/MND is intended to disclose to the public the proposed project's details, analyses of the proposed project's potential environment impacts, and identification of feasible mitigation that would lessen or reduce significant impacts to less-than-significant levels.

1.6.2 Other Agency Action Requested

The District is the lead agency under CEQA and has the approval authority over the proposed project. The District would require approval and/or coordination from the following agencies to implement the proposed project.

Lead Agency	Action
Apple Valley Unified School District	• Approve the proposed project • Adopt the Initial Study/Mitigated Negative Declaration • Adopt the Mitigation Monitoring and Reporting Program
Responsible Agencies	**Action**
Department of General Services, Division of State Architect (DSA)	• Approval of construction drawings
Apple Valley Fire Protection District	• Approval of site plans

1. Introduction

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2. Environmental Checklist

2.1 PROJECT INFORMATION

1. **Project Title:** Granite Hills High School Athletics Project

2. **Lead Agency Name and Address:**
   Apple Unified School District
   12555 Navajo Road
   Apple Valley, CA 92308

3. **Contact Person and Phone Number:**
   Matthew Schulenberg, Assistant Superintendent, Administrative Services
   760.247.8001

4. **Project Location:**
   22900 Esaws Avenue
   Apple Valley, CA 92307

5. **Project Sponsor's Name and Address:**
   Apple Valley Unified School District
   12555 Navajo Road
   Apple Valley, CA 92308

6. **General Plan Designation:** Public Facility (P-F) and Single Family Residential (R-SF)

7. **Zoning:** Public Facility (P-F) and Equestrian Residential (R-EQ)

8. **Description of Project:**
   The District proposes to construct a new athletic complex with associated facilities—a new track and field with artificial turf, four stadium lights, two football field goal posts, a scoreboard, permanent bleachers to the west and east of the track and field, a concessions building, a teams building, a trash enclosure, a PA system, four parking lots, a flood control basin, walkways, ornamental landscaping design features, and vegetation—on undeveloped, District-owned parcels directly adjacent to and on a portion of the existing Granite Hills High School campus.

9. **Surrounding Land Uses and Setting:**
   Uses surrounding the project site include single-family residential to the north and west; Granite Hills HS campus' track and field, tennis courts, and parking lot #4 and single-family residential uses to the east; and single-family residential and the offices of the Mojave Water Agency, the Apple Valley Fire District Station 331, and the San Bernardino County Transitional Assistance Department to the south.

2. Environmental Checklist

10. Other Public Agencies Whose Approval Is Required (e.g., permits, financing approval, or participating agreement):

- State Agencies
  - Division of the State Architect (DSA): for approval of construction drawings.
- Local Agencies
  - Apple Valley Fire Protection District (AVFPD): for approval of site plans.

11. 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, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

> Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.94 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

The District notified the San Manuel Band of Mission Indians (SMBMI) of the proposed project in a signed letter dated January 21, 2025, via email. Confirmation of the letter was received on January 23, 2025.

The response letter acknowledged receipt of the letter by the SMBMI on January 21, 2025. The tribe stated that the project site exists within Serrano ancestral territory and is of interest to the tribe and requested more information so the SMBMI could ascertain how it would assume consulting party status under CEQA and participate in project review and implementation moving forward. On February 3, 2025, the District provided the SMBMI with a copy of the Cultural Resources Inventory Memo for Granite Hills High School Athletics Complex (Appendix C) via email. On February 6, 2025, the SMBMI contacted the District and provided Mitigation Measures CUL-1 through CUL-3 and TCR-1 and TCR-2. Mitigation Measures CUL-1 through CUL-3 can be found in Section 3.5, *Cultural Resources*, and Mitigation Measures TCR-1 and TCR-2 can be found in Section 3.18, *Tribal Cultural Resources*. The tribe also requested that a draft copy of the IS/MND be sent for review. The Notice of Intent (NOI) to Adopt a Mitigated Negative Declaration with a link to the IS/MND was sent to the tribe for review on April 25, 2025.

2.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

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

2.3 DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of this initial evaluation:

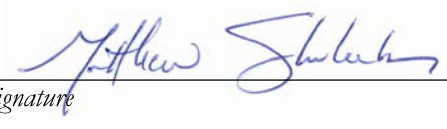
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ 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 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.



Signature

4/25/2025
Date

2.4 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 would 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 particular 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.

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. 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) I**mpacts 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 Measures 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. This 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.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In nonurbanized 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 point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
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?			X	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	
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))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			X	
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
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?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
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?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
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?			X	
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?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
VIII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
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 or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	
X. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in a substantial erosion or siltation on- or off-site;			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			X	
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; or			x	
iv) impede or redirect flood flows?				X
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	
XI. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?				X
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?				x

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?			X	
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?				X
XIII. NOISE. Would the project result in:				
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?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
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?				X
XIV. POPULATION AND HOUSING. Would the project:				
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)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X
XV. PUBLIC SERVICES. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:				
Fire protection?			X	
Police protection?			X	
Schools?				X
Parks?			X	
Other public facilities?				X
XVI. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	

2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	
XVII. TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				X
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	
XVIII. TRIBAL CULTURAL RESOURCES.				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			X	
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:				
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?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
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?			X	
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?			X	
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?			X	
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to substantially 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		X		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

2. Environmental Checklist

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3. Environmental Analysis

Section 2.4 provided a checklist of environmental impacts. This section provides an evaluation of the impact categories and questions contained in the checklist and identifies mitigation measures, if applicable.

3.1 AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The Apple Valley General Plan's open space and conservation element does not specify scenic vistas within the town; however, the general plan describes "vistas of desert valleys" when discussing the town's rural nature (Apple Valley 2009a). The project site and the surrounding area are flat and part of the "desert valley," and views of the project site would come from nearby hills and mountains. The proposed project would be visible from the nearest hill about 1.9 miles northeast of the project site. However, based on the distance and existing development, the proposed project would not impact or constrain views of the desert valley from the nearby hills/mountains.

The proposed project would be adjacent to the existing athletic facilities and educational buildings of similar heights on the Granite Hills campus. The proposed project would be limited to the project site, and the majority of the area surrounding the project site would remain in its current condition (undeveloped). Due to these reasons, the proposed project would not have a substantial effect on scenic vistas. Impacts would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The Apple Valley General Plan identifies important natural scenic resources as the Mojave River, surrounding knolls, hillsides, mountains, and the natural desert environment. The proposed project would expand the existing Granite Hills HS campus and develop an athletic complex with parking lots. The project site and surrounding area are generally flat and do not include knolls, hillsides, or mountains. The Mojave River and the nearest hills are approximately 5.20 miles west, and 0.90 mile northeast of the project site, respectively. The proposed project would not affect these scenic resources. Although the project site is situated within a desert environment, much of the surrounding area has been developed for residential and educational purposes, including the Granite Hills High School campus. The proposed project would include landscaping and design features, such as desert plants and earthy colored architectural coatings for the proposed buildings, that would help the project assimilate with the surrounding desert environment. And upon project completion, the area surrounding the project site would remain undeveloped.

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The nearest officially designated state scenic highway to the project site is a section of State Route 38 (SR-38) near the city of Big Bear, approximately 28 miles southeast of the project site (Caltrans 2018). The nearest eligible state scenic highway to the project site is SR-247, approximately 12.75 miles east of the project site (Caltrans 2018). Due to the distance, topography, and intervening development, the project site is not visible from SR-38, or SR-247. Therefore, the proposed project would not damage scenic resources within a state scenic highway, and no impact would occur.

c) In nonurbanized 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 point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. As defined by Public Resources Code Section 21071, for an incorporated city, "urbanized area" means the city that, either by itself or in combination with two contiguous incorporated cities, has a population of at least 100,000 persons. The town of Apple Valley has an estimated population of 75,786 persons (US Census 2020). Therefore, the project site is not in an urbanized area.

The Apple Valley General Plan describes the town as having a rural character, which "means space—unscarred mountains and vistas of desert valleys, neighborhoods of large lots where keeping horses is allowed, an extensive multi-use trail system, and landscaping consistent with the desert environment" (Apple Valley 2009a). Public views, which include views from the public right-of-way surrounding the campus, would include the desert environment, distant mountains, ridgelines, and hillsides. Views from Esaws Avenue and the public right-of-way include distant mountains and ridgelines to the north, northwest, south, and east. Views to the north and east are partially constrained by existing on-campus development. However, because the distant mountains and ridgelines are largely visible above the campus, the proposed project would result in similar impacts to existing conditions.

Views from Central Road looking west include distant mountains and ridgelines that are partially obscured by the campus, and the proposed project would result in similar impacts. However, views from Ocotilla Road are largely unobscured except for residential uses, which are part of the rural character of the town. Views westward from Ocotilla Road are largely obscured by the existing campus, and the proposed project would not be visible from Ocotilla Road. Thus, the proposed project would not substantially impact or limit views from surrounding public rights-of-way. Additionally, views from the adjacent undeveloped parcels would remain untouched, as would views of the surrounding mountains and ridgelines. The proposed project's buildings and landscaping would be designed to be visually consistent with the existing Granite Hills HS campus and the surrounding desert landscape. The height of the proposed buildings is also similar to existing surrounding buildings. The proposed four stadium light poles would be at a height of 90 feet, but stadium lights would be directed to the project site and would be visually blocked by the existing Granite Hills campus to the east, which will soften the visual impact of the proposed project. Additionally, all project development would be on the project site. Therefore, the proposed project would not degrade the existing visual character or quality of public views of the site and its surroundings. A less than significant impact would occur.

d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. Existing sources of lighting on the project site and surrounding area include security lighting light from outdoor campus lights and residential lights, indoor campus and home lights emanating from windows, streetlights, parking lights, and vehicle headlights. Glare can occur when a light source reflects off a reflective/light-colored surface. Existing sources of glare include light reflecting off vehicles traveling on the public rights-of-way, parked in parking lots and along public rights-of-way, and light-colored building materials.

Terminology

The foot-candle (fc) is a unit based on English measurements. Although foot-candles are considered obsolete in some scientific circles, they are nevertheless used because many existing light meters are calibrated in foot-candles. Moonlight produces approximately 0.01 fc, and sunlight can produce up to 10,000 fc. The general benchmarks for light levels are shown in Table 2, *General Light Levels Benchmark*.

Table 2 General Light Levels Benchmark

Outdoor Light	Foot-Candles
Direct Sunlight	10,000
Full Daylight	1,000
Overcast Day	100
Dusk	10
Twilight	1
Deep Twilight	0.1
Full Moon	0.01
Quarter Moon	0.001
Moonless Night	0.0001
Overcast Night	0.00001
Gas station canopies	25–30
Typical neighborhood streetlight and parking garage	1.0–5.0

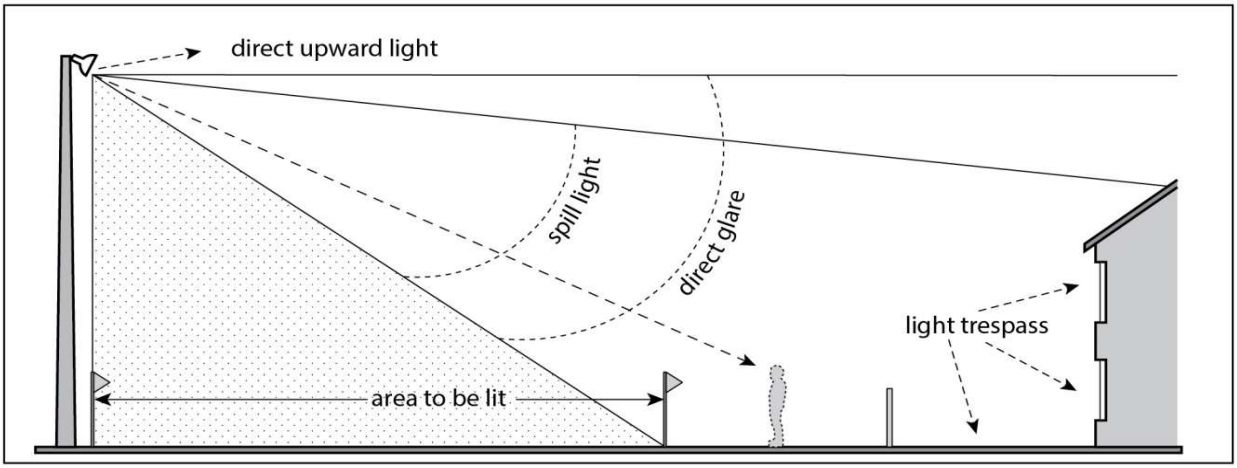
Source: HSI 2019.

- **Horizontal foot-candle.** The amount of light received on a horizontal surface such as a roadway or parking lot pavement.
- **Vertical foot-candle.** The amount of light received on a vertical surface such as a billboard or building façade.
- **Glare** means lighting entering the eye directly from a light fixture or indirectly from reflective surfaces that causes visual discomfort or reduced visibility. Glare can be generated by building-exterior materials, surface-

3. Environmental Analysis

paving materials, vehicles traveling or parked on roads and driveways, and sports lights. Any highly reflective façade material is a concern because buildings can reflect bright sunrays. The concepts of spill light, direct glare, and light trespass are illustrated on Exhibit A, *Spill Light, Direct Glare, and Light Trespass*, adapted from the Institution of Lighting Engineers (ILE 2003).

Exhibit A: Spill Light, Direct Glare, and Light Trespass



- **Direct glare** is caused by looking at an unshielded lamp or a light at maximum candlepower. Direct glare is dependent on the brightness of the light source, the contrast in brightness between the light source and the surrounding environment, the size of the light source, and its position.

- **Illuminance** is the amount of light on a surface or plane, typically expressed in a horizontal plane (e.g., on the ground) or in a vertical plane (e.g., on the side of a building).

- **Lumen** means the unit of measure used to quantify the amount of visible light produced by a light source or emitted from a luminaire (as distinct from "watt," a measure of power consumption).

- **Luminaire** means outdoor electrically powered illuminating devices that include a light source, outdoor reflective or refractive surfaces, lenses, electrical connectors and components, and all parts used to mount the assembly, distribute the light, and/or protect the light source, whether permanently installed or portable. An important component of luminaires is their shielding.

    - **Fully shielded.** A luminaire emitting no light above the horizontal plane.
    - **Shielded.** A luminaire emitting less than 2 percent of its light above the horizontal plane.
    - **Partly shielded.** A luminaire emitting less than 10 percent of its light above the horizontal plane.
    - **Unshielded.** A luminaire that may emit light in any direction.

- **Light trespass.** Spill light that, because of quantitative, directional, or type of light, causes annoyance, discomfort, or loss in visual performance and visibility. Light trespass is light cast where it is not wanted or needed, such as light from a streetlight or a floodlight that illuminates someone's bedroom at night, making it difficult to sleep. As a general rule, taller poles allow fixtures to be aimed more directly on the playing surface, which reduces the amount of light spilling into surrounding areas. Proper fixture angles ensure even light distribution across the playing area and reduce spill light, as shown in Exhibit A, above, *Spill Light, Direct Glare, and Light Trespass.*

- **Sky Glow** is light that reflects into the night sky and reduces visibility of the sky and stars. It is a concern in many jurisdictions, especially those with observatories.

- **Spill light** is caused by misdirected light that illuminates areas outside the area intended to be lit. Spill light can contribute to light pollution.

Municipal Code

The Town of Apple Valley Municipal Code does not have any specific spill light thresholds for an athletic complex. This analysis will use the spill light threshold for a recreational court instead. The Apple Valley Municipal Code (AVMC) defines a recreational court as "facilities developed for the purpose of playing court sports, including but not limited to tennis, paddle tennis, handball, racquetball, and other similar uses" (Chapter 9.08, Definitions). Therefore, as a conservative threshold, the maximum illumination intensity measured at the wall of any residential building on abutting property shall not exceed one-half (0.5) foot-candle (AVMC sec. 9.29.090, Recreational Courts).

Light

The main source of an increase in light at the project site would come from the proposed stadium lighting. Figure 6, *Granite Hills High School Stadium Western Light Spill,* and, Figure 7, *Granite Hills High School Stadium Southern Light Spill*, show the placement of the proposed stadium lighting system. Implementation of four new Musco permanent stadium light poles with LED light fixtures includes two light poles on the home side (eastern side of the field) and two lights on the visitor's side (western side of the field). Additionally, the proposed project would install outdoor mounted fixtures on the concessions building and teams buildings. The project would install approximately 34 light poles at the proposed parking lot to the perimeter of the athletic complex. The four stadium light poles at the athletic stadium would have a height of 90 feet. The stadium lights would include shielding and would be focused on the track and field. The proposed digital scoreboard would be on the south side of the track.

The proximity of the proposed stadium lights to the residential areas presents the potential for light spillover and glare. Musco Lighting conducted a lighting study for the proposed project that looked at spill light and light trespass (see Figure 6 and Figure 7). Figure 6 shows that the proposed lighting system would create a light spill of a maximum of 0.17 vertical fc at the western boundary of the project site, which would be less than the 0.50 fc threshold. Light levels would continue to decrease away from the light source, and all other areas around the proposed athletic complex will have a lower fc light spill measurement. As shown on Figure 7, along the southern boundary of the project site no light spill (0.00 fc) would occur as a result of the proposed project.

The nearest sensitive receptors are single-family residences on the western side of Central Road. As discussed above, light spill along the western boundary of the project site would be 0.17 fc, which is below the 0.50 fc threshold. The fc measurements would be even lower at the residences, since the residences are further from the project site. Furthermore, there are no sensitive uses adjacent to the southern boundary of the project site, and no light spill would occur.

Glare

The buildout of the proposed project would result in more reflective surfaces on the project site compared to existing conditions, potentially increasing glare in the area. The proposed project would not increase the student capacity of the school; however, the number of events on-campus would increase. Specifically, sporting events currently occurring at Newton T Bass Stadium on the Apple Valley High School campus would be moved to the project site, increasing the number of athletic games and practices at the Granite Hills campus as well as other school events and non-school events. Although the proposed project would introduce new sources of glare to the project area, glare sources would be similar to existing conditions and would not be substantially greater from existing sources of glare. Varsity football games and other events, such as graduation, would draw the biggest audiences and increase glare the most. Such large events are limited to certain times of the year. For instance, graduation would only happen once a school year, and varsity football games, the biggest sporting events, would only occur four times per school year. Additionally, surrounding residences have an elevated concrete masonry unit wall that would reduce any light spill and potential glare. Therefore, the proposed project would not create a new source of substantial light or glare. Therefore, impacts would be less than significant.

3.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

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?

Less Than Significant Impact. The project site is vacant and located west of the Granite Hills HS. The Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP) maps California's agricultural resources and determines the suitability of land throughout the state for agriculture purposes. The DOC's FMMP identifies the project site as "Grazing Land" (DOC 2024a). Currently the site is vacant and is not being used for agriculture related purposes. The project site includes a zoning designation of P-F, which is intended for public uses such as schools. The project site also includes the R-EQ zoning designation, which is

intended for residential uses but allows for agricultural uses such as horticulture, animal keeping, and equestrian uses. However, though the project site could be used for agricultural purposes, the project site is not considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, impacts would be less than significant.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Less Than Significant Impact. The existing Granite Hills HS campus is zoned Public Facility (P-F), and the project site, which includes a small portion of the Granite Hills HS campus, is zoned Equestrian Residential (R-EQ). The R-EQ zone is intended for residential uses but allows for agricultural uses such as horticulture, animal keeping, and equestrian uses. However, the main purpose of the zoning is to allow residential uses in a somewhat rural setting, and it is not intended for agricultural uses on a commercial scale. Additionally, the site is not mapped as a site under a Williamson Act contract (DOC 2024b). Therefore, the proposed project would not conflict with existing zoning for agricultural use or conflict with a Williamson Act contract, and a less than significant impact would occur.

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))?

No Impact. The project site is in the Town of Apple Valley. The project site does not support forest land or timberland. Additionally, the proposed project would not conflict with any existing zoning for forest land, timberland, or timberland production. Therefore, no impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The project site is in the Town of Apple Valley. It is currently undeveloped and adjacent to the existing Granite Hills HS, and it does not support forest land. Development of the proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use. Therefore, no impact would occur.

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?

Less Than Significant Impact. The proposed project would include the construction of an athletics complex. The FMMP identifies the project site as Grazing Land. The project site is undeveloped and does not consist of any current agricultural or forest land uses. Additionally, the project site is zoned P-F on the Granite Hills HS campus portion of the project site and R-EQ on the remainder of the project site. The R-EQ zoning, which is intended for residential uses, allows for agricultural uses such as horticulture, animal keeping, and equestrian uses. However, the main purpose of the zoning is to allow residential uses in a somewhat rural setting, and it is not intended for agricultural uses on a commercial scale. Additionally, the project site does not consist of any forest land. The development of the proposed project would not result in the conversion of

farmland to non-agricultural uses or the conversion of forest land to non-forest uses. Therefore, a less than significant impact would occur.

3.3 AIR QUALITY

The Air Quality section addresses the impacts of the proposed project on ambient air quality and the exposure of people, especially sensitive individuals, to unhealthful pollutant concentrations. A background discussion on the air quality regulatory setting, meteorological conditions, existing ambient air quality in the vicinity of the project site, and air quality modeling can be found in Appendix A.

The primary air pollutants of concern for which ambient air quality standards (AAQS) have been established are ozone (O_3), carbon monoxide (CO), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and lead (Pb). Areas are classified under the federal and California Clean Air Act as either in attainment or nonattainment for each criteria pollutant based on whether the AAQS have been achieved. The Mojave Desert Air Basin (MDAB), which is managed by the Mojave Desert Air Quality Management District (MDAQMD), is designated as nonattainment for O_3 and PM_{10} under the California and National AAQS and nonattainment for $PM_{2.5}$ under the California AAQS (CARB 2024).

In addition to criteria air pollutants, both the state and federal government regulate the release of toxic air contaminants (TAC). The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the federal Clean Air Act (42 US Code Section 7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency, acting through the California Air Resources Board (CARB), is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. A consistency determination plays an important role in local agency project review by linking local planning and individual projects to the air quality management plan (AQMP). It fulfills the CEQA goal of informing decision makers of the environmental efforts of the project under consideration at an early enough stage to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to clean air goals in the AQMP.

Regional growth projections are used by MDAQMD to forecast future emission levels in the MDAB. For southern California, these regional growth projections are provided by the Southern California Association of Governments (SCAG) and are partially based on land use designations in city/county general plans. Typically, only large, regionally significant projects have the potential to affect the regional growth projections. The

proposed project is not considered a regionally significant project that would warrant Intergovernmental Review by SCAG under CEQA Guidelines section 15206.

Under the Town's general plan, the project site has a designation of R-SF and is zoned R-EQ, which permit school-related uses. Additionally, the portion of the project on the existing school campus is designated and zoned P-F, which is intended for school uses. The proposed project is intended to serve existing sports activities of the high school that currently use facilities on the existing high school campus or off-site facilities. The proposed project would not contribute to an increase in enrollment at the high school and would therefore not substantially affect housing, employment, or population projections in the region beyond what is accounted for in the Town's general plan and therefore MDAQMD's AQMP and emissions forecasts. Moreover, the proposed project is not a project of statewide, regional, or areawide significance that would require intergovernmental review under Section 15206 of the CEQA Guidelines. Thus, the proposed project would not have the potential to substantially affect the regional growth projections.

Additionally, the regional emissions generated by construction and operation of the proposed project would be less than the MDAQMD emissions thresholds, as shown in Table 3, *Maximum Daily and Annual Regional Construction Emissions*, and Table 4, *Maximum Daily and Annual Regional Operation Emissions*. MDAQMD would not consider the project a substantial source of air pollutant emissions that would have the potential to affect the attainment designations in the MDAB. Therefore, the proposed project would not affect the regional emissions inventory or conflict with strategies in the AQMP. Impacts would be less than significant, and no mitigation measures would be required.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact. The following describes impacts from regional short-term construction activities and regional long-term operation of the proposed project.

Regional Short-Term Construction Impacts

Project construction activities would result in the generation of air pollutants. These emissions would primarily consist of 1) exhaust from off-road diesel-powered construction equipment, 2) dust generated by construction activities, 3) exhaust from on-road vehicles, and 4) off-gassing of volatile organic compounds (VOCs) from paints and asphalt.

Construction activities would disturb a vacant 20.7-acre project site west of the Granite Hills HS campus and approximately 0.23 acre of the existing campus. Construction is anticipated to occur over two phases. The first phase is planned between Spring 2026 and Spring 2027. The second phase is planned between Fall 2027 and Spring 2028. Project development would involve site preparation, grading, building construction, paving, and architectural coating. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2022.1, and construction emissions modeling is provided in Table 3, *Maximum Daily and Annual Regional Construction Emissions*. As demonstrated in Table 3, maximum daily and annual emissions for VOC, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ from construction-related activities would be less than their respective MDAQMD regional significance threshold values. Therefore, air quality impacts from project-related

construction activities would not contribute to a considerable net increase in criteria pollutants for which the project region is nonattainment. Impacts would be less than significant, and no mitigation measures are necessary.

Table 3 Maximum Daily and Annual Regional Construction Emissions

Construction Phase	Maximum Emissions[1]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Maximum Daily Construction Emissions						
Year 2026						
Site Preparation (Phase 1)	3	29	30	<1	22	11
Grading (Phase 1)	3	27	29	<1	12	5
Building Construction (Phase 1)	1	10	13	<1	<1	<1
Year 2027						
Building Construction (Phase 1)	1	9	13	<1	<1	<1
Paving (Phase 1)	1	7	11	<1	1	<1
Architectural Coating (Phase 1)	10	1	1	<1	<1	<1
Building Construction, Paving, and Architectural Coating (Phase 1)	13	17	25	<1	1	1
Site Preparation (Phase 2)	3	28	30	<1	22	11
Grading (Phase 2)	2	14	18	<1	9	4
Building Construction (Phase 2)	1	9	13	<1	<1	<1
Year 2028						
Building Construction (Phase 2)	1	9	13	<1	<1	<1
Paving (Phase 2)	1	6	10	<1	1	<1
Architectural Coating (Phase 2)	8	1	1	<1	<1	<1
Building Construction, Paving, and Architectural Coating (Phase 2)	11	16	24	<1	1	1
Maximum Daily Emissions (lbs/day)	**13**	**29**	**30**	**<1**	**22**	**11**
MDAQMD Regional Daily Threshold	**137**	**137**	**548**	**137**	**82**	**65**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**
Maximum Annual Construction Emissions						
Maximum Annual Emissions (tons/year)	<1	1	2	<1	<1	<1
MDAQMD Regional Annual Threshold	**25**	**25**	**100**	**25**	**15**	**12**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod Version 2022.1; MDAQMD 2020.
Notes: lbs = pounds
[1] Based on the preliminary information provided by the District. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by South Coast AQMD of construction equipment.

Long-Term Operation-Related Air Quality Impacts

Typical long-term air pollutant emissions are generated by area sources (e.g., landscape fuel use, architectural coatings, and asphalt pavement), energy use (natural gas) associated with the proposed restroom and locker buildings, and mobile sources (i.e., on-road vehicles). The proposed buildings would, at minimum, be designed and built to meet the Building Energy Efficiency Standards (Title 24, Part 6) per Title 25 CCR Section 4369.

As shown in Table 4, *Maximum Daily and Annual Operational Phase Emissions*, project-related air pollutant emissions from vehicle trips, area sources, and energy use would not exceed the MDAQMD's regional operation-phase significance thresholds. Therefore, impacts to regional air quality associated with operation of the proposed project would be less than significant, and no mitigation measures are necessary.

Table 4 Maximum Daily and Annual Regional Operation Emissions

Source	Maximum Emissions					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions[1]						
Mobile	10	6	53	<1	10	3
Area	3	<1	18	<1	<1	<1
Energy	<1	<1	0	<1	<1	<1
Maximum Daily Emissions (lbs/day)	13	6	71	<1	10	3
MDAQMD Regional Daily Threshold	**137**	**137**	**548**	**137**	**82**	**65**
Significant?	No	No	No	No	No	No
Maximum Annual Emissions						
Maximum Annual Emissions (tons/year)	<1	<1	2	<1	<1	<1
MDAQMD Regional Threshold	**25**	**25**	**100**	**25**	**15**	**12**
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod Version 2022.1; MDAQMD 2020.
Notes: lbs = pounds.
[1] Summer emissions, which are the highest between the summer and winter emissions, are reported.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The proposed project could expose sensitive receptors to elevated pollutant concentrations if it would cause or contribute significantly to elevated pollutant concentration levels. Unlike regional emissions, localized emission impacts are typically evaluated in terms of air pollutant concentrations rather than mass emissions so they can more readily be correlated to potential health effects.

Construction Localized Emissions and Health Risk

MDAQMD also considers projects that cause or contribute to an exceedance of the California or National AAQS to result in significant impacts. However, emissions that do not exceed the daily or annual emission significant thresholds are considered to result in less than significant localized impacts. As identified above, the proposed project would not result in construction emissions that exceed the MDAQMD significant thresholds; therefore, localized impacts are considered less than significant.

MDAQMD currently does not require the evaluation of long-term excess cancer risk or chronic health impacts for a short-term project when construction activities would not exceed the regional significance thresholds. As identified above, construction-related particulate matter emissions would be substantially below the MDAQMD's regional thresholds. Overall, exposure to on- and offsite receptors would be limited. For the reasons stated above, it is anticipated that construction emissions would not pose a threat to off-site receptors

near the project site, and project-related construction health impacts would be less than significant. No mitigation measures would be required.

Operational-Source Emissions

Land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from MDAQMD include industrial land uses, such as chemical processing, and warehousing operations where substantial truck idling could occur onsite. The proposed project would primarily consist of developing a high school sport complex, which would not be the type of land use that generates substantial quantities of TACs. The primary source of operational emissions under the proposed project would be new passenger vehicle trips to the project site during events. However, these emissions would not generate substantial amounts of diesel particulate matter or TACs. Therefore, localized air quality impacts related to operational-source emissions would be less than significant, and no mitigation measures would be required.

Carbon Monoxide Hotspots

Vehicle congestion has the potential to create pockets of CO called hotspots. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles are backed up and idle for longer periods and are subject to reduced speeds. These pockets could exceed the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations.

The MDAB has been designated as attainment under both the national and California AAQS for CO. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection to more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact (BAAQMD 2023).[2] Based on the traffic impact analysis, the project would generate up to 1,209 new PM daily vehicle trips when a maximum capacity event at the stadium occurs (Garland & Associates 2024; Appendix G). At the intersection of Highway 18 and Navajo Road, the busiest intersection in the vicinity of the project site, the California Department of Transportation reported 2,200 peak hour trips in 2022 (Caltrans 2024a). The new PM peak hour trips added by the proposed project when added to existing traffic levels would result in 3,409 vehicle trips in this intersection, which would therefore not exceed the CO hotspot screening levels of more than 44,000 vehicles per hour, or 24,000 vehicles per hour where vertical and/or horizontal air does not mix. Thus, the proposed project would not substantially increase CO hotspots at intersections, and impacts would be less than significant.

[2] As the MDAQMD does not currently have adopted CO hotspot screening guidance, guidance from the Bay Area Air Quality Management District is used to determine whether the proposed project may result in potentially significant impacts related to CO hotspot generation.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. The project would not result in objectionable odors. The threshold for odor is if a project creates an odor nuisance pursuant to MDAQMD Rule 402, Nuisance, which states:

> A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The proposed project involves the development of a sports complex at an existing high school campus and would not constitute a land use that typically generates objectionable odors. Emissions from construction, such as diesel exhaust from equipment or VOCs from architectural coatings and paving activities, may generate odors. However, these odors would be low in concentration, temporary in nature, within the interior of the project site, and would not affect a substantial number of people. Therefore, odor impacts would be less than significant, and no mitigation measures are necessary.

3.4 BIOLOGICAL RESOURCES

This section is based in part on the following technical study:

General Biological Assessment, Hernandez Environmental Services, January 2025

The General Biological Assessment is in Appendix B to this IS/MND.

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact With Mitigation Incorporated. The General Biological Assessment for the proposed project surveyed approximately 38.53 acres, which included 20.7 acres of the project site, in November 2024. The developed 0.23 acre of the project site on the Granite Hills HS campus was not surveyed (see Appendix B).

The project site is within the boundaries of the proposed Town of Apple Valley Multiple-Species Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). The plan is still being developed

3. Environmental Analysis

and is not yet in effect. The project site is in the California Desert Conservation Area (CDCA) and the Desert Renewable Energy Conservation Plan (DRECP) area. However, the CDCA and the DRECP only apply to federally owned lands.

The survey area consisted of approximately 38.41 acres of disturbed Saltbush scrub habitat, with approximately 0.11 acre of developed land. The dominant plant species on-site was hoary saltbush (*Atriplex canescens*), and the herbaceous layer is dominated by common Mediterranean grass (*Schismus barbatus*). Other plant species observed in this habitat include creosote (*Larrea tridentata*), green rabbitbrush (*Ericameria teretifolia*), tumbleweed (*Salsolatragus*), and Cooper's box thorn (*Lycium cooperi*). The survey area is not in a designated federal critical habitat. Additionally, no impact to federal designated desert tortoise critical habitat is expected. The general wildlife species documented on the survey area or within the vicinity of the survey area include common raven (*Corvus corax*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*), and ring-billed gull (*Larus delawarensis*).

According to the California Natural Diversity Database, a total of 10 sensitive species of plants and 16 sensitive species of wildlife have the potential to occur on or within the vicinity of the survey area. These include species that are listed or candidates for listing by the US Fish and Wildlife Service, California Department of Fish and Wildlife (CDFW), Bureau of Land Management, and California Native Plant Society. Of the 10 sensitive plant species identified, one species was not present: Cushenbury oxytheca (*Acanthoscyphus parishii* var. *goodmaniana*). Seven species have the potential to be present but were not identified during the survey: white pygmy-poppy (*Canbya candida*), desert cymopterus (*Cymopterus deserticola*), purple-nerve cymopterus, Barstow woolly sunflower (*Eriophyllum mohavense*), short-joint beavertail (*Opuntia basilaris* var. *brachyclada*), beaver dam breadroot (*Pediomelum castoreum*), and Latimer's woodland gilia (*Saltugilia latimeri*). One species has a low potential to be present but was not identified during the survey, Mojave monkeyflower (*Diplacus mohavensis*), and one sensitive plant species was present on-site, the Joshua tree (*Yucca brevifolia*). Any impacts to the western Joshua tree would be required to comply with the Western Joshua Tree Conservation Act (WJTCA) as outlined in Mitigation Measure BIO-1. Mitigation Measure BIO-1 would require the District to obtain a WJT Conservation Act Incidental Take Permit from CDFW. Additionally, Mitigation Measure BIO-1 would require that an education program (Worker Environmental Awareness Program-WEAP) be conducted for all construction persons employed or working on the project site before performing any work and that project-related construction personnel shall access the project area using existing routes or routes identified in the project description, and shall not cross western Joshua tree habitat outside or en route to the project site. With incorporation of Mitigation Measure BIO-1, impacts would be reduced to less than significant.

Of the 16 sensitive wildlife species, 12 species were not present: southwestern pond turtle (*Actinemys pallida*), tricolored blackbird (*Agelaius tricolor*), arroyo toad (*Anaxyrus californicus*), Crotch bumble bee (*Bombus crotchii*), Swainson's hawk (*Buteo swainsoni*), western yellow-billed cuckoo (*Coccyzus americanus occidentali*s), southwestern willow flycatcher (*Empidonax traillii extimus*), desert tortoise (*Gopherus agassizii*), California red legged frog (*Rana draytonii*), Mohave tui chub (*Siphateles bicolor mohavensis*), least Bell's vireo (*Vireo bellii pusillus*), and Mohave ground squirrel (*Xerospermophilus mohavensis*). One has low potential to be present, Bendire's thrasher (*Toxostoma bendirei*), and three species have the potential to be present, Le Conte's thrasher (*Toxostoma lecontei*), loggerheaded shrike (*Lanius ludovicianus*), and burrowing owl (*Athene cunicularia*)]. The survey area, which includes the project site, is not within or adjacent to federally designated critical habitat for endangered or threatened species. However,

based on the presence of shrubs within the survey area that can be used by nesting birds during the nesting bird season of February 1 through September 15 potential impacts to nesting birds may occur if vegetation removal occurs.

Nesting birds are protected by the Migratory Bird Treaty Act (MBTA) (US Code, Title 16, Sections 703–712). The MBTA prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of migratory birds, their eggs, parts, and nests, except under a valid permit or as permitted in the implementing regulations. The United States Fish and Wildlife Service administers permits to take migratory birds in accordance with the MBTA. Further, the proposed project would implement Mitigation Measure BIO-2, which would require the preparation of preconstruction surveys for nesting birds and raptors (birds of prey) if vegetation clearing or ground-disturbing activities occur during the nesting season (February 15 through August 31). Compliance with the MBTA and CDFW regulations and implementation of Mitigation Measure BIO-2 would ensure that impacts associated with the proposed project are less than significant to nesting and migratory birds.

The Biological Assessment determined the burrowing owl has the potential to occur on-site. On March 26, 2024, the California Fish and Game Commission (CFGC) received a petition to list the western burrowing owl as threatened or endangered under the California Endangered Species Act (CESA). In response to the March 2024 petition by conservation groups, CDFW recommended that the CFGC advance the burrowing owl to candidate species status. On October 10, 2024, the CFGC unanimously approved the naming of the western burrowing owl as a candidate for potential listing as a protected species under CESA. As such, regulations regarding the take of the western burrowing owl changed. Due to the potential presence of the western burrowing owl, a focused western burrowing owl protocol survey would be required, as outlined in Mitigation Measure BIO-3. If burrowing owls are found to be present colonizing the site, Mitigation Measure BIO-3 would require the District to inform San Bernardino County and CDFW and obtain a CESA Incidental Take Permit (ITP). Therefore, implementation of Mitigation Measures BIO-1 through BIO-3 would reduce impacts to less than significant.

Mitigation Measures

BIO-1 **Western Joshua Tree.** Prior to the initiation of western Joshua tree (WJT) removal, the project applicant shall obtain a WJT Conservation Act Incidental Take Permit from California Department of Fish and Wildlife (CDFW). The incidental take permit will contain a description of proposed project and avoidance and minimization measures to reduce the proposed project's impact on WJTs. The project applicant shall pay statutorily prescribed fees in lieu of conducting mitigation activities.

A qualified biological monitor should be present on site during the transplantation or removal of the Joshua trees. During the remainder of project construction, the biological monitor shall perform weekly site visits to ensure no further project activities occur in the vicinity of the WJTs. The designated botanist shall be responsible for monitoring project construction activities to help avoid incidental take of WJTs.

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An education program (Worker Environmental Awareness Program-WEAP) shall be conducted for all construction persons employed or working in the project site before performing any work. The WEAP will inform all personnel of the Joshua trees protected status.

Project-related construction personnel shall access the project area using existing routes, or routes identified in the project description, and shall not cross western Joshua tree habitat outside or on route to the project site.

The designated botanist shall have authority to immediately stop any activity and/or to order any reasonable measure to avoid unauthorized take of an individual western Joshua tree.

BIO-2 **Preconstruction Avian Survey.** If vegetation clearing or ground disturbing activities need to take place during the breeding season (February 1 through September 15), a pre-construction avian survey(s) will be required. The last survey day should be conducted a minimum of three days prior to the start of work. The District shall hire a qualified biologist to prepare the preconstruction avian survey.

If any bird listed under the Migratory Bird Treaty Act is found to be nesting within the project site or within the area of vegetation or ground disturbing activities, an adequate protective buffer zone shall be established by a qualified biologist to protect the nesting site. If active nests are found during nesting bird surveys, they shall be flagged. A 250-foot buffer shall be fenced around songbird nests and a 500-foot buffer shall be fenced around raptor nests. Additional protective measures shall include establishment of clearly delineated exclusion zones (i.e., demarcated by identifiable fencing, such as orange construction fencing or equivalent) around each nest location as determined by a qualified biologist, taking into account the species of birds nesting, their tolerance for disturbance, and proximity to existing development. The nest site(s) shall be monitored by a qualified biologist periodically to see if the birds are stressed by the construction activities and if the protective buffer needs to be increased. Once the young have fledged and are flying well enough to avoid project construction zones (typically by September), the project can proceed without further regard to the nest site(s).

BIO-3 **Focused Burrowing Owl Survey**. Before any construction or ground disturbing activities occurring on-site, the proposed project shall conduct focused burrowing owls portal surveys by an approved biologist. Per CDFW protocol guidelines for survey number of visits and timing are: Conduct 4 survey visits: 1) at least one site visit between 15 February and 15 April, and 2) a minimum of three survey visits, at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June. If burrowing owls have colonized the project site prior to the initiation of ground disturbing activities, the project proponent shall inform San Bernardino County and CDFW, and shall obtain a California Endangered Species Act (CESA) Incidental Take Permit (ITP).

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact. Sensitive natural communities are natural communities that are considered rare in the region by regulatory agencies; are known to provide habitat for sensitive animal or plant species; or are known to be important wildlife corridors. The project site primarily consists of disturbed saltbush scrub habitat, with small portion of developed areas (see Appendix B). The project site is in the proposed Town of Apple Valley Multiple-Species NCCP/HCP boundaries. The plan is still in the development stage and is not yet in effect. The project site is within the CDCA and the DRECP.

The biological survey concluded that the survey area, which includes the project site, does not contain any drainage, riparian, or riverine features. There are no CDFW, United States Army Corps of Engineers, or Regional Water Quality Control Board jurisdictional waters within the project site boundaries. Additionally, the survey area is not within a designated federal critical habitat. No impact to federal designated desert tortoise critical habitats are expected. Construction and operation of the proposed project would be limited to the project site and would not impact other areas surrounding the project site. Therefore, no impacts to riparian habitat or other sensitive natural communities would occur.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact. As discussed above in Section 3.4(b), the project site does not contain any drainage, riparian, or riverine features or wetlands. Construction-related activities would occur within the project site. As further discussed in Section 3.10, *Hydrology and Water Quality*, the proposed project would prepare a Storm Water Pollution Prevention Plan that would include best management practices (BMP) to properly manage stormwater during construction of the proposed project. Further, stormwater generated by the proposed project would be routed to existing stormwater infrastructure along the public right-of-way and to the proposed flood control basin. Some stormwater may become runoff and be absorbed by impervious surfaces on-site and surrounding the project site. However, the majority would be conveyed to the stormwater basin proposed at the north of the project site. During operation, the proposed project would adhere to the requirements of the State Water Resources Control Board's Trash Amendments, site design, and source control BMPs, as described in Section 3.10(a). Given that there are no riparian habitats or other wetlands on site, with compliance with regulatory compliance measures and incorporation of best management practices, the proposed project would not affect the off-site wetland habitats. Therefore, the proposed project would not have a substantial adverse effect on protected wetlands, and impacts would be less than significant.

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?

Less Than Significant Impact With Mitigation Incorporated. No federally designated critical habitat exists on-site and the survey area is not in a designated wildlife corridor or linkage (Appendix B). The survey area is

flat and does not have any of the landforms needed to function as a wildlife corridor such as hillsides or riparian areas. Furthermore, the survey area is bordered by developed areas and busy roads. The survey area does not serve a function in local wildlife movement. However, the project site does contain disturbed saltbush scrub habitat, which can be used by nesting birds. The proposed project would remove the saltbush scrub on the project site, which has the potential to impact nesting birds. Nesting birds are protected by the MBTA (US Code, Title 16, Sections 703–712). The MBTA prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of migratory birds, their eggs, parts, and nests, except under a valid permit or as permitted in the implementing regulations. The United States Fish and Wildlife Service administers permits to take migratory birds in accordance with the MBTA. Compliance with the existing CDFW regulations and implementation of mitigation measure BIO-2 would ensure that impacts are less than significant to nesting and migratory birds.

With the implementation of Mitigation Measure BIO-2 and compliance with the MBTA and existing CDFW regulations, the proposed project would not interfere with native or migratory wildlife or established wildlife corridors or impede the use of native wildlife nursery sites. Impacts would be reduced to less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact With Mitigation Incorporated. The project site primarily consists of disturbed saltbush scrub habitat, with a small portion of developed area (Appendix B). As discussed in Section 3.4(b), the project site contains one Joshua tree. Ordinance 9.76.040, "Joshua Tree," is an existing ordinance in the Town of Apple Valley's Municipal Code. The intent of Ordinance 9.76.040 is to preserve existing Joshua trees while balancing the town's need for growth. The ordinance also states that any disturbance, transplantation, removal, or destruction of a Joshua tree shall be subject to review by the Town of Apple Valley's Planning Division.

Since the candidacy listing of the western Joshua tree and the passing of the Western Joshua Tree Conservation Act, the state has taken protection authority over the species, and Ordinance 9.76.040 is no longer applicable to the project. However, with implementation of Mitigation Measure BIO-1, impacts to the Joshua tree would be reduced to less than significant.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The project site is located within the proposed Town of Apple Valley Multiple-Species NCCP/HCP boundaries. The plan is still in the development stage and not yet in effect. The project site is within the CDCA. However, the CDCA plan only applies to federally owned lands (BLM 1999). The project site is also within the DRECP. Similar to the CDCA, the DRECP only applies to federally owned lands, and the purpose of the plan is to streamline renewable energy development in the desert regions of California (BLM 2025). The project site is not within any other NCCP/HCP or other conservation plan. Additionally, the proposed project would 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. Therefore, no impacts would occur.

3.5 CULTURAL RESOURCES

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

No Impact. Section 15064.5 defines historic resources as resources listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historical resources, or the lead agency. Generally a resource is considered "historically significant" if it meets one of the following criteria:

i) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

ii) Is associated with the lives of persons important in our past;

iii) Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values;

iv) Has yielded, or may be likely to yield, information important in prehistory or history.

The majority of the project site is undeveloped. Although a small portion of the proposed project is on the western side of the Granite Hills HS, the campus is not listed as a historical resource in the National Register of Historic Places (NPS 2025). Additionally, Granite Hills HS is not listed in the California Historical Landmarks, Points of Historical Interest, or State Historic Structures (California State Parks 2025). Therefore, there are no historic resources on the project site or campus that would be considered historically significant pursuant to Section 15064.5. No impact to historical resources would occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less Than Significant Impact With Mitigation Incorporated. Implementation of the proposed project would result in ground disturbance to construct the new athletic complex. The athletic complex would include the installation of a artificial turf sports field and a synthetic track, football and soccer goals, stadium lights, a scoreboard, home and visitor bleachers, a teams building, a concessions building, a PA system, parking, a flood control basin, walkways, fencing, and ornamental landscaping. Earthwork would include grading for proper base and slope for the concessions building and bleachers, drilling holes for installation of proposed light poles and support beams for the scoreboard and metal screen, and utility trenching. The earthwork activities would generally be surface level and would not include subterranean levels. However, the proposed flood control basin would potentially require substantial excavation to depths of previously undisturbed soils.

As part of the AB 52 Tribal Consultation process, the District notified the San Manuel Band of Mission Indians (SMBMI) of the proposed project via email in a signed letter dated January 21, 2025. A response from the SMBMI was received on January 3, 2025. A subsequent response from the SMBMI on February 6, 2025,

provided Mitigation Measures CUL-1 through CUL-3 and TCR-1 and TCR-2 (see Section 3.18, *Tribal Cultural Resources*).

Although the potential for discovery of archaeological resources within the project site is minimal, implementation of Mitigation Measures CUL-1, CUL-2, and CUL-3 would address the treatment of cultural resources that may be inadvertently discovered. Specifically, Mitigation Measure CUL-1 would require that all work in the immediate vicinity of a cultural resource find cease until a qualified archaeologist assess the cultural resource. Mitigation Measure CUL-2 would require the development of a Monitoring and Treatment Plan if significant pre-contact cultural resources are found. Mitigation Measure CUL-3 would require that work within 100 feet of human remains or funerary objects that are found cease and that the San Bernardino County Coroner be contacted.

Although the potential for discovery of archaeological resources within the project site is minimal, implementation of Mitigation Measures CUL-1, CUL-2, and CUL-3 would address the treatment of cultural resources that may be inadvertently discovered. Therefore, impacts would be less than significant with Mitigation Measures CUL-1, CUL-2, and CUL-3 incorporated.

Mitigation Measures

CUL-1 In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

CUL-2 If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the plan accordingly.

CUL-3 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact With Mitigation Incorporated. A significant impact would occur if previously interred human remains would be disturbed during excavation of the project site. Though it is

unlikely that human remains would be discovered, there is a possibility that human remains could be encountered during excavation and grading activities associated with the proposed project.

If human remains are encountered during ground-disturbing activities, California Health and Safety Code Section 7050.5 requires that disturbance of the site shall halt and remain halted. The San Bernardino County coroner shall investigate the circumstances, manner, and cause of any death and recommend the treatment and disposition of the human remains to the person responsible for the excavation or to his or her authorized representative, in the manner provided in Section 5097.98 of the California Public Resources Code. The coroner is required to make a determination within two working days of being notified of the discovery of the human remains. If the coroner determines that the remains are not subject to his or her authority or has reason to believe they are Native American, he or she shall contact, by telephone within 24 hours, the NAHC, who will contact the "most likely descendant." The most likely descendant shall receive access to the discovery and will provide recommendations or preferences for treatment of the remains within 48 hours of accessing the discovery site. Disposition of human remains and any associated grave goods, if encountered, shall be treated in accordance with procedures and requirements in Sections 5097.94 and 5097.98 of the Public Resources Code; Section 7050.5 of the California Health and Safety Code; and CEQA Guidelines Section 15064.5.

While unlikely, any accidental discovery of human remains during project construction and operation would be required to comply with all applicable laws and regulations establishing the proper handling of human remains as outlined in Mitigation Measure CUL-3. Compliance with these laws and regulations and Mitigation Measure CUL-3 would ensure that proposed project would result in a less than significant impact.

3.6 ENERGY

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The proposed project would result in short-term construction and long-term operational energy consumption. The following discusses the potential energy demands from activities associated with the construction and operation of the proposed sports complex.

Short-Term Construction Impacts

Construction of the proposed project would create temporary increased demands for electricity and vehicle fuels compared to existing conditions.

Electrical Energy

Electricity use during construction of the proposed project would vary during different phases of construction. The majority of the construction equipment would be gas or diesel powered, and any electric-powered construction equipment would be hand tools (e.g., power drills, table saws) and lighting. Thus, electricity usage during construction activities would be minimal, and project-related construction activities would not result in

wasteful or unnecessary electricity demands. Impacts would be less than significant, and no mitigation measures are necessary.

Natural Gas Energy

It is not anticipated that construction equipment used for the proposed project would be powered by natural gas, and no natural gas demand is anticipated during construction. Therefore, impacts would be less than significant, and no mitigation measures are necessary.

Transportation Energy

Transportation energy use during construction of the proposed project would come from delivery vehicles, haul trucks, and construction employee vehicles. In addition, transportation energy demand would come from use of off-road construction equipment. It is anticipated that the majority of off-road construction equipment, such as those used during grading and demolition, would be gas or diesel powered.

The use of energy resources by vehicles and equipment would fluctuate according to the phase of construction and would be temporary. In addition, all construction equipment would cease operating upon completion of project construction. Thus, impacts related to transportation energy use during construction would be temporary and would not require expanded energy supplies or the construction of new infrastructure. Furthermore, to limit wasteful and unnecessary energy consumption, the construction contractors would be required to minimize nonessential idling of construction equipment during construction, in accordance with the California Code of Regulations, Title 13, Article 4.8, Chapter 9, Section 2449.

Construction trips would also not result in unnecessary use of energy because the project site is centrally located and is served by numerous regional freeway systems (e.g., SR-18) that provide the most direct routes from various areas of the region. Thus, energy use during construction of the proposed project would not be considered inefficient, wasteful, or unnecessary. Impacts would be less than significant.

Long-Term Impacts During Operation

Operation of the proposed project would generate new demand for electricity, natural gas, and transportation energy on the project site. For this analysis, it is assumed the proposed restroom would result in electricity and natural gas demands for heating and cooling, and the proposed outdoor lighting would result in electricity demands.

Electrical Energy

Operation of the proposed project would consume electricity for various purposes, including but not limited to heating, cooling, and ventilation of concession/restroom building and teams building, water heating, operation of electrical systems, field lighting, and use of on-site equipment and appliances. Electrical service to the proposed project would be provided by Southern California Edison (SCE) through connections to existing off-site electrical lines and new on-site infrastructure. As shown in Table 5, *Electricity Consumption*, implementation of the proposed project would result in 194,657 kilowatt-hours of electricity use per year.

Table 5 Electricity Consumption

Land Use	Electricity (kWh/year)
Proposed Project Conditions	
High School	165,501
Field Lighting[1]	27,059
Scoreboard[2]	2,096
Total	**194,657**

Source: CalEEMod Version 2022.1.1.12.
Notes: kWh = kilowatt-hour
[1] Based on Musco Lighting Plans provided by the District and calculated electricity use from field lighting (see Appendix A).
[2] Based on assumption that scoreboard would require maximum of 14 kWh (Daktronics 2024).

Though the proposed project is estimated to result in a higher electricity demand than existing conditions, it would be designed and constructed consistent with the requirements of the applicable Building Energy Efficiency Standards (Energy Code) and California Green Building Standards Code (CALGreen) requirements. In addition to the proposed building energy efficiency, SCE is required to comply with the state's renewable portfolios standard (RPS), which mandates utilities to procure a certain proportion of electricity from eligible renewable and carbon-free sources and increasing the proportion through the coming years with an ultimate procurement requirement of 100 percent by 2045. The RPS requirements would support use of electricity by the proposed project that is generated from renewable or carbon-free sources. Overall, the proposed project would generally be consistent with the goals outlined in Appendix F of the CEQA Guidelines regarding increasing energy efficiency, decreasing reliance on fossil fuels, and increasing renewable energy sources. Because the proposed project would comply with these regulations, it would not result in wasteful, inefficient, or unnecessary electricity demands. Therefore, operation of the proposed project would result in a less than significant impact related to electricity.

Natural Gas Energy

As shown in Table 6, *Natural Gas Consumption*, the new building would generate an average natural gas demand of 268,170 kilo British thermal units per year.

Table 6 Natural Gas Consumption

Land Use	Natural Gas (kBTU/year)[1]
Proposed Project Conditions	
Buildings	268,170

Source: CalEEMod Version 2022.11.12
Note: kBTU = kilo British thermal units.
[1] The annual natural gas demand is based on the square footage of the proposed restroom building.

Though the proposed project is estimated to result in a higher natural gas demand than existing conditions on-site, it would be designed and constructed consistent with the requirements of the Building Energy Efficiency Standards. Compliance with state standards would contribute to reducing natural gas demands and decreasing overall reliance on fossil fuels. Overall, the proposed project would not result in wasteful, inefficient, or

unnecessary natural gas demands. Therefore, impacts would be less than significant, and no mitigation measures are necessary.

Transportation Energy

The proposed sports complex would result in the consumption of transportation energy during operations from the use of motor vehicles associated with students, staff, and visitors to the site. The proposed project would increase the number of visitors to Granite Hills HS during sports events and would allow new sports events (i.e., varsity football and track and field) that are currently held off-site in other venues in the town, to be hosted at the campus. At most, the proposed project could result in a net increase of 4,028 spectators for a maximum capacity event, resulting in a net increase in vehicle miles traveled (VMT) and transportation-related fuel usage.

However, fuel efficiency of vehicles during the buildout year of 2028 would, on average, improve compared to vehicle fuel efficiencies experienced under existing conditions, therefore resulting in a lower per capita fuel consumption in 2028 assuming travel distances, travel modes, and trip rates remain the same. The improvement in fuel efficiency would be attributable to the statewide fuel reduction strategies and regulatory compliances (e.g., corporate average fuel economy (CAFE) standards), resulting in new cars that are more fuel efficient and the attrition of older, less-fuel-efficient vehicles. The CAFE standards are not directly applicable to land use development projects, but to car manufacturers. Thus, employees and patrons of the proposed project do not have direct control in determining the fuel efficiency of newly manufactured vehicles. However, compliance with the CAFE standards by car manufacturers would ensure that vehicles produced in future years have greater fuel efficiency and would generally result in an overall benefit of reducing fuel usage by providing the population of the project site's region more fuel-efficient vehicle options.

Because electricity consumed in California is required to meet the increasing renewable energy mix requirements under the State's RPS, accelerated by SB 100, greater and greater proportions of electricity consumed for transportation energy demand envisioned under the proposed project would continue to be sourced from renewable energy sources rather than fossil fuels. Since vehicle fuel efficiencies would improve year over year through the buildout year of 2028 and result in a decrease in overall per capita transportation energy consumption, impacts would be less than significant with respect to operation-related fuel usage.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The state's electricity grid is transitioning to renewable energy under California's Renewable Portfolio Standard program. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. Electricity production from renewable sources is generally considered carbon neutral. Executive Order S-14-08, signed in November 2008, expanded the state's Renewable Portfolio Standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Senate Bill 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. Senate Bill 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

On September 10, 2018, Governor Brown signed SB 100, which supersedes the SB 350 requirements. Under SB 100, the RPS for public owned facilities and retail sellers consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. Additionally, SB 100 also established a new RPS requirement of 50 percent by 2026. The bill also established a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under SB 100 the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

The statewide RPS goal is not directly applicable to individual development projects, but to utilities and energy providers such as SCE, which is the utility that would provide electricity for the proposed project. The compliance of SCE in meeting the RPS goals would ensure the state meets its objective of transitioning to renewable energy. The proposed project would also be designed and constructed to comply with the latest Building Energy Efficiency Standards and CALGreen. Therefore, implementation of the proposed project would not conflict or obstruct implementation of California's RPS Program, and impacts 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:

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.

No Impact. An active fault, for the purposes of the Alquist-Priolo Act, is one that has ruptured in the last 11,000 years (DOC 2025a). Based on the California Department of Conservation fault activity map of California, the proposed project site is not within an Alquist-Priolo Earthquake Fault Zone for fault rupture hazard (DOC 2025b). The closest Alquist-Priolo Earthquake Fault Zone, the Helendale Fault zone, is approximately 6.25 miles northwest. The project site does not lie on or near a fault rupture hazard zone. Since no active faults exist on-site, surface rupture would not occur. No impact would occur.

ii) Strong seismic ground shaking?

Less Than Significant Impact. As discussed in Section 3.7(a)(i), the project site is not within an established Alquist-Priolo Earthquake Fault Zone. However, the project site, like most areas in California, is subject to ground movement associated with earthquakes along the active faults. The degree of ground shaking and earthquake-induced damage is dependent on multiple factors, such as distances to causative faults, earthquake magnitudes, and expected ground accelerations. No active faults are within the town of Apple Valley, and the closest active fault, which is the Helendale Fault, is approximately 6.4 miles west of

the project site (DOC 2025b). The proposed project would be required to comply with the seismic design parameters of the California Building Code (CBC), which regulates all building and construction projects and implements a minimum standard for building design and construction that includes specific requirements for seismic safety, evacuation, foundations, retaining walls, and site demolition. Additionally, the Division of the State Architect (DSA) would be required to review and approve the project plans, which would ensure that the structures are sufficiently designed to withstand ground shaking. Compliance with CBC and DSA review would ensure that impacts are less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction refers to loose, saturated sand, or gravel deposits that lose their load-supporting capability when subjected to intense shaking. Liquefaction potential varies based upon five main contributing factors: 1) Groundwater depth; 2) Soil type; 3) Relative density; 4) Initial confining pressure; and 5) Intensity and duration of ground shaking. According to the California Department of Conservation Liquefaction Zones Mapper, the proposed project is not within an identified liquefaction zone nor in the vicinity of such a zone (DOC 2022). Additionally, the proposed project would be designed and constructed to withstand liquefaction potential consistent with CBC and DSA review, which would ensure that impacts related to liquefaction would be reduced to less than significant.

iv) Landslides?

Less Than Significant Impact. The project site is flat and undeveloped. According to the US Geological Survey's "United States Landslide Inventory and Susceptibility" map, the project site is not in an identified landslide susceptibility zone (USGS 2025a). Additionally, although the project site's census tract is not rated by the FEMA National Risk Index: Landslides, the census tracts surrounding the project site's census tract have relatively low land slide risk (FEMA 2025a). Therefore, adherence to CBC and DSA review would ensure impacts remain less than significant.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Erosion is a normal and inevitable geologic process whereby earthen materials are loosened, worn away, decomposed, or dissolved and removed from one place and transported to another. The project site contains relatively flat terrain, which decreases the project's potential to accelerate erosion. The majority of the project site is undeveloped with exposed soils, and the remainder of the project site is on the developed Granite Hills HS campus. Implementation of the proposed project would require earthwork, which include grading for proper base and slope for the track and field, buildings, parking lots, and bleachers; drilling holes for installation of proposed light poles; and utility trenching. The proposed project does not contain any subterranean levels, and the majority of the proposed project would not require extensive excavation, which could expose more soils to erosion. However, the proposed flood control basin would potentially require substantial excavation to depths of previously undisturbed soils.

In addition, the proposed project would be subject to the National Pollutant Discharge Elimination System permit requirements because the proposed project encompasses an area of more than one acre. These include the preparation of a Storm Water Pollution Prevention Plan (SWPPP), including a BMP program to address

construction-related discharges. The SWPPP for the proposed project would describe construction best practices for erosion control at the site. Adherence with existing state and local laws regulating construction activities would minimize soil erosion. Additionally, erosion would be minimized by the proposed landscaping and aggregate to be installed and the permanent BMPs. Therefore, the proposed project would not result in substantial soil erosion or loss of topsoil, and a less than significant impact would occur.

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?

Less Than Significant Impact. As discussed in Sections 3.7(a)(iii) and 3.7(a)(iv), the project site is not in a liquefaction zone or a landslide zone. Lateral spreading is a type of liquefaction-induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope toward a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements, and such movement typically damages pipelines, utilities, bridges, and structures (Caltrans 2020a). Due to the project site not being identified liquefaction zone, the potential for lateral spreading is considered low.

According to the US Geological Survey's "Areas of Land Subsidence in California," the project site is not in an area subject to land subsidence (USGS 2024b). Collapse of soils occurs when: (1) the soil can no longer hold up the weight pressing on it; (2) the soil particles pack closer together, so the ground surface drops or settles; (3) all the tiny pores in the soil fill with water (no more air pockets); and (4) and when something is pressing down on the soil such as building (Caltrans 2024b). As discussed above, the proposed project would be designed and constructed to withstand landslide, liquefaction, lateral spreading, subsidence, liquefaction, or collapse potential due to adherence with the CBC and with DSA review. Additionally, the proposed project would not result in or contribute to on- or off-site impacts stemming from landslide, liquefaction, lateral spreading, subsidence, liquefaction, or collapse. Therefore, impacts would be less than significant.

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?

Less Than Significant Impact. Expansive soils contain certain types of clay minerals that shrink when they dry out and swell when soils become wet, resulting in the potential for cracking building foundations and in some cases, structural distress of the buildings themselves. Arid or semiarid areas with seasonal changes of soil moisture experiences have a higher potential of expansive soils than areas with higher rainfall.

Based on the United States Department of Agriculture's web soil survey, the soil on the project site contains Helendale Loamy Sand, and Wasco Sandy Loam, which do not contain clay minerals (USDA 2025). Thus it would be unlikely for the project site to be impacted by expansive soils. Additionally, as described in Threshold 3.7(a), compliance with the CBC and with DSA review would ensure adequate structural integrity. Therefore, expansive soils are expected to have less than significant impact or cause direct or indirect risk to life or property.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The proposed project does not propose the use of septic tanks or alternative wastewater disposal systems. The proposed project would be an expansion of the existing Granite Hills High School, and the proposed project would connect to the Town's wastewater system. No impacts related to septic systems would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact With Mitigation Incorporated. The project site is partially developed with the Granite Hills HS campus and the distributed District-owned parcel. No unique geologic features exist on the project site. The proposed project would not directly nor indirectly destroy unique geologic features. No impact would occur.

Paleontological resources or fossils are remains of ancient plants and animals that can provide scientifically significant information about the history of life on earth. This sensitivity is determined by rock type, history of the geologic unit in producing significant fossils, and fossil localities that are recorded from that unit. Based on the DOC Geologic Map of California (Quaternary Surficial Geology) the soils and sediments that overlie bedrock on the project site are a generalized rock type of 'Q' (alluvium, lake, playa, and terrace deposits: unconsolidated and semi-consolidated) with an age of Pleistocene-Holocene (DOC 2025c). The University of California Museum of Paleontology identified 8,507 paleontological localities in San Bernadino County, none of which are within the Holocene Epoch, and 3,730 of which are in the Pleistocene-Epoch (UCMP 2025). Development activities would further disturb previously undeveloped land, and while paleontological resources are not expected to be discovered during project construction, it is possible that unknown paleontological resources could be discovered during grading activities. To reduce impacts to less than significant, Mitigation Measure GEO-1 would be implemented. Mitigation Measure GEO-1 would require that excavations within 50 feet of a fossil locality be temporarily halted until removed and that a qualified paleontologist work with the District to follow accepted professional standards such as further testing for evaluation or data recovery, as necessary. Therefore, implementation of Mitigation Measure GEO-1 would ensure that impacts to unknown paleontological resources are less than significant.

Mitigation Measure

GEO-1 In the event that fossils or fossil locality deposits are discovered during construction, excavations within 50 feet of the fossil locality shall be temporarily halted until removal of the fossil localities. The contractor shall notify a qualified paleontologist to investigate its significance. If the fossil locality is determined to be significant by the qualified paleontologist, the paleontologist shall work with the District to follow accepted professional standards, such as further testing for evaluation or data recovery, as necessary. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the project proponent determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project based on the qualities that make the resource important.

3.8 GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as greenhouse gases (GHG), into the atmosphere. The primary source of these GHGs is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHGs identified by IPCC that contribute to global warming to a lesser extent include nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons.[3,4]

This section analyzes the project's contribution to global climate change impacts in California through an analysis of project-related GHG emissions. Information on manufacture of cement, steel, and other "life cycle" emissions as a result of the proposed project are not applicable and are not included in the analysis.[5] Black carbon emissions are not included in the GHG analysis because the California Air Resources Board (CARB) does not include this pollutant in the State's Senate Bill 32 (SB 32) and Assembly Bill 1279 (AB 1279) inventory but treats this short-lived climate pollutant separately (CARB 2017).[6] A background discussion on the GHG regulatory setting and GHG modeling can be found in Appendix A to this initial study.

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:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even

[3] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals); however, water vapor is not considered a pollutant because it is considered part of the feedback loop rather than a primary cause of change.

[4] Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. However, state and national GHG inventories do not include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

[5] Life-cycle emissions include indirect emissions associated with materials manufacture. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions, found that life-cycle analysis was not warranted for project-specific CEQA analysis in most situations for a variety of reasons, including lack of control over some sources and the possibility of double-counting emissions (CNRA 2018). Because the amount of materials consumed during the operation or construction of the project is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials is also not known, calculation of life-cycle emissions would be speculative. A life-cycle analysis is not warranted (OPR 2008).

[6] Particulate matter emissions, which include black carbon, are analyzed in Section 3.3, *Air Quality*. Black carbon emissions have sharply declined due to efforts to reduce on-road and off-road vehicle emissions, especially diesel particulate matter. The share of black carbon emissions from transportation is dropping rapidly and is expected to continue to do so between now and 2030 as a result of California's air quality programs. The remaining black carbon emissions will come largely from woodstoves/fireplaces, off-road applications, and industrial/commercial combustion (CARB 2022).

3. Environmental Analysis

a very large one, does not generate enough greenhouse gas emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

Implementation of the proposed project would result in the development of a new sports complex at Granite Hills High School. The proposed project would generate GHG emissions from vehicle trips associated with staff and visitors, energy use (i.e., electricity and natural gas), area sources (e.g., equipment used on-site, consumer products, coatings), water/wastewater generation, and waste disposal. Annual average construction emissions were amortized over 30 years and included in the emissions inventory to account for one-time GHG emissions from the construction phase of the proposed project.

Table 7, *Project-Related Operation GHG Emissions*, shows project-related GHG emissions in comparison to MDAQMD's daily and annual significance thresholds. The total GHG emissions on-site from the proposed project would not exceed the MDAQMD's daily and annual GHG thresholds, and the proposed project's cumulative contribution to GHG emissions is less than significant.

Table 7 Project-Related Operation GHG Emissions

Source	Max Daily (lbs CO_2e/day)	Annual ($MTCO_2e$/year)
Construction		
2026	6,991	300
2027	10,045	172
2028	4,240	104
MDAQMD GHG Threshold	548,000	90,718 (100,000 tons)
Exceeds Threshold?	No	No
Operation		
Mobile	12,029	14
Area	76	6
Energy	328	54
Energy – Lighting & Scoreboard[2]	28	5
Water	47	8
Waste	27	5
Refrigerants	<1	<1
Amortized Construction Emissions[1]	709	19
Total Emissions	**13,244**	**110**
MDAQMD's Threshold	548,000	90,718 (100,000 tons)
Exceeds Threshold	No	No

Source: CalEEMod, version 2022.1; MDAQMD 2020.
Notes: $MTCO_2e$ = metric ton of carbon dioxide equivalent
[1] Construction emissions are amortized over a 30-year project lifetime per recommended South Coast AQMD Working Group methodology (South Coast AQMD 2009).
[2] Field lighting and scoreboard and energy based on SCE's 2028 carbon intensity factors.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan and SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). A consistency analysis with these plans is presented below.

CARB Scoping Plan

CARB's latest Climate Change Scoping Plan (2022 Scoping Plan) outlines the State's strategies to reduce GHG emissions in accordance with the targets established under AB 32, SB 32, and AB 1279 (CARB 2022). The Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

Statewide strategies to reduce GHG emissions in the 2022 Climate Change Scoping Plan include: implementing SB 100, which expands the RPS to 60 percent by 2030; expanding the Low Carbon Fuel Standard to 18 percent by 2030; implementing the Mobile Source Strategy to deploy zero-electric vehicle buses and trucks; implementing the Sustainable Freight Action Plan; implementing the Short-Lived Climate Pollutant Reduction Strategy, which reduces methane and hydrofluorocarbons to 40 percent below 2013 levels by 2030 and black carbon emissions to 50 percent below 2013 levels by 2030; continuing to implement SB 375; creating a post-2020 Cap-and-Trade Program; and developing an Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Statewide strategies to reduce GHG emissions include the low carbon fuel standards, California Appliance Energy Efficiency regulations, California Renewable Energy Portfolio standard, changes in the CAFE standards, and other early action measures as necessary to ensure the state is on target to achieve the GHG emissions reduction goals of AB 32, SB 32, and AB 1279. In addition, new developments are required to comply with the current Building Energy Efficiency Standards and CALGreen. The proposed project would comply with these GHG emissions reduction measures since they are statewide strategies. Therefore, the proposed project would not obstruct implementation of the 2022 Scoping Plan, and impacts would be less than significant.

SCAG's Regional Transportation Plan/Sustainable Communities Strategy

SCAG adopted the 2024-2050 RTP/SCS, Connect SoCal, in April 2024. Connect SoCal is a long-term plan for Southern California that details the development, integrated management, and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area (SCAG 2024). This plan outlines a forecast development pattern that demonstrates how the region can sustainably accommodate needed housing and job centers with multimodal mobility options. The overarching vision is to expand alternatives to driving, advance the transition to clean transportation technologies, promote integrated and safe transit networks, and foster transit-oriented development in compact and mixed-use developments (SCAG 2024). In addition, Connect SoCal is supported by a combination of transportation and land use strategies that outline how the region can achieve California's GHG-emission-

reduction goals and federal Clean Air Act requirements. The projected regional development, when integrated with the proposed regional transportation network in Connect SoCal, would reduce per-capita GHG emissions related to vehicular travel and achieve the GHG reduction per capita targets for the SCAG region.

The Connect SoCal Plan does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency to governments and developers. As discussed in Section 3.17, *Transportation*, the proposed project is a locally serving use that would not generate significant VMT. The proposed project would also allow the school's sports events that currently are hosted at other venues in the Town to be held at Granite Hills HS, which would reduce the distance of travel for attendees and result in a decrease in VMT. Therefore, the proposed project would not interfere with SCAG's ability to implement the regional strategies in Connect SoCal, and impacts would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

Less Than Significant Impact. Construction of the proposed project would require small amounts of hazardous materials such as vehicle fuels, lubricants, grease and transmission fluids, paints, and coatings. The handling, use, transport, and disposal of hazardous materials during the construction phase of the proposed project would comply with existing regulations of several agencies—the Environmental Protection Agency (EPA), California Division of Occupational Safety and Health, United States Occupational Safety and Health Administration, and United States Department of Transportation.

Operation of the proposed project would transport, use, store, and dispose of small amounts of hazardous materials typical of school facilities such as cleaning and maintenance supplies (e.g., cleaners, gasoline, paint, pesticides). The proposed project includes various athletic complex improvements that would use cleaners and other chemicals in relatively small quantities, which are not typically considered hazardous materials that could result in a significant hazard to the public or the environment. No manufacturing, industrial, or other uses using large amounts of hazardous materials would be developed on the project site. Compliance with applicable federal and state laws and regulations governing the use, storage, transport, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. Therefore, the proposed project would not create substantial hazards to the public or the environment. Impacts would be less than significant.

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?

Less Than Significant Impact. The project site currently consists of vacant undeveloped land covered by grasses, brush, and exposed soil and a small portion (0.23 acre) of the existing Granite Hills High School. A Phase I Assessment evaluated the historical aerial photographs and United States Geological Survey topographic maps and found that the project site has been undeveloped and vacant since 1932 (Padre 2024)

(see Appendix D). No environmental liens, activity use limitations, or other environmental reports were identified on the project site. On November 25, 2024, during a site reconnaissance of the project site, no petroleum and/or chemical containers and no stained soils or concrete/asphalt surfaces were observed. Additionally, no aboveground or underground petroleum storage tanks were observed, and no pole-mounted or pad-mounted electrical transformers were observed on or adjacent to the project site.

Because no pole-mounted or pad-mounted electrical transformers were observed on or adjacent to the project site, the potential presence of PCBs in soil at the project site is not considered a Recognized Environmental Condition (REC). The report did not identify former building structures, and the potential for asbestos-containing materials, lead-based paint, residual organochlorine pesticides from building structures/materials are not considered RECs.

Additionally, as part of the Phase I Assessment, a database search was conducted for RECs. The Phase I Assessment searched 24 databases and found one property. Specifically, the Granite Hills HS campus was identified in the CERS HAZ Waste List as a site that included the disposal of surplus organics and animal carcasses related to science classes offered at Granite Hills HS. The high school is permitted through the San Bernardino County Fire Protection District and was issued inspection violations. The violations were corrected and, therefore, the Granite Hills HS campus is not considered a REC (see Appendix D).

California Government Code Section 65962.5 requires referencing a list of hazardous materials sites, hazardous waste discharges for which the State Water Control Board has issued certain types of orders, public drinking water wells collecting detectable levels of organic contaminants, underground storage tanks with reported unauthorized releases, and solid waste disposal facilities from which hazardous waste has migrated.

Four additional environmental lists were searched for hazardous materials on the project site:

- **EnviroMapper.** United States Environmental Protection Agency (EPA 2025b)
- **Solid Waste Information System (SWIS).** California Department of Resources Recovery and Recycling (Cal Recycle 2025)
- **Cortese List.** Department of Toxic Substances Control (DTSC 2025a)

The project site is not on any of the above-listed databases. Therefore, the project site would not create a significant hazard to the public or the environment, and no impact would occur.

In addition to the Phase I Assessment, a Geologic and Environmental Hazards Assessment (GEHA) was completed for the proposed project (see Appendix E). According to the GEHA, the proposed project would not disturb and release any naturally occurring asbestos. Additionally, the proposed would not include the following hazards:

- Natural gas transmission lines or hazardous liquid pipelines within a 1,500-foot radius of the project site.
- Aboveground storage tanks.

- High-pressure natural gas pipelines or chemical or petroleum pipelines within a 1,500-foot radius of the project site.
- Water mains or underground electrical lines on-site.
- Oil wells, natural gas wells, and/or geothermal wells within a one-mile radius of the project site.

The GEHA also concluded that there is no potential for public health safety issues related to agricultural uses in the vicinity of the site.

As discussed in Section 3.9(a), construction activities would require small amounts of hazardous materials, which include vehicle fuels, lubricants, grease and transmission fluids, as well as paints and coatings. The use, transportation, and disposal of hazardous materials would be in accordance with regulatory standards and manufacturers' specifications. Hazardous materials would be used in small quantities and stored so they do not pose significant safety hazards. Operation of the proposed project would transport, use, store, and dispose of small amounts of hazardous materials typical of school facilities, such as cleaning and maintenance supplies (cleaners, gasoline, paint, and pesticides). Operation of the proposed project would use cleaners and other chemicals in small quantities that are not typically considered hazardous or with potential to result in a significant hazard to the public or the environment. Compliance with applicable federal and State laws and regulations governing the use, storage, transport, and disposal of hazardous materials would ensure impacts would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. The proposed project includes a portion of the existing Granite Hills HS, and the remaining improvements would occur adjacent to the campus. The closest school to the project site is Rancho Verde Elementary School, approximately 0.6 miles northwest of the project site.

As discussed in Section 3.9(a), construction and operation of the proposed project would handle small amounts of hazardous materials typical of construction activities and used in the operation of school facilities. The use, transportation, and storage of hazardous materials would be required to comply with all applicable State and federal regulations, which would ensure the proper handling of such materials. As discussed in Section 3.9(b), one property within a 0.25-mile radius was identified on the CERS HAZ Waste List database; however, no facility within a one-mile radius of the project site is considered a REC. Thus, no significant hazards from hazardous materials are expected at the project site. Impacts would be less than significant.

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?

Less Than Significant Impact. As stated in Section 3.9(b), the Phase I Assessment conducted a database search of various hazardous waste databases, and no RECs or hazardous facilities were identified within a mile of the project site (Appendix D). Four additional environmental databases were searched for hazardous

materials on the project site and the project site is not listed in any of the databases. Therefore, the project site would not create a significant hazard to the public or the environment, and a less than significant impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles or a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The nearest airport to the project site is the Apple Valley Airport, approximately 4.3 miles south of the project site. The project site is not within two miles of a public airport or public use airport. No impact would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The proposed project would have a significant impact if it would impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. Although the Town of Apple Valley released a Draft 2024 Emergency Operations Plan (EOP), the 2024 EOP does not include a" letter of promulgation" that would implement the EOP (Apple Valley 2024b). Therefore, the Town uses the 2014 EOP, which provides guidance for the Town's response to extraordinary emergencies associated with natural, human-made, and technological disasters. The EOP facilitates multijurisdictional or multiple agency coordination to save lives, protect property and the environment, and restore essential services and critical infrastructure. The EOP aims to interface with applicable local, State, and federal contingency plans. Evacuation would be directed by the Apple Valley Police Department; however, no evacuation routes are defined in the 2014 Apple Valley EOP (Apple Valley 2014).

The Town's 2017 Local Hazard Mitigation Plan (LHMP) is the Town's plan to mitigate the effects of natural hazards and return to pre-disaster operations; however, the LHMP does not identify evacuation routes. The general plan identified established evacuation routes that include Central Road, SR-18, and Bear Valley Road. The closest established evacuation route is Central Road, approximately 0.10 miles east of the project site.

The proposed project would add an additional driveway along Esaws Avenue and internal circulation within the project site, and all improvements would be within the project site and the existing campus. Construction-related vehicles and materials would be properly stored on-site so as not to block vehicle circulation or access to the project site, and no vehicles or materials would be stored on public rights-of-way. The proposed project would comply with the California Department of Education (CDE) guidelines for site design and circulation. DSA would review the project plans to ensure adequate emergency access and circulation during operation. The Apple Valley Fire Protection District would also review plans for adequate emergency access. Therefore, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed project would have a less than significant impact.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact. As discussed further in Section 3.20, *Wildfire*, the project site is in a local responsibility area, and the Town's LHMP identifies the project site in a Moderate Fire Hazard Severity Zone (CAL FIRE 2024; Apple Valley 2017). The northern portion of the project site is in the Wildlife-Urban Intermix zone (USFS 2020). The project site is generally flat, with a gradual downward slope from the north to the south. The project site and the surrounding area are primarily vacant with undeveloped land but include the Granite Hills HS campus and residential uses. The proposed project would be designed in accordance with the California Building Code and California Fire Code. Project design plans would be reviewed by the DSA. Fire suppression equipment specific to construction would be maintained on-site. Additionally, project construction would comply with applicable existing codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. The proposed project would be adequately served by the Apple Valley Fire Protection District. Therefore, the proposed project would not expose people or structures to significant risk of loss, injury, or death involving wildland fires, and impacts would be less than significant.

3.10 HYDROLOGY AND WATER QUALITY

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. Urban runoff from storms or nuisance flows (runoff during dry periods) from development projects can carry pollutants to receiving waters. Runoff can contain pollutants such as oil, fertilizers, pesticides, trash, and sediment. This runoff can flow directly into local streams or storm drains and continue through stormwater pipes until it is released untreated into a local waterway and eventually the ocean. Untreated stormwater runoff degrades water quality in surface waters and groundwater and can affect drinking water, human health, and plant and animal habitats. The construction and operational phases of the proposed project could have the potential to impact water quality. The following is a discussion of the potential impacts that the construction and operational phases of the proposed project could have on water resources and quality.

Construction

Clearing, grading, excavation, and construction activities associated with the proposed project may impact water quality through soil erosion and increasing the amount of silt and debris carried in runoff. Additionally, the use of construction materials such as fuels, solvents, and paints may present a risk to surface water quality. Finally, the refueling and parking of construction vehicles and other equipment on-site during construction may result in oil, grease, or related pollutant leaks and spills that may discharge into the storm drain system.

The proposed project would be required to comply with all applicable regulatory requirements governing water quality. The proposed project would be required to comply with comply with the National Pollution Discharge Elimination System (NPDES) Construction General Permit (CGP) (2022-0057-DWQ). The CGP requires the

preparation of a Stormwater Pollution Prevention Plan that incorporates BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. The State Water Resources Control Board (SWRCB) mandates that projects that disturb one or more acres of land must obtain coverage under the Statewide CGP. Prior to the start of construction activities, the project applicant must file permit registration documents (PRD) with the SWRCB, which includes a Notice of Intent, risk assessment, site map, annual fee, signed certification statement, SWPPP, and post-construction water balance calculations. The construction contractor is required to maintain a copy of the SWPPP on-site at all times and implement all construction BMPs identified in the SWPPP during construction activities. Prior to the issuance of a grading permit, the project applicant is required to provide proof of filing of the PRDs with the SWRCB, including preparation of a SWPPP.

The SWPPP must describe construction BMPs that address pollutant source reduction and provide measures/controls to mitigate potential pollutant sources. These include, but are not limited to:

- Erosion controls (e.g., earth dikes and swales, mulching, slope drains, compost blankets)
- Sediment controls (e.g., silt fence, sediment trap, sandbag or straw bale barriers)
- Tracking controls (e.g., stabilized construction entrance/exit, tire wash)
- Non-storm water management (e.g., dewatering practices, vehicle and equipment cleaning)
- Materials and waste management (e.g., material storage, hazardous waste management, soil management)
- Good housekeeping practices

Submittal of the PRDs and implementation of the SWPPP and its associated BMPs throughout the construction phase would result in an impact of less than significant.

Operation

Once the proposed project has been constructed, urban runoff could include a variety of contaminants that are typical of operating school facilities and could impact water quality. The proposed project would be required to comply with applicable federal and State laws and regulations governing the use, storage, transport, and disposal of hazardous materials to ensure impacts would be less than significant.

The proposed project is required to comply with the post-construction performance standards under the SWRCB's CGP. The proposed project would use a combination of site-design and source-control BMPs to meet SWRCB's requirements.

Site Design BMPs

Site design BMPs would be incorporated into the project's design to reduce the potential impacts on surface and groundwater quality. These may include, but are not limited to:

- Maximizing pervious areas and minimizing directly connected impervious areas
- Using on-site ponding areas (i.e., at-grade detention basins)

- Constructing hardscape with permeable materials and implementing hydrologically functional landscape design.
- Incorporating trees, open space, and landscaping to mitigate urban heat island impacts.
- Including mostly native plants and drought-tolerant plants in landscaping plans.
- Using effective irrigation systems to minimize water usage.

Source Control BMPs

Source control BMPs effectively minimize the potential for typical urban pollutants to contact stormwater, thereby limiting water quality impacts downstream. Source control BMPs would be incorporated into the proposed project and implemented throughout the operation of the campus. These BMPs could include:

- Educational materials related to urban runoff provided to all employees, students, and staff.
- Inspection and maintenance of site BMPs—catch basins, grate inlets, etc.
- Providing storm drain stenciling or signage on all storm drain inlets and catch basins.
- Properly designing and inspecting all trash storage areas, loading docks, outdoor storage areas, and outdoor work areas on a regular basis.

The project would construct a flood control basin at the northern end of the project site to accept runoff and release it in a controlled manner. Additionally, the project site would include landscaping at the entrance of the sports complex as part of project BMPs. As part of the statewide mandate to reduce trash in receiving waters, the proposed project would adhere to the requirements of the SWRCB Trash Amendments. The requirements include the installation and maintenance of full-capture trash-screening devices at curb inlets, grate inlets, and catch basin inlets. The trash screening devices must be certified by the SWRCB. With adherence to such policies, the proposed project would comply with the Storm Water Management Program for the Mojave River Watershed, which requires BMPs during construction and operation (San Bernadino County 2003).

With the implementation of the BMPs, described above, to control the amount and quality of the stormwater leaving the project site and compliance with State and local regulations, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Thus, impacts would be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The project site is in the Upper Mojave River Valley Groundwater Basin, which is characterized as a low- to very-low-priority basin (CDWR 2025a). The project site is in Liberty Utilities' service area, and based on the urban water management plan (UWMP), groundwater is the only source of water supply in the Liberty Utilities service area (Liberty 2021).

The project site is primarily undeveloped, with the exception of a portion on the Granite Hills HS campus, and contains pervious surfaces. The proposed project would develop the project site and would result in an increase in impervious surfaces that would redirect groundwater would have gone directly into the ground or to the storm drains in the public right-of-way. The proposed project would direct runoff to inlets and storm drains in the public right-of-way. Additionally, the project would construct a flood control basin to accept runoff from the project site and release it in a controlled manner into the ground, which would not alter groundwater recharge. The project site is not used for groundwater recharge activities nor extraction. Recharge for the Upper Mojave River Valley Groundwater Basin is primarily from the Mojave River, treated effluent, irrigated waters, and direct precipitation (CDWR 2004). The Upper Mojave River Valley Groundwater Basin has a surface area of 413,000 acres, and the proposed project would result in an increase of 20.7 acres of disturbed area—an increase of less than 1 percent of the basin's surface area.[7] However, the entire project site would not be disturbed by impervious surfaces due to the construction of the proposed football field (artificial turf) and ornamental landscaping. Therefore, the proposed project would not substantially decrease groundwater supplies nor interfere with groundwater recharge. Thus, impacts would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in a substantial erosion or siltation on- or off-site?

Less Than Significant Impact. Erosion and siltation impacts that could result from alteration of drainage patterns would, for the most part, occur during the proposed project's construction phase, which would include site preparation and grading activities. Environmental factors that affect erosion include topography, soil type, wind, and rainfall. Siltation is associated with sediment transport and deposition in waterways. The proposed project would not involve the alteration of any natural drainage channels or any watercourse, since none exist on-site. For the purposes of this analysis, pervious surfaces would be compared to existing conditions, and the proposed project would result in an increase of approximately 20.7 acres of disturbed surfaces. The increase in impervious surfaces would be considered a minor increase and would represent a less than 1 percent increase in impervious surfaces in the Upper Mojave River Valley Groundwater Basin.[8]

While the proposed project would develop the project site, the disturbed land on the Granite Hills HS campus would primarily remain in its current state. The proposed project's construction includes grading, utilities trenching, and minor asphalt demolition. If not controlled, the transport of soil from earthwork to local waterways could temporarily increase suspended sediment concentrations and release pollutants attached to sediment particles into local waterways. As discussed in Section 3.10(a), the proposed project would be required to submit PRDs and a SWPPP to the SWRCB for approval prior to the commencement of construction activities. The SWPPP would describe the BMPs to reduce the impact of erosion and siltation. The operational phase of the project would be required to comply with State and local regulations, including the SWRCB Trash Amendments, and site design and source control BMPs, as described in

[7] (20.7 acre ÷ 413,000 acres) x 100 = 0.00501%

[8] This calculation does not take into account the ornamental landscaping, which would be unpaved.

Section 3.10(a), to reduce erosion and siltation. Implementation of the project BMPs during the construction phase and operational phase would therefore ensure that erosion and siltation impacts would be less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less Than Significant Impact. The project site is primarily undeveloped but disturbed, with the exception of the developed portion of the project site on the Granite Hills HS campus. The proposed project would construct an athletic complex with parking lot and would increase impervious surfaces on the project site. The proposed project would direct runoff to stormwater inlets on-site that would drain to the proposed flood control basin in the northern portion of the project site or would be directed to stormwater inlets in the public right-of-way. The proposed project would capture runoff in the new stormwater basin and hold the water as it is slowly released into the ground at a controlled rate. Additionally, the proposed project would implement site BMPs discussed in Section 3.10(a). Since the site BMPs would be designed to collect and detain peak runoff flows, the proposed project would not substantially increase the rate or amount of surface runoff in a manner that would cause flooding on- or off-site. Therefore, impacts related to stormwater drainage and flooding are less than significant.

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?

Less Than Significant Impact. The project site is primarily undeveloped but disturbed, with the exception of the developed portion of the project site within the Granite Hill's campus. As discussed in Section 3.10(c), although the proposed project would result in an increase in pervious surfaces, the project would also construct a flood control basin to accept runoff and release it in a controlled manner or would direct runoff to inlets in the public right-of-way. Such stormwater infrastructure would be designed to accept and hold the excess stormwater flows so as not to exceed the capacity of the existing stormwater systems. Additionally, as discussed above, construction and operation of the proposed project would be required to implement BMPs that would control the amount and quality of stormwater leaving the project site.

Construction and operation of the proposed project would use small quantities of hazardous materials, such as oil, solvents, paint, and gasoline during construction (among other materials), and chemicals used for cleaning and maintenance and paints during operation (among other materials). All potentially hazardous materials used on-site are typical of construction activities and maintenance uses. All potentially hazardous materials would be properly handled, stored, used, and disposed of in accordance with federal and State policies and would not represent a substantial source of pollution.

The proposed project would not exceed the capacity of existing stormwater drainage systems and would not create substantial additional sources of polluted runoff. Impacts would be less than significant.

iv) Impede or redirect flood flows?

No Impact. The project site is not within a Federal Emergency Management Agency (FEMA) 100-year flood hazard zone (FEMA 2025b). The project site is within Zone D, which is defined as areas with possible but undetermined flood hazards. According to the California Department of Water Resources' Dam Breach Inundation Map and the US Army Corps of Engineers' National Inventory of Dams, the campus is not within a dam inundation area (CDWR 2025b; USACE 2025). No other maps or documents from the LHMP or the town's general plan identify the proposed project in a flood risk zone (Apple Valley 2017, 2009b). Therefore, the proposed project would not impede or redirect flood flows, and no impact would occur.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant Impact. As discussed above in Section 3.10(c)(iv), the project site is not within a FEMA flood zone or a dam inundation area.

A tsunami is a series of ocean waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. The campus is approximately 83 miles inland from the Pacific Ocean, at an elevation of approximately 850 feet above mean sea level, and is outside of the tsunami hazard zone identified by the California Department of Conservation's "California Tsunami Maps" (DOC 2018). Therefore, the proposed project would not be at risk of releasing pollutants due to tsunamis.

A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam or other artificial body of water. As discussed above, the project site is not within a dam inundation area or near any bodies of water.

While the proposed project is expected to use small amounts of hazardous materials during construction and operation (paints, cleaners, oils, etc.), the construction and operation of the proposed project would be required to comply with applicable regulations for proper handling, usage, and storage of potentially hazardous materials (see Section 3.9, *Hazardous Materials*). Therefore, the proposed project would not release pollutants due to project inundation, and impacts would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. As identified by the Sustainable Groundwater Management Act Portal: Groundwater Sustainability Plan (GSP) Map, the town and project site are in a groundwater basin that is not required to submit a GSP and does not have a GSP (CDWR 2025c, 2025d). Therefore, the proposed project would not conflict with an applicable sustainable groundwater management plan.

The Lahontan Regional Water Quality Control Board prepares and maintains the Water Quality Control Plan for the Lahontan Region (Basin Plan) and designates beneficial uses for surface water bodies and groundwater in the area. The Basin Plan also contains water quality criteria for groundwater (LRWQCB 2021). The proposed project would not conflict or obstruct the implementation of a water quality control plan or a sustainable

groundwater management plan. Project construction would be subject to the Statewide CGP and implementation of BMPs specified in the SWPPP. This would minimize the potential for erosion or siltation impacts to receiving waters. Therefore, the proposed project would comply with the Basin Plan, and impacts would be less than significant.

3.11 LAND USE AND PLANNING

Would the project:

a) Physically divide an established community?

No Impact. The project site is undeveloped. The proposed project would be located on an undeveloped, District-owned parcel and a portion of the existing Granite Hills HS campus. The proposed project would include the construction of a new athletic complex with associated facilities. The proposed project would be limited to the project site (see Figure 5). The proposed project would not create any new land use barriers, or divide or disrupt the physical arrangement of any surrounding communities. Therefore, no impact would occur.

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?

No Impact. According to the Town of Apple Valley Zoning Land Use Map, the project site includes a general plan land use designation of R-SF and zoning R-EQ, and the Granite Hills HS campus has a general plan and zoning designation of P-F, which is included in the project site (Apple Valley 2023). The undeveloped, District-owned parcels that are zoned R-EQ are intended for residential uses; however, school-related uses are also permitted. Additionally, the P-F zoning allows for public uses, which include school uses. The proposed project would be consistent with the land use and zoning designation. The proposed project would not alter or modify the project site's current land use designations or zoning. Development of the proposed project would not conflict with any applicable land use plans, policies, or regulations. Therefore, there would be no impact.

3.12 MINERAL RESOURCES

Would the project:

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

Less Than Significant Impact. In 1975, the state legislature adopted the Surface Mining and Reclamation Act, which designated mineral resources zones (MRZ) of statewide or regional importance. The classifications used to define MRZs are:

- **MRZ-1:** Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.
- **MRZ-2a:** Areas underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present. MRZ-2 is divided on the basis of both degree of knowledge and economic

factors. Areas classified MRZ-2a contain discovered mineral deposits that are either measured or indicated reserves as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information. Land included in the MRZ-2a category is of prime importance because it contains known economic mineral deposits.

- **MRZ-2b:** Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. For this report, areas classified MRZ-2b contain discovered mineral deposits that are significant inferred resources as determined by their lateral extension from proven deposits or their similarity to proven deposits. Further exploration work could result in upgrading areas classified MRZ-2b to MRZ-2a.

- **MRZ-3a:** Areas containing known mineral occurrences of undetermined mineral resource significance. Further exploration work within these areas could result in the reclassification of specific localities into MRZ-2a or MRZ-2b categories. MRZ-3 is divided on the basis of knowledge of economic characteristics of the resources.

- **MRZ-3b:** Areas containing inferred mineral occurrences of undetermined mineral resource significance. Land classified MRZ-3b represents areas in geologic settings that appear to be favorable environments for the occurrence of specific mineral deposits. Further exploration work could result in the reclassification of all or part of these areas into the MRZ-2a or MRZ-2b categories.

- **MRZ-4:** Areas of no known mineral occurrences where geologic information does not rule out either the presence or absence of significant mineral resources.

The proposed project is in a region classified MRZ-3a, according to the town's general plan (Apple Valley 2009). Although the project site is in MRZ-3a, the significance of deposits is underdetermined. Additionally, the project site is in the R-EQ zone, which is intended for residential uses, and the P-F is intended for public uses such as schools. Neither zoning district includes provisions for mining activities. No minerals are being extracted from the project site, and the proposed project would not include any mineral extraction. Therefore, impacts would be less than significant.

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?

No Impact. According to the town's general plan, the California Geological Survey identified significant concrete aggregate deposits in Apple Valley, as required by the Surface Mining and Reclamation Act. These significant concrete aggregate deposits are designated ARA-8 and ARA-9, which are defined by location and significance of the concrete aggregate deposits. However, according to the general plan, the project site is not in either aggregate deposit designation but in MRZ-3a (Apple Valley 2009). Therefore, implementation of the proposed project would not result in the loss of availability of a locally important mineral resource recovery site such as concrete aggregate. No impact would occur.

3.13 NOISE

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, federal, state, and city governments have established criteria to protect public health and safety and to prevent the disruption of certain human activities, such as classroom instruction, communication, and sleep. The analysis in this section is based on the noise monitoring and modeling prepared by PlaceWorks in December 2024, which is summarized herein and included as Appendix F.

3.13.1 Environmental Setting

Noise is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal government, State of California, and Town of Apple Valley have established criteria to protect public health and safety and to prevent disruption of certain human activities. Additional information on noise and vibration fundamentals and applicable regulations are in Appendix F.

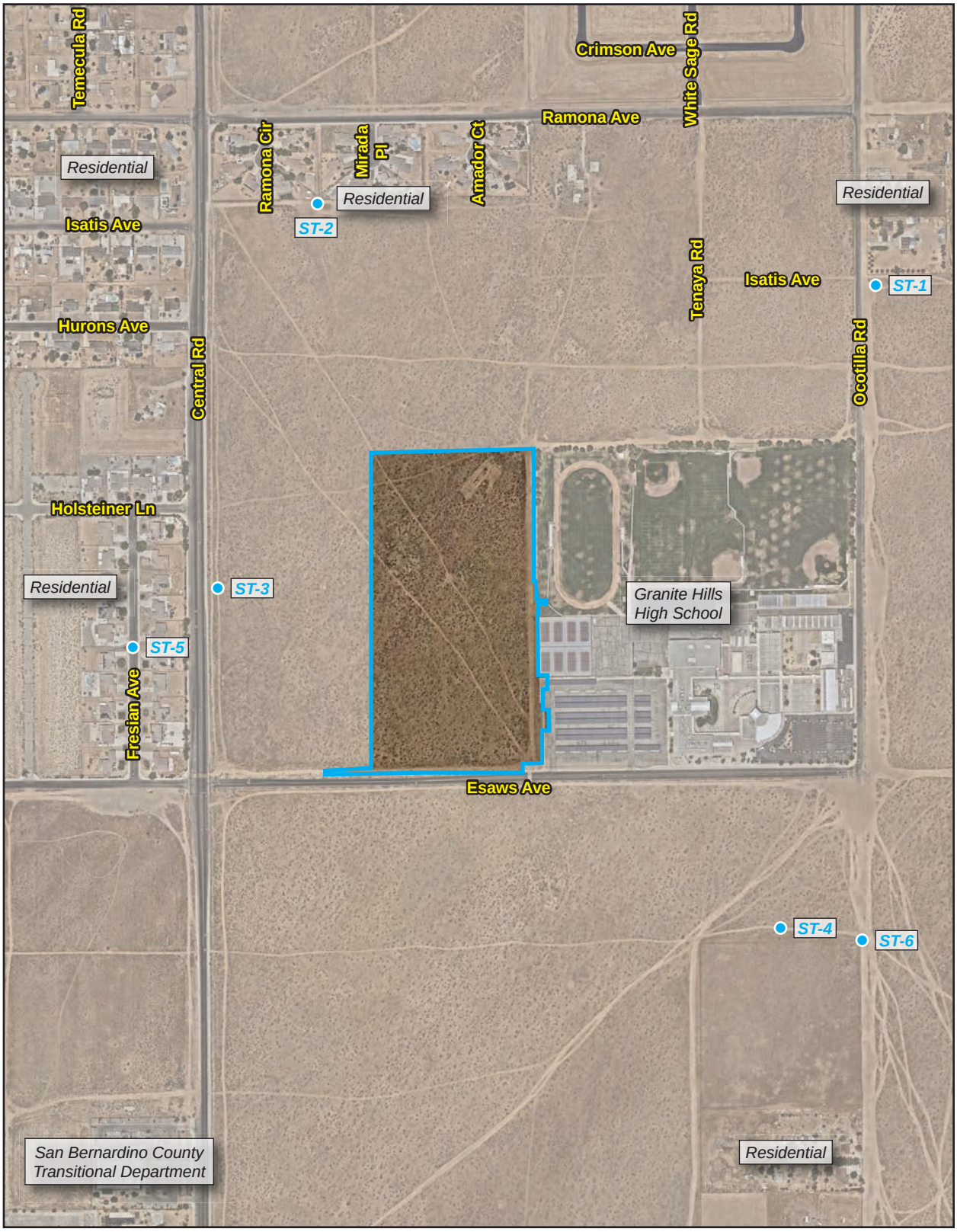
3.13.1.1 SENSITIVE RECEPTORS

Certain land uses are particularly sensitive to noise and vibration. These uses include residences, schools, libraries, churches, hospitals, nursing homes, and other health care facilities. Daycare centers, parks, and other outdoor recreation areas may also be considered sensitive receptors. Moderately sensitive land uses include cemeteries, golf courses, hotels and motels, and dormitories. The nearest sensitive receptors to the project site are the single-family residential uses to the west along Fresian Avenue, single-family residential uses to the north along Ramona Avenue, and rural residential uses to the south and east.

3.13.1.2 AMBIENT NOISE MONITORING

Short-term (15-minute) measurements were conducted at six locations around the project site. All measurements were conducted Friday, December 6, 2024. The short-term sound-level meter used (Larson Davis LxT) for noise monitoring satisfies the American National Standards Institute standard for Type 1 instrumentation. The short-term sound-level meter was set to "slow" response and "A" weighting (dBA). The meter was calibrated prior to and after each monitoring period. All measurements were at least five feet above the ground and away from reflective surfaces. Temperatures were approximately 50 degrees Fahrenheit, with wind speeds of 2.0 to 6.5 miles per hour and 30 percent relative humidity during the noise measurements. Short-term measurements and locations are described below and shown on Figure 8, *Approximate Noise Monitoring Locations*, and results are summarized in Table 8, *Short-Term Noise Measurements Summary in A-weighted Sound Levels*.

Figure 8 - Approximate Noise Monitoring Locations



Source: Nearmap 2024; PlaceWorks 2024.

3. Environmental Analysis

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- **Short-Term Location 1 (ST-1)** was south of 14450 Ocotilla Road, approximately 665 feet north of the northwestern corner of Granite Hills High School, and approximately 660 feet southeast of the Ocotilla Road and Ramona Avenue intersection. A 15-minute noise measurement began at 1:17 pm on Friday, December 6, 2024. The noise environment is characterized by frequent traffic consisting of school buses and student pick-up vehicles on Ocotilla Road. Noise levels measured 58.2 dBA Leq and 74.1 dBA Lmax during the measurement period at ST-1.

- **Short-Term Location 2 (ST-2)** was at the southwestern corner (the rear) of 14478 Mirada Place, north of the project site, approximately 580 feet southeast of the Ramona Avenue and Central Road intersection, and approximately 1,300 feet northwest of the northwestern corner of the Granite Hills High School track and field. A 15-minute noise measurement began at 2:56 pm on Friday, December 6, 2024. The noise environment is characterized primarily by constant dog barking and birds; also audible was distant roadway noise on Central Road. Noise levels measured 63.2 dBA Leq and 81.4 dBA Lmax during the measurement period at ST-2.

- **Short-Term Location 3 (ST-3)** was on the westbound side of the street bordering the south of the project site on Central Road, approximately 790 feet north of the Central Road and Esaws Avenue intersection, and approximately 330 feet from the centerline of Holsteiner Lane. A 15-minute noise measurement began at 2:16 pm on Friday, December 6, 2024. The noise environment is characterized by consistent Central Road traffic. Noise levels measured 67.9 dBA Leq and 89.1 dBA Lmax during the measurement period at ST-3.

- **Short-Term Location 4 (ST-4)** was on an undeveloped area south of the Granite Hills High School, approximately 615 feet south of the southern boundary of Granite Hills High School and 2,363 feet from the Central Road and Esaws Avenue intersection. A 15-minute noise measurement began at 12:50 pm on Friday, December 6, 2024. The noise environment is characterized by distant roadway noise on Esaws Avenue and intermittent school intercom and bell announcements. Noise levels measured 40.2 dBA Leq and 51.1 dBA Lmax during the measurement period at ST-4.

- **Short-Term Location 5 (ST-5)** was between 14173 and 14159 Fresian Avenue, approximately 522 feet south of the centerline of Holsteiner Lane and 283 feet from the western boundary of the project site. A 15-minute noise measurement began at 1:42 pm on Friday, December 6, 2024. The noise environment is characterized by distant roadway noise on Central Road, dogs barking, and residential noises (i.e., residents talking and trash pick-up). Noise levels measured 44.8 dBA Leq and 64.7 dBA Lmax during the measurement period at ST-5.

- **Short-Term Location 6 (ST-6)** was on an undeveloped area south of the Granite Hills High School, approximately 675 feet south of the southern boundary of Granite Hills High School and 2,684 feet from the Central Road and Esaws Avenue intersection. A 15-minute noise measurement began at 12:30 pm on Friday, December 6, 2024. The noise environment is characterized by distant roadway noise on Esaws Avenue. Noise levels measured 40.1 dBA Leq and 53.6 dBA Lmax during the measurement period at ST-6.

Table 8 Short-Term Noise Measurements Summary in A-Weighted Sound Levels

Monitoring Location	Description	15-Minute Noise Level, dBA						
		L_{eq}	L_{max}	L_{min}	L_{50}	L_{25}	L_8	L_2
ST-1	South of 14450 Ocotilla Road, approximately 665 feet north of the northwestern corner of Granite Hills High School. 12/06/24, 1:17 PM	58.2	74.1	33.2	44.6	56.0	63.7	67.7
ST-2	Southwestern corner (the rear) of 14478 Mirada Place, north of the project site, approximately 580 feet southeast of the Ramona Avenue and Central Road intersection. 12/06/24, 2:56 PM	63.2	81.4	33.5	43.5	47.6	65.4	75.4
ST-3	Westbound side of the street bordering the south of the project site on Central Road, approximately 790 feet north of Central Road and Esaws Avenue intersection 12/06/24, 2:16 PM	67.9	89.1	38.8	63.3	67.5	70.6	74.2
ST-4	On an undeveloped area south of the Granite Hills High School, approximately 615 feet south of the southern boundary of Granite Hills High School. 12/06/24, 12:50 PM	40.2	51.1	33.9	38.7	40.5	43.4	46.8
ST-5	Between 14173 and 14159 Fresian Avenue, approximately 522 feet south of the centerline of Holsteiner Lane. 12/06/24, 1:42 PM	44.8	64.7	34.3	40.7	42.9	46.6	51.4
ST-6	On an undeveloped area south of the Granite Hills High School, approximately 675 feet south of the southern boundary of Granite Hills High School. 12/06/24, 12:30 PM	40.1	53.6	33.2	37.2	39.1	43.6	48.5

Source: Appendix F.

3.13.1.3 APPLICABLE STANDARDS

The Town of Apple Valley's regulations with respect to noise are in Chapter 9.73, Noise Control, of the Code of Ordinances. Section 9.73.050, External and Internal Noise Standards, presents the Town's noise standards for permissible interior and exterior sound levels at receiving land uses with correction for character of sound. Section 9.73.060 provides prohibited noise and vibration standards for stationary sources and construction activities, and Section 9.73.080 provides exemptions to the noise control ordinance chapter. The noise standards are summarized in Tables 9, 10, and 11.

Section 9.73.050 External and Internal Noise Standards

1. **Maximum Permissible Sound Levels by Receiving Land Use**

   a. The noise standards for the various categories of land use identified by the Noise Control Officer as presented in Table 9.73.050-A shall, unless otherwise specifically indicated, apply to all such property within a designated zone.

   b. No person shall produce or cause to be produced any sound at any location within the incorporated Town or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level when measured on any other property, either incorporated or unincorporated, to exceed:

- The noise standard for that land use as specified in Table 9.73.050-A for a cumulative period of more than thirty (30) minutes in any hour; or
- The noise standard plus five (5) dBA for a cumulative period of more than fifteen (15) minutes in any hour; or
- The noise standard plus ten (10) dBA for a cumulative period of more than five (5) minutes in any hour; or
- The noise standard plus fifteen (15) dBA for a cumulative period of more than one (1) minute in any hour; or
- The noise standard plus twenty (20) dBA or the maximum measured ambient level, for any period of time.

c. If the measured ambient level differs from that permissible within any of the first four noise limit categories above, the allowable noise exposure standard shall be adjusted in five (5) dBA increments in each category as appropriate to encompass or reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under this category shall be increased to reflect the maximum ambient noise level.

d. If the measurement location is on a boundary between two different zones, the noise level limit applicable to the lower noise zone plus five (5) dBA shall apply.

e. If possible, the ambient noise shall be measured at the same location along the property line utilized in paragraph 9.73.050.A.1.b of this Chapter with the alleged offending noise source inoperative. If, for any reason, the alleged offending noise source cannot be shut down, the ambient noise must be estimated by performing a measurement in the same general area of the source but at a sufficient distance such that the noise from the source is at least ten (10) dBA below the ambient in order that only the ambient level be measured. If the difference between the ambient and the noise source is five (5) to ten (10) dBA, then the level of the ambient itself can be reasonably determined by subtracting a one decibel correction to account for the contribution of the source.

2. **Correction for Character of Sound.** In the event the alleged offensive noise, as judged by the NCO, contains a steady, audible tone such as a whine, screech, or hum, or is a repetitive noise such as hammering or riveting, or contains music or speech conveying informational content, the standard limits set forth in Table 9.73.050-A shall be reduced by five (5) dBA.

3. Environmental Analysis

Table 9 Exterior Noise Limits

Receiving Land Use Category	Time Period	Noise Level (dBA)
Single Family Residential	10 p.m. - 7 a.m. 7 a.m. - 10 p.m.	40 50
Multiple Dwelling Residential, Public Space	10 p.m. - 7 a.m. 7 a.m. - 10 p.m.	45 50
Limited Commercial & Office	10 p.m. - 7 a.m. 7 a.m. - 10 p.m.	55 60
General Commercial	10 p.m. - 7 a.m. 7 a.m. - 10 p.m.	60 65
Light Industrial Heavy Industrial	Anytime Anytime	70 75

Source: Table 9.73.050-A of the Town of Apple Valley Code of Ordinances (see Appendix F).
Notes: Levels not to be exceeded more than 30 minutes an hour.

B. Interior Noise Standards

1. Maximum Permissible Dwelling Interior Sound Levels

a. The interior noise standards for multi-family residential dwellings as presented in Table 9.73.050-B shall apply, unless otherwise specifically indicated, within all such dwellings with windows in their normal seasonal configuration.

Table 10 Interior Noise Limits

Noise Zone	Type of Land Use	Time Interval	Allowable Interior Noise Level (dBA)
Single Family Residential	Multi-Family	10 p.m. - 7 a.m.	35
Multiple Dwelling Residential, Public Space	Residential	7 a.m. - 10 p.m.	45

Source: Table 9.73.050-B of the Town of Apple Valley Code of Ordinances (see Appendix F).
Notes: Levels not to be exceeded more than 30 minutes an hour.

b. No person shall operate or cause to be operated within a dwelling unit any source of sound or allow the creation of any noise which causes the noise level, when measured inside a neighboring receiving dwelling unit, to exceed:

1) The noise standard as specified in Table 9.73.050-B for a cumulative period of more than five (5) minutes in any hour; or

2) The noise standard plus five (5) dBA for a cumulative period of more than one (1) minute in any hour; or

3) The noise standard plus ten (10) dBA or the maximum measured ambient, for any period of time.

c. If the measured ambient level differs from that permissible within any of the noise limit categories above, the allowable noise exposure standard shall be adjusted in five (5) dBA increments in each category as appropriate to reflect said ambient noise level.

2. **Correction for Character of Sound.** In the event the alleged offensive noise, as judged by the NCO, contains a steady, audible tone such as a whine, screech, or hum, or is a repetitive noise such as hammering or riveting, or contains music or speech conveying informational content, the standard limits set forth in Table 9.73.050-B shall be reduced by five (5) dBA.

Section 9.73.060 Prohibited Noise and Vibration.

No person shall unnecessarily make, continue, or cause to be made or continued, any noise disturbance. The following acts, and the causing or permitting thereof, are declared to be in violation of this ordinance:

A. Operating, playing or permitting the operation or playing of any radio, television, phonograph, drum, musical instrument, or similar device which produces or reproduces sound:

3. Between the hours of 10 p.m. and 7 a.m. in such a manner as to create a noise disturbance across a residential or commercial real property line or at any time to violate the provisions of Section 9.73.050.A.1., except for cases in which an exception has been issued by the Town.

4. In such a manner as to exceed the levels set forth for public space in Table 9.73.050-A, measured at a distance of at least fifty (50) feet from such device operating on a public right-of-way or public space.

B. Using or operating for any purpose any loudspeaker, loudspeaker system, or similar device between the hours of 10 p.m. and 7 a.m., such that the sound therefrom creates a noise disturbance across a residential real property line, or at any time violates the provisions of Section 9.73.050.A.1., except for any noncommercial public speaking, public assembly or other activity for which an exception has been issued by the Town.

F. Construction/Demolition

1. Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7 p.m. and 7 a.m., or at any time on weekends or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real property line, except for emergency work of public service utilities or by variance issued by the Town.

2. **Noise Restrictions at Affected Properties.** Where technically and economically feasible, construction activities shall be conducted in such a manner that the maximum noise levels at affected properties will not exceed those listed in the following schedule:

3. All mobile or stationary internal combustion engine powered equipment or machinery shall be equipped with suitable exhaust and air intake silencers in proper working order.

3. Environmental Analysis

Table 11 Maximum Noise Limits at Residential Properties

	Type I Areas Single-Family Residential	Type II Areas Multi-family Residential	Type III Areas Semi-residential/ Commercial
Mobile Equipment: Maximum noise levels for nonscheduled intermittent, short-term operation (less than 10 days) of mobile equipment:			
Daily, except Sundays and Legal Holidays, 7 a.m. to 7 p.m.	75 dBA	80 dBA	85 dBA
Daily, 7 p.m. to 7 a.m. and all day Sunday and Legal Holidays	60 dBA	65 dBA	70 dBA
Stationary Equipment: Maximum noise levels for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment:			
Daily, except Sundays and Legal Holidays, 7 a.m. to 7 p.m.	60 dBA	65 dBA	70 dBA
Daily, 7 p.m. to 7 a.m. and all day Sunday and Legal Holidays	50 dBA	55 dBA	60 dBA
Mobile Equipment: Maximum noise levels for nonscheduled, intermittent, short-term operation of mobile equipment: Daily, including Sundays and legal holidays, all hours: maximum of 85 dBA.			
Stationary Equipment: Maximum noise levels for repetitively scheduled and relatively long-term operation of stationary equipment:			
Daily, including Sundays and legal holidays, all hours: maximum of 75 dBA.			

Source: Table 9.73.060-A of the Town of Apple Valley Code of Ordinances (see Appendix F).
Notes: Levels not to be exceeded more than 30 minutes an hour.

G. **Vibration.** Operating or permitting the operation of any device that creates a vibration which is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at one hundred fifty (150) feet (46 meters) from the source if on a public space or public right-of-way.

H. **Powered Model Vehicles.** Operating or permitting the operation of powered model vehicles:

1. Between the hours of 7 p.m. and 7 a.m. so as to create a noise disturbance across a residential or commercial real property line or at any time to violate the provisions of paragraph 9.73.050.A.1.

2. In such a manner as to exceed the levels set forth for public space land use in Table 9.73.050-A, measured at a distance not less than 100 feet from any point on the path of a vehicle operating on public space or public right-of-way.

I. **Stationary Nonemergency Signaling Devices**

3. Sounding or permitting the sounding of any electronically-amplified signal from any stationary bell, chime, siren, whistle, or similar device, intended primarily for nonemergency purposes, from any place for more than 10 seconds in any hourly period. Houses of religious worship shall be exempt from this provision.

4. Sound sources covered by this provision and not exempted under subsection 1 above may be exempted by an exception issued by the Town.

Section 9.73.080 Exemptions.

The following activities shall be exempted from the provisions of this Chapter:

C. Warning devices necessary for the protection of public safety; for example, police, fire and ambulance sirens, and train horns;

D. Regularly scheduled school bands, school athletic and school entertainment events between the hours of 8:45 a.m. and 10:00 p.m., provided a Special Events permit is obtained for band activities on Town streets;

E. Regularly scheduled activities conducted on public parks, public playgrounds, and public or private school grounds. However, the use of public address or amplified music systems is not permitted to exceed the exterior noise standard of adjacent property at the property line.

Would the project result in:

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?

Less Than Significant Impact. The project would construct a new athletic complex with a track and field with artificial turf, stadium lights, field goal posts, a scoreboard, permanent bleachers to the west and east of the track and field, a concessions building, a teams building, a trash enclosure, a PA system, four parking lots, a flood control basin, and walkways. No nighttime work or the use of pile-driving equipment is proposed.

Noise generated by on-site construction equipment is based on the type of equipment used, its location relative to sensitive receptors, and the timing and duration of noise-generating activities. Each phase of construction involves different types of equipment and has distinct noise characteristics. Noise levels from construction activities are typically dominated by the loudest three pieces of equipment. The dominant equipment noise source is typically the engine, although work-piece noise (such as dropping of materials) can also be noticeable.

The noise produced at each construction phase is determined by combining the Leq contributions from the three loudest pieces of equipment used at a given time, while accounting for the ongoing time variations of noise emissions (commonly referred to as the usage factor). Heavy equipment, such as a dozer or a loader, can have maximum, short-duration noise levels of up to 85 dBA at 50 feet. However, overall noise emissions vary considerably, depending on the specific activity being performed at any given moment.

Noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction phase would result in different noise levels from construction activities at a given receptor. Since noise from construction equipment is intermittent and diminishes at a rate of at least 6 dBA per doubling of distance (conservatively disregarding other attenuation effects from air absorption, ground effects, and shielding effects provided by intervening structures or existing solid walls), the average noise levels at noise-sensitive receptors could vary considerably, because mobile construction equipment would move around the site (site of each development phase) with different equipment mixes, loads, and power requirements.

The expected construction equipment mix was estimated and categorized by construction activity using the Federal Highway Administration Roadway Construction Noise Model (RCNM). Assuming the nearest sensitive

receptor to the closest boundary for project construction activities, construction-related noise levels would be up to 59 dBA Leq at residences to the west. Construction noise levels at receptors further away are estimated to be even less. Results are summarized in Table 12, *Project Related Construction Noise Levels dBA*, at the nearest receptors. Construction noise levels would not exceed the Town of Appley Valley's daytime threshold of 75 dBA and 60 Leq for mobile and stationary sources, respectively, at the nearest residential uses per Section 9.73.050 F of the Town Code. Therefore, construction noise impacts would be less than significant.

Table 12 Project-Related Construction Noise Levels, dBA

	Noise Levels in dBA L_{eq}				
Construction Activity Phase	**RCNM Reference Noise Level**	**Residential Receptor to North**	**Campus Receptor to East**	**Residential Receptor to South**	**Residential Receptor to West**
Distance in feet	*50*	*1,185*	*540*	*1,690*	*850*
Site Preparation	81	54	60	50	56
Grading	84	57	63	53	59
Building Construction	79	52	58	48	54
Architectural Coating	74	47	53	43	49
Paving	79	52	58	48	54
Exceeds 75 dBA L_{eq} Mobile Threshold?		**No**	**No**	**No**	**No**
Exceeds 60 dBA L_{eq} Stationary Threshold?		**No**	**No**	**No**	**No**

Source: FHWA's RCNM software; Appendix F.
Notes: Distance measurements were taken using Google Earth (2024) from the acoustical center of the project site.
dBA Leq = Energy-Average (Leq) Sound Levels.

On-Campus Receptors

Students would remain on-site during construction of the sports complex. Construction activities could occur as close as 540 feet to existing classroom buildings. As shown in Table 12, construction noise levels would range between 53 and 63 dBA Leq at the nearest classrooms per the RCNM noise model. Typical exterior-to-interior noise attenuation with windows and doors closed is 25 dBA. This would result in interior noise levels of approximately 28 to 38 dBA Leq. Speech interference is considered intolerable when background noise levels exceed 60 dBA. However, average construction noise levels are not expected to exceed 60 dBA Leq in the nearest classrooms based on typical exterior-to-interior noise attenuation. Construction would occur throughout the project site and sometimes would be farther than 540 feet, which would reduce interior noise levels. In addition, to avoid classroom disruption, some work would be done during instructional breaks when students are off campus. Therefore, on-campus construction noise impacts would be less than significant.

Operational Off-Site Traffic Noise

A project will normally have a significant effect on the environment related to traffic noise if it substantially increases the ambient noise levels for adjoining areas. Most people can detect changes in sound levels of approximately 3 dBA under normal, quiet conditions, and changes of 1 to 3 dBA under quiet, controlled conditions. Changes of less than 1 dBA are usually indiscernible. A change of 5 dBA is readily discernible to most people in an outdoor environment. Noise levels above 65 dBA CNEL are normally unacceptable at sensitive receptor locations such as residences, and noise environments in these areas would be considered

degraded. Based on this, a significant impact would occur if the following traffic noise increases occur relative to the existing noise environment:

- 1.5 dBA in ambient noise environments of 66 dBA CNEL and higher
- 3 dBA in ambient noise environments of 60 to 65 dBA CNEL
- 5 dBA in ambient noise environments of less than 60 dBA CNEL

For this analysis, a significant traffic noise impact occurs when the thresholds above are exceeded under cumulative conditions (with project) and the contribution of the project to future traffic is calculated to be greater than 3 dBA CNEL, based on existing modeled traffic noise levels.

With implementation of the proposed project, event traffic trips during campus stadium events would increase. Traffic volume data for the new trips associated with the project are provided by Garland Associates (2024) in Appendix G. The proposed project is expected to have a net increase of 1,108 peak hour event trips and add 2,420 daily trips to existing daily trips. The data provided by the traffic engineer present the streets and locations with scenarios for existing, existing with project conditions, future 2028, and future 2028 with project conditions. Table 13, *Project-Related Increases in Traffic Noise, dBA CNEL at 50 Feet*, shows that the addition of project trips due to the school events would result in an increase of up to 2.5 dBA over existing and Future 2028 conditions along Esaws Avenue between Central Road and Ocotilla Road. The project would not result in a 3 dBA increase due to the addition of project traffic. Therefore, traffic noise impacts would be less than significant.

Table 13 Project-Related Increases in Traffic Noise, dBA CNEL at 50 Feet

	Segment		Traffic Noise Increase					
Roadway	From	To	Existing No Project	Existing with Proposed Project	Existing Increase	Future No Project	Future With Project	Future Increase
Esaws Avenue	Pioneer Rd	Central Rd	60.3	61.2	0.9	60.5	61.4	0.9
	Central Rd	Ocotilla Rd	64.5	67.0	2.5	64.6	67.1	2.5
Ocotilla Road	Standing Rock Ave	Ramona Ave	59.8	60.4	0.5	60.0	60.6	0.5
	Ramona Ave	Esaws Ave	60.3	61.6	1.3	60.5	61.8	1.3
Romona Avenue	Navajo Rd	Central Rd	59.9	60.7	0.9	60.0	60.9	0.9
	Central Rd	Ocotilla Rd	57.4	58.4	1.0	57.6	58.5	1.0
Central Road	Standing Rock Ave	Ramona Ave	69.7	70.1	0.4	69.8	70.2	0.4
	Ramona Ave	Esaws Ave	69.7	70.1	0.5	69.8	70.3	0.5
	Esaws Ave	Happy Trails Highway (SR-18)	72.0	72.3	0.3	72.1	72.5	0.3
	Happy Trails Highway (SR-18)	the South	71.1	71.3	0.2	71.3	71.4	0.1
	the West	Central Rd	71.9	72.0	0.2	72.0	72.2	0.2
Happy Trails Highway (SR-18)	Central Rd	the East	71.1	71.2	0.1	71.3	71.3	0.1
	Pioneer Rd	Central Rd	60.3	61.2	0.9	60.5	61.4	0.9

Source: Traffic data provided by Garland Associates 2024. See Appendix G.

3. Environmental Analysis

Stadium Operations

The proposed project's primary on-site operational noise sources would include a PA system, spectator cheering, and band noise. The proposed project could accommodate up to 2,476 spectators on the home side and 1,552 spectators on the visitor side bleachers. However, project spectator attendance is estimated to be up to 1,200 spectators for football games, 400 for track and field meets, and 200 for soccer. As discussed above, a change of 5 dBA is readily discernible in an exterior environment, and an increase of 10 dBA is perceived as a doubling in sound level. Based on this and noted that games would result in temporary periodic (not daily) increases in ambient noise levels from the proposed stadium events, a threshold of 10 dBA above the ambient is used. A noise increase above 10 dBA for periodic events (such as stadium events) would be considered significant.

The proposed project's stadium operational scenarios were modeled using SoundPLAN computer software. SoundPLAN uses industry-accepted propagation algorithms based on International Organization for Standardization (ISO) and ÖAL-28 standards for outdoor sound propagation. See Appendix F for modeling results. The modeling calculations account for classical sound wave divergence (spherical spreading loss with adjustments for source directivity from point sources) plus attenuation factors due to air absorption and ground effects. Additionally, SoundPLAN provides for other correction factors, including level increases due to reflections, source directivity, and source tonality. SoundPLAN noise modeling estimated noise levels at the short-term noise measurement locations, representing the nearest residential receptors to the project site. The model also incorporated other stadium noise assumptions associated with events. Based on other typical event observations, the following additional modeling inputs were assumed to be reasonable:

- Rowdy crowd cheering (both home and visitors) was assumed for a cumulative 10 minutes per hour, and each cheer interval approximately 10 seconds long.
- The home band was assumed to play a cumulative of 10 minutes per hour for football games only.
- Approximately 36 individual speaker announcements (from the top of the scoreboard) were assumed per hour, with individual announcement durations of 20 seconds, for a cumulative time of 12 minutes per hour.
- For football and soccer games, the referee whistle and players in action on the field were assumed to occur 12 times per hour for durations of 25 seconds, for a cumulative of 5 minutes per hour.

Table 14, *SoundPLAN Modeled Noise Levels, dBA Leq*, shows measured ambient and modeled operational noise levels associated with the proposed project at noise measurement locations ST-1 through ST-6. Sites ST-1 through ST-6 represent the nearest residential receptors to the north, south, east, and west of the project site. As shown in Table 14, project stadium noise levels would range from 42.9 dBA to 53.1 dBA Leq at the nearest noise-sensitive receptors. Modeled stadium scenario inputs, results, and operational noise contours associated with stadium noise on the project site and in the greater community are shown in Appendix F for all scenarios.

Table 14 SoundPLAN Modeled Noise Levels, dBA Leq

Location	Measured Ambient	Stadium Noise Level, dBA L_{eq}			
		Soccer 200 Spectators	Track Meet 400 Spectators	Football 1,200 Spectators	Full Capacity 4,028 Spectators
ST-1	58.2	42.9	42.9	43.3	43.8
ST-2	63.2	45.1	45.1	45.6	46.2
ST-3	67.9	51.7	51.7	52.4	53.1
ST-4	40.2	46.7	46.8	47.0	47.3
ST-5	44.8	46.2	46.3	50.4	48.4
ST-6	40.1	44.9	45.0	45.2	45.6

See Appendix F for SoundPLAN modeling inputs and results.

Modeled noise levels at the sensitive receptors would range from 43.3 dBA to 52.4 dBA Leq during football games with 1,200 spectators, 42.9 dBA to 51.7 dBA Leq during soccer games with 200 spectators, and 42.9 dBA to 51.7dBA Leq during track meets with 400 spectators. Conservatively, noise levels at the sensitive receptors would range from 43.8 dBA to 53.1 dBA Leq if the stadium is at full capacity with 4,028 spectators, which would be representative of a graduation event with 3,500 spectators. Table 15, *Increase Over Ambient Due to Project Stadium Noise Level, dBA Leq*, shows the increase over ambient noise levels due to stadium noise at the nearest noise-sensitive receptor to the project site for all modeled stadium scenarios.

Table 15 Increase Over Ambient Due to Project Stadium Noise Level, dBA Leq

Location	Event Noise Level, dBA L_{eq}			
	Soccer 200 Spectators	Track Meet 400 Spectators	Football 1,200 Spectators	Full Capacity 4,028 Spectators
ST-1	No Increase	No Increase	No Increase	No Increase
ST-2	No Increase	No Increase	No Increase	No Increase
ST-3	No Increase	No Increase	No Increase	No Increase
ST-4	6.5	6.6	6.8	7.1
ST-5	1.4	1.5	5.6	3.6
ST-6	4.8	4.9	5.1	5.5

Source: See Appendix F.

As shown in Table 15, project stadium noise would not result in an increase over existing ambient noise levels at adjacent sensitive receptors represented by ST-1, ST-2, and ST-3. However, project stadium noise would periodically exceed existing ambient noise levels at adjacent sensitive receptors represented by ST-4, ST-5, and ST-6 by between 1.4 dBA to 7.1 dBA Leq for project stadium scenarios. The conservative full-capacity stadium scenario would result in ambient noise level increases of up to 7.1 dBA Leq with 4,028 spectators in attendance. The larger increases in project noise levels at receptors represented by ST-4 through ST-6 (to the west and south) are due to existing low ambient noise levels typical for a rural setting and for receptors shielded by a row of residences from traffic noise. Operational noise associated with the proposed stadium would not exceed the

10 dBA increase over ambient threshold. In addition, regularly scheduled school bands, school athletic, and school entertainment events between the hours of 8:45 a.m. and 10:00 p.m. are considered exempt per Section 9.73.080 of the Town Code. Therefore, periodic stadium noise impacts would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Construction can generate varying degrees of ground vibration, depending on the construction procedures and equipment. The use of construction equipment generates vibrations that spread through the ground and diminish with distance from the source. The effect on buildings in the vicinity of the construction site varies depending on soil type, ground strata, and receptor building construction. The effects from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures.

Table 16, *Proposed Project's Vibration Levels (in/sec PPV)*, summarizes vibration levels for typical construction equipment at a reference distance of 25 feet and at the nearest sensitive receptor. Typical construction equipment can generate vibration levels ranging up to 0.21 inches per second (in/sec) peak particle velocity (PPV) at 25 feet.

Table 16 Proposed Project's Vibration Levels (in/sec PPV)

Equipment	FTA Reference PPV (in/sec)	Campus Receptor to East
Distance in feet	**25**	**540**
Vibratory Roller	0.21	0.002
Clam Shovel	0.202	0.002
Hoe Ram	0.089	0.001
Large Bulldozer	0.089	0.001
Loaded Trucks	0.076	0.001
Jackhammer	0.035	0.000
Small Bulldozer	0.003	0.000

Sources: FTA 2018; Appendix F.

The nearest structure to the site's construction activities, on campus structures to the east, is approximately 540 feet away from the nearest proposed construction area boundary. At this distance, construction vibration from a vibratory roller would attenuate to 0.002 in/sec PPV or less. See Appendix F for results at the nearest receptors to the north, south, and west. Construction vibration levels would not be perceptible at the nearest sensitive receptor per Section 9.73.060 G of the Town code. Therefore, construction vibration impacts would be less than significant.

Operation

The proposed project would not include the use of any large-scale stationary equipment that would result in excessive vibration levels. Therefore, project operational vibration impacts would be less than significant.

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?

No Impact. The project site is located approximately 4.25 miles south of Apple Valley Airport and outside the 60 dBA CNEL noise contour for Apple Valley Airport. Therefore, implementation of the proposed project would not result in increased exposure of people working at or visiting the project site to aircraft noise.

3.14 POPULATION AND HOUSING

Would the project:

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)?

No Impact. The proposed project would be constructed on the undeveloped District-owned parcels west of the Granite Hills HS and on a portion of the Granite Hills HS campus. The proposed project would serve the needs of the high school campus by providing an athletics complex for sports games and practices and a venue for other school events and non-school events. The project site would not construct any housing, nor would the construction of the proposed project generate a significant number of permanent employment opportunities that could generate demand for local housing. The proposed project would not increase student enrollment or capacity at Granite Hills HS. Additionally, the proposed project would continue to use the existing roads and infrastructure, and no new roads, expanded utility lines, or housing are being proposed. Therefore, project development would not induce substantial population growth in the area, either directly or indirectly. Thus, no impact would occur.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would be constructed on the undeveloped District-owned parcels west of Granite Hills HS and on a portion of the Granite Hills HS campus. No housing exists on the project site or on the Granite Hills HS campus. There would be no displacement of residents or need construction of replacement housing. Therefore, no impact would occur.

3.15 PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:

a) Fire protection?

Less Than Significant Impact. Fire protection and emergency medical services in the Town of Apple Valley are provided by the Apple Valley Fire Protection District. Services include fire suppression, emergency medical, rescue, and risk prevention. The nearest fire station is Apple Valley Fire District Station No. 331, at 22400 Headquarters Drive in Apple Valley, approximately 0.5 mile southwest of the project site (AVFPD 2025). During the operational phase, the proposed project would generate more people and activities on the project site, which may create an increase in demand for fire protection and emergency services compared to existing conditions on-site. However, demand for fire protection services is generally tied to population growth. The proposed project would include the construction of a new athletic complex with associated facilities and would not increase the population of the project area. Therefore, the project would not substantially increase the need for fire protection services, and impacts would be less than significant.

b) Police protection?

Less Than Significant Impact. The San Bernardino County Sherrif's Department (Sheriff) provides law enforcement protection to the Town of Apple Valley. The Sheriff is responsible for campus safety and creating safe school passages for students, staff, and the school community. The nearest Sheriff's station is the Town of Apple Valley Station, at 14931 Dale Evans Parkway in Apple Valley, approximately 2.8 miles northwest of the project site (SBCSD 2025). The project may cause a slight increase in demand for police services during construction from possible trespass, theft, and/or vandalism. Active construction areas would be fenced during the construction phase, and construction-site access would be limited to authorized personnel. Any increase in police demands would be temporary and would not require construction of new or expanded police facilities. The demand for law enforcement protection services generally corresponds to population. During the operational phase, the proposed project would generate more people and activities on the project site, which may create an increase in demand for police protection services compared to existing conditions on-site. Sporting events and activities on-site would be monitored and supervised by District staff or another authorized supervisor, which would deter unwanted activities. Additionally, since the project would not increase the area population, project implementation would not increase the demand for law enforcement services or generate a need for additional law enforcement facilities. The project would not increase the area population or demand and would not result in new adverse impacts on existing law enforcement service. Impacts would be less than significant.

c) Schools?

No Impact. The proposed project would include the construction of a new athletic complex with associated facilities. Demand for schools is largely generated by new housing developments. The proposed project would serve existing students and would not generate an increase in student capacity or enrollment. Additionally, the proposed project would not involve construction of any dwelling units or an increase in population that would require the construction of new school facilities. Development of the project would not result in the need for

construction associated with an expansion of existing schools or development of new schools such that environmental impacts would result. Therefore, no impacts to schools would occur.

d) Parks?

Less Than Significant Impact. Typically, an increase in demand for parks is created by the development of new housing and/or population generating actions. The proposed project would include the construction of a new athletic complex with associated facilities and would not generate new students or housing that would increase the demand for parks. The proposed project would serve the existing needs of the campus. The proposed project would not increase the use of existing parks or recreational facilities or the need for new parks or recreational facilities. The proposed project would continue to be available to authorized community groups, subject to District facility use policies and the Civic Center Act. Thus, the proposed project would provide improved recreational opportunities to the school and surrounding community and reduce the demand on neighborhood parks. A less than significant impact to parks would occur.

e) Other public facilities?

No Impact. Physical impacts to public services are usually associated with population in-migration and growth, which increase the demand for public services and facilities. The project would not result in impacts associated with the provision of other new or physically altered public facilities (e.g., libraries, hospitals, childcare, teen, senior centers). The project would not induce population growth. No impacts to other public facilities would occur.

3.16 RECREATION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact. The proposed project is within the Town of Apple Valley and is operated and maintained by the District. Norm Schmidt Park is the closest park to the project site, approximately 3.8 miles west, and is operated by Town of Apple Valley (Apple Valley 2024b). Typically, the demand for parks is created by the development of new housing and/or actions that generate additional population.

The proposed project would construct a new athletic complex with associated facilities to serve Granite Hills HS. The proposed project would allow for sports games and practices to be played on the Granite Hills HS campus, would allow for other school-related non-sports events, and would allow community-sponsored events after school hours. The proposed project would not include the construction of any housing and would not include an increase in local population. Additionally, the recreational activities that would result from the proposed project would stay within the project site and not expand to nearby recreational facilities. Therefore, the proposed project would not generate an increased demand for existing neighborhood, regional facilities, or other recreational facilities and would not result in substantial physical deterioration of such facilities or cause deterioration to accelerate. The proposed project would have less than significant impact.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Less Than Significant Impact. As discussed in section 3.16(a), the proposed project would not require construction of off-site recreational facilities but would include the construction of recreational facilities. The proposed project includes the construction of a new athletic complex with associated facilities. The proposed project would serve the students and staff of Granite Hills HS and the general public for community-sponsored events after school hours. The proposed project would not change the school's enrollment or the number of staff on-site, would not induce growth, and would not increase use of any existing facilities. Additionally, the proposed project would not require the construction or expansion of recreational facilities off-site. Thus the project would not include the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. Therefore, impacts would be less than significant.

3.17 TRANSPORTATION

Would the project:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Impact. The circulation improvements associated with the proposed project would include construction of a new driveway to provide access to the proposed parking lots on the project site and internal drive aisles to parking lots on the project site and to an existing parking lot in the southwestern portion of the Granite Hills HS campus. Additionally, the proposed project would construct paved walking paths throughout the project site and sidewalks along Esaws Avenue.

The primary ordinances and policies addressing the circulation system in the area are from the Town of Apple Valley General Plan Circulation Element. The circulation element includes specific goals, policies, and programs that offer strategies for sustainable transportation networks that are designed to improve the balance between environmental concerns, community objectives, and performance (mobility and safety). The overall goal of the circulation element is to continue to maintain and expand a safe and efficient circulation and transportation system. The circulation element states that a sustainable transportation system can be advanced by focusing on the following objectives: network connectivity, operational balance, emissions reduction/energy efficiency, pedestrian accommodations, transit readiness, and quality public space.

The proposed project is consistent with the goals and policies of the circulation element. The project would not conflict with any objectives, policies, or programs of the general plan, and it would not adversely affect the performance of any roadway, transit, or non-motorized (pedestrian and bicycle) transportation facilities. The proposed project would improve the existing circulation system and would be required to comply with applicable provisions of the Apple Valley Municipal Code for any improvements in the public right-of-way. Additionally, the proposed project would be required to comply with the CDE guidelines for site design and would be reviewed and approved by CDE. Circulation and emergency access would be reviewed and approved by CDE and Apple Valley Fire District. Furthermore, the unpaved walking paths along Central Road and Esaws Avenue could be used by bicycles. Additionally, the Town proposes Class 1 bike lanes at such roadways per the

Town's General Plan Exhibit II-10; however, no official bike lanes are near the campus (Apple Valley 2009a). Also, there are four bus stops nearby at the Central Road and Esaws Avenue intersection and at the Central Road and Ramona Avenue intersection, near the Granite Hills campus but not within the project site. As such, the proposed project would not hinder or alter vehicle circulation on public rights-or-way or interfere with existing bus and bicycle routes. As discussed above, the proposed project would pave the pedestrian sidewalk along Esaws Avenue, supporting and promoting pedestrian mobility.

Based on the preceding, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Therefore, no impact would occur.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Less Than Significant Impact. Vehicle delays and levels of service (LOS) have historically been used as the basis for determining the significance of traffic impacts as standard practice in CEQA documents. On September 27, 2013, SB 743 was signed into law, starting a process that fundamentally changed transportation impact analyses as part of CEQA compliance. SB 743 eliminated auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as the sole basis for determining significant impacts under CEQA. As part of the current CEQA Guidelines, the criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099(b)(1)). Pursuant to SB 743, on December 28, 2018, the California Natural Resources Agency adopted revisions to the CEQA Guidelines to implement SB 743. CEQA Guidelines Section 15064.3 describes how transportation impacts are to be analyzed after SB 743. Under the Guidelines, metrics related to "vehicle miles traveled" (VMT) were required beginning July 1, 2020, to evaluate the significance of transportation impacts under CEQA for development projects, land use plans, and transportation infrastructure projects. State courts ruled that under the Public Resources Code Section 21099, subdivision (b)(2), "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment" under CEQA, except for roadway capacity projects.

Table 17, *Project-Generated Traffic*, indicates that a capacity-level event at the stadium with 4,028 spectators would generate an estimated 1,209 vehicle trips during the peak hour (1,108 inbound and 101 outbound) and 2,420 daily trips. The peak hour for this analysis represents the one-hour time period prior to the beginning of an event when patrons are traveling to the stadium. Approximately the same level of traffic would be generated at the end of an event when patrons are exiting (with the inbound and outbound traffic volumes reversed). A capacity-level event would occur only several times each year, such as a homecoming football game or a graduation ceremony. The proposed athletics complex would also generate traffic at other times of the day and other days of the week for events such as soccer matches. The patronage levels at these other events would be substantially lower than for a capacity-level football game. The traffic analysis represents, as seen in Table 17, a conservative worst-case scenario.

3. Environmental Analysis

Table 17 Project-Generated Traffic

Facility	Evening Hour – Pre-Event			Average Daily Trips
	Inbound	Outbound	Total	
Trip Generation Rates				
Stadium (vehicle trips per spectator)	0.275	0.025	0.30	0.60
Generated Traffic Volumes				
Proposed Stadium (4,028 spectators)	1,108	101	1,209	2,420

Source: Appendix G.

The San Bernardino County "Transportation Impact Study Guidelines" includes screening criteria that can be used to identify when a proposed project is anticipated to result in a less than significant VMT impact. The document states that projects which serve the local community and have the potential to reduce VMT should not be required to complete a VMT assessment, and K-12 schools are included in the list of projects/land uses that are subject to this screening criteria.

As the proposed project is an athletics complex for a high school, it is in the local community category and can be screened from requiring a detailed VMT analysis. In addition, since the project will provide the opportunity for football games and other events to be held at the Granite Hills HS campus instead of stadiums at other schools in the District, it would result in a reduction in vehicle miles traveled because the proposed stadium would be closer to most of the homes in the attendance area compared to the stadiums where the major activities currently take place. Based on these guidelines, this athletics complex/stadium project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), and would have a less than significant VMT impact.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. The proposed circulation improvements associated with the proposed project include construction of a new driveway to the proposed parking lots on the project site, with an internal drive aisles to all parking lots on the project site, and to an existing parking lot located in the southwestern portion of the Granite Hills HS campus. The proposed project would not provide any on- or off-site access or circulation features that would create or increase any design hazards or incompatible uses. Access to the campus would be provided by a new driveway on Esaws Avenue for the project's new parking lot as well as the existing driveways on Esaws Avenue and Ocotilla Road.

The proposed project would result in increased levels of vehicle trips, number of pedestrians, and number of vehicular turning movements at the driveways and at the nearby intersections, which would result in an increased potential for traffic conflicts and a corresponding increase in the probability of an accident occurring. These impacts would not be significant, however, because the streets, intersections, and driveways are designed to accommodate the anticipated levels of vehicular and pedestrian activity. These streets and intersections have historically been accommodating school-related traffic on a daily basis for the existing school. Additionally, the proposed project would be required to comply with the CDE guidelines for site design, which would be

reviewed and approved by CDE. Further, circulation and emergency access would be reviewed and approved by CDE, the Apple Valley Fire Protection District, and the Town Engineer. Compliance with CDE's and DSA's established design standards and implementation of signage and pedestrian circulation features would ensure that hazards due to design features would not occur and that the placement of the circulation improvements would not create a conflict for motorists, pedestrians, or bicyclists traveling within or around the project site. The proposed athletics complex/stadium project is consistent with the goals, policies, and programs presented in the circulation element, and the project would not adversely affect the performance of any roadway, transit, or non-motorized (pedestrian and bicycle) transportation facilities.

Furthermore, the proposed project would be consistent with general plan policies for improvements in the public right-of-way, including but not limited to: Policy 1.C, sidewalks shall be provided on local streets; Program 1.C.3, safe routes to school; and, Policy 1.I, Pedestrian access shall be preserved and enhanced.

Although the proposed project would add more vehicles to the roadway network, the additional vehicles would be compatible with the design and use of the affected streets, and the proposed project would comply with applicable state and local regulations. Further, the proposed project would construct an athletic complex at an existing school campus and would not introduce incompatible uses. Therefore, the proposed project would not substantially increase hazards due to a geometric design feature or incompatible uses; thus, a less than significant impact would occur.

d) Result in inadequate emergency access?

Less Than Significant Impact. Access to the campus would continue to be provided by the existing driveways on Esaws Avenue and Ocotilla Road, and a new driveway on Esaws Avenue would provide access to the project site. The existing and proposed access and circulation features at the school, including the driveways, on-site roadways, parking lots, and fire lanes, would accommodate emergency services. The proposed project would be required to accommodate emergency access to the project site. The proposed project would have several parking lots, and an emergency vehicle roadway that would provide adequate emergency access to the proposed athletic complex. Additionally, the proposed project would connect with the existing campus, providing access to other areas of the project site and campus. The proposed project would be required to comply with the CDE guidelines for site design and would be reviewed and approved by CDE. Further, circulation and emergency access would be reviewed and approved by CDE, DSA, and Apple Valley Fire Protection District, which would ensure that adequate emergency access is provided. Therefore, a less than significant impact would occur.

3.18 TRIBAL CULTURAL RESOURCES

a) 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:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

Less Than Significant Impact. As discussed under Threshold 3.5(a), the project site is not listed or eligible for listing in the California Register of Historical Resources, National Register of Historic Places, California State Historical Landmarks, or Points of Historical Interest or in a local register of historical resources (OHP 2025a, 2025b; NPS 2025a). The project site does not meet any of the historic resource criteria and does not meet the definition of a historic resource pursuant to CEQA. Therefore, impacts would be less than significant.

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact With Mitigation Incorporated. In accordance with Public Resources Code Section 21080.1(d), a lead agency is required to provide formal notification of intended development projects to Native American tribes that have requested to be on the lead agency's list for receiving such notification. The formal notification is required to include a brief description of the proposed project and its location, lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. Pursuant to AB 52, the District notified the SMBMI of the Granite Hills HS High School Athletics project by providing a signed letter dated January 21, 2025, via email.

On January 23, 2025, the SMBMI notified the District that the proposed project is within Serrano ancestral territory and requested additional information to ascertain how the SMBMI would assume consulting party status under CEQA and participate, moving forward, in project review and implementation. On February 3, 2025, the District sent the SMBMI a copy of the Cultural Resources Inventory Memo for Granite Hills High School Athletics Complex (Appendix C) via email. On February 6, 2025, the SMBMI contacted the District and provided Mitigation Measures CUL-1 through CUL-3 (see above) and TCR-1 and TCR-2. Mitigation Measure TCR-1 requires that the SMBMI be contacted if any pre-contact cultural resources are discovered during project implementation so the tribe can provide input regarding significance and treatment. Mitigation Measure TCR-2 requires that any and all archeological/cultural documents created as part of the project be provided to the SMBMI. With the incorporation of mitigation measures TCR-1 and TCR-2, a less than significant impact would occur.

Mitigation Measures

TCR-1 The San Manuel Band of Mission Indians Cultural Resources Management Department (SMBMI) shall be contacted, as detailed in CUL-1, of any pre-contact cultural resources discovered during project implementation, and be provided

information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject to this plan. This plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site.

TCR-2 Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and lead agency for dissemination to SMBMI. The lead agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.

3.19 UTILITIES AND SERVICE SYSTEMS

Would the project:

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?

Less Than Significant Impact.

Water

The proposed project would construct a sports complex that would include artificial turf, ornamental landscaping, and the teams and concessions buildings, which would increase the demand for water. Water is currently provided to the campus and project site by Liberty Utilities through existing mains. Potable water would be provided to the teams and concessions building, the ornamental landscaping, and the artificial turf through connections to the existing water mains.

According to the 2020 UWMP, water supply would be approximately 18,538 acre-feet (AF),[9] or 6.04 billion gallons, in a normal year in 2045. For a single dry year, the water supply would be approximately 17,458 AF, or 5.68 billion gallons, in 2045, and the supply in 2045 after five consecutive dry years would be 16,726 AF, or 5.45 billion gallons (Liberty 2021).

Based on the seating capacity of 4,028 seats, the bleachers have the potential to result in the consumption of approximately 17,723 gallons of water per day during a capacity event.[10] As a conservative assumption, if a

[9] 1 AF = 325,851 gallons
18,538 x 325,851 = 6.04 billion gallons
17,458 x 325,851 = 5.68 billion gallons
16,726 x 325,851 = 5.45 billion gallons

[10] Generation rate for a school stadium is 4 gallons/day/seat (Los Angeles 2006); consumption rate is assumed to be 4.4 gallons/day/seat (110 percent generation rate).
4,028 seats x 4.4 gallons/day/seat = 17,723 gallons/day.

capacity event were to occur every day of the year the approximate amount of water used for capacity events would be 6.46 million gallons per year.[11] Additionally, outdoor water uses for the proposed project, which would consist of water use for landscaping and the artificial turf, would be approximately 6.55 million gallons per year (Appendix A). By combining the capacity event water usage and the outdoor water usage, total water usage would be approximately 13.01 million gallons per year. When compared to the water supply in 2045 after five consecutive dry years, the proposed project's water supply would use less than 1 percent.[12] Therefore, water consumption from the proposed project would be less than 1 percent of the supply in a normal year, a single dry year, and after five consecutive dry years.

In addition, the proposed water system improvements would be designed and constructed in accordance with the California Building Code and CALGreen requirements, such as CALGreen Division 5.3, Water Efficiency and Conservation, including Sections 5.303, Indoor Water Use, and 5.304, Outdoor Water Use. As further discussed under Section 3.19(b), Liberty Utilities provides water to the campus, which is sourced from ground water, and Liberty Utilities has sufficient water capacity to serve the proposed project (Liberty 2021). The proposed project would not require the construction of new or expanded water facilities that could cause significant effects. Impacts would be less than significant.

Wastewater

The proposed project includes restroom facilities within the proposed teams and concessions buildings, which would increase the demand for wastewater facilities. The Town's Public Works department provides wastewater collection and conveyance service to the project site. The Town is a member of a joint powers authority with the Victor Valley Wastewater Reclamation Authority (VVWRA), and the town's wastewater is conveyed to the VVWRA's treatment plant in Victorville for treatment (Apple Valley 2019). Currently the plant has a treatment capacity of 18 million gallons per day (mgd), and an average daily use of 13 mgd (Liberty 2021). The VVWRA's treatment plant has a surplus of 5 mgd.

Based on a seating capacity of 4,028 seats, the bleachers have the potential to result in the generation of approximately 16,112 gallons per day (gpd)[13] of wastewater. This increase would make up less than 1 percent of the VVWRA's treatment capacity.[14]

In addition, the proposed project would connect to the existing sewer lines. Wastewater generated by the proposed project will be conveyed to the existing sewer lines on campus. Although the proposed project would not generate population growth, or increase student population, new events on campus would increase the demand for wastewater services. However, the proposed project's wastewater generation would be within the VVWRA's available capacity. Therefore, the proposed project would not require the construction of new or expanded wastewater facilities that could cause significant environmental effects. Impacts would be less than significant.

[11] 17,723 x 365 = 6.46 million gallons
[12] 13.01 million gallons ÷ 5.45 billion gallons x 100 = 0.238%
[13] 4,028 seats x 4 gallons/day/seat = 16,112 gallons/day
[14] 16,112 ÷ 5,000,000 x 100 = 0.322%

Stormwater Drainage

The proposed project would result in a substantial increase in impervious surfaces compared to existing conditions. Due to the increase in impervious surfaces, the proposed project would construct a flood control basin in the northern portion of the project site to collect and store stormwater flows and release them at a controlled rate. The stormwater from the proposed project would be conveyed from the new inlets to the proposed storm water basin and into the inlets along the public right-of-way. As discussed in Section 3.10(iii), the proposed project would not substantially increase the rate or amount of surface runoff in a manner that would cause flooding on- or off-site. The proposed project would not require or result in the relocation or construction of new or expanded storm water drainage facilities. Impacts would be less than significant.

Electric Power

Electricity is provided by Southern California Edison. The proposed project would connect to existing electric power infrastructure for operation. Although the proposed project would result in a higher electricity demand compared to existing conditions, the increase would be negligible in Southern California Edison's capacity (see Section 3.6, *Energy*). The proposed project would be required to comply with energy efficiency standards set by the California Building Code and CALGreen. Therefore, implementation of the proposed project would not result in major construction related to electrical power facilities that could cause significant environmental impacts. Impacts would be less than significant.

Natural Gas

Natural gas service is provided by the Southwest Gas Corporation. The proposed project would not require the use of gas during construction; however, operation of the project would require use of natural gas. As discussed in Section 3.6, *Energy*, the project would be consistent with the requirements of the Building Energy Efficiency Standards; Compliance would reduce natural gas use and would not result in wasteful, inefficient, or unnecessary natural gas demands. Therefore, impacts would be less than significant.

Telecommunications

The proposed project would not require additional telecommunications facilities demand. The proposed project would not require off-site construction or relocation of utilities, and therefore no impacts would occur.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. The 2020 UWMP determined that the Town has adequate water supplies for the next 25 years. Groundwater pumped from the Mojave Basin Area is the only source of water supply for Liberty Utilities' distribution system, and it does not use purchased water, surface water, stormwater, or recycled water to meet its water demands. Currently and in the future, there are potential water supply projects and programs that may allow Liberty Utilities to enhance and augment existing water supplies, which includes water transfer opportunities and recycled water uses. The UWMP projects that the Town will have sufficient water supplies to meet expected demands in normal years, single-dry years, and multiple-dry years until 2040 (Liberty 2021).

3. Environmental Analysis

The proposed sports complex and associated buildings would require water use and installation of a water line connection to serve the new buildings and would increase water demand. As demonstrated in Section 3.19(a), the proposed project would use less than 1 percent of the total water supply in 2045 after five consecutive dry years. Therefore, the proposed project would also be served and use less than 1 percent of the water supply in 2045 during a normal year and a dry year.

In addition, the new field and facilities would increase water demand, and the increase would be minimal compared to existing conditions for three reasons: first, the proposed project would not increase the campus's enrollment capacity; second, a portion of the new events at the project site are existing events that would be relocated to the project site; and third, the increased water demand would only occur during events/games, which are intermittent. Furthermore, development of the proposed project would be required to comply with the provisions of CALGreen Division 5.3, Water Efficiency and Conservation, including those of Sections 5.303, Indoor Water Use, and 5.304, Outdoor Water Use. Based on the UWMP, Liberty Utilities has adequate water supplies to meet the water demands of the proposed project during normal, dry, and multiple dry years. Impacts would be less than significant.

c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. Wastewater generated at the campus and project site is conveyed to the VVWRA's treatment plant. The proposed project would connect to the existing sewer lines and wastewater generated by the proposed project will be conveyed to the existing sewer lines on campus. Additionally, as stated in Section 3.19(a), the treatment plant has a surplus capacity of 5 mgd.

The proposed sports complex would include a teams and concessions buildings, which would generate wastewater and require installation of a wastewater line connection. As demonstrated in Section 3.19(a), the increase in wastewater generation would make up less than 1 percent of the VVWRA's treatment capacity.

In addition, the proposed project's increase in wastewater generation would be low for three reasons: first, the proposed project would not increase the campus's enrollment capacity; second, a portion of the new events at the project site are existing events that would be relocated to the project site; and third, the increased wastewater generation would only occur during events/games, which are intermittent. The proposed project's wastewater generation would be within VVWRA's remaining capacity. The proposed project would not require construction of new or expanded wastewater treatment facilities. Impacts would be less than significant.

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?

Less Than Significant Impact. During construction, the proposed project would generate some demolition debris from clearance and waste debris. Construction solid waste generation would be minimal, since the construction would not require the demolition of buildings. In accordance with CALGreen Section 5.408, Construction Waste Reduction, Disposal, and Recycling, at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations would be recycled and/or salvaged for reuse.

The proposed project would not increase student enrollment. However, the District anticipates an increase in sporting events and other school-related events and non-school events. The solid waste generated by the proposed project's operational activities would increase the amount of solid waste generated by the Granite Hills HS campus. The proposed project would generate approximately 14.48 tons of solid waste per year (Appendix A).

Solid waste from all District schools is transported by Burrtec Waste Industries to regional landfills (Apple Valley 2009c). Solid waste generated in the Town of Apple Valley is disposed to landfills in San Bernadino County, which include the Victorville Sanitary Landfill and Barstow Sanitary Landfill (CalRecycle 2025a). The two landfills have a combined remaining capacity of 147 million cubic yards or 206 million tons[15] (CalRecycle 2025a, 2025b). As such, the proposed project would use less than 1 percent of the total capacity of the Victorville Sanitary Landfill and Barstow Sanitary Landfill.[16]

In addition, the proposed project would not result in an increase in student capacity, and the increase in solid waste demand would only occur during events/games, which are intermittent, and some events already occur on campus or are hosted at other campuses within the District. The increase in waste generation would be within the remaining capacity of area landfills, and the proposed project would continue to be serviced by Burrtec and regional landfills. The proposed project would not adversely impact landfill capacity or impair attainment of solid waste reduction goals, and impacts would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. The construction and operation of the proposed project would comply with federal, State, and local statutes and regulations related to solid waste, such as the California Integrated Waste Management Act and local recycling and waste programs. The District and its construction contractor would comply with all applicable laws and regulations and make every effort to reuse and/or recycle the construction debris that would otherwise be taken to a landfill. CALGreen Section 5.408, Construction Waste Reduction, Disposal, and Recycling, requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. The proposed project would comply with all applicable federal, state, and local statutes and regulations related to solid waste disposal during operation. Therefore, the impacts would be 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:

[15] 1 ton = cubic yards x 1.4
147 million cubic yards x 1.4 = 206 million tons

[16] 14.48 million tons ÷ 206 million tons x 100 = 0.000007%

3. Environmental Analysis

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The project site is not within or near a state responsibility area (SRA) or a very high fire hazard severity zone (FHSZ) (CAL FIRE 2025). The nearest very high FHSZ in an SRA is approximately 2.6 miles southeast of the project site. The project site is in a local responsibility area (LRA) (CAL FIRE 2024). The project site and surrounding area are not in a very high FHSZ. The project site is also not in the wildland-urban interface (WUI); however, the northern portion of the project site is within the wildland-urban intermix (USFS 2020).

The proposed project is not in or near an SRA or a very high FHSZ and would not significantly affect the existing emergency response plan or emergency evacuation plan. Therefore, impacts would be less than significant.

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?

Less Than Significant Impact. The project site and surrounding area are relatively flat with little to no variation in elevation. The Town of Apple Valley and immediately surrounding areas are in the Mojave Desert, which includes limited amounts of yearly precipitation, hot and dry summers, freezing temperatures and some precipitation during the winter, and strong winds during the fall, late winter, and early spring months (NPS 2025b).

The proposed project would include development consistent with school uses. The remaining acreage of the parcels west of the project site would remain undeveloped. The proposed project would be designed in accordance with the California Building Code and California Fire Code. Project design and site plans would be reviewed and approved by the DSA. Further, the Apple Valley Fire Protection District would review site plans to confirm fire personnel accessibility, fire hydrant locations and distribution, water supply requirements for fire flow, and automatic fire sprinklers. During construction, construction personnel would handle, store, and operate construction and mechanical equipment and potentially flammable materials in accordance with manufacturers' specifications and standard safety practices. Fire suppression equipment would be maintained on-site during construction. Therefore, the construction and operation of the proposed project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire due to slope, prevailing winds, and other factors. Impacts would be less than significant.

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?

Less Than Significant Impact. The project site is in an undeveloped area of the Town of Apple Valley and is served by existing utility infrastructure. Development of the proposed project would require new utility hook-ups to existing utilities for the concession stand, teams room, scoreboard, and lighting, including the proposed stadium lighting. The proposed project would include the installation of a flood control basin and three catch basins to capture stormwater flows. As such, the proposed project would be designed and constructed in

accordance with the California Building Code and the California Fire Code. These project features would not exacerbate fire risk. Development of the proposed project would not require the installation of roads and fuel breaks. Therefore, the proposed project does not include the installation or maintenance of infrastructure that could exacerbate fire risk or result in temporary or ongoing impacts to the environment. Impacts would be less than significant.

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?

Less Than Significant Impact. The project site is not located in or near an SRA or very high FHSZ. As discussed in Section 3.10, *Hydrology and Water Quality*, the project site is not within a FEMA-designated 100-year flood zone, and there are no nearby water bodies, streams, or other conditions that would result in flooding in the project site. Additionally, the project site is relatively flat and undeveloped and, according to the US Geological Survey's "United States Landslide Inventory and Susceptibility" map, the project site is not in an identified landslide susceptibility zone (USGS 2024a). Therefore, the proposed project would not 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. A less than significant impact would occur.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to substantially 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, substantially 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?

Less Than Significant Impact With Mitigation Incorporated. The proposed project would not degrade the quality of the environment with implementation of identified standard permit conditions and mitigation measures. As discussed in Section 3.4, *Biological Resources*, with the implementation of Mitigation Measures BIO-1 through BIO-3, the proposed project would result in a less-than-significant impact on the quality of the environment and would not 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. Additionally, as discussed in Section 3.5, *Cultural Resources*, with the implementation of Mitigation Measures CUL-1 through CUL-3, the proposed project would result in a less-than-significant impact on archaeological and historic resources.

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.)

Less Than Significant Impact With Mitigation Incorporated. As discussed previously in this initial study, the proposed project would have no impact or a less-than-significant impact to aesthetics, agricultural and

forestry resources, air quality, energy, 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, utilities and service systems, and wildfire. As discussed in Sections 3.4, *Biological Resources*; 3.5, *Cultural Resources*; and 3.18, *Tribal Cultural Resources*, the project would not result in significant impacts to those resources with the implementation of identified and mitigation measures. For this reason, the project would not result in significant cumulative impacts to those resources. Therefore, all impacts are individually limited and would not result in any cumulatively significant impact.

c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact With Mitigation Incorporated. As discussed in the previous analyses, the proposed project would not result in significant direct or indirect adverse impacts or result in substantial adverse effects on human beings. Impacts would be less than significant with the implementation of the proposed mitigation measures.

4. References

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5. List of Preparers

LEAD AGENCY

Apple Unified School District

Matthew Schulenberg, Assistant Superintendent, Administrative Services

PLACEWORKS

Malia Durand, Associate Principal

Jared Bradford, Associate

Angel Castro, Project Planner

Joseph Ruiz, Planner

Cary Nakama, Graphic Artist

5. List of Preparers

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Appendix A Air Quality and Greenhouse Gas Background and Modeling Data

Appendix

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Air Quality and Greenhouse Gas Background and Modeling Data

AIR QUALITY

Air Quality Regulatory Setting

The proposed project has the potential to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, it falls under the ambient air quality standards promulgated at the local, state, and federal levels. The project site is in the Mojave Desert Air Basin (MDAB) and is subject to the rules and regulations imposed by the Mojave Desert Air Quality Management District (MDAQMD). However, MDAQMD reports to California Air Resources board (CARB), and all criteria emissions are also governed by the California and national Ambient Air Quality Standards (AAQS). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

AMBIENT AIR QUALITY STANDARDS

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

These National AAQS and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants. As shown in Table 1, *Ambient Air Quality Standards for Criteria Pollutants*, these pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb). In addition, the state has set standards for

sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Ozone (O_3)[3]	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m^3	150 µg/m^3	
Respirable Fine Particulate Matter ($PM_{2.5}$)[4]	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m^3	
Lead (Pb)	30-Day Average	1.5 µg/m^3	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m^3	
	Rolling 3-Month Average	*	0.15 µg/m^3	
Sulfates (SO_4)[5]	24 hours	25 µg/m^3	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hours	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.
Notes: ppm: parts per million; µg/m^3: micrograms per cubic meter
* Standard has not been established for this pollutant/duration by this entity.
1 California standards for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2 National standards (other than O_3, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
3 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
4 On February 7, 2024, the national annual $PM_{2.5}$ primary standard was lowered from 12.0 µg/m^3 to 9.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
5 On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions, including:

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code

AIR POLLUTANTS OF CONCERN

Criteria Air Pollutants

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are categorized as primary or secondary pollutants. Primary air pollutants are those that are emitted directly from sources and include CO, VOC, NO_2, SO_X, PM_{10}, $PM_{2.5}$, and Pb. Of these, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that ambient air quality standards (AAQS) have been established for them. VOC and oxides of nitrogen (NO_X) are air pollutant precursors that form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and NO_2 are the principal secondary pollutants. A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion, engines and motor vehicles operating at slow speeds are the primary source of CO in the SoCAB. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (US EPA 2024a). The MDAB is designated as attainment/unclassified under the California AAQS (CARB 2024a). It has an attainment/unclassified designation under the National AAQS (CARB 2024a).

Volatile Organic Compounds (VOC) are composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources include evaporative emissions from paints and solvents, asphalt paving, and household consumer products such as aerosols. There are no AAQS for VOCs. However, because they contribute to the formation of O_3, MDAQMD has established a significance threshold for this pollutant. The health effects for ozone are described later in this section.

Nitrogen Oxides (NO_X) are a by-product of fuel combustion and contribute to the formation of ground-level O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NO_X are nitric oxide (NO) and nitrogen dioxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_X produced by combustion is NO, but NO reacts quickly with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO_2 is only potentially irritating. NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO_2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between elevated short-term NO_2 concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (US EPA 2023a). The MDAB is designated an attainment area for NO_2 under the California AAQS and an unclassified/attainment area under the National AAQS (CARB 2024a).

Sulfur Dioxide (SO_2) is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2. When sulfur dioxide forms sulfates (SO_4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_X). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO_2, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing) at lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. Studies also show a connection

between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics (South Coast AQMD 2005; USEPA 2024a). The MDAB is designated attainment under the California AAQS and unclassified/attainment under the National AAQS (CARB 2024a).

Suspended Particulate Matter (PM_{10} and $PM_{2.5}$) consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤0.01 millimeter). Inhalable fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 microns or less (i.e., ≤0.002.5 millimeter). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The EPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing). There has been emerging evidence that ultrafine particulates, which are even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.0001 millimeter) have human health implications because their toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (South Coast AQMD 2013). However, the EPA and the California Air Resources Board (CARB) have not adopted AAQS to regulate these particulates. Diesel particulate matter is classified by CARB as a carcinogen (CARB 2024c). Particulate matter can also cause environmental effects such as visibility impairment,[1] environmental damage,[2] and aesthetic damage[3] (South Coast AQMD 2005; USEPA 2024a). The MDAB is a nonattainment area for $PM_{2.5}$ under California and National AAQS and a nonattainment area for PM_{10} under the California AAQS (CARB 2024a).[4]

Ozone (O_3) is a key ingredient of "smog" and is a gas that is formed when VOCs and NO_X, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O_3 is a secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O_3 can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O_3 also can reduce lung function and inflame the linings of the lungs.

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1 $PM_{2.5}$ is the main cause of reduced visibility (haze) in parts of the United States.

2 Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

3 Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

4 CARB approved the South Coast AQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM_{10} standards from 2004 to 2007. The EPA approved the State of California's request to redesignate the South Coast PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.

Repeated exposure may permanently scar lung tissue. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O_3 harms sensitive vegetation during the growing season (USEPA 2024a). The MDAB is designated nonattainment under the California AAQS (1-hour and 8-hour) and nonattainment in the southwestern desert of San Bernardino County for National AAQS (8-hour) (CARB 2024a).

Lead (Pb) is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (South Coast AQMD 2005; USEPA 2018). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. The MDAB is designated in attainment of the California AAQS and unclassified/attainment under the National AAQS for lead (CARB 2024a).

Table 2, *Criteria Air Pollutant Health Effects Summary*, summarizes the potential health effects associated with the criteria air pollutants.

Table 2 Criteria Air Pollutant Health Effects Summary

Pollutant	Health Effects	Examples of Sources
Carbon Monoxide (CO)	• Chest pain in heart patients • Headaches, nausea • Reduced mental alertness • Death at very high levels	Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves
Ozone (O_3)	• Cough, chest tightness • Difficulty taking a deep breath • Worsened asthma symptoms • Lung inflammation	Atmospheric reaction of organic gases with nitrogen oxides in sunlight
Nitrogen Dioxide (NO_2)	• Increased response to allergens • Aggravation of respiratory illness	Same as carbon monoxide sources
Particulate Matter (PM_{10} and $PM_{2.5}$)	• Hospitalizations for worsened heart diseases • Emergency room visits for asthma • Premature death	Cars and trucks (particularly diesels) Fireplaces and woodstoves Windblown dust from overlays, agriculture, and construction
Sulfur Dioxide (SO_2)	• Aggravation of respiratory disease (e.g., asthma and emphysema) • Reduced lung function	Combustion of sulfur-containing fossil fuels, smelting of sulfur-bearing metal ores, and industrial processes

Table 2 Criteria Air Pollutant Health Effects Summary

Pollutant	Health Effects	Examples of Sources
Lead (Pb)	• Behavioral and learning disabilities in children • Nervous system impairment	Contaminated soil

Source: CARB 2024b.

Toxic Air Contaminants

The public's exposure to air pollutants classified as toxic air contaminants (TACs) is a significant environmental health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant (HAP) pursuant to Section 112(b) of the federal Clean Air Act (42 United States Code §7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency (Cal/EPA), acting through CARB, is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. To date, CARB has established formal control measures for 11 TACs, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

CARB has promulgated the following specific rules to limit TAC emissions:

- 13 CCR Chapter 10, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- 13 CCR Chapter 10, Section 2480, Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- 13 CCR Section 2477 and Article 8, Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

Community Risk

In addition, to reduce exposure to TACs, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources. CARB's recommendations on the siting of new sensitive land uses were based on a compilation of recent studies that evaluated data on the adverse health effects from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases exposure and the potential for adverse health effects. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic, DPM from trucks, and benzene and 1,3-butadiene from passenger vehicles. CARB recommendations are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

REGIONAL

The State is divided into air pollution control districts/air quality management districts. These agencies are county or regional governing authorities that have primary responsibility for controlling air pollution from stationary sources. CARB and local air districts are also responsible for developing clean air plans to demonstrate how and when California will attain AAQS established under both the federal and California Clean Air Acts. For the areas in California that have not attained air quality standards, CARB works with air districts to develop and implement state and local attainment plans. In general, attainment plans contain a discussion of ambient air quality data and trends; a baseline emissions inventory; future year projections of emissions, which account for growth projections and already adopted control measures; a comprehensive control strategy of additional measures needed to reach attainment; an attainment demonstration, which generally involves

complex modeling; and contingency measures. Plans may also include interim milestones for progress toward attainment.

AB 617, Community Air Protection Program

Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017) requires local air districts to monitor and implement air pollution control strategies that reduce localized air pollution in communities that bear the greatest burdens. In response to AB 617, CARB has established the Community Air Protection Program.

Air districts are required to host workshops to help identify disadvantaged communities disproportionately affected by poor air quality. Once the criteria for identifying the highest priority locations have been identified and the communities have been selected, new community monitoring systems would be installed to track and monitor community-specific air pollution goals. In 2018, CARB prepared an air monitoring plan (Community Air Protection Blueprint), that evaluates the availability and effectiveness of air monitoring technologies and existing community air monitoring networks. Under AB 617, the Blueprint is required to be updated every five years.

Under AB 617, CARB is also required to prepare a statewide strategy to reduce TACs and criteria pollutants in impacted communities; provide a statewide clearinghouse for best available retrofit control technology; adopt new rules requiring the latest best available retrofit control technology for all criteria pollutants for which an area has not achieved attainment of California AAQS; and provide uniform, statewide reporting of emissions inventories. Air districts are required to adopt a community emissions reduction program to achieve reductions for the communities impacted by air pollution that CARB identifies.

AIR QUALITY MANAGEMENT PLANNING

MDAQMD is geographically the second largest of the state's 35 air districts. Air monitoring staff operates and maintains six monitoring stations (Barstow, Hesperia, Phelan, Trona, Twentynine Palms, and Victorville) in the District's 20,000-square-mile jurisdiction. MDAQMD is the agency responsible for ensuring that the National and California AAQS are attained and maintained in the MDAB. MDAQMD is responsible for:

- Adopting and enforcing rules and regulations concerning air pollutant sources.
- Issuing permits for stationary sources of air pollutants.
- Inspecting stationary sources of air pollutants.
- Responding to citizen complaints.
- Monitoring ambient air quality and meteorological conditions.
- Awarding grants to reduce motor vehicle emissions.
- Conducting public education campaigns.

The MDAQMD is the agency responsible for preparing the air quality management plan (AQMP) for the San Bernardino and Riverside County portions of the MDAB. MDAQMD has adopted the following attainment plans for nonattainment pollutants that are applicable in the project area (MDAQMD 2020):

Ozone Attainment Plans

- 2023 –Federal 70 PPB Ozone Attainment Plan (Western Mojave Desert Nonattainment Area)
- 2018 –Federal Negative Declaration (8-Hour Ozone Standard) for One CTG Categories
- 2018 –Federal Negative Declaration (8-Hour Ozone Standard) for Two CTG Categories
- 2015 –8-Hour Ozone Reasonably Available Control Technology (RACT) State Implementation Plan (SIP) Analysis: Mojave Desert Air Quality Management District
- 2015 –Federal Negative Declaration (8-Hour Ozone Standard) for Nineteen CTG Categories
- 2008 – Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Nonattainment Area).
- 2004 – 2004 Ozone Attainment Plan (State and Federal).
- 1996 – Triennial Revision to the 1991 Air Quality Attainment Plan.
- 1994 – Reasonable Further Progress Rate-of-Progress Plan.
- 1996 – Post-1996 Attainment Demonstration and Reasonable Further Progress Plan.
- 1991 – 1991 Air Quality Attainment Plan.

Particulate Matter Attainment Plans

- 1995 – Mojave Desert Planning Area Federal Particulate Matter Attainment Plan.

Existing Conditions

Mojave Desert Air Basin Meteorology

The project site lies within the Mojave Desert Air Basin (MDAB). The MDAQMD has jurisdiction over the desert portion of San Bernardino County and the far eastern end of Riverside County. This region includes the incorporated communities of Adelanto, Apple Valley, Barstow, Blythe, Hesperia, Needles, Twentynine Palms, Victorville, and Yucca Valley. This region also includes the National Training Center at Fort Irwin, the Marine Corps Air Ground Combat Center, the Marine Corps Logistics Base, the eastern portion of Edwards Air Force Base, and a portion of the China Lake Naval Air Weapons Station.

Topography and Climate

The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains that dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada to the north; air masses pushed onshore in southern California by differential heating are channeled through the MDAB.

The MDAB is separated from the southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet), whose passes form the main channels for these air masses. Antelope Valley is bordered in the northwest by the Tehachapi Mountains, separated from the Sierra Nevada in the north by the Tehachapi Pass (3,800 ft elevation). Antelope Valley is bordered in the south by the San Gabriel Mountains, bisected by Soledad Canyon (3,300 ft). The Mojave Desert is bordered in the southwest by

the San Bernardino Mountains, separated from the San Gabriels by the Cajon Pass (4,200 ft). A lesser channel lies between the San Bernardino Mountains and the Little San Bernardino Mountains (Morongo Valley).

The Palo Verde Valley portion of the Mojave Desert lies in the low desert, at the eastern end of a series of valleys (notably the Coachella Valley), whose primary channel is the San Gorgonio Pass (2,300 ft) between the San Bernardino and San Jacinto Mountains. During the summer the MDAB is generally influenced by a Pacific subtropical high cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, because these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south.

The MDAB averages between three and seven inches of precipitation per year (from 16 to 30 days with at least 0.01 inch of precipitation). The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, to indicate at least three months have maximum average temperatures over 100.4°F (MDAQMD 2020).

The climatological station nearest to the project site with temperature data is the Joshua Tree, California Monitoring Station (ID No. 044405). The lowest average temperature is reported at 35.8°F in December, and the highest average temperature is 101.1°F in July (WRCC 2024).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from October through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall averages 4.69 inches per year in the vicinity of the area (WRCC 2024).

AREA DESIGNATIONS

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan (SIP). Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- **Unclassified:** a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- **Attainment:** a pollutant is in attainment if the CAAQS for that pollutant was not violated at any site in the area during a three-year period.
- **Nonattainment:** a pollutant is in nonattainment if there was at least one violation of a state AAQS for that pollutant in the area.

- **Nonattainment/Transitional:** a subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SoCAB is shown in Table 3, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*.

Table 3 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Nonattainment	No Federal Standard
Ozone – 8-hour	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Unclassified/Attainment	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment
All others	Nonattainment	No Federal Standard

Source: CARB 2024a.

EXISTING AMBIENT AIR QUALITY

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project site are best documented by measurements taken by the MDAQMD. The air quality monitoring station closest to the project site is the Victorville-14306 Park Avenue Monitoring Station. This station monitors O_3, PM_{10}, $PM_{2.5}$, and NO_2. The most current three years of data from these monitoring stations are included in Table 4. The data show regular violations of the state and federal O_3 standards as well as the federal PM_{10}, and federal $PM_{2.5}$ standards in the last five years.

Table 4 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations[1,2]		
	2021	2022	2023
Ozone (O_3)			
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	8	3	2
State & Federal 8-hour ≥ 0.070 ppm (days exceed threshold)	35	49	32
Max. 1-Hour Conc. (ppm)	0.112	0.100	0.097
Max. 8-Hour Conc. (ppm)	0.098	0.090	0.088
Nitrogen Dioxide (NO_2)			
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0
Max. 1-Hour Conc. (ppb)	0.0566	0.0535	0.0601
Coarse Particulates (PM_{10})			
State 24-Hour > 50 µg/m³ (days exceed threshold)	*	*	*
Federal 24-Hour > 150 µg/m³ (days exceed threshold)	1	2	1
Max. 24-Hour Conc. (µg/m³)	591.6	372.1	160.4

Table 4 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations[1,2]		
	2021	2022	2023
Fine Particulates ($PM_{2.5}$)			
Federal 24-Hour > 35 µg/m³ (days exceed threshold)	1	0	0
Max. 24-Hour Conc. (µg/m³)	87.1	24.6	25.6

Source: CARB 2024c.
Notes: ppm = parts per million; ppb = parts per billion; µg/m³ = micrograms per cubic meter; * = Data not available
[1] Data for O_3, NO_2, $PM_{2.5}$, and PM_1 from the Victorville-14306 Park Avenue Monitoring Station.
[2] Most recent data available as of January 2025.

SENSITIVE RECEPTORS

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases.

Residential areas are also considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public. The nearest offsite sensitive receptor to the project site is the existing Granite Hills High School campus.

Thresholds of Significance

Air quality impacts in the North Desert and East Desert Regions of San Bernardino County follow the guidance, methodologies, and significance thresholds in MDAQMD's *CEQA and Federal Conformity Guidelines* (2016). CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. MDAQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation.

CONSISTENCY WITH AIR QUALITY MANAGEMENT PLANS

MDAQMD requires a consistency evaluation with adopted federal and state AQMPs. If a project is deemed consistent with the existing land use plan, it is considered consistent with the AQMPs. Zoning changes, specific plans, general plan amendments, and similar land use plan changes that do not increase dwelling unit density, do not increase vehicle trips, and do not increase vehicle miles traveled are also deemed to not exceed this threshold (MDAQMD 2020).

REGIONAL SIGNIFICANCE THRESHOLDS

MDAPCD's significance criteria are shown in Table 5, *MDAQMD Regional Significance Thresholds*. The thresholds in this table are applied to both construction and operational phases of the project regardless of whether they are stationary or mobile sources, resulting in a conservative estimate of air quality impacts of the project. Projects with phases shorter than one year (e.g., construction activities) should be compared to the daily value.

Table 5 MDAQMD Regional Significance Thresholds

Air Pollutant	Annual	Daily
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	25 tons/year	137 lbs/day
Carbon Monoxide (CO)	100 tons/year	548 lbs/day
Nitrogen Oxides (NO_X)	25 tons/year	137 lbs/day
Sulfur Oxides (SO_X)	25 tons/year	137 lbs/day
Particulates (PM_{10})	15 tons/year	82 lbs/day
Particulates ($PM_{2.5}$)	12 tons/year	65 lbs/day

Source: MDAQMD 2020.
Notes: Lead and hydrogen sulfide are not air quality pollutants of concern for most projects and are typically generated by industrial (MDAQMD permitted) projects only. Project with phases shorter than one year, including construction activities, can be compared to the daily value.

LOCALIZED SIGNIFICANCE THRESHOLDS

MDAQMD also considers projects that cause or contribute to an exceedance of the California or National AAQS to result in significant impacts. Emissions that do not exceed the daily or annual emission in Table 5 are considered to result in less than significant localized impacts.

HEALTH RISK THRESHOLDS

Whenever a project would require use of chemical compounds that have been identified in MDAQMD Regulation XIII, New Source Review, placed on CARB's air toxics list pursuant to AB 1807, Air Contaminant Identification and Control Act (1983); or placed on the EPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment (HRA) is required by MDAQMD. Table 6, *Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. Projects that do not generate emissions that exceed the values in Table 5, above, would not substantially contribute to cumulative air quality hazards or exacerbate an existing environmental hazard. Residential, commercial, office, and institutional uses do not use substantial quantities of TACs and typically do not exacerbate existing hazards. Therefore, these thresholds are typically applied to new industrial projects.

Table 6 Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0
Cancer Burden	> 0.5 excess cancer cases (in areas ≥ 1 in 1 million)

Source: MDAQMD 2020; South Coast AQMD 2019.

In addition, MDAQMD requires that project types listed below be evaluated using the significance threshold criteria in Table 5 when located within a certain distance of an existing or planned (zoned) sensitive receptor land use:

- Industrial projects within 1,000 feet
- Distribution centers (40 or more trucks per day) within 1,000 feet
- Major transportation projects (50,000 or more vehicles per day) within 1,000 feet
- Dry cleaners using perchloroethylene within 500 feet
- Gasoline dispensing facilities within 300 feet (MDAQMD 2020)

GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHG, to the atmosphere. Climate change is the variation of Earth's climate over time, whether due to natural variability or as a result of human activities. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHG—water vapor,[5] carbon (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).[6] The major GHG are briefly described below.

- **Carbon dioxide (CO_2)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.

- **Methane (CH_4)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.

[5] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

[6] Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017a). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

- **Nitrous oxide (N_2O)** is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.

- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.

    - ***Chlorofluorocarbons (CFCs***) are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are also ozone-depleting gases and are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.

    - ***Perfluorocarbons (PFCs)*** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF_4] and perfluoroethane [C_2F_6]) were introduced as alternatives, along with HFCs, to the ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high global warming potential.

    - ***Sulfur Hexafluoride (SF_6)*** is a colorless gas soluble in alcohol and ether, slightly soluble in water. SF_6 is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.

    - ***Hydrochlorofluorocarbons (HCFCs)*** contain hydrogen, fluorine, chlorine, and carbon atoms. Although ozone-depleting substances, they are less potent at destroying stratospheric ozone than CFCs. They have been introduced as temporary replacements for CFCs and are also GHGs.

    - ***Hydrofluorocarbons (HFCs)*** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs (IPCC 2001; USEPA 2024b).

GHGs are dependent on the lifetime or persistence of the gas molecule in the atmosphere. Some GHGs have stronger greenhouse effects than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 7, *GHG Emissions and Their Relative Global Warming Potential Compared to CO_2*. The GWP is used to convert GHGs to CO_2-equivalence (CO_2e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under

IPCC's Fifth Assessment Report (AR5) GWP values for CH_4, a project that generates 10 MT of CH_4 would be equivalent to 280 MT of CO_2.[7]

Table 7 GHG Emissions and Their Relative Global Warming Potential Compared to CO_2

GHGs	Fourth Assessment Report (AR4) Global Warming Potential Relative to CO_2[1]	Fifth Assessment Report (AR5) Global Warming Potential Relative to CO_2[1]	Sixth Assessment Report (AR6) Global Warming Potential Relative to CO_2[1]
Carbon Dioxide (CO_2)	1	1	1
Methane[2] (CH_4)	25	28	30
Nitrous Oxide (N_2O)	298	265	273

Source: IPCC 2007, 2013, and 2023.

Notes: The IPCC published updated GWP values in its Sixth Assessment Report (AR6) that reflect latest information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO_2. However, GWP values identified in AR5 are used by the 2022 Scoping Plan for long-term emissions forecasting.

1 Based on 100-year time horizon of the GWP of the air pollutant compared to CO_2.

2 The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

GHG Regulatory Setting

REGULATION OF GHG EMISSIONS ON A NATIONAL LEVEL

The US Environmental Protection Agency (EPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements but allow the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

To regulate GHGs from passenger vehicles, EPA was required to issue an endangerment finding. The finding identifies emissions of six key GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the project's GHG emissions inventory because they constitute the majority of GHG emissions and, per South Coast AQMD guidance, are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MT or more of CO_2 per year are required to submit an annual report.

7 The global warming potential of a GHG is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

Update to Corporate Average Fuel Economy Standards (2021 to 2026)

The federal government issued new Corporate Average Fuel Economy (CAFE) standards in 2012 for model years 2017 to 2025, which required a fleet average of 54.5 miles per gallon in 2025. On March 30, 2020, the EPA finalized an updated CAFE and GHG emissions standards for passenger cars and light trucks and established new standards covering model years 2021 through 2026, known as the Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021 to 2026. Under SAFE, the fuel economy standards will increase 1.5 percent per year compared to the 5 percent per year under the CAFE standards established in 2012. Overall, SAFE requires a fleet average of 40.4 MPG for model year 2026 vehicles (85 Federal Register 24174 (April 30, 2020)).

On December 21, 2021, under direction of Executive Order (EO) 13990 issued by President Biden, the National Highway Traffic Safety Administration repealed Safer Affordable Fuel Efficient Vehicles Rule Part One, which had preempted state and local laws related to fuel economy standards. In addition, on March 31, 2022, the National Highway Traffic Safety Administration finalized new fuel standards in response to EO 13990. Fuel efficiency under the standards proposed will increase 8 percent annually for model years 2024 to 2025 and 10 percent annual for model year 2026. Overall, the new CAFE standards require a fleet average of 49 MPG for passenger vehicles and light trucks for model year 2026, which would be a 10 MPG increase relative to model year 2021 (NHTSA 2022).

EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)

Pursuant to its authority under the Clean Air Act, the EPA has developed regulations for new, large, stationary sources of emissions, such as power plants and refineries. Under former President Obama's 2013 Climate Action Plan, the EPA was directed to develop regulations for existing stationary sources as well. On June 19, 2019, the EPA issued the final Affordable Clean Energy (ACE) rule, which became effective on August 19, 2019. The ACE rule was crafted under the direction of President Trump's Energy Independence EO. It officially rescinded the Clean Power Plan rule issued during the Obama Administration and set emissions guidelines for states in developing plans to limit CO_2 emissions from coal-fired power plants. The Affordable Clean Energy rule was vacated by the United States Court of Appeals for the District of Columbia Circuit on January 19, 2021. The Biden Administration is assessing options on potential future regulations.

REGULATION OF GHG EMISSIONS ON A STATE LEVEL

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in EO S-03-05 and EO B-30-15, EO B-55-18, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32), and SB 375.

Executive Order S-3-05

Executive Order S-3-05, signed June 1, 2005. Executive Order S-3-05 set the following GHG reduction targets for the State:

- 2000 levels by 2010
- 1990 levels by 2020
    - 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in EO S-03-05. CARB prepared the 2008 Scoping Plan to outline a plan to achieve the GHG emissions reduction targets of AB 32.

Executive Order B-30-15

EO B-30-15, signed April 29, 2015, set a goal of reducing GHG emissions within the state to 40 percent of 1990 levels by year 2030. EO B-30-15 also directed CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in EO S-03-05. It also requires the Natural Resources Agency to conduct triennial updates of the California adaption strategy, "Safeguarding California", in order to ensure climate change is accounted for in state planning and investment decisions.

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and AB 197 into law, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

Executive Order B-55-18

Executive Order B-55-18, signed September 10, 2018, set a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Executive Order B-55-18 directs CARB to work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning that not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions should be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Assembly Bill 1279

AB 1279, signed by Governor Newsom in September 2022, codified the carbon neutrality targets of EO B-55-18 for year 2045 and sets a new legislative target for year 2045 of 85 percent below 1990 levels for anthropogenic GHG emissions. SB 1279 also requires CARB to update the Scoping Plan to address these new targets.

2022 Climate Change Scoping Plan

CARB adopted the *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) on December 15, 2022, which lays out a path to achieve carbon neutrality by 2045 or earlier and to reduce the State's anthropogenic GHG emissions (CARB 2022a). The Scoping Plan provides updates to the previously adopted 2017 Scoping Plan and addresses the carbon neutrality goals of EO B-55-18 (discussed below) and the ambitious GHG reduction target as directed by AB 1279. Previous Scoping Plans focused on specific GHG reduction targets

for our industrial, energy, and transportation sectors—to meet 1990 levels by 2020, and then the more aggressive 40 percent below that for the 2030 target. The 2022 Scoping Plan updates the target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. Carbon neutrality takes it one step further by expanding actions to capture and store carbon including through natural and working lands and mechanical technologies, while drastically reducing anthropogenic sources of carbon pollution at the same time.

The path forward was informed by the recent Sixth Assessment Report (AR6) of the IPCC and the measures would achieve 85 percent below 1990 levels by 2045 in accordance AB 1279. CARB's 2022 Scoping Plan identifies strategies as shown in Table 8, *Priority Strategies for Local Government Climate Action Plans*, that would be most impactful at the local level for ensuring substantial process towards the State's carbon neutrality goals.

Table 8 Priority Strategies for Local Government Climate Action Plans

Priority Area	Priority Strategies
Transportation Electrification	Convert local government fleets to zero-emission vehicles (ZEV) and provide EV charging at public sites.
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans).
VMT Reduction	Reduce or eliminate minimum parking standards.
	Implement Complete Streets policies and investments, consistent with general plan circulation element requirements.
	Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking
	Implement parking pricing or transportation demand management pricing strategies.
	Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing allowable density of the neighborhood).
	Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert "greenfield" land to urban uses (e.g., green belts, strategic conservation easements)
Building Decarbonization	Adopt all-electric new construction reach codes for residential and commercial uses.
	Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers).
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances.
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing) .
	Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings) .

Source: CARB 2022a.

Based on Appendix D of the 2022 CARB Climate Change Scoping Plan, for residential and mixed-use development projects, CARB recommends first demonstrating that these land use development projects are

aligned with State climate goals based on the attributes of land use development that reduce operational GHG emissions while simultaneously advancing fair housing. Attributes that accommodate growth in a manner consistent with the GHG and equity goals of SB 32 have all the following attributes:

- Transportation Electrification
  - Provide EV charging infrastructure that, at a minimum, meets the most ambitious voluntary standards in the California Green Building Standards Code at the time of project approval.

- VMT Reduction
  - Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).
  - Does not result in the loss or conversion of the State's natural and working lands;
  - Consists of transit-supportive densities (minimum of 20 residential dwelling units/acre), or is in proximity to existing transit stops (within a half mile), or satisfies more detailed and stringent criteria specified in the region's Sustainable Communities Strategy (SCS);
  - Reduces parking requirements by:
    - Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or
    - Providing residential parking supply at a ratio of <1 parking space per dwelling unit; or
    - For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.
  - At least 20 percent of the units are affordable to lower-income residents;
  - Result in no net loss of existing affordable units.

- Building Decarbonization
  - Use all electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking (CARB 2022a).

If the first approach to demonstrating consistency is not applicable (such as in the case of this school modernization project), the second approach to project-level alignment with state climate goals is to achieve net zero GHG emissions. The third approach to demonstrating project-level alignment with state climate goals is to align with GHG thresholds of significance, which many local air quality management (AQMDs) and air pollution control districts (APCDs) have developed or adopted (CARB 2022a).

Senate Bill 375

In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPO). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 is defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 $MMTCO_2e$ of reductions by 2020 and 15 $MMTCO_2e$ of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010).

2017 Update to the SB 375 Targets

CARB is required to update the targets for the MPOs every eight years. CARB adopted revised SB 375 targets for the MPOs in March 2018. The updated targets became effective in October2018. All SCSs adopted after October 1, 2018, are subject to these new targets. CARB's updated SB 375 targets for the SCAG region were an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2018).

The targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update (for SB 32), while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of "percent per capita" reductions in GHG emissions from automobiles and light trucks relative to 2005; this excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies, such as statewide road user pricing. The proposed targets call for greater per-capita GHG emission reductions from SB 375 than are currently in place, which for 2035 translate into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted SCSs to achieve the SB 375 targets. CARB foresees that the additional GHG emissions reductions in 2035 may be achieved from land use changes, transportation investment, and technology strategies (CARB 2018).

SCAG's Regional Transportation Plan / Sustainable Communities Strategy

SB 375 requires each MPO to prepare a sustainable communities strategy in its regional transportation plan. For the SCAG region, the 2020-2045 RTP/SCS (Connect SoCal) was adopted on September 3, 2020, and is an update to the 2016-2040 RTP/SCS. In general, the SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

Connect SoCal focuses on the continued efforts of the previous RTP/SCSs to integrate transportation and land use strategies in development of the SCAG region through horizon year 2045 (SCAG 2020). Connect SoCal forecasts that the SCAG region will meet its GHG per capita reduction targets of 8 percent by 2020 and 19 percent by 2035. Additionally, Connect SoCal also forecasts that implementation of the plan will reduce VMT per capita in year 2045 by 4.1 percent compared to baseline conditions for that year. Connect SoCal includes a "Core Vision" that centers on maintaining and better managing the transportation network for moving people and goods while expanding mobility choices by locating housing, jobs, and transit closer together and increasing investments in transit and complete streets (SCAG 2020).

Transportation Sector Specific Regulations

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model years 2017 through 2025 light-duty vehicles. (See also the discussion on the update to the Corporate Average Fuel Economy standards at the beginning of this Section 5.5.2 under "Federal.") In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of ZE vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025 new automobiles will emit 34 percent less GHG emissions and 75 percent less smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the state set a new LCFS for transportation fuels sold in the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in CO_2e gram per unit of fuel energy sold in California. The LCFS required a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and uses market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate ZE vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directed the number of ZE vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are ZE by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions to 80 percent below 1990 levels.

Executive Order N-79-20

On September 23, 2020, Governor Newsom signed Executive Order N-79-20, whose goal is that 100 percent of in-state sales of new passenger cars and trucks will be ZE by 2035. Additionally, the fleet goals for trucks are that 100 percent of drayage trucks are ZE by 2035, and 100 percent of medium- and heavy-duty vehicles in the state are ZE by 2045, where feasible. The Executive Order's goal for the State is to transition to 100 percent ZE off-road vehicles and equipment by 2035, where feasible.

Renewables Portfolio: Carbon Neutrality Regulations

Senate Bills 1078, 107, and X1-2 and Executive Order S-14-08

A major component of California's Renewable Energy Program is the renewables portfolio standard established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S-14-08, signed in November 2008, expanded the state's renewable energy standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects because electricity production from renewable sources is generally considered carbon neutral.

Senate Bill 350

Senate Bill 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100. Under SB 100, the RPS for public-owned facilities and retail sellers consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. SB 100 also established a new RPS requirement of 50 percent by 2026. Furthermore, the bill establishes an overall state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of

all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Energy Efficiency Regulations

California Building Code: Building Energy Efficiency Standards

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

The 2022 Building Energy Efficiency Standards were adopted on August 11, 2021, and went into effect on January 1, 2023. The 2022 standards encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expand solar photovoltaic and battery storage standards, strengthen ventilation standards, and more. The 2022 standards require mixed-fuel single-family homes to be electric-ready to accommodate replacement of gas appliances with electric appliances. In addition, the standards also include prescriptive photovoltaic system and battery requirements for high-rise, multifamily buildings (i.e., more than three stories) and noncommercial buildings such as hotels, offices, medical offices, restaurants, retail stores, schools, warehouses, theaters, and convention centers (CEC 2021).

The CEC is currently developing the final code language for the 2025 Building Energy Efficiency Standards, which are anticipated to be adopted in late 2024. The 2025 Building Energy Efficiency Standards will replace the 2022 Building Energy Efficiency Standards and will become effective on January 1, 2026.

California Building Code: CALGreen

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[8] The mandatory provisions of CALGreen became effective January 1, 2011, and were last updated in 2022. The 2022 CALGreen standards became effective on January 1, 2023, and provides updates to the residential and non-residential voluntary measures.

Overall, the code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction. CALGreen contains requirements for construction site selection, stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation

[8] The green building standards became mandatory in the 2010 edition of the code.

conservation, and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency (CBSC 2022).

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances. Though these regulations are now often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

Solid Waste Diversion Regulations

AB 939: Integrated Waste Management Act of 1989

California's Integrated Waste Management Act of 1989 (AB 939, Public Resources Code §§ 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 341

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses. Section 5.408 of CALGreen also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

AB 1327

The California Solid Waste Reuse and Recycling Access Act (AB 1327, Public Resources Code §§ 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

AB 1826

In October of 2014, Governor Brown signed AB 1826 requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses and multifamily residential dwellings with five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed with food waste.

Water Efficiency Regulations

SBX7-7

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed "SBX7-7." SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 required urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

AB 1881: Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or an equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Short-Lived Climate Pollutant Reduction Strategy

Senate Bill 1383

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and CH_4. Black carbon is the light-absorbing component of fine particulate matter produced during the incomplete combustion of fuels. SB 1383 required the state board, no later than January 1, 2018, to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The bill also established targets for reducing organic waste in landfills. On March 14, 2017, CARB adopted the Short-Lived Climate Pollutant Reduction Strategy, which identifies the state's approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s, despite the tripling of diesel fuel use (CARB 2017a). In-use on-road rules were expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020.

CALIFORNIA'S GREENHOUSE GAS SOURCES AND RELATIVE CONTRIBUTION

In 2022, the statewide GHG emissions inventory was updated for 2000 to 2020 emissions using the GWPs in IPCC's AR4, and reported that California produced 369.2 $MMTCO_2e$ GHG emissions in 2020 (CARB 2022b), which was 35.3 $MMTCO_2e$ lower than 2019 levels and 61.8 $MMTCO_2e$ below the 2020 GHG Limit of 431 $MMTCO_2e$. The 2019 to 2020 decrease in emissions is likely due in large part to the impacts of the COVID-19 pandemic. However, since the peak level in 2004, California's GHG emissions have generally followed a

decreasing trend. In 2014, statewide GHG emissions dropped below the 2020 GHG Limit and have remained below the Limit since that time. Per capita GHG emissions in California have dropped from a 2001 peak of 13.8 metric tons per person to 9.3 metric tons per person in 2020, a 33-percent decrease (CARB 2022b).

California's transportation sector remains the largest generator of GHG emissions, producing 37 percent of the state's total emissions in 2020. Industrial sector emissions made up 20 percent and electric power generation made up 16 percent of the state's emissions inventory. Other major sectors of GHG emissions include commercial and residential (4 percent), agriculture and forestry (8.6 percent), high-GWP gases (5.8 percent), and recycling and waste (2 percent) (CARB 2022b).

Transportation emissions continued to decline for the past three consecutive years with the rise of fuel efficiency for the passenger vehicle fleet and an increase in battery electric vehicles. The deployment of renewable and less carbon-intensive resources and higher energy efficiency standards have facilitated the continuing decline in fossil fuel electricity generation. The industrial sector trend has been relatively flat in recent years but saw a decrease of 7.1 $MMTCO_2e$ in 2020. Commercial and residential emissions saw a decrease of 1.7 $MMTCO_2e$. Emissions from high-GWP gases have continued to increase as they replace ozone depleting substance (ODS) that are being phased out under the 1987 Montreal Protocol. Emissions from other sectors have remained relatively constant in recent years. Overall trends in the inventory also continue to demonstrate that the carbon intensity of California's economy (i.e., the amount of carbon pollution per million dollars of gross domestic product [GDP]) is declining. From 2000 to 2020, the carbon intensity of California's economy decreased by 49 percent while the GDP increased by 56 percent (CARB 2022b).

Thresholds of Significance

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;

3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.[9]

[9] The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

The analysis of the project's air quality impacts follows the guidance and methodologies recommended in MDAQMD's *CEQA and Federal Conformity Guidelines* (2016). CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. MDAQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation.

Regional Significance Thresholds

MDAQMD's significance criteria are shown in Table 8, *MDAQMD Greenhouse Gas Significance Thresholds*. The thresholds identified in this table are applied to both construction and operational phases of the project regardless of whether they are stationary or mobile sources, resulting in a conservative estimate of air quality impacts of the project. Project with phases shorter than one year (e.g., construction activities) should be compared to the daily value.

Table 8 MDAQMD Greenhouse Gas Significance Thresholds

Annual (tons/year)	Daily[1] (lbs/day)
100,000 (90,718 $MTCO_2e$/year)	548,000

Source: MDAQMD 2020.
[1] Project with phases shorter than one year, including construction activities, can be compared to the daily value.

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CalEEMod Inputs - Granite Hills High School Athletics Project, Construction

Name:	Granite Hills High School Athletics Project
Project Number:	AVUS-02
Project Location:	22900 Esaws Ave, Apple Valley, CA 92307
County/Air Basin:	San Bernardino-Mojave Desert
Climate Zone:	10
Land Use Setting:	Suburban
Gas Utility Company:	Southern California Edison
Electric Utility Company:	Southwest Gas Corp.
Air Basin:	Mojave Desert
Air District:	Mojave Desert AQMD

Project Site Acreage	20.73
Disturbed Site Acreage	20.78

Project Components	SQFT	Acres
Phase 1 (Spring 2026-Spring 2027)		
Restroom/Concessions Building	5,733	0.13
Football/Soccer Field Artifical Turf	90,910	2.09
Landscaping (Retention Basin)	184,933	4.25
Natural Desert	82,848	1.90
Synthetic Track Surface	70,379	1.62
Non-Parking Asphalt	47,588	1.09
Road Widening (Esaws Ave)	10,906	0.25
Crushed Rock Groundcover	28,287	0.65
Decomposed Granite Walkways	1,274	0.03
Concrete Hardscape	141,890	3.26
East Parking Lot	33,123	0.76
TOTAL	**697,871**	**16.02**
Project Components	**SQFT**	**Acres**
Phase 2 (Fall 2027-Spring 2028)		
Team Lockers Building	5,409	0.12
Concrete Hardscape	46,615	1.07
Synthetic Track Surface	2,172	0.05
Non-Parking Asphalt	42,709	0.98
Crushed Rock Groundcover	35,541	0.82
Decomposed Granite Walkways	1,667	0.04
Balance of Parking Lots	73,318	1.68
TOTAL	**207,431**	**4.76**

CalEEMod Land Use Inputs Phase 1

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Landscape Area Square Feet	Special Landscape Area Square Feet
Educational	High School	5.73	1000 sqft	6.46	5,733	184,933	90,910
Parking	Other Non-Asphalt Surfaces	324.68	1000 sqft	7.45	324,678	0	0
Parking	Other Asphalt Surfaces	58.49	1000 sqft	1.34	58,494	0	0
Parking	Parking Lot	33.12	1000 sqft	0.76	33,123	0	0
				16.02			

CalEEMod Land Use Inputs Phase 2

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Landscape Area Square Feet	Special Landscape Area Square Feet
Educational	High School	5.41	1000 sqft	0.12	5,409	0	0
Parking	Other Non-Asphalt Surfaces	86.00	1000 sqft	1.97	85,995	0	0
Parking	Other Asphalt Surfaces	42.71	1000 sqft	0.98	42,709	0	0
Parking	Parking Lot	73.32	1000 sqft	1.68	73,318	0	0
				4.76			

Architectural Coating

	Percent Painted	
Interior Painted:	100%	
Exterior Painted:	100%	

MDAQMD Rule 1113

Interior Non-Residential Paint VOC content:	50	grams per liter
Exterior Non-Residential Paint VOC content:	50	grams per liter
Parking Paint VOC contect:	100	grams per liter

Phase 1

Structures	Land Use Square Feet	CalEEMod Factor[2]	Total Paintable Surface Area	Paintable Interior Area[1]	Paintable Exterior Area[1]
Non-Residential Structures					
High School	5,733	2.0	11,466	8,600	2,867
				8,600	**2,867**
Parking					
Other Non-Asphalt Surfaces	324,678	6%	19,481	-	19,481
Other Asphalt Surfaces	58,494	6%	3,510	-	3,510
Parking Lot	33,123	6%	1,987	-	1,987
					24,978

Phase 2

Structures	Land Use Square Feet	CalEEMod Factor[2]	Total Paintable Surface Area	Paintable Interior Area[1]	Paintable Exterior Area[1]
Non-Residential Structures					
High School	5,409	2.0	10,818	8,114	2,705
				8,114	**2,705**
Parking					
Other Non-Asphalt Surfaces	85,995	6%	5,160	-	5,160
Other Asphalt Surfaces	42,709	6%	2,563	-	2,563
Parking Lot	73,318	6%	4,399	-	4,399
					12,121

Notes

[1] CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively. Exclude square footage of modular buildings and shipping container storages since these type of structures do not usually require painting.

[2] The program assumes the total surface for painting equals 2 times the floor square footage for nonresidential square footage defined by the user.

[3] Assume CalEEMod default for 6% striping of non-asphalt surfaces.

CalEEMod Construction Measures

MDAQMD Rule 403

Water Unpaved Roads	Frequency:	2	per day
	PM10:	55	% Reduction
	PM25:	55	% Reduction
Water Exposed Area	Frequency:	2	per day
	PM10:	61	% Reduction
	PM25:	61	% Reduction
Unpaved Roads	Vehicle Speed:	25	mph
MDAQMD Rule 1186	Clean Paved Road	9	% PM Reduction

Southern California Edison Carbon Intensity Forecasted Factors for 2028[1]

CO2:	346.20	pounds per megawatt hour
CH4:	0.033	pound per megawatt hour
N2O:	0.004	pound per megawatt hour

Notes:

[1] CalEEMod default values.

Construction Activities and Schedule Assumptions

Default Construction Schedule Phase 1				
Construction Activities	**Phase Type**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**
Site Preparation	Site Preparation	3/30/2026	4/13/2026	11
Grading	Grading	4/14/2026	5/26/2026	31
Building Construction	Building Construction	5/27/2026	7/21/2027	301
Paving	Paving	7/22/2027	8/19/2027	21
Architectural Coating	Architectural Coating	8/20/2027	9/17/2027	21

New CalEEMod Construction Schedule (Phase 1)				
Construction Activities	**Phase Type**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**
Site Preparation	Site Preparation	3/2/2026	3/11/2026	8
Grading	Grading	3/12/2026	4/9/2026	21
Building Construction	Building Construction	4/10/2026	4/1/2027	255
Paving	Paving	3/15/2027	4/1/2027	14
Architectural Coating	Architectural Coating	3/15/2027	4/1/2027	14

Default Construction Schedule Phase 2				
Construction Activities	**Phase Type**	**Start Date**	**End Date**	**CalEEMod**
Site Preparation	Site Preparation	9/30/2027	10/14/2027	11
Grading	Grading	10/14/2027	11/12/2027	22
Building Construction	Building Construction	11/13/2027	9/30/2028	230
Paving	Paving	10/1/2028	10/29/2028	20
Architectural Coating	Architectural Coating	10/30/2028	11/27/2028	21

New CalEEMod Construction Schedule (Phase 2)				
Construction Activities	**Phase Type**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**
Site Preparation	Site Preparation	9/30/2027	10/7/2027	6
Grading	Grading	10/8/2027	10/22/2027	11
Building Construction	Building Construction	10/23/2027	4/30/2028	135
Paving	Paving	4/17/2028	4/30/2028	10
Architectural Coating	Architectural Coating	4/17/2028	4/30/2028	10

CalEEMod Construction Off-Road Equipment Inputs

Construction Equipment Details Phase 1[1]				
CalEEMod Equipment	**# of Equipment**	**hr/day**	**hp**	**total trips per day**
Site Preparation				
Rubber Tired Dozers	3	8	367	
Tractors/Loaders/Backhoes	4	8	84	
Worker Trips				18
Vendor Trips				0
Hauling Trips				0
Water Trucks	Acres Disturbed:	3.25		4
Grading				
Graders	1	8	148	
Rubber Tired Dozers	1	8	367	
Scapers	2	8	423	
Excavators	1	8	36	
Tractors/Loaders/Backhoes	2	8	84	
Worker Trips				20
Vendor Trips				0
Hauling Trips				0
Water Trucks	Acres Disturbed:	3.63		4
Building Construction				
Cranes	1	7	367	
Forklifts	3	8	82	
Generator Sets	1	8	14	
Tractors/Loaders/Backhoes	3	7	84	
Welders	1	8	46	
Worker Trips				3
Vendor Trips				1
Hauling Trips				0
Paving				
Pavers	2	8	81	
Paving Equipment	2	8	89	
Rollers	2	8	36	
Worker Trips				15
Vendor Trips				0
Hauling Trips				0
Architectural Coating				
Air Compressors	1	6	37	
Worker Trips				1
Vendor Trips				0
Hauling Trips				0

Construction Equipment Details Phase 1[1]				
CalEEMod Equipment	**# of Equipment**	**hr/day**	**hp**	**total trips per day**
Site Preparation				
Graders	3	8	367	
Rubber Tired Dozers	4	8	84	
Worker Trips				18
Vendor Trips				0
Hauling Trips				0
Water Trucks	Acres Disturbed:	3.25		4
Grading				
Graders	1	8	148	
Rubber Tired Dozers	1	8	367	
Excavators	1	8	36	
Tractors/Loaders/Backhoes	3	8	84	
Worker Trips				15
Vendor Trips				0
Hauling Trips				0
Water Trucks	Acres Disturbed:	2.31		2
Building Construction				
Cranes	1	7	367	
Forklifts	3	8	82	
Generator Sets	1	8	14	
Tractors/Loaders/Backhoes	3	7	84	
Welders	1	8	46	
Worker Trips				3
Vendor Trips				1
Hauling Trips				0
Paving				
Pavers	1	8	81	
Paving Equipment	2	6	89	
Rollers	2	6	36	
Tractors/Loaders/Backhoes	1	8	84	
Cement and Mortar Mixers	2	6	10	
Worker Trips				20
Vendor Trips				0
Hauling Trips				0
Architectural Coating				
Air Compressors	1	6	37	
Worker Trips				1
Vendor Trips				0
Hauling Trips				0

Notes:

[1] If specific equipment type was not given then CalEEMod default equipment and hp was used.

Water Truck Vendor Trip Calculation

Amount of Water (gal/acre/day)[1]	Water Truck Capacity (gallons)[2]
10,000	4,000

Notes:

[1] Based on data provided in Guidance for Application for Dust Control Permit

Maricopa County Air Quality Department. 2005, June. Guidance for Application of Dust Control Permit. https://www.epa.gov/sites/default/files/2019-04/documents/mr_guidanceforapplicationfordustcontrolpermit.pdf)

[2] Based on standard water truck capacity:

McLellan Industries. 2022, January (access). Water Trucks. https://www.mclellanindustries.com/trucks/water-trucks/

[3]

Assumes that dozers, tractors/loaders/backhoes, and graders can disturb 0.50 acres per day and scrapers can disturb 1 acre per day.

CalEEMod Inputs - Granite Hills High School Athletics Project, Operation

Name: Granite Hills High School Athletics Project
Project Number: AVUS-02
Project Location: 22900 Esaws Ave, Apple Valley, CA 92307
County/Air Basin: San Bernardino-Mojave Desert
Climate Zone: 10
Land Use Setting: Suburban
Gas Utility Company: Southwest Gas Corp.
Electric Utility Company: Southern California Edison
Air Basin: Mojave Desert
Air District: Mojave Desert AQMD

CalEEMod Land Use Inputs Phase 1 & 2

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Landscape Area	Special Landscape Area
Educational	High School	11.14	1000 sqft	6.59	11,142	184,933	90,910
Parking	Other Non-Asphalt Surfaces	410.67	1000 sqft	9.43	410,673	0	0
Parking	Other Asphalt Surfaces	101.20	1000 sqft	2.32	101,203	0	0
Parking	Parking Lot	106.44	1000 sqft	2.44	106,441	0	0
				20.78			

Net Increase in Weekday Net Trips for Maximum Daily Emissions [1]

Land Use Type	Maximum Daily Trips[2]	CalEEMod Max Daily Trip Rate
High School	2,420	**217.20**

Notes:
[1] No trips on weekend as the majority of events would occur during weekdays.
[2] Used traffic generated from maximum capacity event at stadium as the conservative daily trips estimate for comparison to MDAQMD's maximum daily emissions thresholds.

Source: Garland & Associates, 2023. Patriot High School Stadium Improvements Traffic Impact Analysis.

Net Annual Trips Calculation for Annual Emissions [1]

Maximum Capacity Seats	Number of Trips for Max Capacity Event	Rate of Trips per Seat
4,028	2,420	0.60

Event	Maximum Existing Spectators/Event (Onsite)	Maximum Proposed Spectators/Event	Net increase in Spectators[2]	Existing Events Onsite	Proposed Events Onsite[2]	Net Increase in number of Trips per Year
Football (Fall - August to November)						
Freshman Football	125	300	175	3	3	315
Junior Varsity	125	350	225	6	6	810
Varsity Football	0	1,200	1,200	0	4	2,880
Soccer (Winter – November to February)						
Girls JV Soccer	100	200	100	7	7	420
Girls Varsity Soccer	100	200	100	9	9	540
Boys JV Soccer	100	200	100	8	8	480
Boys Varsity Soccer	100	200	100	8	8	480
Track and Field (Spring – February to May)						
Track and Field	0	400	400	0	4	960
Graduation Ceremony	0	3,500	400	1	1	240
TOTAL				42	**50**	**7,125**

	CalEEMod Average Daily Trip Rate
Trip Rate for Annual GHG Emissions (Average Daily):	1.75

Notes
[1] For comparison to MDAQMD's annual thresholds, the number of trips per event per year have been calculated.
[2] Varsity football and track and field occur off-site under existing conditions and would be moved to the proposed sports complex under the proposed project. Therefore this analysis conservatively assumes that all trips for these events would be new trips to the project site.

Source: Garland & Associates, 2024. Granite Hills High School Traffic Impact Analysis.

Water Use [1,2]

	Indoor (gpy)	Outdoor (gpy)	Total
High School	369,899	6,554,008	6,923,907

Notes

[1] CalEEMod defaults used.

[2] Assumes 100% aerobic treatment.

Solid Waste [1]

Land Use	Total Solid Waste (tons/yr)	Total Solid Waste (tons/unit/yr)
High School	14.48	1.30

Notes

[1] CalEEMod defaults used.

Electricity (Buildings)

Default CalEEMod Energy Use

Land Use Subtype	Total Annual Electricity Consumption (kWh/year)	Total Annual Natural Gas Consumption (kBTU/year)	Title-24 Electricity Energy Intensity (kWhr/size/year)*	Title-24 Natural Gas Energy Intensity (KBTU/size/year)*	Nontitle-24 Electricity Energy Intensity (kWhr/size/year)	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/year)
High School	72,259.88	268,169.47	**62,436.87**	**156,469.19**	9,823.01	111,700.28
Parking Lot	93,241.44	0.00	**93,241.44**	**0.00**	0.00	0.00

Architectural Coating

	Percent Painted		SCAQMD Rule 1113	g/L
Interior Painted:	100%	*Interior Paint VOC content:*	100
Exterior Painted:	100%	*Exterior Paing VOC content:*	100

Structures	Land Use Square Feet	CalEEMod Factor[2]	Total Paintable Surface Area	Paintable Interior Area[1]	Paintable Exterior Area[1]
Non-Residential Structures					
High School	11,142	2.0	22,284	16,713	5,571
				16,713	**5,571**
Parking					
Other Non-Asphalt Surfaces	410,673	6%	24,640		24,640
Other Asphalt Surfaces	101,203	6%	6,072		6,072
Parking Lot	106,441	6%	6,386	-	6,386
					37,099

Notes

[1] CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively. Exclude square footage of modular buildings and shipping container storages since these type of structures do not usually require painting.

[2] The program assumes the total surface for painting equals 2 times the floor square footage for nonresidential square footage defined by the user.

[3] Assume CalEEMod default for 6% striping of non-asphalt surfaces.

Field Lighting (Electricity Use)

	Total Average kW/Event [1]	Events/Year	Hours/Event	kWh (Annual)
Practices				
Freshman & JV Football	75.06	48	3.00	10,809
Varsity Football	75.06	48	0.50	1,801
Girls Soccer	75.06	48	1.50	5,404
Boys Soccer	75.06	48	0.00	0
Track and Field	75.06	48	0.00	0
Events				
Freshman Football	75.06	3	1.50	338
Junior Varsity	75.06	6	1.50	676
Varsity Football	75.06	4	3.50	1,051
Girls JV Soccer	75.06	7	2.50	1,314
Girls Varsity Soccer	75.06	9	2.50	1,689
Boys JV Soccer	75.06	8	2.50	1,501
Boys Varsity Soccer	75.06	8	2.50	1,501
Track and Field	75.06	4	2.50	751
Graduation	75.06	1	3.00	225
			Total	**27,059**

Scoreboard (Electricity Use)

	Energy use per scoreboard (kW/hr)[2]	Events/Year	Hours	kWh (Annual)
Scoreboard	13.98	50	3.00	2,096

Calculation of GHGs from Field Lighting & Scoreboard

Source: CalEEMod Defaults

CO_2	CH_4	N_2O	CO_2e	CO_2e
lbs/Mwh	lbs/Mwh	lbs/Mwh	lbs/Mwh	MT/kWh
348.64	0.033	0.004	348.67	0.0002
			CO_2e from Energy (MT/Year)	**4.61**
			CO_2e from Energy (lbs/day)	**27.85**

Notes

[1] Based on Musco Lighting Plans for the proposed field lighting as provided by the District.

[2] Based on the use of a LVX-312X552 Scoreboard, as provided by the District.

Type of games and practices	Time Start (PM)	Time End (PM)	Lighting in use (hrs)[1,2]	Games / Practices per Year	Total Light Use per Year
Sports Practice					
Freshman & JV Football[3]	5:00	8:00	3.0	48	144
Varsity Football	2:00	5:00	0.5	48	24
Girls Soccer[3]	4:00	6:00	1.5	48	72
Boys Soccer[3]	2:00	4:00	0.0	48	0
Track and Field	2:00	4:30	0.0	48	0
				240	240
				Hrs/Event	**1.0**
Games/Events					
Freshman Football	4:00	6:00	1.5	3	4.5
Junior Varsity	4:00	6:00	1.5	6	9
Varsity Football	7:00	10:30	3.5	4	14
Girls JV Soccer	3:00	7:00	2.5	7	17.5
Girls Varsity Soccer	4:30	7:00	2.5	9	22.5
Boys JV Soccer	3:00	7:00	2.5	8	20
Boys Varsity Soccer	3:00	7:00	2.5	8	20
Track and Field	2:00	7:00	2.5	4	10
Graduation	6:00	9:00	3	1	3
				50	121
				Hrs/Event	**2.4**
				TOTAL	**3**

Notes:

[1] Assume lighting in use past 4:30pm.

[2] Assume net increase in events would occur with use of lights as conservative estimate.

[3] Girls and Boys JV and Varsity Soccer teams practice together; Freshman and JV Football practice together.

AVUS-02_Phase 1 Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	AVUS-02_Phase 1
Construction Start Date	3/1/2026
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	12.4
Location	22900 Esaws Ave, Apple Valley, CA 92307, USA
County	San Bernardino-Mojave Desert
City	Apple Valley
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5117
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.29

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
High School	5.73	1000sqft	6.46	5,733	184,933	90,910	—	—
Other Non-Asphalt Surfaces	325	1000sqft	7.45	0.00	0.00	—	—	—

Other Asphalt Surfaces	58.5	1000sqft	1.34	0.00	0.00	—	—	—
Parking Lot	33.1	1000sqft	0.76	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.9	12.5	27.4	29.2	0.06	1.12	10.8	12.0	1.03	3.85	4.89	—	6,961	6,961	0.28	0.07	1.15	6,991
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.9	12.5	29.4	29.8	0.06	1.24	21.1	22.4	1.15	10.3	11.4	—	6,928	6,928	0.27	0.07	0.03	6,957
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.97	0.81	7.37	9.14	0.02	0.29	1.10	1.39	0.27	0.45	0.72	—	1,803	1,803	0.07	0.02	0.08	1,810
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.18	0.15	1.35	1.67	< 0.005	0.05	0.20	0.25	0.05	0.08	0.13	—	298	298	0.01	< 0.005	0.01	300

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

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.73	3.14	27.4	29.2	0.06	1.12	10.8	12.0	1.03	3.85	4.89	—	6,961	6,961	0.28	0.07	1.15	6,991
2027	12.9	12.5	17.3	25.3	0.04	0.65	0.24	0.90	0.60	0.06	0.66	—	4,322	4,322	0.17	0.05	0.85	4,340
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.83	3.22	29.4	29.8	0.06	1.24	21.1	22.4	1.15	10.3	11.4	—	6,928	6,928	0.27	0.07	0.03	6,957
2027	12.9	12.5	17.3	24.9	0.04	0.65	0.24	0.90	0.60	0.06	0.66	—	4,293	4,293	0.17	0.05	0.02	4,311
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.97	0.81	7.37	9.14	0.02	0.29	1.10	1.39	0.27	0.45	0.72	—	1,803	1,803	0.07	0.02	0.08	1,810
2027	0.67	0.63	1.98	2.79	< 0.005	0.07	0.01	0.09	0.07	< 0.005	0.07	—	508	508	0.02	0.01	0.02	510
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.18	0.15	1.35	1.67	< 0.005	0.05	0.20	0.25	0.05	0.08	0.13	—	298	298	0.01	< 0.005	0.01	300
2027	0.12	0.11	0.36	0.51	< 0.005	0.01	< 0.005	0.02	0.01	< 0.005	0.01	—	84.1	84.1	< 0.005	< 0.005	< 0.005	84.5

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

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

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

Off-Road Equipm	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	1.21	1.21	< 0.005	0.12	0.12	—	12.7	12.7	< 0.005	< 0.005	< 0.005	13.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.64	0.63	< 0.005	0.03	—	0.03	0.03	—	0.03	—	116	116	< 0.005	< 0.005	—	117
Dust From Material Movement	—	—	—	—	—	—	0.43	0.43	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.29
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.2	19.2	< 0.005	< 0.005	—	19.3
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.90	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	222	222	< 0.005	0.01	0.02	224
Vendor	< 0.005	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	< 0.005	0.02	0.01	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	5.00	5.00	< 0.005	< 0.005	0.01	5.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.74	2.74	< 0.005	< 0.005	< 0.005	2.85
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.84
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.47
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	1.35	1.35	< 0.005	0.13	0.13	—	13.9	13.9	< 0.005	< 0.005	0.03	14.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	1.35	1.35	< 0.005	0.13	0.13	—	14.0	14.0	< 0.005	< 0.005	< 0.005	14.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.57	1.59	< 0.005	0.06	—	0.06	0.06	—	0.06	—	380	380	0.02	< 0.005	—	381
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.21	0.21	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07	0.07	< 0.005	0.01	0.01	—	0.80	0.80	< 0.005	< 0.005	< 0.005	0.84
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.29	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.9	62.9	< 0.005	< 0.005	—	63.1
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.14

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.09	1.54	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	286	286	0.01	0.01	0.97	290
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.5	62.5	< 0.005	0.01	0.16	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.10	1.03	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.03	256
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.5	62.5	< 0.005	0.01	< 0.005	65.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	15.0	15.0	< 0.005	< 0.005	0.02	15.2
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.60	3.60	< 0.005	< 0.005	< 0.005	3.75
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.48	2.48	< 0.005	< 0.005	< 0.005	2.52
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.62
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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

Off-Road	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.56	5.13	6.75	0.01	0.20	—	0.20	0.18	—	0.18	—	1,248	1,248	0.05	0.01	—	1,252
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.94	1.23	< 0.005	0.04	—	0.04	0.03	—	0.03	—	207	207	0.01	< 0.005	—	207
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.19	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	34.4	34.4	< 0.005	< 0.005	0.12	34.9
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.3	29.3	< 0.005	< 0.005	0.07	30.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.5	30.5	< 0.005	< 0.005	< 0.005	30.9
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.4	29.4	< 0.005	< 0.005	< 0.005	30.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.3	16.3	< 0.005	< 0.005	0.03	16.6
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.3	15.3	< 0.005	< 0.005	0.02	15.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.70	2.70	< 0.005	< 0.005	< 0.005	2.74
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.53	2.53	< 0.005	< 0.005	< 0.005	2.64
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.22	0.18	1.67	2.30	< 0.005	0.06	—	0.06	0.06	—	0.06	—	427	427	0.02	< 0.005	—	428
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.04	0.03	0.31	0.42	< 0.005	0.01	—	0.01	0.01	—	0.01	—	70.7	70.7	< 0.005	< 0.005	—	70.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.8	33.8	< 0.005	< 0.005	0.11	34.3
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.7	28.7	< 0.005	< 0.005	0.07	29.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.0	30.0	< 0.005	< 0.005	< 0.005	30.3
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.7	28.7	< 0.005	< 0.005	< 0.005	29.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.49	5.49	< 0.005	< 0.005	0.01	5.57
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.11	5.11	< 0.005	< 0.005	0.01	5.32
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.91	0.91	< 0.005	< 0.005	< 0.005	0.92
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.39	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.39	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.27	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	58.0	58.0	< 0.005	< 0.005	—	58.2
Paving	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.60	9.60	< 0.005	< 0.005	—	9.63
Paving	< 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	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	1.07	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	211	211	< 0.005	0.01	0.66	214
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.72	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	187	187	< 0.005	0.01	0.02	189
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.37	7.37	< 0.005	< 0.005	0.01	7.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.22	1.22	< 0.005	< 0.005	< 0.005	1.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.12	5.12	< 0.005	< 0.005	—	5.14
Architectural Coatings	0.39	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.85	0.85	< 0.005	< 0.005	—	0.85
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.77	6.77	< 0.005	< 0.005	0.02	6.86
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.99	5.99	< 0.005	< 0.005	< 0.005	6.07

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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	3/2/2026	3/11/2026	5.00	8.00	—
Grading	Grading	3/12/2026	4/9/2026	5.00	21.0	—
Building Construction	Building Construction	4/10/2026	4/1/2027	5.00	255	—
Paving	Paving	3/15/2027	4/1/2027	5.00	14.0	—
Architectural Coating	Architectural Coating	3/15/2027	4/1/2027	5.00	14.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	4.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	1.00	3.25	HHDT
Grading	—	—	—	—

Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	2.00	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	1.00	3.63	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2.41	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	0.94	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.48	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

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	8,600	2,867	24,977

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	—	—	12.0	0.00	—
Grading	—	—	63.0	0.00	—
Paving	0.00	0.00	0.00	0.00	9.56

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
High School	0.00	0%
Other Non-Asphalt Surfaces	7.45	0%
Other Asphalt Surfaces	1.34	100%
Parking Lot	0.76	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005
2027	0.00	532	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Land Use	Adjusted to match applicant-provided data
Construction: Construction Phases	Adjusted to remove demolition phase and account for overlap of building construction, paving, and architectural coating phases

AVUS-02_Phase 2 Custom Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	AVUS-02_Phase 2
Construction Start Date	9/1/2027
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	12.4
Location	22900 Esaws Ave, Apple Valley, CA 92307, USA
County	San Bernardino-Mojave Desert
City	Apple Valley
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5117
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.29

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
High School	5.41	1000sqft	0.12	5,409	0.00	0.00	—	—
Other Non-Asphalt Surfaces	86.0	1000sqft	1.97	0.00	0.00	—	—	—

Other Asphalt Surfaces	42.7	1000sqft	0.98	0.00	0.00	—	—	—
Parking Lot	73.3	1000sqft	1.68	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.0	10.7	28.2	29.6	0.05	1.17	21.1	22.3	1.08	10.3	11.4	—	5,678	5,678	0.22	0.07	1.07	5,705
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.72	3.13	28.2	29.2	0.05	1.17	21.1	22.3	1.08	10.3	11.4	—	5,650	5,650	0.22	0.07	0.03	5,677
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.55	0.50	2.31	3.39	0.01	0.08	0.60	0.68	0.08	0.28	0.35	—	628	628	0.02	0.01	0.03	631
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.10	0.09	0.42	0.62	< 0.005	0.02	0.11	0.12	0.01	0.05	0.06	—	104	104	< 0.005	< 0.005	< 0.005	104

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

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.73	3.14	28.2	29.6	0.05	1.17	21.1	22.3	1.08	10.3	11.4	—	5,678	5,678	0.22	0.07	1.07	5,705
2028	11.0	10.7	15.7	24.4	0.04	0.53	0.30	0.83	0.48	0.07	0.56	—	4,221	4,221	0.16	0.05	0.95	4,240
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.72	3.13	28.2	29.2	0.05	1.17	21.1	22.3	1.08	10.3	11.4	—	5,650	5,650	0.22	0.07	0.03	5,677
2028	1.19	1.00	8.96	13.0	0.02	0.30	0.04	0.34	0.28	0.01	0.29	—	2,452	2,452	0.10	0.02	< 0.005	2,461
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.29	0.24	2.19	2.82	< 0.005	0.08	0.60	0.68	0.08	0.28	0.35	—	526	526	0.02	0.01	0.03	528
2028	0.55	0.50	2.31	3.39	0.01	0.08	0.02	0.09	0.07	< 0.005	0.08	—	628	628	0.02	0.01	0.02	631
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.05	0.04	0.40	0.51	< 0.005	0.02	0.11	0.12	0.01	0.05	0.06	—	87.1	87.1	< 0.005	< 0.005	< 0.005	87.5
2028	0.10	0.09	0.42	0.62	< 0.005	0.01	< 0.005	0.02	0.01	< 0.005	0.01	—	104	104	< 0.005	< 0.005	< 0.005	104

3. Construction Emissions Details

3.1. Site Preparation (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	1.21	1.21	< 0.005	0.12	0.12	—	12.4	12.4	< 0.005	< 0.005	0.02	13.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	1.21	1.21	< 0.005	0.12	0.12	—	12.5	12.5	< 0.005	< 0.005	< 0.005	13.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.46	0.46	< 0.005	0.02	—	0.02	0.02	—	0.02	—	87.1	87.1	< 0.005	< 0.005	—	87.4
Dust From Material Movement	—	—	—	—	—	—	0.32	0.32	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.21
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.4	14.4	< 0.005	< 0.005	—	14.5

Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.04
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.25	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	246	246	< 0.005	0.01	0.77	249
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	0.28	127
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.84	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	218	218	< 0.005	0.01	0.02	220
Vendor	< 0.005	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	0.01	127
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.69	3.69	< 0.005	< 0.005	0.01	3.73
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.01	2.01	< 0.005	< 0.005	< 0.005	2.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.35
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.89	1.59	14.2	17.3	0.03	0.60	—	0.60	0.55	—	0.55	—	2,960	2,960	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.86	0.86	< 0.005	0.09	0.09	—	9.49	9.49	< 0.005	< 0.005	< 0.005	9.95
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.43	0.52	< 0.005	0.02	—	0.02	0.02	—	0.02	—	89.2	89.2	< 0.005	< 0.005	—	89.5
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.8	14.8	< 0.005	< 0.005	—	14.8

Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.72	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	187	187	< 0.005	0.01	0.02	189
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.2	61.2	< 0.005	0.01	< 0.005	63.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.79	5.79	< 0.005	< 0.005	0.01	5.87
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.92
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.96	0.96	< 0.005	< 0.005	< 0.005	0.97
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.32
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2027) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.29	1.77	< 0.005	0.05	—	0.05	0.04	—	0.04	—	328	328	0.01	< 0.005	—	329
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.4	54.4	< 0.005	< 0.005	—	54.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.3	28.3	< 0.005	< 0.005	< 0.005	28.6
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.1	27.1	< 0.005	< 0.005	< 0.005	28.2

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.99	3.99	< 0.005	< 0.005	0.01	4.04
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.71	3.71	< 0.005	< 0.005	< 0.005	3.86
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.64
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.23	2.11	3.06	0.01	0.07	—	0.07	0.07	—	0.07	—	568	568	0.02	< 0.005	—	570
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.39	0.56	< 0.005	0.01	—	0.01	0.01	—	0.01	—	94.0	94.0	< 0.005	< 0.005	—	94.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.3	31.3	< 0.005	< 0.005	0.09	31.7
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.4	26.4	< 0.005	< 0.005	0.06	27.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.7	27.7	< 0.005	< 0.005	< 0.005	28.1
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.4	26.4	< 0.005	< 0.005	< 0.005	27.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.76	6.76	< 0.005	< 0.005	0.01	6.85
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.25	6.25	< 0.005	< 0.005	0.01	6.51
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.12	1.12	< 0.005	< 0.005	< 0.005	1.13
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.03	1.03	< 0.005	< 0.005	< 0.005	1.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	5.85	8.80	0.01	0.21	—	0.21	0.19	—	0.19	—	1,350	1,350	0.05	0.01	—	1,355
Paving	0.70	0.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	37.0	37.0	< 0.005	< 0.005	—	37.1
Paving	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.12	6.12	< 0.005	< 0.005	—	6.15
Paving	< 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	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.07	1.33	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	276	276	< 0.005	0.01	0.79	279
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.89	6.89	< 0.005	< 0.005	0.01	6.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2028) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	8.13	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.66	3.66	< 0.005	< 0.005	—	3.67
Architectural Coatings	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.61	0.61	< 0.005	< 0.005	—	0.61
Architectural Coatings	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	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.26	6.26	< 0.005	< 0.005	0.02	6.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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	9/30/2027	10/7/2027	5.00	6.00	—
Grading	Grading	10/8/2027	10/22/2027	5.00	11.0	—
Building Construction	Building Construction	10/23/2027	4/30/2028	5.00	135	—
Paving	Paving	4/17/2028	4/30/2028	5.00	10.0	—

Architectural Coating	Architectural Coating	4/17/2028	4/30/2028	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	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	4.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	1.00	3.25	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	2.00	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	1.00	2.31	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2.27	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	0.89	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.45	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

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	8,114	2,705	12,121

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	—	—	9.00	0.00	—
Grading	—	—	11.0	0.00	—
Paving	0.00	0.00	0.00	0.00	4.64

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
High School	0.00	0%
Other Non-Asphalt Surfaces	1.97	0%

Other Asphalt Surfaces	0.98	100%
Parking Lot	1.68	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	532	0.03	< 0.005
2028	0.00	532	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Revised schedule to remove demolition activities and account for overlap between building construction, paving, and architectural coating

AVUS-02_Operation Custom Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	AVUS-02_Operation
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	12.4
Location	22900 Esaws Ave, Apple Valley, CA 92307, USA
County	San Bernardino-Mojave Desert
City	Apple Valley
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5117
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.29

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
High School	11.1	1000sqft	6.59	11,140	184,933	90,910	—	—
Other Non-Asphalt Surfaces	411	1000sqft	9.43	410,670	0.00	—	—	—

Other Asphalt Surfaces	101	1000sqft	2.32	0.00	0.00	—	—	—
Parking Lot	106	1000sqft	2.44	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.7	13.0	6.14	71.1	0.12	0.13	9.99	10.1	0.11	2.53	2.65	8.51	12,261	12,270	1.39	0.57	33.0	12,507
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.24	8.76	6.43	43.5	0.11	0.10	9.99	10.1	0.09	2.53	2.62	8.51	11,175	11,183	1.43	0.59	0.90	11,394
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.9	10.3	6.63	55.8	0.11	0.11	9.91	10.0	0.10	2.51	2.61	8.51	11,442	11,451	1.44	0.59	14.3	11,679
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.99	1.88	1.21	10.2	0.02	0.02	1.81	1.83	0.02	0.46	0.48	1.41	1,894	1,896	0.24	0.10	2.37	1,934

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.1	9.59	5.91	52.7	0.12	0.09	9.99	10.1	0.08	2.53	2.62	—	11,815	11,815	0.51	0.56	33.0	12,029
Area	3.61	3.36	0.15	18.3	< 0.005	0.03	—	0.03	0.02	—	0.02	—	75.4	75.4	< 0.005	< 0.005	—	75.7
Energy	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	327	327	0.02	< 0.005	—	328
Water	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Waste	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	13.7	13.0	6.14	71.1	0.12	0.13	9.99	10.1	0.11	2.53	2.65	8.51	12,261	12,270	1.39	0.57	33.0	12,507
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.88	8.41	6.36	43.4	0.11	0.09	9.99	10.1	0.08	2.53	2.62	—	10,804	10,804	0.55	0.58	0.86	10,992
Area	0.35	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	327	327	0.02	< 0.005	—	328
Water	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Waste	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	9.24	8.76	6.43	43.5	0.11	0.10	9.99	10.1	0.09	2.53	2.62	8.51	11,175	11,183	1.43	0.59	0.90	11,394
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.94	8.46	6.48	46.7	0.11	0.09	9.91	10.00	0.08	2.51	2.60	—	11,034	11,034	0.56	0.59	14.2	11,239
Area	1.96	1.83	0.08	9.05	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.2	37.2	< 0.005	< 0.005	—	37.3
Energy	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	327	327	0.02	< 0.005	—	328
Water	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Waste	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	10.9	10.3	6.63	55.8	0.11	0.11	9.91	10.0	0.10	2.51	2.61	8.51	11,442	11,451	1.44	0.59	14.3	11,679
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	1.63	1.54	1.18	8.52	0.02	0.02	1.81	1.82	0.02	0.46	0.47	—	1,827	1,827	0.09	0.10	2.36	1,861
Area	0.36	0.33	0.01	1.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.16	6.16	< 0.005	< 0.005	—	6.18
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	54.2	54.2	< 0.005	< 0.005	—	54.4
Water	—	—	—	—	—	—	—	—	—	—	—	0.12	7.22	7.33	0.01	< 0.005	—	7.75
Waste	—	—	—	—	—	—	—	—	—	—	—	1.29	0.00	1.29	0.13	0.00	—	4.52
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	1.99	1.88	1.21	10.2	0.02	0.02	1.81	1.83	0.02	0.46	0.48	1.41	1,894	1,896	0.24	0.10	2.37	1,934

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	10.1	9.59	5.91	52.7	0.12	0.09	9.99	10.1	0.08	2.53	2.62	—	11,815	11,815	0.51	0.56	33.0	12,029
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	10.1	9.59	5.91	52.7	0.12	0.09	9.99	10.1	0.08	2.53	2.62	—	11,815	11,815	0.51	0.56	33.0	12,029

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	8.88	8.41	6.36	43.4	0.11	0.09	9.99	10.1	0.08	2.53	2.62	—	10,804	10,804	0.55	0.58	0.86	10,992
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	8.88	8.41	6.36	43.4	0.11	0.09	9.99	10.1	0.08	2.53	2.62	—	10,804	10,804	0.55	0.58	0.86	10,992
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	1.63	1.54	1.18	8.52	0.02	0.02	1.81	1.82	0.02	0.46	0.47	—	1,827	1,827	0.09	0.10	2.36	1,861
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.63	1.54	1.18	8.52	0.02	0.02	1.81	1.82	0.02	0.46	0.47	—	1,827	1,827	0.09	0.10	2.36	1,861

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	105	105	0.01	< 0.005	—	106
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	136	136	0.01	< 0.005	—	136
Total	—	—	—	—	—	—	—	—	—	—	—	—	241	241	0.01	< 0.005	—	242
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	105	105	0.01	< 0.005	—	106
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	136	136	0.01	< 0.005	—	136
Total	—	—	—	—	—	—	—	—	—	—	—	—	241	241	0.01	< 0.005	—	242
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	17.4	17.4	< 0.005	< 0.005	—	17.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	22.5	22.5	< 0.005	< 0.005	—	22.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	39.9	39.9	< 0.005	< 0.005	—	40.1

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85.9	85.9	0.01	< 0.005	—	86.2
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85.9	85.9	0.01	< 0.005	—	86.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85.9	85.9	0.01	< 0.005	—	86.2
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85.9	85.9	0.01	< 0.005	—	86.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.2	14.2	< 0.005	< 0.005	—	14.3
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.2	14.2	< 0.005	< 0.005	—	14.3

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	3.27	3.01	0.15	18.3	< 0.005	0.03	—	0.03	0.02	—	0.02	—	75.4	75.4	< 0.005	< 0.005	—	75.7
Total	3.61	3.36	0.15	18.3	< 0.005	0.03	—	0.03	0.02	—	0.02	—	75.4	75.4	< 0.005	< 0.005	—	75.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.35	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.29	0.27	0.01	1.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.16	6.16	< 0.005	< 0.005	—	6.18
Total	0.36	0.33	0.01	1.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.16	6.16	< 0.005	< 0.005	—	6.18

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.12	7.22	7.33	0.01	< 0.005	—	7.75
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.12	7.22	7.33	0.01	< 0.005	—	7.75

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	1.29	0.00	1.29	0.13	0.00	—	4.52
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.29	0.00	1.29	0.13	0.00	—	4.52

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

5. Activity Data

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
High School	2,420	2,420	2,420	883,141	14,158	14,158	14,158	5,167,821
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

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	16,710	5,570	37,099

5.10.3. Landscape Equipment

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)
High School	72,260	532	0.0330	0.0040	268,169
Other Non-Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00
Parking Lot	93,241	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
High School	369,900	6,554,008
Other Non-Asphalt Surfaces	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
High School	14.5	—
Other Non-Asphalt Surfaces	0.00	—
Other Asphalt Surfaces	0.00	—
Parking Lot	0.00	—

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
High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
High 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

5.16. 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

8. User Changes to Default Data

Screen	Justification
Land Use	Updated land use information to account for total land use of the proposed project
Operations: Vehicle Data	Modified trip generation to adhere to project TIA
Operations: Water and Waste Water	—

AVUS-02_Operation v2 Custom Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	AVUS-02_Operation v2
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	12.4
Location	22900 Esaws Ave, Apple Valley, CA 92307, USA
County	San Bernardino-Mojave Desert
City	Apple Valley
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5117
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.29

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
High School	11.1	1000sqft	6.59	11,140	184,933	90,910	—	—
Other Non-Asphalt Surfaces	411	1000sqft	9.43	410,670	0.00	—	—	—

Other Asphalt Surfaces	101	1000sqft	2.32	0.00	0.00	—	—	—
Parking Lot	106	1000sqft	2.44	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.70	3.44	0.27	18.8	< 0.005	0.04	0.08	0.12	0.03	0.02	0.05	8.51	541	550	0.89	0.01	0.31	575
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.43	0.42	0.12	0.41	< 0.005	0.01	0.08	0.09	0.01	0.02	0.03	8.51	458	466	0.88	0.01	0.05	491
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.04	1.91	0.20	9.48	< 0.005	0.02	0.08	0.10	0.02	0.02	0.04	8.51	497	505	0.88	0.01	0.16	530
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.37	0.35	0.04	1.73	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	0.01	1.41	82.3	83.7	0.15	< 0.005	0.03	87.8

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.08	0.08	0.05	0.43	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	95.3	95.3	< 0.005	< 0.005	0.27	97.0
Area	3.61	3.36	0.15	18.3	< 0.005	0.03	—	0.03	0.02	—	0.02	—	75.4	75.4	< 0.005	< 0.005	—	75.7
Energy	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	327	327	0.02	< 0.005	—	328
Water	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Waste	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	3.70	3.44	0.27	18.8	< 0.005	0.04	0.08	0.12	0.03	0.02	0.05	8.51	541	550	0.89	0.01	0.31	575
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.07	0.07	0.05	0.35	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	87.1	87.1	< 0.005	< 0.005	0.01	88.7
Area	0.35	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	327	327	0.02	< 0.005	—	328
Water	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Waste	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	0.43	0.42	0.12	0.41	< 0.005	0.01	0.08	0.09	0.01	0.02	0.03	8.51	458	466	0.88	0.01	0.05	491
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.07	0.07	0.05	0.38	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	89.0	89.0	< 0.005	< 0.005	0.11	90.7
Area	1.96	1.83	0.08	9.05	< 0.005	0.02	—	0.02	0.01	—	0.01	—	37.2	37.2	< 0.005	< 0.005	—	37.3
Energy	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	327	327	0.02	< 0.005	—	328
Water	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Waste	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	2.04	1.91	0.20	9.48	< 0.005	0.02	0.08	0.10	0.02	0.02	0.04	8.51	497	505	0.88	0.01	0.16	530
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.01	0.01	0.01	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	14.7	14.7	< 0.005	< 0.005	0.02	15.0
Area	0.36	0.33	0.01	1.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.16	6.16	< 0.005	< 0.005	—	6.18
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	54.2	54.2	< 0.005	< 0.005	—	54.4
Water	—	—	—	—	—	—	—	—	—	—	—	0.12	7.22	7.33	0.01	< 0.005	—	7.75
Waste	—	—	—	—	—	—	—	—	—	—	—	1.29	0.00	1.29	0.13	0.00	—	4.52
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	0.37	0.35	0.04	1.73	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	0.01	1.41	82.3	83.7	0.15	< 0.005	0.03	87.8

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.08	0.08	0.05	0.43	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	95.3	95.3	< 0.005	< 0.005	0.27	97.0
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.08	0.08	0.05	0.43	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	95.3	95.3	< 0.005	< 0.005	0.27	97.0

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.07	0.07	0.05	0.35	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	87.1	87.1	< 0.005	< 0.005	0.01	88.7
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.07	0.07	0.05	0.35	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	87.1	87.1	< 0.005	< 0.005	0.01	88.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.01	0.01	0.01	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	14.7	14.7	< 0.005	< 0.005	0.02	15.0
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.01	0.01	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	14.7	14.7	< 0.005	< 0.005	0.02	15.0

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	105	105	0.01	< 0.005	—	106
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	136	136	0.01	< 0.005	—	136
Total	—	—	—	—	—	—	—	—	—	—	—	—	241	241	0.01	< 0.005	—	242
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	105	105	0.01	< 0.005	—	106
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	136	136	0.01	< 0.005	—	136
Total	—	—	—	—	—	—	—	—	—	—	—	—	241	241	0.01	< 0.005	—	242
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	17.4	17.4	< 0.005	< 0.005	—	17.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	22.5	22.5	< 0.005	< 0.005	—	22.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	39.9	39.9	< 0.005	< 0.005	—	40.1

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85.9	85.9	0.01	< 0.005	—	86.2
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85.9	85.9	0.01	< 0.005	—	86.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85.9	85.9	0.01	< 0.005	—	86.2
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85.9	85.9	0.01	< 0.005	—	86.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.2	14.2	< 0.005	< 0.005	—	14.3
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.2	14.2	< 0.005	< 0.005	—	14.3

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	3.27	3.01	0.15	18.3	< 0.005	0.03	—	0.03	0.02	—	0.02	—	75.4	75.4	< 0.005	< 0.005	—	75.7
Total	3.61	3.36	0.15	18.3	< 0.005	0.03	—	0.03	0.02	—	0.02	—	75.4	75.4	< 0.005	< 0.005	—	75.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.29	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.35	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.29	0.27	0.01	1.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.16	6.16	< 0.005	< 0.005	—	6.18
Total	0.36	0.33	0.01	1.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.16	6.16	< 0.005	< 0.005	—	6.18

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.71	43.6	44.3	0.08	< 0.005	—	46.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.12	7.22	7.33	0.01	< 0.005	—	7.75
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.12	7.22	7.33	0.01	< 0.005	—	7.75

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	7.80	0.00	7.80	0.78	0.00	—	27.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	1.29	0.00	1.29	0.13	0.00	—	4.52
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.29	0.00	1.29	0.13	0.00	—	4.52

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

5. Activity Data

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
High School	19.5	19.5	19.5	7,124	114	114	114	41,685
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

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	16,710	5,570	37,099

5.10.3. Landscape Equipment

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)
High School	72,260	532	0.0330	0.0040	268,169
Other Non-Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00
Parking Lot	93,241	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
High School	369,900	6,554,008
Other Non-Asphalt Surfaces	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
High School	14.5	—
Other Non-Asphalt Surfaces	0.00	—
Other Asphalt Surfaces	0.00	—
Parking Lot	0.00	—

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
High School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
High School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
High School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
High 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

5.16. 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

8. User Changes to Default Data

Screen	Justification
Land Use	Updated land use information to account for total land use of the proposed project
Operations: Vehicle Data	Modified trip generation to adhere to project TIA

Regional Construction Emissions Worksheet:

Phase 1							
3.1. Site Preparation (2026) - Unmitigated							
		ROG	NOx	CO	SO_2	PM10 Total	PM2.5Total
Onsite		**Winter**					
	Off-Road Equipment	3.14	29.20	28.80	0.05	1.24	1.14
	Dust From Material Movement	0.00	0.00	0.00	0.00	19.70	10.10
	Onsite truck	< 0.005	0.03	0.02	< 0.005	1.21	0.12
	Total	**3.14**	**29.23**	**28.82**	**0.05**	**22.15**	**11.36**
Offsite							
	Worker	0.07	0.08	0.90	0.00	0.23	0.05
	Vendor	< 0.005	0.13	0.05	< 0.005	0.04	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.07**	**0.21**	**0.95**	**0.00**	**0.27**	**0.06**
TOTAL		***3.21***	***29.44***	***29.77***	***0.05***	***22.42***	***11.42***
Onsite							
	Off-Road Equipment	3.14	29.20	28.80	0.05	1.24	1.14
	Dust From Material Movement	0.00	0.00	0.00	0.00	19.70	10.10
	Onsite truck	0.00	0.03	0.02	0.00	1.21	0.12
	Total	**3.14**	**29.23**	**28.82**	**0.05**	**22.15**	**11.36**
Offsite							
	Worker	0.07	0.08	0.90	0.00	0.23	0.05
	Vendor	0.00	0.13	0.05	0.00	0.04	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.07**	**0.21**	**0.95**	**0.00**	**0.27**	**0.06**
TOTAL		***3.21***	***29.44***	***29.77***	***0.05***	***22.42***	***11.42***
3.3. Grading (2026) - Unmitigated							
		ROG	NOx	CO	SO_2	PM10 Total	PM2.5Total
Onsite		**Summer**					
	Off-Road Equipment	3.04	27.20	27.60	0.06	1.12	1.03
	Dust From Material Movement	0.00	0.00	0.00	0.00	9.20	3.65
	Onsite truck	< 0.005	0.03	0.01	< 0.005	1.35	0.13
	Total	**3.04**	**27.23**	**27.61**	**0.06**	**11.67**	**4.81**
Offsite							
	Worker	0.10	0.09	1.54	0.00	0.26	0.06
	Vendor	< 0.005	0.06	0.03	< 0.005	0.02	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.10**	**0.15**	**1.57**	**0.00**	**0.28**	**0.07**
TOTAL		***3.14***	***27.38***	***29.18***	***0.06***	***11.95***	***4.88***
Onsite		**Winter**					
	Off-Road Equipment	3.04	27.20	27.60	0.06	1.12	1.03
	Dust From Material Movement	0.00	0.00	0.00	0.00	9.20	3.65
	Onsite truck	< 0.005	0.03	0.02	< 0.005	1.35	0.13
	Total	**3.04**	**27.23**	**27.62**	**0.06**	**11.67**	**4.81**
Offsite							
	Worker	0.08	0.10	1.03	0.00	0.26	0.06
	Vendor	< 0.005	0.07	0.03	< 0.005	0.02	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.08**	**0.17**	**1.06**	**0.00**	**0.28**	**0.07**
TOTAL		***3.12***	***27.40***	***28.68***	***0.06***	***11.95***	***4.88***
Onsite							
	Off-Road Equipment	3.04	27.20	27.60	0.06	1.12	1.03
	Dust From Material Movement	0.00	0.00	0.00	0.00	9.20	3.65
	Onsite truck	0.00	0.03	0.02	0.00	1.35	0.13
	Total	**3.04**	**27.23**	**27.62**	**0.06**	**11.67**	**4.81**
Offsite							
	Worker	0.10	0.10	1.54	0.00	0.26	0.06
	Vendor	0.00	0.07	0.03	0.00	0.02	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.10**	**0.17**	**1.57**	**0.00**	**0.28**	**0.07**
TOTAL		***3.14***	***27.40***	***29.19***	***0.06***	***11.95***	***4.88***

3.5. Building Construction (2026) - Unmitigated

		ROG	NOx	CO	SO_2	PM10 Total	PM2.5Total
Onsite		**Summer**					
	Off-Road Equipment	1.07	9.85	13.00	0.02	0.38	0.35
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.07**	**9.85**	**13.00**	**0.02**	**0.38**	**0.35**
Offsite							
	Worker	0.01	0.01	0.19	0.00	0.03	0.01
	Vendor	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**0.04**	**0.20**	**0.00**	**0.04**	**0.01**
TOTAL		***1.08***	***9.89***	***13.20***	***0.02***	***0.42***	***0.36***
Onsite		**Winter**					
	Off-Road Equipment	1.07	9.85	13.00	0.02	0.38	0.35
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.07**	**9.85**	**13.00**	**0.02**	**0.38**	**0.35**
Offsite							
	Worker	0.01	0.01	0.12	0.00	0.03	0.01
	Vendor	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**0.04**	**0.13**	**0.00**	**0.04**	**0.01**
TOTAL		***1.08***	***9.89***	***13.13***	***0.02***	***0.42***	***0.36***
Onsite							
	Off-Road	1.07	9.85	13.00	0.02	0.38	0.35
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.07**	**9.85**	**13.00**	**0.02**	**0.38**	**0.35**
Offsite							
	Worker	0.01	0.01	0.19	0.00	0.03	0.01
	Vendor	0.00	0.03	0.01	0.00	0.01	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**0.04**	**0.20**	**0.00**	**0.04**	**0.01**
TOTAL		***1.08***	***9.89***	***13.20***	***0.02***	***0.42***	***0.36***

3.7. Building Construction (2027) - Unmitigated

		ROG	NOx	CO	SO_2	PM10 Total	PM2.5Total
Onsite		**Summer**					
	Off-Road Equipment	1.03	9.39	12.90	0.02	0.34	0.31
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.03**	**9.39**	**12.90**	**0.02**	**0.34**	**0.31**
Offsite							
	Worker	0.01	0.01	0.17	0.00	0.03	0.01
	Vendor	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**0.04**	**0.18**	**0.00**	**0.04**	**0.01**
TOTAL		***1.04***	***9.43***	***13.08***	***0.02***	***0.38***	***0.32***
Onsite		**Winter**					
	Off-Road Equipment	1.03	9.39	12.90	0.02	0.34	0.31
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.03**	**9.39**	**12.90**	**0.02**	**0.34**	**0.31**
Offsite							
	Worker	0.01	0.01	0.12	0.00	0.03	0.01
	Vendor	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**0.04**	**0.13**	**0.00**	**0.04**	**0.01**
TOTAL		***1.04***	***9.43***	***13.03***	***0.02***	***0.38***	***0.32***
Onsite							
	Off-Road	1.03	9.39	12.90	0.02	0.34	0.31
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.03**	**9.39**	**12.90**	**0.02**	**0.34**	**0.31**
Offsite							
	Worker	0.01	0.01	0.17	0.00	0.03	0.01
	Vendor	0.00	0.03	0.01	0.00	0.01	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**0.04**	**0.18**	**0.00**	**0.04**	**0.01**
TOTAL		***1.04***	***9.43***	***13.08***	***0.02***	***0.38***	***0.32***

3.9. Paving (2027) - Unmitigated

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.74	6.94	9.95	0.01	0.30	0.27
	Paving	0.39	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.13**	**6.94**	**9.95**	**0.01**	**0.30**	**0.27**
Offsite							
	Worker	0.07	0.06	1.07	0.00	0.20	0.05
	Vendor	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
	Total	**0.07**	**0.06**	**1.07**	**0.00**	**0.20**	**0.05**
TOTAL		***1.20***	***7.00***	***11.02***	***0.01***	***0.50***	***0.32***
Onsite		**Winter**					
	Off-Road Equipment	0.74	6.94	9.95	0.01	0.30	0.27
	Paving	0.39	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.13**	**6.94**	**9.95**	**0.01**	**0.30**	**0.27**
Offsite							
	Worker	0.06	0.07	0.72	0.00	0.20	0.05
	Vendor	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
	Total	**0.06**	**0.07**	**0.72**	**0.00**	**0.20**	**0.05**
TOTAL		***1.19***	***7.01***	***10.67***	***0.01***	***0.50***	***0.32***
Onsite							
	Off-Road	0.74	6.94	9.95	0.01	0.30	0.27
	Paving	0.39	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.13**	**6.94**	**9.95**	**0.01**	**0.30**	**0.27**
Offsite							
	Hauling	0.07	0.07	1.07	0.00	0.20	0.05
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.07**	**0.07**	**1.07**	**0.00**	**0.20**	**0.05**
TOTAL		***1.20***	***7.01***	***11.02***	***0.01***	***0.50***	***0.32***

3.11. Architectural Coating (2027) - Unmitigated

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	0.02
	Architectural Coatings	10.20	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**10.31**	**0.83**	**1.13**	**0.00**	**0.02**	**0.02**
Offsite							
	Worker	< 0.005	< 0.005	0.03	0.00	0.01	< 0.005
	Vendor	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
	Total	**0.00**	**0.00**	**0.03**	**0.00**	**0.01**	**0.00**
TOTAL		***10.31***	***0.83***	***1.16***	***0.00***	***0.03***	***0.02***
Onsite		**Winter**					
	Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	0.02
	Architectural Coatings	10.20	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**10.31**	**0.83**	**1.13**	**0.00**	**0.02**	**0.02**
Offsite							
	Worker	< 0.005	< 0.005	0.02	0.00	0.01	< 0.005
	Vendor	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
	Total	**0.00**	**0.00**	**0.02**	**0.00**	**0.01**	**0.00**
TOTAL		***10.31***	***0.83***	***1.15***	***0.00***	***0.03***	***0.02***
Onsite							
	Off-Road Equipment	0.11	0.83	1.13	0.00	0.02	0.02
	Architectural Coatings	10.20	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**10.31**	**0.83**	**1.13**	**0.00**	**0.02**	**0.02**
Offsite							
	Worker	0.00	0.00	0.03	0.00	0.01	0.00
	Vendor	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
	Total	**0.00**	**0.00**	**0.03**	**0.00**	**0.01**	**0.00**
TOTAL		***10.31***	***0.83***	***1.16***	***0.00***	***0.03***	***0.02***

Phase 2

3.1. Site Preparation (2027) - Unmitigated

		ROG	NOx	CO	SO_2	PM10 Total	PM2.5Total
Onsite		**Summer**					
	Off-Road Equipment	3.05	28.00	28.30	0.05	1.17	1.08
	Dust From Material Movement	0.00	0.00	0.00	0.00	19.70	10.10
	Onsite truck	< 0.005	0.03	0.01	< 0.005	1.21	0.12
	Total	**3.05**	**28.03**	**28.31**	**0.05**	**22.08**	**11.30**
Offsite							
	Worker	0.08	0.07	1.25	0.00	0.23	0.05
	Vendor	< 0.005	0.12	0.05	< 0.005	0.04	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.08**	**0.19**	**1.30**	**0.00**	**0.27**	**0.06**
TOTAL		***3.13***	***28.22***	***29.61***	***0.05***	***22.35***	***11.36***
Onsite		**Winter**					
	Off-Road Equipment	3.05	28.00	28.30	0.05	1.17	1.08
	Dust From Material Movement	0.00	0.00	0.00	0.00	19.70	10.10
	Onsite truck	< 0.005	0.03	0.02	< 0.005	1.21	0.12
	Total	**3.05**	**28.03**	**28.32**	**0.05**	**22.08**	**11.30**
Offsite							
	Worker	0.07	0.08	0.84	0.00	0.23	0.05
	Vendor	< 0.005	0.13	0.05	< 0.005	0.04	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.07**	**0.21**	**0.89**	**0.00**	**0.27**	**0.06**
TOTAL		***3.12***	***28.24***	***29.21***	***0.05***	***22.35***	***11.36***
Onsite							
	Off-Road Equipment	3.05	28.00	28.30	0.05	1.17	1.08
	Dust From Material Movement	0.00	0.00	0.00	0.00	19.70	10.10
	Onsite truck	0.00	0.03	0.02	0.00	1.21	0.12
	Total	**3.05**	**28.03**	**28.32**	**0.05**	**22.08**	**11.30**
Offsite							
	Worker	0.08	0.08	1.25	0.00	0.23	0.05
	Vendor	0.00	0.13	0.05	0.00	0.04	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.08**	**0.21**	**1.30**	**0.00**	**0.27**	**0.06**
TOTAL		***3.13***	***28.24***	***29.62***	***0.05***	***22.35***	***11.36***

3.3. Grading (2027) - Unmitigated

		ROG	NOx	CO	SO_2	PM10 Total	PM2.5Total
Onsite		**Winter**					
	Off-Road Equipment	1.59	14.20	17.30	0.03	0.60	0.55
	Dust From Material Movement	0.00	0.00	0.00	0.00	7.08	3.42
	Onsite truck	< 0.005	0.02	0.02	< 0.005	0.86	0.09
	Total	**1.59**	**14.22**	**17.32**	**0.03**	**8.54**	**4.06**
Offsite							
	Worker	0.06	0.07	0.72	0.00	0.20	0.05
	Vendor	< 0.005	0.06	0.03	< 0.005	0.02	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.06**	**0.13**	**0.75**	**0.00**	**0.22**	**0.06**
TOTAL		***1.65***	***14.35***	***18.07***	***0.03***	***8.76***	***4.12***
Onsite							
	Off-Road Equipment	1.59	14.20	17.30	0.03	0.60	0.55
	Dust From Material Movement	0.00	0.00	0.00	0.00	7.08	3.42
	Onsite truck	0.00	0.02	0.02	0.00	0.86	0.09
	Total	**1.59**	**14.22**	**17.32**	**0.03**	**8.54**	**4.06**
Offsite							
	Worker	0.06	0.07	0.72	0.00	0.20	0.05
	Vendor	0.00	0.06	0.03	0.00	0.02	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.06**	**0.13**	**0.75**	**0.00**	**0.22**	**0.06**
TOTAL		***1.65***	***14.35***	***18.07***	***0.03***	***8.76***	***4.12***

3.5. Building Construction (2027) - Unmitigated

		ROG	NOx	CO	SO_2	PM10 Total	PM2.5Total
Onsite		**Winter**					
	Off-Road Equipment	1.03	9.39	12.90	0.02	0.34	0.31
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.03**	**9.39**	**12.90**	**0.02**	**0.34**	**0.31**
Offsite							
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Vendor	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**0.04**	**0.12**	**0.00**	**0.04**	**0.01**
TOTAL		***1.04***	***9.43***	***13.02***	***0.02***	***0.38***	***0.32***
Onsite							
	Off-Road	1.03	9.39	12.90	0.02	0.34	0.31
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.03**	**9.39**	**12.90**	**0.02**	**0.34**	**0.31**
Offsite							
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Vendor	0.00	0.03	0.01	0.00	0.01	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**0.04**	**0.12**	**0.00**	**0.04**	**0.01**
TOTAL		***1.04***	***9.43***	***13.02***	***0.02***	***0.38***	***0.32***

3.7. Building Construction (2028) - Unmitigated

		ROG	NOx	CO	SO_2	PM10 Total	PM2.5Total
Onsite		**Summer**					
	Off-Road Equipment	0.99	8.92	12.90	0.02	0.30	0.28
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.99**	**8.92**	**12.90**	**0.02**	**0.30**	**0.28**
Offsite							
	Worker	0.01	0.01	0.15	0.00	0.03	0.01
	Vendor	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**0.04**	**0.16**	**0.00**	**0.04**	**0.01**
TOTAL		***1.00***	***8.96***	***13.06***	***0.02***	***0.34***	***0.29***
Onsite		**Winter**					
	Off-Road Equipment	0.99	8.92	12.90	0.02	0.30	0.28
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.99**	**8.92**	**12.90**	**0.02**	**0.30**	**0.28**
Offsite							
	Worker	0.01	0.01	0.10	0.00	0.03	0.01
	Vendor	< 0.005	0.03	0.01	< 0.005	0.01	< 0.005
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**0.04**	**0.11**	**0.00**	**0.04**	**0.01**
TOTAL		***1.00***	***8.96***	***13.01***	***0.02***	***0.34***	***0.29***
Onsite							
	Off-Road	0.99	8.92	12.90	0.02	0.30	0.28
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.99**	**8.92**	**12.90**	**0.02**	**0.30**	**0.28**
Offsite							
	Worker	0.01	0.01	0.15	0.00	0.03	0.01
	Vendor	0.00	0.03	0.01	0.00	0.01	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.01**	**0.04**	**0.16**	**0.00**	**0.04**	**0.01**
TOTAL		***1.00***	***8.96***	***13.06***	***0.02***	***0.34***	***0.29***

3.9. Paving (2028) - Unmitigated

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.63	5.85	8.80	0.01	0.21	0.19
	Paving	0.70	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.33**	**5.85**	**8.80**	**0.01**	**0.21**	**0.19**
Offsite							
	Worker	0.09	0.07	1.33	0.00	0.26	0.06
	Vendor	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
	Total	**0.09**	**0.07**	**1.33**	**0.00**	**0.26**	**0.06**
TOTAL		***1.42***	***5.92***	***10.13***	***0.01***	***0.47***	***0.25***
Onsite							
	Off-Road	0.63	5.85	8.80	0.01	0.21	0.19
	Paving	0.70	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**1.33**	**5.85**	**8.80**	**0.01**	**0.21**	**0.19**
Offsite							
	Hauling	0.09	0.07	1.33	0.00	0.26	0.06
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.09**	**0.07**	**1.33**	**0.00**	**0.26**	**0.06**
TOTAL		***1.42***	***5.92***	***10.13***	***0.01***	***0.47***	***0.25***

3.11. Architectural Coating (2028) - Unmitigated

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**Summer**					
	Off-Road Equipment	0.11	0.81	1.12	< 0.005	0.02	0.01
	Architectural Coatings	8.13	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**8.24**	**0.81**	**1.12**	**0.00**	**0.02**	**0.01**
Offsite							
	Worker	< 0.005	< 0.005	0.03	0.00	0.01	< 0.005
	Vendor	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
	Total	**0.00**	**0.00**	**0.03**	**0.00**	**0.01**	**0.00**
TOTAL		***8.24***	***0.81***	***1.15***	***0.00***	***0.03***	***0.01***
Onsite							
	Off-Road Equipment	0.11	0.81	1.12	0.00	0.02	0.01
	Architectural Coatings	8.13	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**8.24**	**0.81**	**1.12**	**0.00**	**0.02**	**0.01**
Offsite							
	Worker	0.00	0.00	0.03	0.00	0.01	0.00
	Vendor	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
	Total	**0.00**	**0.00**	**0.03**	**0.00**	**0.01**	**0.00**
TOTAL		***8.24***	***0.81***	***1.15***	***0.00***	***0.03***	***0.01***

Phase 1 Construction						
	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
3.1. Site Preparation (2026) - Unmitigated	*3*	*29*	*30*	*0*	*22*	*11*
3.3. Grading (2026) - Unmitigated	*3*	*27*	*29*	*0*	*12*	*5*
3.5. Building Construction (2026) - Unmitigated	*1*	*10*	*13*	*0*	*0*	*0*
3.7. Building Construction (2027) - Unmitigated	*1*	*9*	*13*	*0*	*0*	*0*
3.9. Paving (2027) - Unmitigated	*1*	*7*	*11*	*0*	*1*	*0*
3.11. Architectural Coating (2027) - Unmitigated	*10*	*1*	*1*	*0*	*0*	*0*
Building Construction (2027), Paving, and Architectural Coating	*13*	*17*	*25*	*0*	*1*	*1*
MAX DAILY	**13**	**29**	**30**	**0**	**22**	**11**
MDAQMD Regional Thresholds (lbs/day)	**137**	**137**	**548**	**137**	**82**	**65**
Exceeds Thresholds?	No	No	No	No	No	No

Phase 2 Construction						
	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
3.1. Site Preparation (2027) - Unmitigated	*3*	*28*	*30*	*0*	*22*	*11*
3.3. Grading (2027) - Unmitigated	*2*	*14*	*18*	*0*	*9*	*4*
3.5. Building Construction (2027) - Unmitigated	*1*	*9*	*13*	*0*	*0*	*0*
3.7. Building Construction (2028) - Unmitigated	*1*	*9*	*13*	*0*	*0*	*0*
3.9. Paving (2028) - Unmitigated	*1*	*6*	*10*	*0*	*0*	*0*
3.11. Architectural Coating (2028) - Unmitigated	*8*	*1*	*1*	*0*	*0*	*0*
Building Construction (2028), Paving, Architectural Coating, and Finishing/Landscaping	*11*	*16*	*24*	*0*	*1*	*1*
MAX DAILY	**11**	**28**	**30**	**0**	**22**	**11**
MDAQMD Regional Thresholds (lbs/day)	**137**	**137**	**548**	**137**	**82**	**65**
Exceeds Thresholds?	No	No	No	No	No	No

Regional Annual Construction Emissions Worksheet

Annual		ROG	NO_x	CO	SO_2	PM10 Total	PM2.5 Total
	2026	0.15	1.35	1.67	< 0.005	0.25	0.13
	2027	0.15	0.76	1.02	0.00	0.14	0.07
	2028	0.09	0.42	0.62	< 0.005	0.02	0.01
MAX ANNUAL		**0.15**	**1.35**	**1.67**	**0.00**	**0.25**	**0.13**
MDAQMD Regional Thresholds (tons/year)		**25**	**25**	**100**	**25**	**15**	**12**
Exceeds Thresholds?		No	No	No	No	No	No

Maximum Daily Operation Emissions Worksheet

[1] CalEEMod, Version 2022.1

Proposed Project

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	9.59	5.91	52.70	0.12	10.10	2.62
Area	3.36	0.15	18.30	< 0.005	0.03	0.02
Energy	< 0.005	0.07	0.06	< 0.005	0.01	0.01
Total	**12.95**	**6.13**	**71.06**	**0.12**	**10.14**	**2.65**

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	8.41	6.36	43.40	0.11	10.10	2.62
Area	0.35	0.00	0.00	0.00	0.00	0.00
Energy	< 0.005	0.07	0.06	< 0.005	0.01	0.01
Total	**8.76**	**6.43**	**43.46**	**0.11**	**10.11**	**2.63**

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	10	6	53	0	10	3
Area	3	0	18	0	0	0
Energy	0	0	0	0	0	0
Total	**13**	**6**	**71**	**0**	**10**	**3**
Regional Thresholds (lb/day)	**137**	**137**	**548**	**137**	**82**	**65**
Exceeds Thresholds?	No	No	No	No	No	No

Annual Operation Emissions Worksheet

[1] CalEEMod, Version 2022.1

Proposed Project

Annual

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	0	0	0	< 0.005	0	< 0.005
Area	0	0	2	< 0.005	< 0.005	< 0.005
Energy	< 0.005	0	0	< 0.005	< 0.005	< 0.005
Total	**0**	**0**	**2**	**0**	**0**	**0**
Regional Thresholds (tons/year)	**25**	**25**	**100**	**25**	**15**	**12**
Exceeds Thresholds?	No	No	No	No	No	No

GHG Emissions Inventory

Construction[1]

Phase 1 Construction

	Annual ($MTCO_2e$/Year)	Max Daily (CO_2e/day)
2026	300	6,991
2027	85	4,340
Total Construction	**385**	**11,331**
30-Year Amortization[2]	**13**	**378**

Phase 2 Construction

	Annual ($MTCO_2e$/Year)	Max Daily (CO_2e/day)
2027	88	5,705
2028	104	4,240
Total Construction	**192**	**9,945**
30-Year Amortization[2]	**6**	**332**

Totals

	Annual ($MTCO_2e$/Year)	Max Daily (CO_2e/day)	Percent of Emissions
Year 2026	300	6,991	52%
Year 2027	172	10,045	30%
Year 2028	104	4,240	18%
Total Construction	**576**	**21,276**	100%
Total 30-Year Amortization[2]	**19**	**709**	

Notes

1 CalEEMod, Version 2022.1

2 Total construction emissions are amortized over 30 years per SCAQMD methodology; SCAQMD. 2009, November 19. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 14. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2.

Operations[1]

	Annual ($MTCO_2e$/Year)	Max Daily (CO_2e/day)	Percent of Emissions
Mobile	15	12,029	13%
Area	6	76	6%
Energy	54	328	49%
Energy- Lighting & Scoreboard[4]	5	28	4%
Water	8	47	7%
Solid Waste	5	27	4%
Refrigerants	0	0	0%
30-Year Construction Amortization	19	709	17%
TOTAL	**112**	**13,244**	100%
MDAQMD Threshold (MTCO2e/year)[3]	90,719	548,000	
Exceed Threshold?	**No**	**No**	

Notes

1 CalEEMod, Version 2022.1

2 $MTCO_2e$=metric tons of carbon dioxide equivalent.

3 MDAQMD Threshold is in tons per year (100,000 tons).

4 Field lighting and scoreboard and energy based on SCE's 2028 carbon intensity factors.

Appendix B General Biological Assessment

Appendix

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GENERAL BIOLOGICAL ASSESSMENT
FOR
ASSESSOR'S PARCEL NUMBER:
043-901-219 through -224
GRANITE HILLS HIGH SCHOOL
APPLE VALLEY
SAN BERNARDINO COUNTY
CALIFORNIA

Prepared for:

Mr. Dwayne Mears
3 MacArthur Place, Suite 1100
Santa Ana, CA

Prepared by:

Hernandez Environmental Services
17037 Lakeshore Drive
Lake Elsinore, CA 92530

JANUARY 2025

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FIGURES

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APPENDICES

Appendix A – Observed Species List
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Appendix D – Soil Map

1.0 Introduction

Hernandez Environmental Services (HES) was contracted to prepare a General Biological Assessment (GBA) for Apple Valley United School Distruct Granite Hills HS Athletic Complex project in the town of Apple Valley, San Bernardino County, California. The project site consists of Assessor's Parcel Numbers (APNs) 043-901-219 through 043-901-224. HES surveyed an approximately 38.53-acre survey area which will hereby be referred to as the Survey Area in this report. This report also analyzes the approximately 20.06-acre project impact area, herby referred to as Project Impact Area (PIA) in this report. The PIA occurs within the Survey except for the portions of the Granite Hills High School property, approximately 0.67 acre.

1.1 Project Site Location

The Survey Area is located northeast of the intersection of Central Road and Esaws Avenue within the incorporated town of Apple Valley, San Bernardino County, California. Specifically, the Survey Area is located within section 23, township 5 north, range 3 west in the *Apple Valley North* United States Geological Survey (USGS) 7.5' topographic quadrangle. The center point latitude and longitude for the Survey Area is 34.50985014, -117.17061132 (Figures 1 and 2).

1.2 Project Description

The proposed project includes the development of an athletic complex with associated landscaping and parking as well as a flood control basin.

2.0 Methodology

2.1 Literature Review

HES conducted a literature review and reviewed aerial photographs and topographic maps of the Survey Area and surrounding areas. The *Apple Valley North* USGS topographic quad and surrounding eight quads were used to identify sensitive species with the California Natural Diversity Data Base (CNDDB), the U.S. Fish and Wildlife Service (USFWS) Endangered Species Lists, Bureau of Land Management (BLM) special status plants, and the California Native Plant Society (CNPS) rare plant lists to obtain species information for the project area. The CNDDB and USFWS critical habitat databases were utilized, together with Geographic Information System (GIS) software, to locate the previously recorded locations of sensitive plant and wildlife occurrences and designated critical habitat and determine the distance from the project site.

2.2 Field Survey

On November 25, 2024, HES conducted a field survey of the Survey Area. The ambient temperature at 9:30 A.M. was 53 degrees Fahrenheit, cloudy, with winds ranging from zero to three miles per hour to the northeast. The purpose of the field survey was to document the

existing habitat conditions, obtain plant and animal species information, view the surrounding land uses, assess the potential for state and federal waters, assess the potential for wildlife movement corridors, and assess the presence of constituent elements for critical habitat, if present.

Linear transects spaced approximately 50 to 100 feet apart were walked across the project site for 100 percent coverage. All species observed were recorded. Global Positioning System (GPS) waypoints were taken to delineate specific habitat types, species locations, state or federal waters, and any other information that would be useful for the assessment of the project site. A comprehensive list of all plant and wildlife species that were detected during the field survey within the project site is included in Appendix A. Sensitive plant and wildlife species with the potential to occur within the project area are listed in Appendix B. Representative site photographs were taken and are included within Appendix C.

3.0 Existing Conditions and Results

3.1 Environmental Setting

The Survey Area consists of vacant land with dirt roads along the west, south, and east border. The site is vegetated with disturbed saltbush scrub habitat. Vacant land occurs to the north, Granite Hills High School is directly east, Esaws Avenue and vacant land occurs to the south, and Central Road and residential development occur to the west.. The Survey Area is relatively flat with onsite elevations ranging from 2,919 feet above mean sea-level (AMSL) to 2,946 feet AMSL.

3.2 Soils

According to the USDA Web Soil Survey, two soil types occur within the Survey Area: Helendale loamy sand (131), 0 to 2 percent slopes and Wasco sandy loam cool (173), 0 to 2 percent slopes. Refer to Appendix D.

3.3 Plant and Habitat Communities

The 39.53-acre Survey Area consists of 38.41 acres of disturbed saltbush scrub habitat and 0.11 acre of developed areas. The PIA includes an additional 0.67 acre of developed area within the Granite Hills High School property.

Disturbed Saltbush Scrub

The Survey Area contains approximately 38.41 acres of saltbush scrub habitat. This habitat had a lot of plants that appeared to be dead beyond typical winter dieback. There are also unvegetated dirt paths and graded areas within this habitat on site. The dominant plant species on site was hoary saltbush (*Atriplex canescens*) and the herbaceous layer is dominated by common mediterranean grass (*Schismus barbatus*). Other plant species observed in this habitat include

creosote (*Larrea tridentata*), green rabbitbrush (*Ericameria teretifolia*), tumbleweed (*Salsola tragus*), and Cooper's box thorn (*Lycium cooperi*).

Developed Areas

The Survey Area contains approximately 0.78 acre of developed areas consisting of paved areas. Approximately 0.67 acre of these areas include portions of Granite Hills High School property.

3.4 Wildlife

The general wildlife species documented on the Survey Area or within the vicinity of the Survey Area include common raven (*Corvus corax*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*), and ring-billed gull (*Larus delawarensis*).

3.5 Regional Connectivity/Wildlife Movement

Wildlife movement corridors can be local or regional in scale; their functions may vary temporally and spatially based on conditions and species present. Wildlife corridors represent areas where wildlife movement is concentrated due to natural or anthropogenic constraints. Local corridors provide access to resources such as food, water, and shelter. Animals use these corridors, which are often hillsides or riparian areas, to move between different habitats. Regional corridors provide these functions and link two or more large habitat areas. They provide avenues for wildlife dispersal, migration, and contact between otherwise distinct populations.

The Survey Area is not located within a designated wildlife corridor or linkage. The Survey Area is flat and does not have any of the landforms needed to function as a wildlife corridor such as hillsides or riparian areas. Furthermore, the Survey Area is bordered by developed areas and busy roads. The Survey Area does not serve a function in local wildlife movement.

3.6 Sensitive Biological Resources

According to the CNDDB a total of 15 sensitive species of plants and 33 sensitive species of wildlife have the potential to occur on or within the vicinity of the Survey Area. These include those species listed or candidates for listing by the USFWS, CDFW, BLM, and CNPS. All habitats with the potential to be used by sensitive species were evaluated during the site visit and a determination has been made for the presence or probability of presence within this report. All sensitive species within the *Apple Valley North* USGS topographic quad and eight surrounding quads of project area were reviewed in CNDDB, and a complete list of those species are discussed within Appendix B. This section will address those species listed as Candidate, Rare, Threatened, or Endangered under the state and federal endangered species laws, and any species found to occur on site. All other special status species are addressed within Appendix B.

3.6.1 Sensitive Plant Resources

Below are descriptions of the special status plant species found to occur or have a potential to occur within the Survey Area:

Cushenbury oxytheca
Cushenbury oxytheca (*Acanthoscyphus parishii var. goodmaniana*) is a federally listed Endangered Species and is ranked 1B.1 in the CNPS Rare Plant Inventory. This species habitats include pinyon and juniper woodlands with limestone talus and rocky slopes. No suitable habitat for this species is present on site. **This species is not present**.

White pygmy-poppy
White pygmy-poppy (*Canbya candida*) is ranked 4.2 in the CNPS Rare Plant Inventory. This species habitats include Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. There is suitable habitat for this species present on site. **This species has the potential to be present but was not identified to be present during survey.**

Desert cymopterus
Desert cymopterus (*Cymopterus deserticola*) is ranked 4.2 in the CNPS Rare Plant Inventory. This species habitats include Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. There is suitable habitat for this species present on site. **This species has the potential to be present but was not identified to be present during survey.**

Purple-nerve cymopterus
Purple-nerve cymopterus (*Cymopterus multinervatus*) is ranked 2B.2 in the CNPS Rare Plant Inventory. This species habitat include Joshua tree woodland and Mojavean desert scrub. There is suitable habitat for this species present on site. **This species has the potential to be present but was not identified to be present during survey.**

Mojave monkeyflower
Mojave monkeyflower (*Diplacus mohavensis*) is ranked 1B.2 in the CNPS Rare Plant Inventory. This species habitats include desert wash, Joshua tree woodland, and Mojavean desert scrub. This species is typically found in dry sandy or rocky washed along the Mojave River. There is marginally suitable habitat present on site. **This species has a low potential to be present but was not identified to be present during survey**.

Barstow woolly sunflower
Barstow woolly sunflower (*Eriophyllum mohavense*) is ranked 1B.2 in the CNPS Rare Plant Inventory. This species habitats include chenopod scrub, Mojavean desert scrub, and playas. There is suitable habitat for this species present on site. **This species has the potential to be present but was not identified to be present during survey.**

Short-joint beavertail
Short-joint beavertail (*Opuntia basilaris var. brachyclada*) is ranked 1B.2 in the CNPS Rare Plant Inventory. This species habitats include chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. There is suitable habitat for this species present on site. **This species has the potential to be present but was not identified to be present during survey.**

Beaver Dam breadroot
Beaver Dam breadroot (*Pediomelum castoreum*) is ranked 1B.2 in the CNPS Rare Plant Inventory. This species habitats include desert wash, Joshua tree woodland, and Mojavean desert scrub. There is suitable habitat for this species present on site. **This species has the potential to be present but was not identified to be present during survey.**

Latimer's woodland gilia
Latimer's woodland gilia (*Saltugilia latimeri*) is ranked 1B.2 in the CNPS Rare Plant Inventory. This species habitats include chaparral, Mojavean desert scrub, and pinyon and juniper woodland. There is suitable habitat for this species present on site. **This species has the potential to be present but was not identified to be present during survey**.

Joshua tree
Joshua tree (*Yucca brevifolia*) is a state listed Candidate Endangered Species. The Western Joshua Tree is primarily found in the Mojave Desert but also resides in the Great Basin Desert and irregularly dispersed within southern Nevada and southeastern California. This species was found during the general biological survey performed in 2024. **This species is present**.

3.6.2 Sensitive Wildlife Resources

Below are descriptions of the special status wildlife species listed as state and/or federal Threatened, Endangered, Candidate and other special status species found to have a potential to occur on site:

Southwestern pond turtle
Southwestern pond turtle (*Actinemys pallida*) is a federally listed Proposed Threatened Species. This species habitats include creeks and coastal drainages. No suitable habitat occurs on site. **This species is not present**.

Tricolored blackbird
Tricolored blackbird (*Agelaius tricolor*) is a state listed Threatened Species. This species is highly colonial and requires open water, protected nesting substrate, and foraging area with

insect prey within a few km of the colony. No suitable habitat occurs on site. **This species is not present**.

Arroyo toad

Arroyo toad (*Anaxyrus californicus*) is a federally listed Endangered Species. This species habitats include desert wash, riparian scrub, riparian woodland, south coast flowing waters, and south coast standing waters. No suitable habitat occurs on site. **This species is not present**.

Burrowing owl

Burrowing owl (*Athene cunicularia*) is a state listed Candidate Endangered Species. This species is a subterranean nester, dependent upon burrowing mammals such as the California ground squirrel. It inhabits open, dry annual or perennial grasslands and scrublands characterized by low-growing vegetation. The project site provides suitable habitat for this species. **This species has potential to be present.**

Crotch bumble bee

Crotch bumble bee (*Bombus crotchii*) is a state listed Candidate Endangered Species. This species is fond in coastal California east to the Sierra Cascade crest and south into Mexico. Its food plant genera include *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*. None of this species food plant genera were found on site. Furthermore, the lands adjacent to the site do not provide suitable habitat. The site is bordered by developed areas and desert scrub similar or the same as the scrub on site. No suitable habitat is present on the project site. **This species is not present**.

Swainson's hawk

Swainson's hawk (*Buteo swainsoni*) is a state listed Threatened Species. This species habitats include Great Basin grassland, riparian forest, riparian woodland, and valley & foothill grassland. No suitable habitat occurs on site. **This species is not present**.

Western yellow-billed cuckoo

Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is a federally listed Threated and state listed Endangered Species. This species is a riparian forest nester, found along the broad, lower flood-bottoms of larger river systems. No suitable habitat for this species is present on the project site. **This species is not present.**

Southwestern willow flycatcher

Southwestern willow flycatcher (*Empidonax traillii extimus*) is a state and federally listed Endangered Species. This species occurs in riparian woodland in southern California. No suitable habitat for this species is present on the project site. **This species is not present.**

Desert tortoise

The desert tortoise (*Gopherus agassizii*) is a federally and state listed Threatened Species. This species is most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. It prefers Creosote bush habitat with large annual wildflower blooms. No suitable desert tortoise burrows or desert tortoise sign were found during the general biological survey. The saltbush scrub on site is disturbed and has dirt roads and paved roads along the borders. The site is directly adjacent to a high school, busy streets, and residential development. There are dirt paths that cross the site. The nearest occurrence recorded on CNDDB is five miles from the site, was made in 1990, and is in an area that is now currently developed. Due to the level of disturbance on site and the surrounding urban development the site is not suitable to support desert tortoise. **This species is not present**.

Loggerheaded shrike

Loggerheaded shrike (*Lanius ludovicianus*) is a CDFW Species of Special Concern. This species habitats include broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. There is suitable habitat for this species present on site. **This species has potential to be present**.

California red legged frog

California red legged frog (*Rana draytonii*) is a federally listed Threatened Species. This species habitats include lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. No suitable habitat for this species is present on the project site. **This species is not present.**

Mohave tui chub

Mohave tui chub (*Siphateles bicolor mohavensis*) is a federally and state listed Endangered Species. This species is endemic to the Mojave River basin and needs deep pools and ponds. No suitable habitat for this species is present on the project site. **This species is not present.**

Bendire's thrasher

Bendire's thrasher (*Toxostoma bendirei*) is a CDFW Species of Special Concern. This species is migratory; local spring/summer resident in flat areas of desert succulent shrub/Joshua tree habitats in Mojave Desert. There is marginally suitable habitat present on site. **This species has a low potential to be present.**

Le Conte's thrasher

Le Conte's thrasher (*Toxostoma lecontei*) is a CDFW Species of Special Concern. This species is a desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert

succulent scrub habitats. Suitable habitat occurs on site. **This species has the potential to be present**.

Least Bell's vireo
Least Bell's vireo (*Vireo bellii pusillus*) is a federally and state listed Endangered Species. This species habitats include riparian forest, riparian scrub, and riparian woodland. No suitable habitat for this species is present on the project site. **This species is not present.**

Mohave ground squirrel
Mohave ground squirrel (*Xerospermophilus mohavensis*) is a state listed Threatened species. This species habitats include chenopod scrub, Joshua tree woodland, and Mojavean desert scrub. The saltbush scrub on site is disturbed and has dirt roads and paved roads along the borders. The site is directly adjacent to a high school, busy streets, and residential development. There are dirt paths that cross the site. The nearest occurrence of this species recorded on CNDDB is 3.5 miles from the site, was made in 1985, and is on a hill surrounded by disturbed areas. Due to the level of disturbance on site and the surrounding urban development the site is not suitable to support Mohave ground squirrel. There is no suitable habitat present on site. **This species is not present**.

3.7 Critical Habitat

Critical habitat is designated by USFWS for endangered and threatened species per the federal ESA (16 U.S.C. § 1533 (a)(3)), and to the extent prudent and determinable. Special management of critical habitat, including measures for water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types is required to ensure the long-term survival and recovery of the identified species. Critical habitat designation delineates all suitable habitat for the species. The Survey Area is not located within or adjacent to federally-designated critical habitat for endangered or threatened species.

3.8 Nesting Birds

Migratory non-game native bird species are protected under the federal Migratory Bird Treaty Act. Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests. The Survey Area contains shrubs that can be utilized by nesting birds during the nesting bird season of February 1 through September 15.

3.9 Jurisdictional Waters

The Survey Area does not contain any drainage, riparian, or riverine features. There are no CDFW, United States Army Corps of Engineers (USACE), or Regional Water Quality Control Board (RWQCB) jurisdictional waters within the project site boundaries.

4.0 Project Impacts

4.1 Impacts to Habitats

The proposed project is expected to impact 19.49 acres of disturbed saltbush scrub and0.75 acre of developed areas. Approximately 0.67 acre of the impacts to developed areas occur within the adjacent Granite Hills School property.

4.2 Impacts to Sensitive Species

The following sensitive species were found on the Survey Area or have the potential to occur on the Survey Area:

4.2.1 Impacts to Sensitive Plant Resources

The following plants species have the potential to occur on the Survey Area:

White pygmy-poppy
White pygmy-poppy (*Canbya candida*) is ranked 4.2 in the CNPS Rare Plant Inventory. This species habitats include Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. The saltbush scrub habitat on site is disturbed and only provides marginally suitable habitat. This species has a low potential to be present. Implementation of the measures identified in the Recommendations section (Section 6) of this report will ensure that potential impacts to this species are less than significant.

Desert cymopterus
Desert cymopterus (*Cymopterus deserticola*) is ranked 4.2 in the CNPS Rare Plant Inventory. This species habitats include Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. The saltbush scrub habitat on site is disturbed and only provides marginally suitable habitat. This species has a low potential to be present. Implementation of the measures identified in the Recommendations section (Section 6) of this report will ensure that potential impacts to this species are less than significant.

Purple-nerve cymopterus
Purple-nerve cymopterus (*Cymopterus multinervatus*) is ranked 2B.2 in the CNPS Rare Plant Inventory. This species habitat include Joshua tree woodland and Mojavean desert scrub. The saltbush scrub habitat on site is disturbed and only provides marginally suitable habitat. This species has a low potential to be present. Implementation of the measures identified in the Recommendations section (Section 6) of this report will ensure that potential impacts to this species are less than significant.

Mojave monkeyflower
Mojave monkeyflower (*Diplacus mohavensis*) is ranked 1B.2 in the CNPS Rare Plant Inventory. This species habitats include desert wash, Joshua tree woodland, and Mojavean desert scrub. This species is typically found in dry sandy or rocky washed along the Mojave River. The saltbush scrub habitat on site is disturbed and only provides marginally suitable habitat. This species has a low potential to be present. Implementation of the measures identified in the Recommendations section (Section 6) of this report will ensure that potential impacts to this species are less than significant.

Barstow woolly sunflower
Barstow woolly sunflower (*Eriophyllum mohavense*) is ranked 1B.2 in the CNPS Rare Plant Inventory. This species habitats include chenopod scrub, Mojavean desert scrub, and playas. The saltbush scrub habitat on site is disturbed and only provides marginally suitable habitat. This species has a low potential to be present. Implementation of the measures identified in the Recommendations section (Section 6) of this report will ensure that potential impacts to this species are less than significant.

Short-joint beavertail
Short-joint beavertail (*Opuntia basilaris var. brachyclada*) is ranked 1B.2 in the CNPS Rare Plant Inventory. This species habitats include chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. The saltbush scrub habitat on site is disturbed and only provides marginally suitable habitat. This species has a low potential to be present. Implementation of the measures identified in the Recommendations section (Section 6) of this report will ensure that potential impacts to this species are less than significant.

Beaver Dam breadroot
Beaver Dam breadroot (*Pediomelum castoreum*) is ranked 1B.2 in the CNPS Rare Plant Inventory. This species habitats include desert wash, Joshua tree woodland, and Mojavean desert scrub. The saltbush scrub habitat on site is disturbed and only provides marginally suitable habitat. This species has a low potential to be present. Implementation of the measures identified in the Recommendations section (Section 6) of this report will ensure that potential impacts to this species are less than significant.

Latimer's woodland gilia
Latimer's woodland gilia (*Saltugilia latimeri*) is ranked 1B.2 in the CNPS Rare Plant Inventory. This species habitats include chaparral, Mojavean desert scrub, and pinyon and juniper woodland. The saltbush scrub habitat on site is disturbed and only provides marginally suitable habitat. This species has a low potential to be present. Implementation of the measures identified in the Recommendations section (Section 6) of this report will ensure that potential impacts to this species are less than significant.

Joshua tree
Joshua tree (*Yucca brevifolia*) is a state listed Candidate Endangered Species. The Western Joshua Tree is primarily found in the Mojave Desert but also resides in the Great Basin Desert and irregularly dispersed within southern Nevada and southeastern California. This species was found during the general biological survey performed in 2024. This species is present. Implementation of the measures identified in the Recommendations section (Section 6) of this report will ensure that potential impacts to this species are less than significant.

4.2.2 Sensitive Wildlife Resources

The following sensitive wildlife species have a potential to occur on site:

Burrowing owl
Burrowing owl (*Athene cunicularia*) is a state listed Candidate Endangered Species. This species is a subterranean nester, dependent upon burrowing mammals such as the California ground squirrel. It inhabits open, dry annual or perennial grasslands and scrublands characterized by low-growing vegetation. The project site provides suitable habitat for this species. **This species has potential to be present.**

Loggerheaded shrike
Loggerheaded shrike (Lanius ludovicianus) is a CDFW Species of Special Concern. This species habitats include broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. There is suitable habitat for this species present on site. This species has potential to be present. Implementation of the measures identified in the Recommendations section (Section 6) of this report will ensure that potential impacts to this species are less than significant.

Bendire's thrasher
Bendire's thrasher (Toxostoma bendirei) is a CDFW Species of Special Concern. This species is migratory; local spring/summer resident in flat areas of desert succulent shrub/Joshua tree habitats in Mojave Desert. There is marginally suitable habitat present on site. This species has a low potential to be present. Implementation of the measures identified in the Recommendations section (Section 6) of this report will ensure that potential impacts to this species are less than significant.

Le Conte's thrasher
Le Conte's thrasher (Toxostoma lecontei) is a CDFW Species of Special Concern. This species is a desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Suitable habitat occurs on site. This species has the potential to be

present. Implementation of the measures identified in the Recommendations section (Section 6) of this report will ensure that potential impacts to this species are less than significant.

4.3 Impacts to Nesting Birds

Potential impacts to nesting birds may occur if vegetation removal occurs during the bird nesting season of February 1 through September 15. Implementation of the measures identified in the Recommendations section of this report will ensure that potential impacts to nesting birds are less than significant.

4.4 Impacts to Critical Habitat

The Survey Area is not located within designated federal critical habitat. No impacts to federal designated desert tortoise critical habitat are expected.

4.5 Impacts to Wildlife Movement Corridors

No wildlife movement corridors were found to be present on the Survey Area. No impacts are expected.

4.6 Conflict with Local Policies or Ordinances Protecting Biological Resources

Per California Government Code 53094 the proposed project is not subject to local policies or ordinances:

> **53094**.(a) Notwithstanding any other provision of this article, this article does not require a school district to comply with the zoning ordinances of a county or city unless the zoning ordinance makes provision for the location of public schools and unless the city or county has adopted a general plan.
>
> (b) Notwithstanding subdivision (a), the governing board of a school district, that has complied with the requirements of Section 65352.2 of this code and Section 21151.2 of the Public Resources Code, by a vote of two-thirds of its members, may render a city or county zoning ordinance inapplicable to a proposed use of property by the school district. The governing board of the school district may not take this action when the proposed use of the property by the school district is for nonclassroom facilities, including, but not limited to, warehouses, administrative buildings, and automotive storage and repair buildings.
>
> (c) The governing board of the school district shall, within 10 days, notify the city or county concerned of any action taken pursuant to subdivision (b). If the governing board has taken such an action, the city or county may commence an action in the superior court of the county whose zoning ordinance is involved or in which is situated the city whose zoning ordinance is involved, seeking a review of the action of the

governing board of the school district to determine whether it was arbitrary and capricious. The city or county shall cause a copy of the complaint to be served on the board. If the court determines that the action was arbitrary and capricious, it shall declare it to be of no force and effect, and the zoning ordinance in question shall be applicable to the use of the property by the school district.

4.7 Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation Plan

The project site is located within the proposed Town of Apple Valley Multiple-Species Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) boundaries. The plan is still in the developmental stages and is not yet in effect.

The Project site is located within the California Desert Conservation Area (CDCA). The Project site is located within the Desert Renewable Energy Conservation Plan (DRECP). The Project site is not located within the California Desert National Conservation Lands (CDNCL). The Project site is not located within a BLM LUPA Conservation Designated Area of Critical Environmental Concern.

4.8 State and Federal Drainages

The project site does not contain any state or federal drainages, therefore no impacts to any jurisdictional drainages are expected.

5.0 Recommendations

Based upon the findings of this report, it is recommended that the following studies or surveys be performed as part of the project.

<u>Burrowing Owl</u>

- Based on the presence of suitable habitat documented during the habitat assessment focused BUOW protocol surveys shall be performed by an approved biologist to determine presence or absence of this species on site.
- The current CDFW protocol guidelines for survey number of visits and timing are: Conduct 4 survey visits: 1) at least one site visit between 15 February and 15 April, and 2) a minimum of three survey visits, at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June.
- If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the project proponent shall inform San Bernardino County and

CDFW, and shall obtain a California Endangered Species Act (CESA) Incidental Take Permit (ITP).

Nesting Birds

- It is recommended that vegetation removal be conducted outside of the nesting season for migratory birds to avoid direct impacts.
- If vegetation removal will occur during the migratory bird nesting season, between February 1 and September 15, pre-construction nesting bird surveys shall be performed within three days prior to vegetation removal.
- If active nests are found during nesting bird surveys, they shall be flagged. A 250-foot buffer shall be fenced around songbird nests and a 500-foot buffer shall be fenced around raptor nests.

Sensitive wildlife

The loggerhead shrike, Bendire's thrasher, and LeConte's thrasher have a potential to occur on site. The measures outlined for nesting birds will ensure potential impacts to these species remain less than significant.

Sensitive Plants

White pygmy-poppy, desert cymopterus, purple-nerve cymopterus, Mojave monkeyflower, Barstow woolly sunflower, short-joint beavertail, beaver Dam breadroot, and Latimer's woodland gilia have the potential to occur on site. Focused surveys should be performed during the appropriate blooming season for these species to determine presence or absence.

Plant Species Common Name	**Blooming Period**
White pygmy-poppy	March- June
Desert cymopterus	March-May
Purple-nerve cymopterus	March-April
Mojave monkeyflower	April-June
Barstow woolly sunflower	April-May
Short-joint beavertail	April-June
Beaver dam breadroot	April-May
Latimer's woodland gilia	March-June

Joshua Tree

- Any impacts to Western Joshua tree would require compliance with the Western Joshua Tree Conservation Act (WJTCA) which was passed in July 2023 to conserve western Joshua tree and its habitat while supporting the state's renewable energy and housing priorities. The WJTCA authorizes CDFW to:
    - Permit the trimming and removal of hazardous or dead western Joshua trees.
    - Permit the incidental take of western Joshua trees under CESA provided the permittee meets certain conditions.

Any proposed impacts to the Joshua trees on site would require prior authorization from CDFW.

6.0 Certification

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



Date 1/23/2025 Signed _____

PROJECT MANAGER

Fieldwork Performed By:

Juan Hernandez

_____

Principal Biologist

Elizabeth Gonzalez

_____

Senior Biologist

7.0 References

Bureau of Land Management (BLM), National Designated Areas of Critical Environmental Concern Polygons, June 2023. This is an aggregate national dataset. Source data were received from all or some of the BLM state offices of Alaska, Arizona, California, Colorado, Eastern States, Idaho, Montana, Nevada, New Mexico, Oregon/Washington, Utah, and Wyoming.

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FIGURES

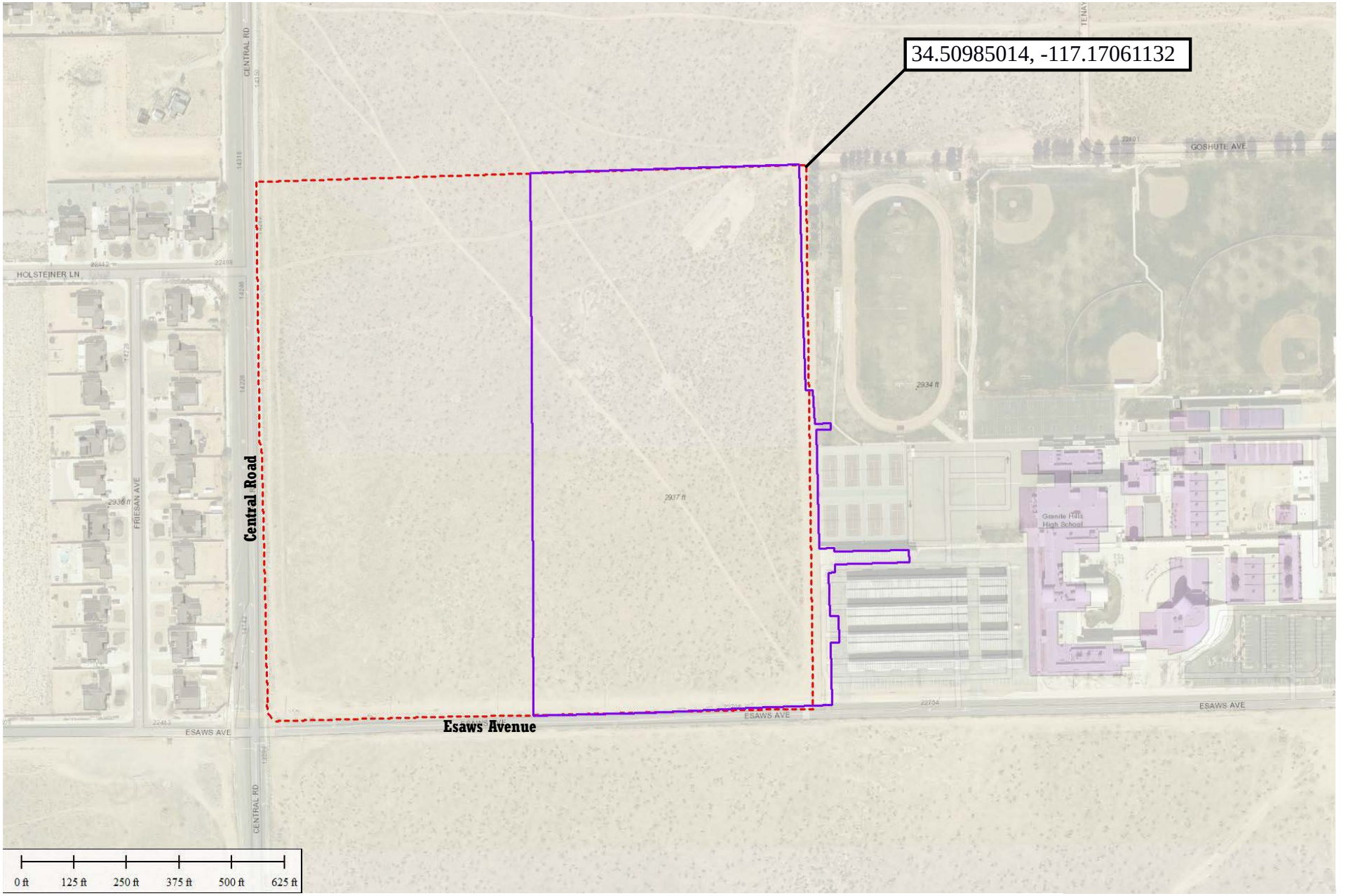


Figure 1
Location Map
Granite Hills HS Athletic Compound
Apple Valley, San Bernardino County, California

Legend

- Surevy Area (38.53 acres)
- Project Impact Area (20.06 acres)

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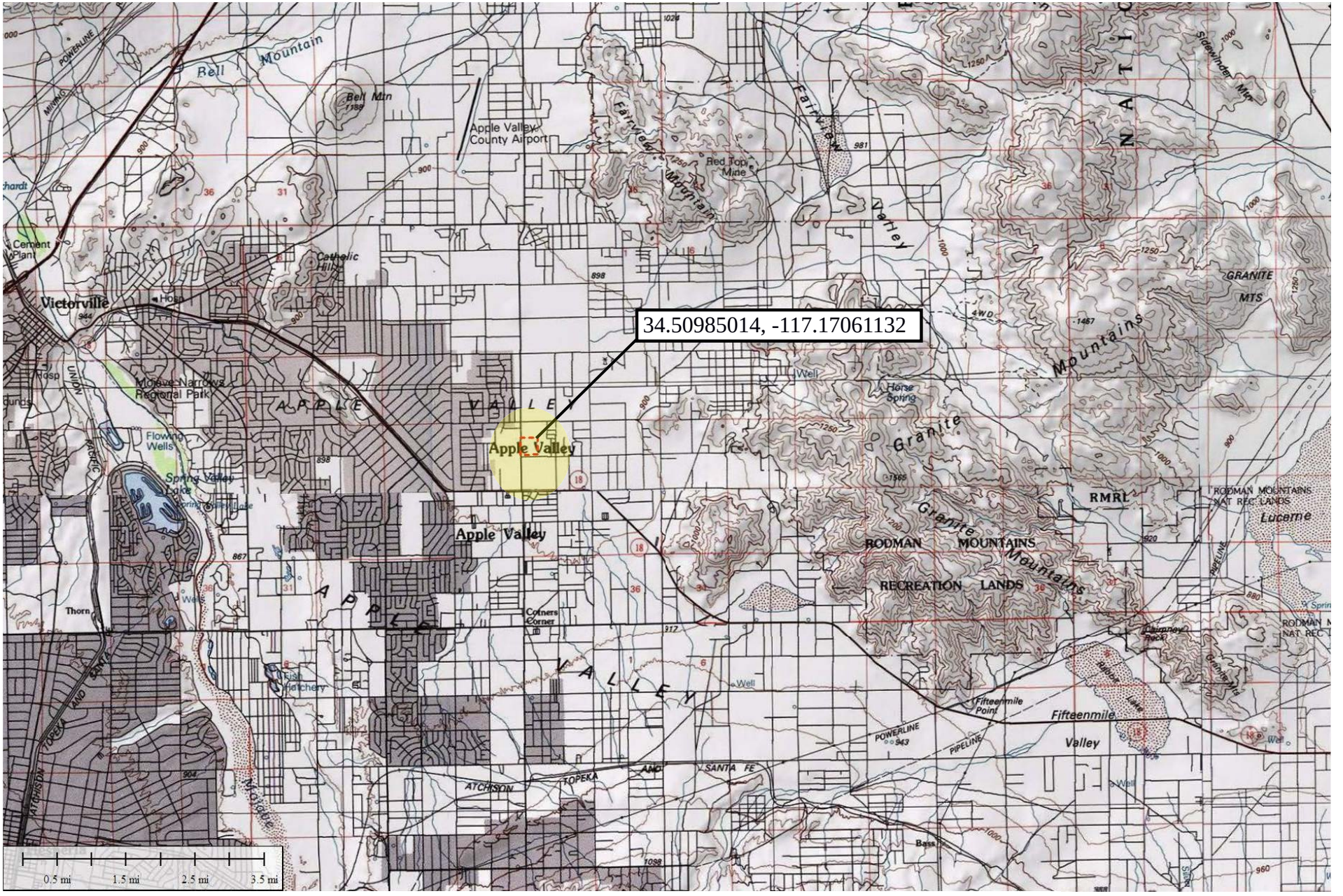


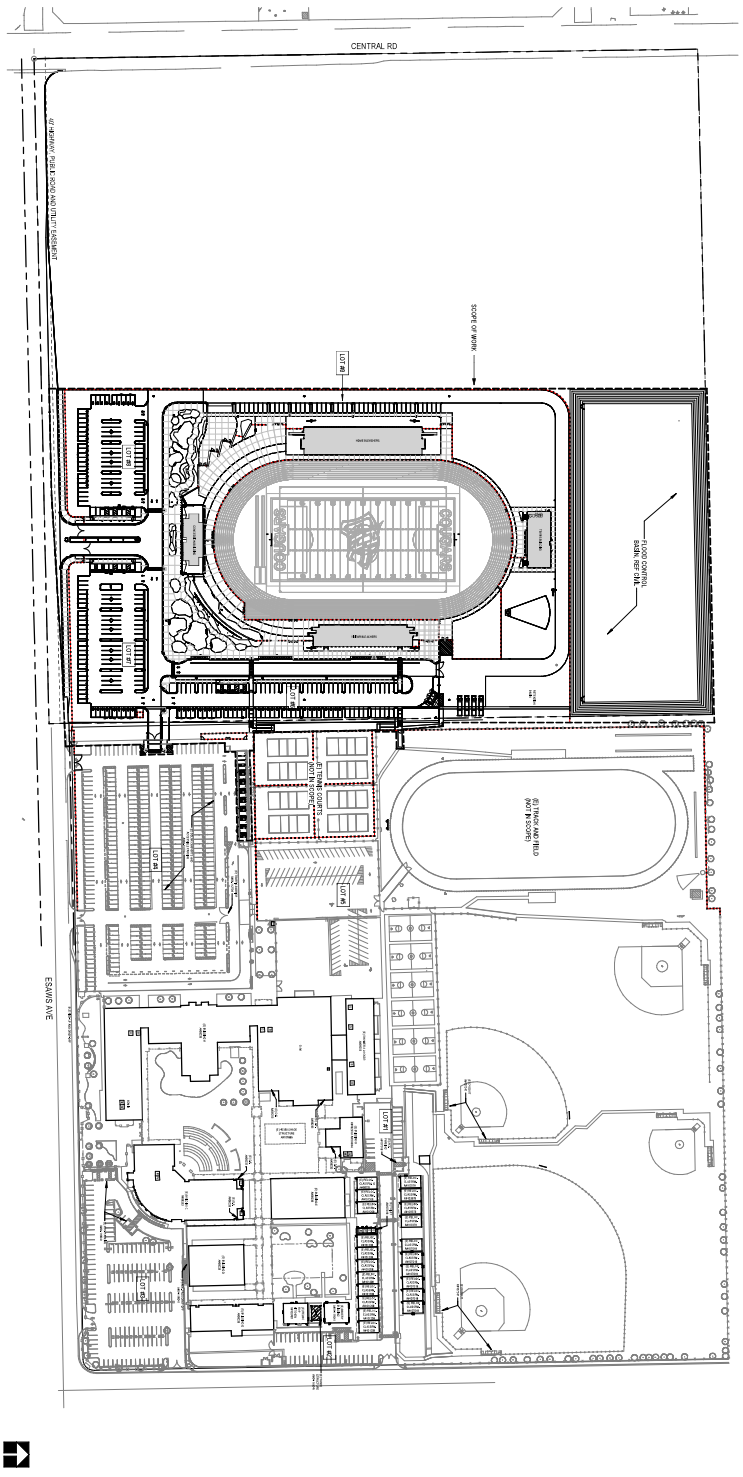
Figure 2
Vicinity Map
Granite Hills HS Athletic Compound
Apple Valley, San Bernardino County, California

Legend

Survey Area (38.53 acres)

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CENTRAL RD
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LOT 1Q
LOT 1R
LOT 1S
LOT 1T
LOT 1U
LOT 1V
LOT 1W
LOT 1X
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LOT 1Z
FLOOD CONTROL BASIN (BY OTHERS)
SYNTHETIC TURF
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SYNTHETIC TURF

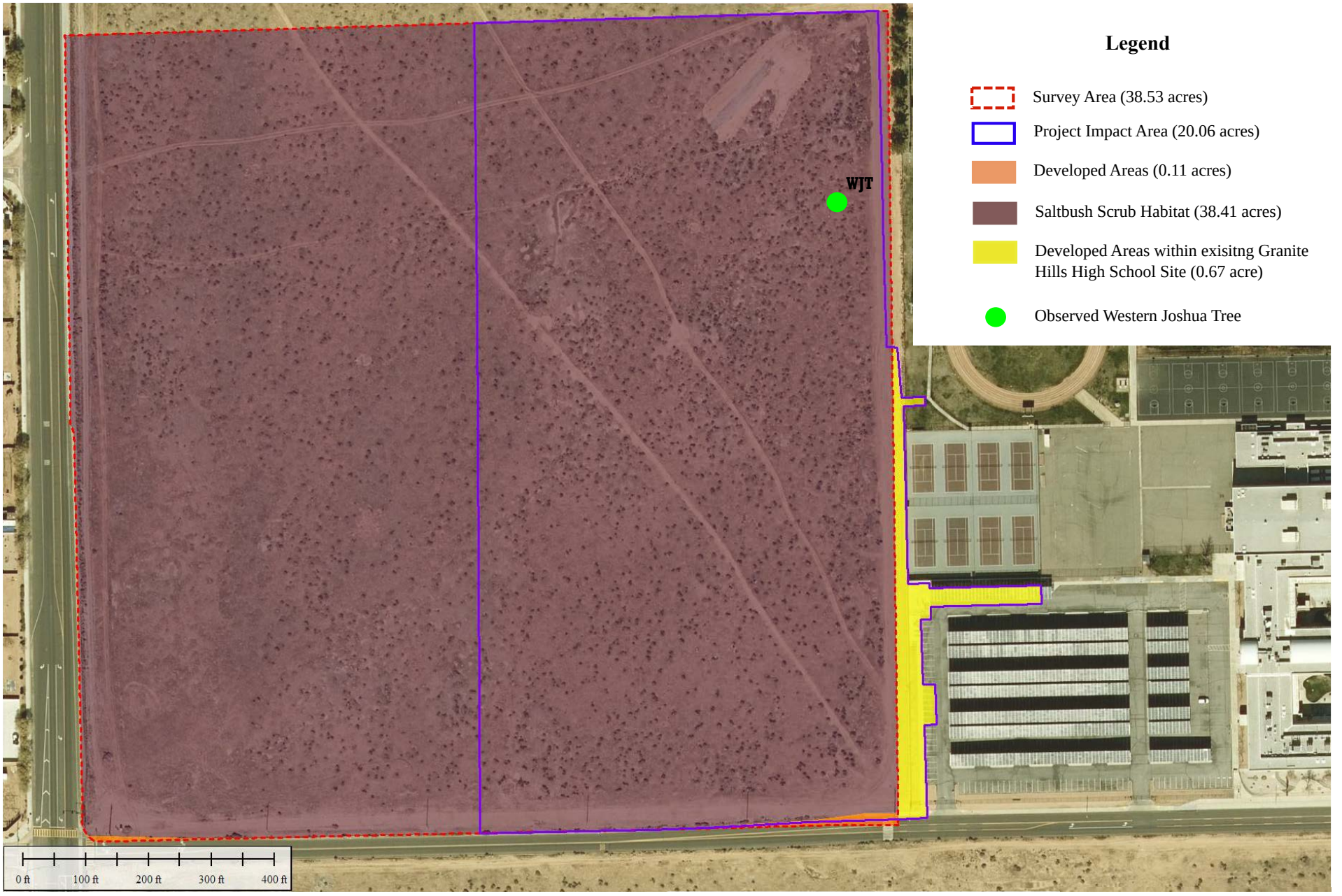


Figure 4
Habitat Map
Granite Hills HS Athletic Compound
Apple Valley, San Bernardino County, California

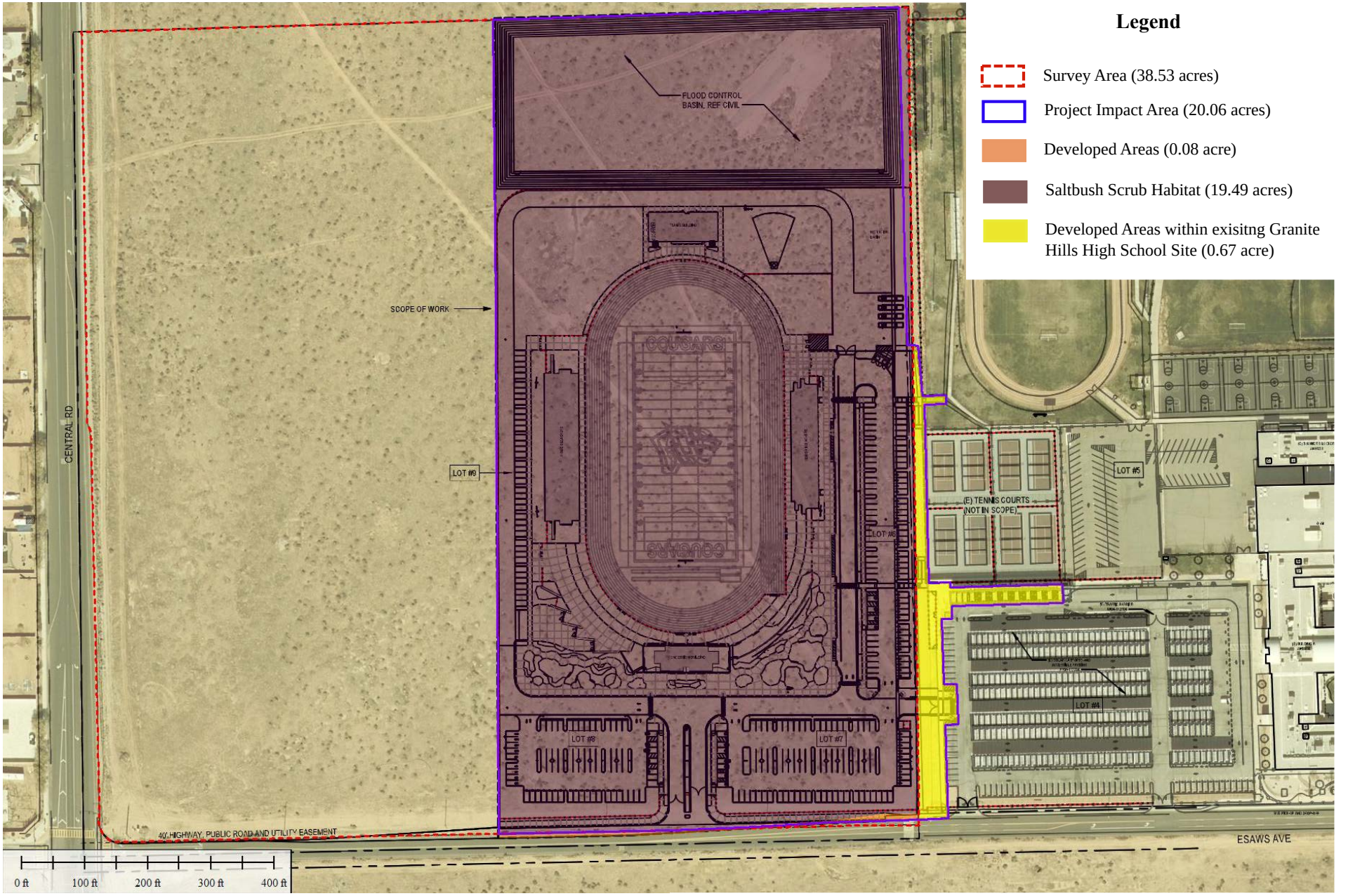


Figure 5
Impact Map
Granite Hills HS Athletic Compound
Apple Valley, San Bernardino County, California

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APPENDIX A

Observed Species List

Plant List

Scientific Name	Common Name
Atriplex canescens	Fourwing saltbush
Bromus tectorum	Cheatgrass
Ericameria teretifolia	Green rabbitbrush
Krascheninnikovia lanata	Winterfat
Larrea tridentata	Creosote
Lycium cooperi	Cooper's box thorn
Parkinsonia florida	Palo verde
Pinus sp.	Pine tree
Salsola tragus	Tumbleweed
Schismus barbatus	Common mediterranean grass
Yucca brevifolia	Western Joshua tree

Wildlife List

Scientific Name	Common Name
Corvus corax	Common raven
Lepus californicus	Black-tailed jackrabbit
Otospermophilus beecheyi	California ground squirrel
Larus delawarensis	Ring-billed gull

APPENDIX B

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Acanthoscyphus parishii var. goodmaniana	Cushenbury oxytheca	Dicots	Endangered	None	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Limestone | Pinon & juniper woodlands	Pinyon and juniper woodland.	On limestone talus and rocky slopes. 1400-2350 m.	No suitable habitat occurs on site. **This species is not present.**
Boechera dispar	pinyon rockcress	Dicots	None	None	2B.3	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Joshua tree woodland | Mojavean desert scrub | Pinon & juniper woodlands	Joshua tree woodland, pinyon and juniper woodland, Mojavean desert scrub.	Granitic, gravelly slopes and mesas. Often under desert shrubs which support it as it grows. 1005-2805 m.	The project site is below the elevation range for this species. No slopes or mesas occur on site. **This species is not present.**
Canbya candida	white pygmy-poppy	Dicots	None	None	4.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Joshua tree woodland | Mojavean desert scrub | Pinon & juniper woodlands	Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland.	Gravelly, sandy, granitic places. 600-1460 m.	There is minimally suitable habitat present on site. **This species has a low potential to be present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Cymopterus deserticola	desert cymopterus	Dicots	None	None	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Joshua tree woodland | Mojavean desert scrub	Joshua tree woodland, Mojavean desert scrub.	On fine to coarse, loose, sandy soil of flats in old dune areas with well-drained sand. 625-1220 m.	There is minimally suitable habitat present on site. **This species has a low potential to be present.**
Cymopterus multinervatus	purple-nerve cymopterus	Dicots	None	None	2B.2		Joshua tree woodland | Mojavean desert scrub	Mojavean desert scrub, pinyon and juniper woodland.	Sandy or gravelly places. 765-2195 m.	There is minimally suitable habitat present on site. **This species has a low potential to be present.**
Diplacus mohavensis	Mojave monkeyflower	Dicots	None	None	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Desert wash | Joshua tree woodland | Mojavean desert scrub	Joshua tree woodland, Mojavean desert scrub.	Dry sandy or rocky washes along the Mojave River. 660-1270 m.	There is minimally suitable habitat present on site. **This species has a low potential to be present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Dudleya abramsii ssp. affinis	San Bernardino Mountains dudleya	Dicots	None	None	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Limestone | Pavement plain | Pinon & juniper woodlands | Upper montane coniferous forest	Pebble (pavement) plain, upper montane coniferous forest, pinyon and juniper woodland.	Outcrops, granite or quartzite, rarely limestone. 1200-2425 m.	No suitable habitat occurs on site. **This species is not present**.
Eremothera boothii ssp. boothii	Booth's evening-primrose	Dicots	None	None	2B.3		Joshua tree woodland | Pinon & juniper woodlands	Joshua tree woodland, pinyon and juniper woodland.	285-2290 m.	No suitable habitat occurs on site. **This species is not present.**
Eriophyllum mohavense	Barstow woolly sunflower	Dicots	None	None	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_USDA-US Dept of Agriculture	Alkali playa | Chenopod scrub | Mojavean desert scrub	Chenopod scrub, Mojavean desert scrub, desert playas.	Mostly in open, silty or sandy areas w/saltbush scrub, or creosote bush scrub. Barren ridges or margins of playas. 605-1290 m.	There is minimally suitable habitat present on site. **This species has a low potential to be present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Opuntia basilaris var. brachyclada	short-joint beavertail	Dicots	None	None	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral | Joshua tree woodland | Mojavean desert scrub | Pinon & juniper woodlands	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland.	Sandy soil or coarse, granitic loam. 425-2015 m.	There is minimally suitable habitat present on site. **This species has a low potential to be present.**
Pediomelum castoreum	Beaver Dam breadroot	Dicots	None	None	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Desert wash | Joshua tree woodland | Mojavean desert scrub	Joshua tree woodland, Mojavean desert scrub.	Sandy soils; washes and roadcuts. 605-1485 m.	There is minimally suitable habitat present on site. **This species has a low potential to be present.**
Penstemon clevelandii var. mohavensis	Mojave beardtongue	Dicots	None	None	1B.2		Mojavean desert scrub | Pinon & juniper woodlands	Mojavean desert scrub, pinyon and juniper woodland.	Rocky, granitic (often). 925-1620 m.	The project site is below the elevation range for this species. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Saltugilia latimeri	Latimer's woodland-gilia	Dicots	None	None	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_USDA-US Dept of Agriculture | USFS_S-Sensitive	Chaparral | Limestone | Mojavean desert scrub | Pinon & juniper woodlands	Chaparral, Mojavean desert scrub, pinyon and juniper woodland.	Rocky or sandy substrate; sometimes in washes, sometimes limestone. 120-2200 m.	There is minimally suitable habitat present on site. **This species has a low potential to be present.**
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	Dicots	None	None	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | USFS_S-Sensitive	Chaparral | Cismontane woodland | Lower montane coniferous forest	Chaparral, cismontane woodland, lower montane coniferous forest.	In gravelly soils on streambanks or in mesic sites in oak or pine woodland. 425-2000 m.	No suitable habitat occurs on site. **This species is not present**.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Symphyotrichum defoliatum	San Bernardino aster	Dicots	None	None	1B.2	BLM_S-Sensitive | SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden | SB_CRES-San Diego Zoo CRES Native Gene Seed Bank | USFS_S-Sensitive	Cismontane woodland | Coastal scrub | Lower montane coniferous forest | Marsh & swamp | Meadow & seep | Valley & foothill grassland	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland.	Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 3-2045 m.	No suitable habitat occurs on site. **This species is not present**.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Accipiter cooperii	Cooper's hawk	Birds	None	None	CDFW_WL-Watch List | IUCN_LC-Least Concern	Cismontane woodland | Riparian forest | Riparian woodland | Upper montane coniferous forest	Woodland, chiefly of open, interrupted or marginal type.	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	No suitable habitat occurs on site. **This species is not present.**
Actinemys pallida	southwestern pond turtle	Reptiles	Proposed Threatened	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive				No suitable habitat occurs on site. **This species is not present.**
Agelaius tricolor	tricolored blackbird	Birds	None	Threatened	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered | USFWS_BCC-Birds of Conservation Concern	Freshwater marsh | Marsh & swamp | Swamp | Wetland	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	No suitable habitat occurs on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Anaxyrus californicus	arroyo toad	Amphibians	Endangered	None	CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered	Desert wash | Riparian scrub | Riparian woodland | South coast flowing waters | South coast standing waters	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	No suitable habitat occurs on site. **This species is not present.**
Antrozous pallidus	pallid bat	Mammals	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive	Chaparral | Coastal scrub | Desert wash | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Riparian woodland | Sonoran desert scrub | Upper montane coniferous forest | Valley & foothill grassland	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	No suitable roosting habitat occurs on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Aquila chrysaetos	golden eagle	Birds	None	None	BLM_S-Sensitive | CDF_S-Sensitive | CDFW_FP-Fully Protected | CDFW_WL-Watch List | IUCN_LC-Least Concern	Broadleaved upland forest | Cismontane woodland | Coastal prairie | Great Basin grassland | Great Basin scrub | Lower montane coniferous forest | Pinon & juniper woodlands | Upper montane coniferous forest | Valley & foothill grassland	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	No suitable habitat occurs on site. **This species is not present.**
Asio otus	long-eared owl	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Cismontane woodland | Great Basin scrub | Riparian forest | Riparian woodland | Upper montane coniferous forest	Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses.	Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	No suitable habitat occurs on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Athene cunicularia	burrowing owl	Birds	None	Candidate Endangered	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Coastal prairie | Coastal scrub | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Suitable habitat occurs on site. **This species has the potential to be present.**
Bombus crotchii	Crotch's bumble bee	Insects	None	Candidate Endangered	IUCN_EN-Endangered		Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	The food plant genera for this species are not present on site. No suitable habitat occurs on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Buteo swainsoni	Swainson's hawk	Birds	None	Threatened	BLM_S-Sensitive | IUCN_LC-Least Concern	Great Basin grassland | Riparian forest | Riparian woodland | Valley & foothill grassland	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	No suitable habitat occurs on site. **This species is not present.**
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	Mammals	None	None		Desert wash | Pinon & juniper woodlands | Sonoran desert scrub	Desert border areas of San Diego, Riverside, San Bernardino, and Los Angeles counties in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	The project site does not have areas with rocks or coarse gravel. No suitable habitat occurs on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	Threatened	Endangered	BLM_S-Sensitive | USFS_S-Sensitive	Riparian forest	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	No suitable habitat occurs on site. **This species is not present.**
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive	Broadleaved upland forest | Chaparral | Chenopod scrub | Great Basin grassland | Great Basin scrub | Joshua tree woodland | Lower montane coniferous forest | Meadow & seep | Mojavean desert scrub | Riparian forest | Riparian woodland | Sonoran desert scru	Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	No suitable roosting habitat occurs on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Empidonax traillii extimus	southwestern willow flycatcher	Birds	Endangered	Endangered		Riparian woodland	Riparian woodlands in Southern California.		No suitable habitat occurs on site. **This species is not present.**
Falco mexicanus	prairie falcon	Birds	None	None	CDFW_WL-Watch List | IUCN_LC-Least Concern	Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland	Inhabits dry, open terrain, either level or hilly.	Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	No suitable breeding sites occur on site. No suitable habitat occurs on site. **This species is not present.**
Gopherus agassizii	desert tortoise	Reptiles	Threatened	Threatened	IUCN_CR-Critically Endangered	Joshua tree woodland | Mojavean desert scrub | Sonoran desert scrub	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat.	Require friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.	No suitable habitat occurs on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Helminthoglypta mohaveana	Victorville shoulderband	Mollusks	None	None	IUCN_NT-Near Threatened	Aquatic | Great Basin flowing waters	Known only from along the Mojave River in San Bernardino County.	Found among granite boulders and at the base of rocky cliffs.	No suitable habitat occurs on site. **This species is not present.**
Icteria virens	yellow-breasted chat	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Riparian forest | Riparian scrub | Riparian woodland	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses.	Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	No suitable habitat occurs on site. **This species is not present.**
Lanius ludovicianus	loggerhead shrike	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	Broadleaved upland forest | Desert wash | Joshua tree woodland | Mojavean desert scrub | Pinon & juniper woodlands | Riparian woodland | Sonoran desert scrub	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes.	Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Suitable habitat occurs on site. **This species has the potential to be present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Lasionycteris noctivagans	silver-haired bat	Mammals	None	None	IUCN_LC-Least Concern	Lower montane coniferous forest | Oldgrowth | Riparian forest	Primarily a coastal and montane forest dweller, feeding over streams, ponds and open brushy areas.	Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.	No suitable habitat occurs on site. **This species is not present.**
Lasiurus cinereus	hoary bat	Mammals	None	None	IUCN_LC-Least Concern	Broadleaved upland forest | Cismontane woodland | Lower montane coniferous forest | North coast coniferous forest	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding.	Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	No suitable habitat occurs on site. **This species is not present.**
Microtus californicus mohavensis	Mohave river vole	Mammals	None	None	CDFW_SSC-Species of Special Concern	Riparian scrub	Occurs only in weedy herbaceous growth in wet areas along the Mojave River. May be found in some irrigated pastures.	Burrows into soft soil. Feeds on leafy parts of grasses, sedges and herbs. Clips grasses to form runways from burrow.	No suitable habitat occurs on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Chaparral | Cismontane woodland | Coastal bluff scrub | Coastal scrub | Desert wash | Pinon & juniper woodlands | Riparian scrub | Riparian woodland | Valley & foothill grassland	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	No suitable habitat occurs on site. **This species is not present.**
Piranga rubra	summer tanager	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Riparian forest	Summer resident of desert riparian along lower Colorado River, and locally elsewhere in California deserts.	Requires cottonwood-willow riparian for nesting and foraging; prefers older, dense stands along streams.	No suitable habitat occurs on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Plebulina emigdionis	San Emigdio blue butterfly	Insects	None	None	USFS_S-Sensitive		Found in desert canyons and along riverbeds in Inyo, Kern, Los Angeles, and San Bernardino counties.	Host plant is Atriplex canescens; maybe Lotus purshianus also.	No canyons or riverbeds occur on site. **This species is not present.**
Rana draytonii	California red-legged frog	Amphibians	Threatened	None	CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable	Aquatic | Artificial flowing waters | Artificial standing waters | Freshwater marsh | Marsh & swamp | Riparian forest | Riparian scrub | Riparian woodland | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowi	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	No suitable habitat occurs on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Setophaga petechia	yellow warbler	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Riparian forest | Riparian scrub | Riparian woodland	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	No suitable habitat occurs on site. **This species is not present.**
Siphateles bicolor mohavensis	Mohave tui chub	Fish	Endangered	Endangered	AFS_EN-Endangered | CDFW_FP-Fully Protected	Aquatic | Artificial flowing waters | Artificial standing waters	Endemic to the Mojave River basin, adapted to alkaline, mineralized waters.	Needs deep pools, ponds, or slough-like areas. Needs vegetation for spawning.	No suitable habitat occurs on site. **This species is not present.**
Toxostoma bendirei	Bendire's thrasher	Birds	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFWS_BCC-Birds of Conservation Concern	Joshua tree woodland | Mojavean desert scrub	Migratory; local spring/summer resident in flat areas of desert succulent shrub/Joshua tree habitats in Mojave Desert.	Nests in cholla, yucca, palo verde, thorny shrub, or small tree, usually 0.5 to 20 feet above ground.	There is marginally suitable habitat present on site. **This species has a low potential to be present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Toxostoma lecontei	Le Conte's thrasher	Birds	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Desert wash | Mojavean desert scrub | Sonoran desert scrub	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats.	Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	Suitable habitat occurs on site. **This species has the potential to be present.**
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered		Riparian forest | Riparian scrub | Riparian woodland	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	No suitable habitat occurs on site. **This species is not present.**
Vireo vicinior	gray vireo	Birds	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive	Chaparral	Dry chaparral; west of desert, in chamise-dominated habitat; mountains of Mojave Desert, associated with juniper and Artemisia.	Forage, nest, and sing in areas formed by a continuous growth of twigs, 1-5 ft above ground.	No suitable habitat occurs on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Xerospermophilus mohavensis	Mohave ground squirrel	Mammals	None	Threatened	BLM_S-Sensitive | IUCN_NT-Near Threatened	Chenopod scrub | Joshua tree woodland | Mojavean desert scrub	Open desert scrub, alkali scrub and Joshua tree woodland. Also feeds in annual grasslands. Restricted to Mojave Desert.	Prefers sandy to gravelly soils, avoids rocky areas. Uses burrows at base of shrubs for cover. Nests are in burrows.	No suitable habitat occurs on site. **This species is not present**.

APPENDIX C



View disturbed saltbush scrub habitat on southwest portion of the site.



View of Granite Hills High School adjacent to the eastern border of the site.



View of disturbed saltbush scrub habitat on northern portion of the site. View facing south.

Hernandez Environmental Services



View of suitable burrowing owl burrow on site.



View of dirt road along eastern border of site.



View of Western Joshua Tree located on site.

Hernandez Environmental Services

APPENDIX D

Soil Map—San Bernardino County, California, Mojave River Area
(AVUS Granite PB)



Map Scale: 1:3,130 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 45 90 180 270

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County, California, Mojave River Area
Survey Area Data: Version 16, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 17, 2022—Jun 12, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
131	HELENDALE LOAMY SAND, 0 TO 2 PERCENT SLOPES	34.4	86.6%
173	WASCO SANDY LOAM, COOL, 0 TO 2 PERCENT SLOPES	5.3	13.4%
Totals for Area of Interest		**39.7**	**100.0%**

Appendix C Cultural Resources Inventory Memo for Granite Hills High School Athletics Complex

Appendix

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January 30, 2025

Jared Bradford
PlaceWorks, Inc.
Via email: jbradford@placeworks.com

Cultural Resources Inventory Memo for Granite Hills High School Athletics Complex, Apple Valley, San Bernardino County, California

Dear Mr. Bradford,

This letter report documents the results of the cultural resources inventory records search review and survey conducted in support of the Granite Hills High School (HS) Athletics Complex in Apple Valley, San Bernardino County, California by ASM Affiliates (ASM). This project was conducted in compliance with the California Environmental Quality Act (CEQA). The study included a records search at the South Central Coastal Information Center (SCCIC) and an intensive pedestrian survey of proposed areas of Project-related ground disturbance to determine the presence or absence of historic resources. Maps and photos are provided with this report as Attachment A; SCCIC summary tables are included as Attachment B.

Project Description and Location

The proposed Project involves the construction of a new athletics complex on a small portion of the west side of the Granite Hills HS campus as well as a portion of six undeveloped, District-owned parcels adjacent to the west edge of the campus at the northeast intersection of Central Road and Esaws Avenue (Figures 1 and 2). The survey/study area for this cultural resources inventory encompasses the six currently vacant parcels west of the campus, APN 0439-012-19-0000 through 0439-012-24-0000; the proposed Project will also include a small portion of APN 0439-012-18, the location of Granite Hills HS.

Cultural and Environmental Setting

Natural Setting

The Town of Apple Valley is located in southwestern San Bernardino County, in the area of the southwestern Mojave Desert known as the Victor Valley, which is separated from other urbanized areas in southern California by the San Bernardino and San Gabriel mountains. Apple Valley is approximately 70 miles (mi.) northeast of Los Angeles, 29 mi. south of Barstow, 27 mi. north of San Bernardino, and 5 mi. east of Victorville. The Project area is located in a relatively sparsely developed area, located towards the eastern outskirts of town, flanked by Granite Hills High School to the east, single family homes along Central Road, Fresian Avenue, and Holsteiner Lane to the west, and undeveloped desert land to the north and south across Esaws Avenue.

Prehistoric Cultural Setting

The following brief overview of the prehistory of the region is adapted from Moratto (1984), Warren (1984), and Warren and Crabtree (1986).

Lake Mojave Period (Paleo-Indian and Early Archaic; ca. 12,000 – 7000 B.P.

The Lake Mojave complex represents the earliest human occupation in the Mojave Desert region, beginning at about 12,000 years before present (B.P.) (Grayson 1993; Wallace 1962). Considered a Paleo-Indian assemblage, it is thought to be ancestral to the Early Archaic cultures of the subsequent Pinto period (Warren and Crabtree 1986:184). Claims for archaeological assemblages dating to periods earlier than Lake Mojave period, such as those made for Tule Springs (Harrington and Simpson 1961), China Lake (Davis 1978), and Manix Lake (Simpson 1958, 1960, 1961), are controversial and, even if eventually proven to be authentic, these manifestations appear to have no relationship to later cultural developments in the region (Warren and Crabtree 1986). This era, at the close of the Pleistocene, was a time of extreme environmental change as the relatively cool and moist conditions of the terminal Wisconsin glacial age were gradually replaced by the warmer and drier conditions of the Holocene (Spaulding 1990). Desertification continued throughout the period with mesquite appearing by ca. 8000 B.P. (DuBarton et al. 1991).

Cultural materials characteristic of the Lake Mojave Complex includes Lake Mojave, Parman, Silver Lake, and rare fluted projectile points (Clovis). Other artifacts typically found in these assemblages include lunate and eccentric crescents, small flake engravers, technical scrapers, leaf-shaped knives, drills, and heavy choppers or hammer stones. Milling stones are generally absent in the Lake Mojave Complex (Campbell et al. 1937; Warren and Crabtree 1986).

In the Mojave Desert and southern Great Basin, this assemblage is typically (but not exclusively) found in association with Late Pleistocene/Early Holocene lake stands and outwash drainages, although the role of the lakes in the overall adaptation remains in dispute (e.g., Bedwell 1970, 1973; Davis 1978; Warren 1967; Willig 1988). Some researchers have argued that lacustrine resources were the subsistence focus, while others suggest that grasslands suitable for the grazing of Late Pleistocene megafauna would have surrounded the lakes, and that these were the primary subsistence focus of the Lake Mojave cultures. Warren (1967) postulated that the assemblages are the remains of a widespread, generalized hunting adaptation found throughout the western Great Basin. Bedwell (1970, 1973), Hester (1973), and others interpret the same assemblages as indicating a specialized exploitation of the lacustrine resources of the pluvial lakes and call the complex the “Western Pluvial Lakes Tradition.”. Jonathan O. Davis (1978) proposes a combination of these models positing a generalized hunting and collecting economy, in which lakeside sites represent the seasonal exploitation of marsh resources.

This complex represents Early Man in the Mojave Desert and exhibits similarities to sites in the western Great Basin and to the San Dieguito complex of the southern California culture area (Warren and Crabtree 1986). Alternate designations for the manifestation of the complex in the interior desert area include: Lake Mojave Culture (Campbell et al. 1937; Wallace 1962), San Dieguito Complex (Warren 1967) and Western Pluvial Lakes Tradition (Bedwell 1970; Moratto 1984). Establishing strong temporal definition of the period is also hampered by the shortage in datable sites throughout the Great Basin and Mojave Desert. Few sites dating to the early portion of the Lake Mojave period have been excavated and little direct evidence of subsistence practices has been reported. When sites do contain datable materials, artifacts are generally found on the surface with no stratigraphic separation. Unlike sites in the Southwest, no early Great Basin projectile point types have been found in undisputed association with the large mega-fauna known to have existed during that time (Warren and Crabtree 1986:184). The characterization of this period of prehistory in California is extremely complex due to the large number of competing models. For detailed discussions of the Lake Mojave period, see Moratto (1984), Warren and Crabtree (1986), and Warren’s contributions in Blair et al. (2004).

Pinto Period (Middle Archaic; ca. 7000 - 4000 B.P.)

The transition from pluvial to arid conditions at the end of the early Holocene appears to have been the most extreme environmental change in the southern Great Basin during post-Pleistocene times. Increasingly arid conditions prevailed throughout the region between about 7500 and 5000 B.P. (Hall 1985; Spaulding 1991). Woodland environments reached their approximate modern elevations and the modern desert scrub communities appeared with the migration of plant species such as creosote bush into the area.

Warren (1984) sees the cultural manifestations of this period as indicative of adaptation to increasing aridity. As the Pleistocene lakes and rivers dried up and plant and animal life changed, human populations adapted or withdrew to more desirable areas. Pinto populations appear to have withdrawn to desert margins and scattered oases, undergoing the changes as the Pinto Basin Complex assemblages gradually replace those of the preceding Lake Mojave period (Warren 1984:414). As in the Lake Mojave period, Pinto period sites are usually found in open settings in relatively well-watered locales representing isolated oases of high productivity. Artifacts dating to the Pinto period include Pinto series projectile points, leaf-shaped points and knives, domed and elongated keeled scrapers, and occasional Lake Mojave and Silver Lake points. Simple flat milling stones, occasional shallow-basined milling stones, and hand stones also occur in Pinto period sites (Warren and Crabtree 1986:184-187). Warren (1990) attributes the latter development to the exploitation of hard seeds, which is seen as part of a process of subsistence diversification brought on by increased aridity and reduced ecosystem carrying capacity. Big-game hunting probably continued as an important focus during this time, but the economic return of this activity likely decreased as artiodactyl populations declined in response to increased aridity (Warren and Crabtree 1986).

The appearance of Pinto projectile points in the archaeological record denote this period in the Mojave Desert, although their dating remains controversial (Lyneis 1982:176; Schroth 1994; Warren 1984). Warren and Crabtree (1986) and Warren (1984:414) postulate that the Pinto Complex represents a continuation and evolution from the hunting complexes of the Lake Mojave period. During this period, small, mobile populations continued to be dependent upon hunting and gathering. The use of grinding implements is expanded; however, these were poorly developed as might be expected in a newly acquired technology. This development suggests that the processing of hard seeds was becoming more important in the subsistence system, although it is believed that Pinto period people maintained a mobile subsistence strategy focused primarily on the hunting of highly ranked large game (Elston 1982).

The question of how people adjusted to environmental change is central to varying interpretations of the Pinto period (Warren 1984:410-411). Some (Donnan 1964; Kowta 1969; Wallace 1962) argue the desert was essentially abandoned between 7000 and 5000 B.P., while others (Susia 1964; Tuohy 1974; Warren 1980) argue that no evidence of an occupational hiatus of such magnitude exists in the archaeological record. The ongoing debate revolves around the definition and dating of Pinto projectile points (Schroth 1994; Warren and Crabtree 1986:184).

Gypsum Period (Late Archaic; ca. 4000 - 1500 B.P.)

Gradual improvement of the climate began by around 5000 B.P. culminating in the Neoglacial at about 3600 B.P. A period of greater effective moisture emerged in the latter part (by 3000-4000 B.P.) of the middle Holocene (for an overview of Neoglacial and Little Ice Age environments in the Mojave Desert, see Enzel et al. 1989, 1992; Spaulding 1995). At this time, the barren pans in the Mojave Sink intermittently held perennial water (Enzel et al. 1992), although it is not known if this was the case for other closed basins in the region.

The Gypsum period is characterized by population increases and broadening economic activities as technological adaptation to the changing environment evolved. Hunting continued to be an important

subsistence activity, but the increase in the occurrence and diversity of ground stone artifacts indicate that plant foods were becoming a more important subsistence item. The reduction in the size of projectile points about 1350 B.P. marks the introduction of the bow and arrow (Bettinger and Eerkins 1999), increasing the efficiency of hunting and possibly indicating a shift from larger to smaller game. Perhaps as a result of these new adaptive mechanisms, the increase in aridity during the late Gypsum period (after ca. 2500 B.P.) seems to have had relatively little consequence on the distribution and increase in human populations (Warren 1984:418-420; Warren and Crabtree 1986:189).

The use of rock shelters appears to have increased at this time although the occupation of open sites continues. Base camps with extensive midden development are a prominent site type in well-watered valleys and near concentrated subsistence resources (Warren and Crabtree 1986). Additionally, several types of special purpose sites in upland settings begin to appear during this period. Considerable evidence is present indicating increased contact with the California coast and the Southwest, and the presence of split-twig figurines and zoomorphic petroglyphs, thought to date to this period, suggest a rich ritual life was present (Fowler and Madsen 1986). Evidence of this increased ritual life is clearly seen in the archaeological record at Newberry Cave (Davis and Smith 1981), where split-twig figurines, ritual bows, arrows, pictographs, and what was interpreted as a wand were recovered supporting what was interpreted as ritual hunting magic.

Gypsum period artifact assemblages are characterized by medium- to large-stemmed and notched projectile points (i.e., Elko series, Humboldt Concave Base, and Gypsum types). The assemblages also include rectangular-based knives, flake scrapers, infrequently large scraper planes, choppers, and hammer stones. Milling equipment becomes more common and the mortar and pestle appear for the first time.

Sites dated to the Gypsum period are well represented in the mountains and in adjoining areas toward the coast. The Siphon site in Summit Valley, characterized by Sutton et al. (1993) as a middle to late Millingstone horizon base camp, has been dated to about 1550 B.C. Other sites in the area from this period include those at Yucaipa (Grenda 1998) and at Prado Basin (Grenda 1995). In general, the Gypsum period was a time of intensified settlement and exploitation of the desert valley floor and surrounding mountains.

Saratoga Springs Period (ca. 1500 - 750 B.P.)

During the Saratoga Springs period, marked regional diversification in artifact and site types is evidenced throughout the region (Warren and Crabtree 1986). The primary projectile point types of the southern Mojave Desert—and by extension, the San Bernardino Mountains—are Cottonwood and Desert Side-notched points. The Rose Spring types common to the north are rarer in the San Bernardino Mountains but have found around Baldwin Lake, while Eastgate and Rose Spring points began to dominate assemblages in other parts of the Mojave Desert and southern Great Basin (Lyneis 1982). These regional variations might have been the result of intensified contact with neighboring groups along the coast, in the mountains, and in the southwest. Evidence from the Oro Grande site on the Mojave River below the northern slopes of the San Bernardino Mountains indicates trade with coastal groups during this period and a more structured settlement hierarchy centered on large village sites (Rector et al. 1983). Cultural developments south of the Mojave River and Providence Mountains diverge from those in the northern area during this period, reflecting influence from Hakataya developments along the lower Colorado.

Ceramics were likely introduced into the region during this period, though evidence is scarce. Lower Colorado Buff Ware and Tizon Brown Ware ceramics are often associated with Cottonwood and Desert Side-notched points and likely date from the very end of the Saratoga Springs period and into protohistoric times. Unlike some communities farther to the north who were using Anasazi-inspired pottery as early as A.D. 500 (Warren 1984:421–422), the southern desert and mountain groups seem to have concentrated on contacts with coastal communities. For example, marine shell beads are much more

common at Saratoga Springs period sites, suggesting trade with the southern California coast, probably along the Mojave River valley route later known as the Mojave Trail (Warren 1984).

Evidence for Ancestral Puebloan influence or occupation is limited to the occurrence of pottery, which has been found as far west as the Halloran Spring (Blair 1985; Blair and Winslow 2004; Leonard and Drover 1980; Rogers 1929; Warren 1980) and the Cronise Basin in California (Larson 1981; Rogers 1929). It is unclear whether the pottery was left by small foraging or hunting parties (Berry 1974:83-84; Fowler and Madsen 1986:180; James 1986:114-115; Rafferty 1984:30-35; Shutler 1961:7; Warren and Crabtree 1986:191), the result of Ancestral Puebloan people working the turquoise mines near Halloran Springs (Blair 1985:2-4; Blair and Winslow 2004; Leonard and Drover 1980:251; Rogers 1929:12-13; Warren 1980:81-84), or if it was being traded along the Mohave trading route along with shells, obsidian and salt (Harrington 1927:238-239; Heizer and Treganza 1944; Hughes and Bennyhoff 1986; Morrissey 1968; Pogue 1915:46-51; Ruby 1970; Shutler 1961:58-66). Overall, the nature of the Ancestral Puebloan presence in the Mojave Desert is poorly understood at this time and warrants future research. In contrast, a strong Ancestral Puebloan influence is seen in the northeastern Mojave, where this horticultural people (termed the Lowland Virgin Branch Anasazi) resided in residential communities along the Muddy and lower Virgin rivers in southeastern Nevada and adjacent portions of Utah and Arizona (Fowler and Madsen 1986:175-181; Lyneis 1982, 1995; Lyneis et al. 1978:178-179; Warren and Crabtree 1986:191; Winslow 2003a, 2003b).

In the remainder of the Mojave Desert region, sites of this period seem to exhibit general continuity with the Gypsum pattern. One of the most conspicuous changes from the earlier period is the reduction in size of projectile points. Rose Spring and Cottonwood series points dominate assemblages of this period and are morphologically similar to Gypsum period points with the exception of their smaller size, and milling equipment (i.e., metates, manos, mortars and pestles) continues to be in use (Warren and Crabtree 1986).

Late in prehistory (approximately 1000 B.P.), it is theorized, groups of people speaking Numic languages expanded from somewhere in the Death Valley area across the Great Basin. The Numic Expansion hypothesis gained widespread support in the years following its introduction by Sydney Lamb in 1958 (Lamb 1958). Bettinger and Baumhoff (1982:485) believe that the Numa were able to displace the previous inhabitants because of low-cost adaptive strategies oriented around the exploitation of diverse plant resources. This hypothesis is supported by similarities in artifact types and glottochronological theory advanced by Lamb (1958:99). Young and Bettinger (1992:85), supporting Bettinger and Baumhoff (1982), propose that a competitive interaction existed between the Numic and pre-Numic groups in the Great Basin. In recent years, however, the hypothesis has been challenged and remains controversial.

Protohistoric Period (750 B.P. to Contact)

The Protohistoric era, a transitional period between the prehistoric and the historic/ethnohistoric, dates from ca. 750 B.P. and continues until first contact with Euro-Americans (Warren 1980; Warren and Crabtree 1986). Cultural developments established earlier during the Saratoga Springs period continue with some modifications. Numerous sites dating to this most recent period of prehistory are located along the Mojave River (Altschul et al. 1989; Schneider 1988; Smith 1963), in the San Bernardino Mountains (Simpson et al. 1972; White and Reeder 1970), and in the inland valleys to the south of the mountains (Grenda 1998). Diagnostic artifacts for this period are Desert Side-notched points and various poorly defined types of brown ware pottery. Most archaeologists agree that trade along the Mojave Trail was steady throughout this period, accounting for much of the coastal and Colorado River influences in the San Bernardino Mountains (Warren 1984).

Regional diversity continued during this period (Warren and Crabtree 1986:191). South of the Mojave River, the influence of the Yuman-speaking Hakataya continued. It is clear that by around 1,400 years ago, Hakatayan groups occupied a wide area in western Arizona, southeastern California, and southern

Nevada (Schroeder 1979). The Hakataya were centered primarily on the lower Colorado River, however, and their assemblages, characterized by brown, buff, and red-on-buff pottery, and Desert Side-notched and Cottonwood Triangular points, are found along the length of the Mojave River to the Mojave Sinks (Drover 1979; Rogers 1929; Smith 1963). These ceramics, along with the continued use of coastal artifacts such as shell beads, suggest fairly long-distance trade contacts and possibly more extensive seasonal rounds.

North of the Mojave River, the Saratoga Springs artifact assemblage continued, with the addition of Desert Side-notched and Cottonwood Triangular points and Great Basin Brown Ware pottery. Also present in these assemblages are steatite beads, large triangular knives, unshaped manos and milling stones, mortars and pestles, incised stones, slate pendants, and shell beads (Warren and Crabtree 1986). Bettinger (1975, 1976, 1977) attributes the beginning of regular pinyon exploitation to this period, as shown by the appearance of camps in the pinyon-juniper woodland (Warren 1984:424-427; Warren and Crabtree 1986:191-192). Warren and Crabtree (1986:191-192) note that the initial occurrence of this assemblage is linked with the ancestors of the historic Southern Paiute and is roughly contemporaneous with the terminal date for the Ancestral Puebloan occupation of the region. Virgin Anasazi development and influence had been curtailed in the eastern Mojave Desert by the Protohistoric period (Warren 1984:427). Occupation by the hunter-gatherer groups present earlier, however, appears to have continued relatively unchanged.

Ethnohistoric Background

The major ethnographic group associated with the Project area was the Serrano (Bean and Smith 1978; Benedict 1924; Kroeber 1925:611-619; Strong 1929:5-35). The following summary is closely drawn from a recent ethnography by Lerch and Ciolek-Torrello (2007). Details concerning other aspects of Serrano culture, such as social organization and religion, may be found in a number of sources, including Benedict (1924), Gifford (1918), Kroeber (1907, 1925), Strong (1929), Bean and Smith (1978) and Bean et al. (1981). The Serrano were so called by the Spanish because they lived in and around the San Bernardino Mountains (*serrano*, from sierra, means “mountain dweller” in Spanish). The Serrano’s own general name for themselves was *Takhtam*, or “people,” although most individuals were identified by the name of their particular clan or village, and these names are frequently referred to as “tribes.”

The Serrano language is part of the Takic subfamily of the larger Uto-Aztecan language family (Ergle 1999; Moratto 1984:534), which includes a wide variety of language groups extending as far south as the Basin of Mexico. Closer to home, the culture groups neighboring the Serrano to the south of the San Bernardino Mountains—the Gabrielino, Luiseño, and Cahuilla—were also Takic-language speakers. The Serrano appear to have been most closely linguistically aligned with the Cahuilla people, the easternmost of the three. In the Mojave Desert, to the west, north, and east, were the Kawaiisu, Panamint, and Chemehuevi, who spoke Numic languages, another subfamily of the Uto-Aztecan language family. Although these language group names are often understood as some sort of tribal identity reflecting politically unified groups, this was clearly not the case. Designations such as Serrano and Chemehuevi are purely linguistic labels that, when applied to a geographic region, simply refer to the total territory inhabited by a number of independent bands who spoke a common language. Very often, significant cultural interactions crosscut language groups as a result of topography or other factors. The Serrano, in particular, seem to have maintained close ties with peoples on both sides of the mountains, regardless of linguistic affiliation.

The Serrano, and many neighboring language groups, were organized into independent but interconnected village communities. Each of these villages consisted of one or more patrilineal clans that belonged to one of two exogamous moieties, named coyote or wildcat. The clan-based villages and the larger moiety groups maintained complex ceremonial relationships with one another (Gifford 1918; Strong 1929).

Frequently, a number of communities would combine to celebrate important festivals, harvest cycles, and other ceremonial events, occasionally inviting distant, linguistically unrelated groups.

Prior to European contact, the Serrano were hunters and gatherers who exploited a wide variety of resources from the mountains, the desert, and the Mojave River, including both large and small game, as well as numerous plant resources. Large game—such as deer, mountain sheep, and pronghorn—was hunted with bow and arrow, and smaller animals such as rabbits, rodents, and reptiles were taken with throwing sticks, nets, and snares. Acorns, pinyon nuts, and mesquite beans were among the staple foods, which were seasonally supplemented by chia and ricegrass seeds, roots, tubers, and various fresh greens (Bean and Smith 1978; Lerch 2002).

The presence of a perennial water source was the determining factor in the nature, duration, and distribution of Serrano villages (Benedict 1924:368). Most Serrano village-hamlets "were in the foothill Upper Sonoran life-zone while a few were out on the desert floor (near permanent water sources) or in the forest Transition zone" (Bean and Smith 1978:570). Small villages were more common, although there were larger villages in the Summit Valley and the Cajon Pass. Small special purpose sites, such as temporary camps, food processing stations, and lithic procurement areas, were located as needed. The Serrano who inhabited the San Bernardino Mountains would inhabit the milder areas of Apple Valley and Lucerne Valley during the winter and the area in and around Baldwin Lake during the summer.

In the early literature, there are only occasional references to the Project study area and the Native Americans who once lived there (Beattie and Beattie 1951:421; Brown and Boyd 1922:21-25; Pierson 1970:110-111), although contact with Europeans may have occurred as early as 1771. By 1806, the Serrano were recruited into the mission systems and most of them were removed from their homelands to the missions (Beattie and Beattie 1939:366). Missionization led to the loss of their native lifeways; although, northeast of the San Gorgonio Pass, Serrano culture survived.

By 1975, most Serrano lived on two southern California reservations (Morongo and San Manuel), where with other native Californians, they participated in ceremonial and political affairs on a pan-reservation. According to Bean and Smith (1978:543), at the time of the writing, only slightly over 100 people claimed Serrano descent, reduced from a pre-contact figure between 1,500 (Kroeber 1925:617) and 2,500 (Bean 1962-1972), and even fewer speak their native language; however, all recall with pride their history. Ethnic identity is strong and they remain a readily identifiable cultural entity.

Brief History of Apple Valley

The following brief overview of the history of Apple Valley is adapted from O'Rourke (2013), Lovato (2021), and information available on the Town of Apple Valley's website (Town of Apple Valley 2025).

The earliest recorded European to establish a long-term presence in the Valley was Father Francisco Garcés, who was part of the Spanish missionary effort in that region and who established a trail through the Colorado River in Apple Valley. The Paiute later migrated into the Valley in the late 1800s, a period during which trapping and gold prospecting boomed, bringing many travelers into the area. During the height of westward expansion, settler Silas Cox built the first cabin in the Valley in 1860, and the first road was established in 1861 (Town of Apple Valley 2025).

The origin of Apple Valley's name is disputed, though most sources point to it as a reference to either the Appleton Land Company which had a prominent presence there in the early 1900s, or to the many apple orchards that grew there during the 1920s (Town of Apple Valley 2025). The apple industry however only lasted until the 1940s- by when the Great Depression, a devastating tree fungus, the high cost of water used for irrigation, and the advent of World War II drove the orchards to ruin (Town of Apple Valley 2025). With agriculture no longer being viable, Apple Valley landowners turned to operating guest

and dude ranches. While cattle ranches and health farms had existed prior to this, many of them advertising the health benefits of a dry desert climate, the demand for a retreat from busy city life skyrocketed among those who returned after the end of World War I (Lovato 2021). Guest ranches offered a wide variety of western, country-themed getaway experiences appealing to customers ranging from the union working class to Hollywood celebrities (Town of Apple Valley 2025). One of the most famous of these places was the Murray Overall Wearing Dude Ranch, which opened in the 1920s as the first dude ranch to welcome Black customers (Lovato 2021).

In 1946, Long Beach entrepreneurs Newton T. Bass and B.J. "Bud" Westlund, considered the modern founders of Apple Valley, established the Apple Valley Ranchos Land Co (Lovato 2021). From the town's inception until Bass and Westlund's arrival, Apple Valley had operated as a rural, agrarian community involved primarily in agriculture, mining, railroad work, and cattle and guest ranches. Under their efforts to grow the town into what they marketed as "The Golden Land of Apple Valley," they transformed the ranching town into a residential community that catered to a more country-style way of life (Lovato 2021; Town of Apple Valley 2025). The first retail building, Valley Building and Materials, was erected in 1946, followed by the Double R Tradin' Post in 1947, and amenities such as banks, churches, dance halls, and restaurants soon followed (O'Rourke 2013: Lovato 2021). The name of Apple Valley was officially recognized when the Apple Valley Post Office was established in 1949, and the town was finally incorporated on November 28, 1988 (Town of Apple Valley 2025).

Study Methods

Methods used to assess the presence of and potential for cultural resources within the survey/study area included a search of existing records and a pedestrian field survey. The records search was conducted at the SCCIC and encompassed the study area itself and a radius of 1 mi. surrounding it.

Prior to the field survey, historic aerials and historic topographic maps were also reviewed on Historicaerials.com to identify potential historic features or structures that might be encountered during the field survey.

The field survey was conducted on December 20, 2024, by Senior Archaeologist Joakim Lamoy and Associate Archaeologist Teresa Tran. Field methods consisted of intensive pedestrian survey of the proposed locations of Project-related ground disturbance.

Study Results

Records Search Results

The records search conducted at the SCCIC identified 10 previous cultural resource studies that had been conducted within a 1-mi. radius of the survey/study area (Table 1), none of which include the study parcels.

Table 1. Previous Cultural Resources Reports within 1-mi. Records Search Radius

Report No. (SB-)	Year	Author(s)/Affiliation	Title
04804	2006	McKenna, Jeanette A./McKenna et al.	Results of Phase I Cultural Resources Investigation for the Central & Highway 18, LLC Project Area, Approx. 120 Acres in Apple Valley, San Bernardino County, CA
05563	2007	Jordan, Stacey C./Jones & Stokes	Archaeological Survey Report for Southern California Edison Company Apple Valley Storage Overhead Removal Project on the Lakota 12 kV Circuit, San

Report No. (SB-)	Year	Author(s)/Affiliation	Title
			Bernardino County, CA (WO#6473-7214, AI#6-7210)
05565	2006	Budinger, Fred E., Jr./Tetra Tech	Proposed Wireless Device Monopole and Associated Equipment; Tonikan Site, 22400 Headquarters Dr., Apple Valley, California, 92307
06157	2008	Aislin-Kay, Marnie/Michael Brandman Associates	Cultural Resource Records Search and Site Visit Results for T-Mobile Facility Candidate IE25530C (GM Towing), 13579 Nomwaket Road, Apple Valley, San Bernardino County, CA
06639	2010	Bai, Tang., T. Jacquemain, P. Ballester, & L.H. Shaker/CRM Tech	Identification and Evaluation of Historic Properties: Nanticoke Pump Station Bypass Sewer Project, Town of Apple Valley, San Bernardino County, CA
06776	2010	Mirro, Michael, John. J. Eddy, and Josh Smallwood/Applied Earthworks, Inc.	Phase I Cultural Resources Investigation for the Sunlight Partners Solar Project: NVNN 8135 10± Acres for APN 439-281-35, Town of Apple Valley, San Bernardino County, CA
07135	2011	Heidelberg, Kurt, and Gabrielle Duff/Inland Environmental Associates	Archaeological Survey Report for Southern California Edison's Pole Replacement Projects for Six Deteriorated Poles Near Victorville and Barstow (WO# 6073-4800, 1-4842 & 1-4843)
07136	2011	Schmidt, James J./Compass Rose Archaeological Inc.	Lakota, Cochise and Kenworth 12x1 Deteriorated Pole Replacement Project, San Bernardino County, CA
07841	2013	LaForge, Travis B., and Dina M. Bazzill/Environmental Corporation of America	Archaeological Assessment TCNS ID #100810 Proposed 100-Foot Overall Height Monopine Telecommunications Structure Within an Approximate 50-Foot (15-Meter By 15-Meter) Lease Area, Capital Telecom Site – Apple Valley, CA (Manhasset Road) 13625 Manhasset Road, Apple Valley, San Bernardino County, CA
08111	2013	Brunzell, David/BCR Consulting	Cultural Resources Assessment: Assessor Parcel Number 0439-022-65, Town of Apple Valley, San Bernardino County, California

A total of three cultural resources have been previously recorded within the 1-mi. records search radius (Table 2). None of these resources are within the current survey/study area. All are historic in age and consist of a trash scatter located 0.3 mi. to the south-southwest, a road segment 0.7 mi. to the southeast, and one standing commercial structure approximately 0.75 mi. to the southwest.

Table 2. Previously Recorded Cultural Resources within the 1-mi. Records Search Radius

Primary # (P-36-)	Trinomial (CA-SBR-)	Date / Recorded by	Site Type	Description	Attribute Codes*
012189	12181H	2005 (Brunzell, LSA); 2012 (M. O'Neill, Pacific Legacy); 2013 (A. Bean and A. Elzinga, SWCA); 2015 (C. Chasteen, Applied Earthworks); 2015 (P. B. Stanton, SRI); 2017 (S. Andrews, ASM)	Historic	40-m segment of SR-18, a 117-mi., two-lane undivided conventional highway constructed ca. 1920; segment recorded within search area consists of a 6-x-4-ft. café/store billboard painted onto a boulder located by the road, along with a historic 80-x-85-ft. locus containing glass fragments, cans, metal artifacts, and ceramic fragments	AH4; AH7; AH16; HP37

Primary # (P-36-)	Trinomial (CA-SBR-)	Date / Recorded by	Site Type	Description	Attribute Codes*
029693	29693H	2016 (N. Gallardo and B. Kerridge)	Historic	Building debris including bricks, glass shards, and lumber and concrete fragments, as well as food and beverage cans scattered over a 280-x-480-ft. area	AH4
033187	-	2018 (S. Boites)	Historic	Concrete historic automotive garage built in 1948 that was later turned into a sign shop and trailer part store	HP6; HP46

*AH4. Privies/dumps/trash scatters; AH7. Road; AH16. Other; HP6. 1-3 story commercial building; HP37. Highway/trail; HP46. Walls/gates/fences

Historic Image Review

Historic aerials from 1952, 1959, 1968, 1969, 1984, 1995, 2005, 2009, 2010, 2012, 2014, 2016, 2018, 2020, and 2022 were analyzed on historicaerials.com, as were historic topographic maps dated 1957, 1960, 1968, 1974, 1980, 1987, 1993, 2012, 2015, 2018, and 2021.

The survey/study area remains entirely undeveloped throughout all available aerials from 1952 to 2022. The current Central Road on the western border of the parcel is visible as a defined unpaved road while the current Esaws Avenue and an unnamed east-to-northwest trending dirt trail are both present as informal dirt trails in the 1952 aerial. There is farmland to the northwest and the southwest and a few structures resembling a homestead to the west, northeast, and southeast. Between the 1952 and 1959 aerials, Central Road is paved and Esaws Avenue is developed into a formal road, and between the 1969 and 1984 aerials, a north-south dirt trail adjacent to the east side of Central Road appears. The 1974 topographic map shows divisions that reflect much of how the land would later be used when compared with 2022 aerials. The previously mentioned structures continue to be built up until 1995, when the western homestead disappears and three cul-de-sacs appear to the north of the project parcel adjacent to the northeast homestead. The farmland to the northwest is also redeveloped into a residential neighborhood sometime between the 1984 and 1995 aerials. Between 1995 and 2005, the Granite Hills High School is constructed, resulting in the destruction of the homestead to the southeast, and two more dirt roads running from the northwest of the parcel to the southeast appear. Esaws Avenue is also paved during this period. The final major development in the area occurs between the 2005 and 2009 aerials, when the empty parcel to the immediate west of the project area is turned into a neighborhood with several residential streets.

Pedestrian Survey Results

The survey/study area covers an approximately 0.25 mi.-x-0.25-mi., 40-acre area of vacant desert land located immediately west of Granite Hills HS and northeast of the intersection of Central Road and Esaws Avenue. The survey/study area encompasses six parcels, APN 0439-012-19-0000 through 0439-012-24-0000, flanked on the east by Granite Hills HS, by residential buildings and single-family homes to the west along Central Road, and by undeveloped desert land to the north as well as south across Esaws Avenue. All exposed ground surface was carefully examined; no cultural resources were encountered within the survey/study area.

Conclusion

No prehistoric or historic cultural resources were identified within the current study/survey area as a result of the records search and pedestrian survey. As such, no historical resources that would require further consideration as defined under CEQA were identified within the survey/study area.

However, if any cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt, and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology (NPS 2009) should be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

In addition, the discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the NAHC, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Should you have any questions regarding this study, please do not hesitate to contact me.

Respectfully submitted,

Sherri Andrews, M.A., RPA
Senior Archaeologist

Attachments

Attachment A. MAPS AND FIGURES
- Figure 1. Project vicinity map.
- Figure 2. Survey/study area location on USGS Apple Valley North, CA 7.5-minute topographic map.
- Figure 3. Survey/study area projected on aerial image.
- Figures 4-7. Overview photos.

Attachment B. SCCIC RECORDS SEARCH SUMMARY TABLES
- Table 1: SCCIC records search summary table, Reports
- Table 2: SCCIC records search summary table, Resources

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ATTACHMENT A
Maps and Photos



Figure 1. Project vicinity map.

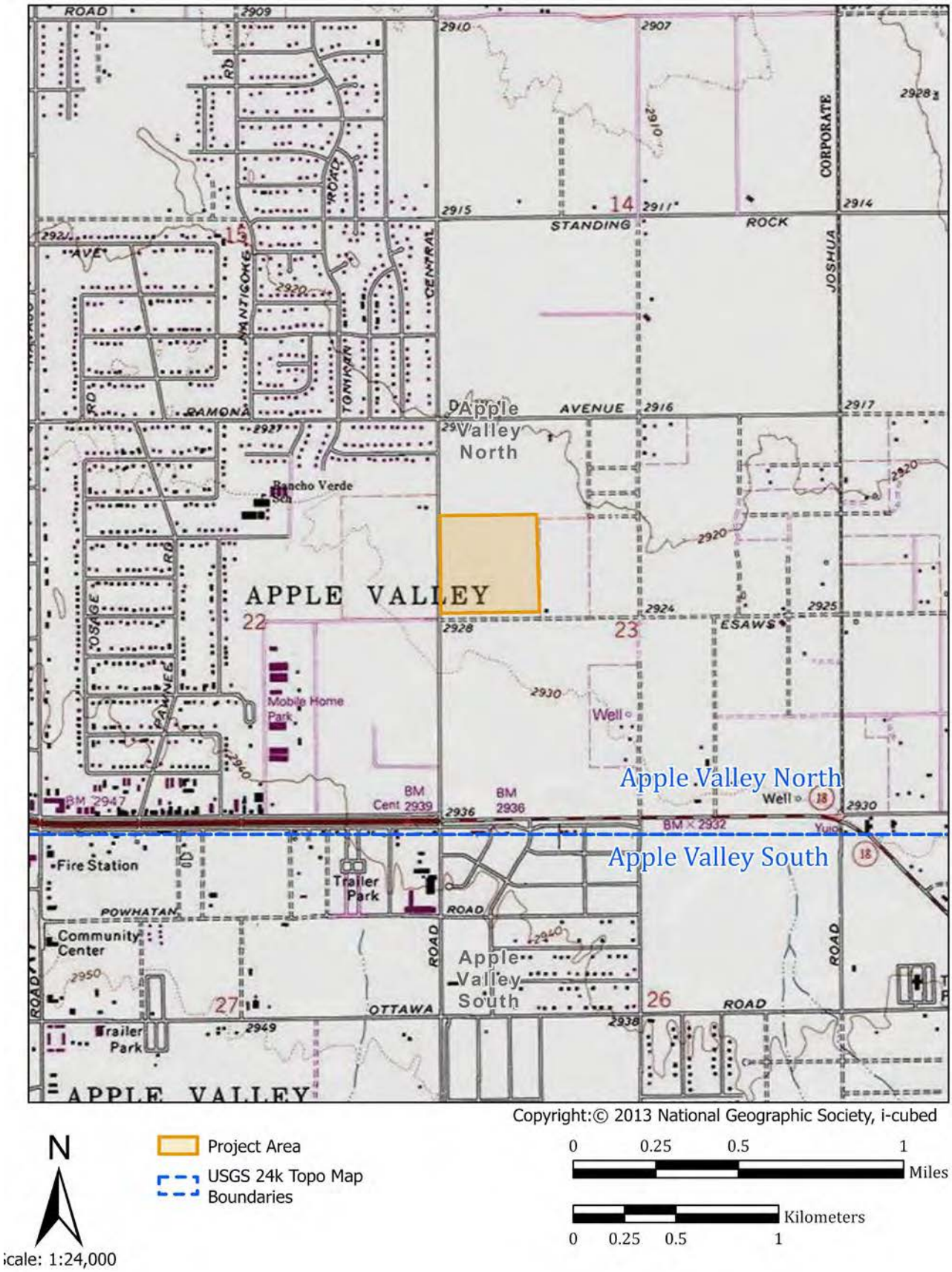


Figure 2. Survey/study area location on USGS Apple Valley North, CA 7.5-minute topographic map.

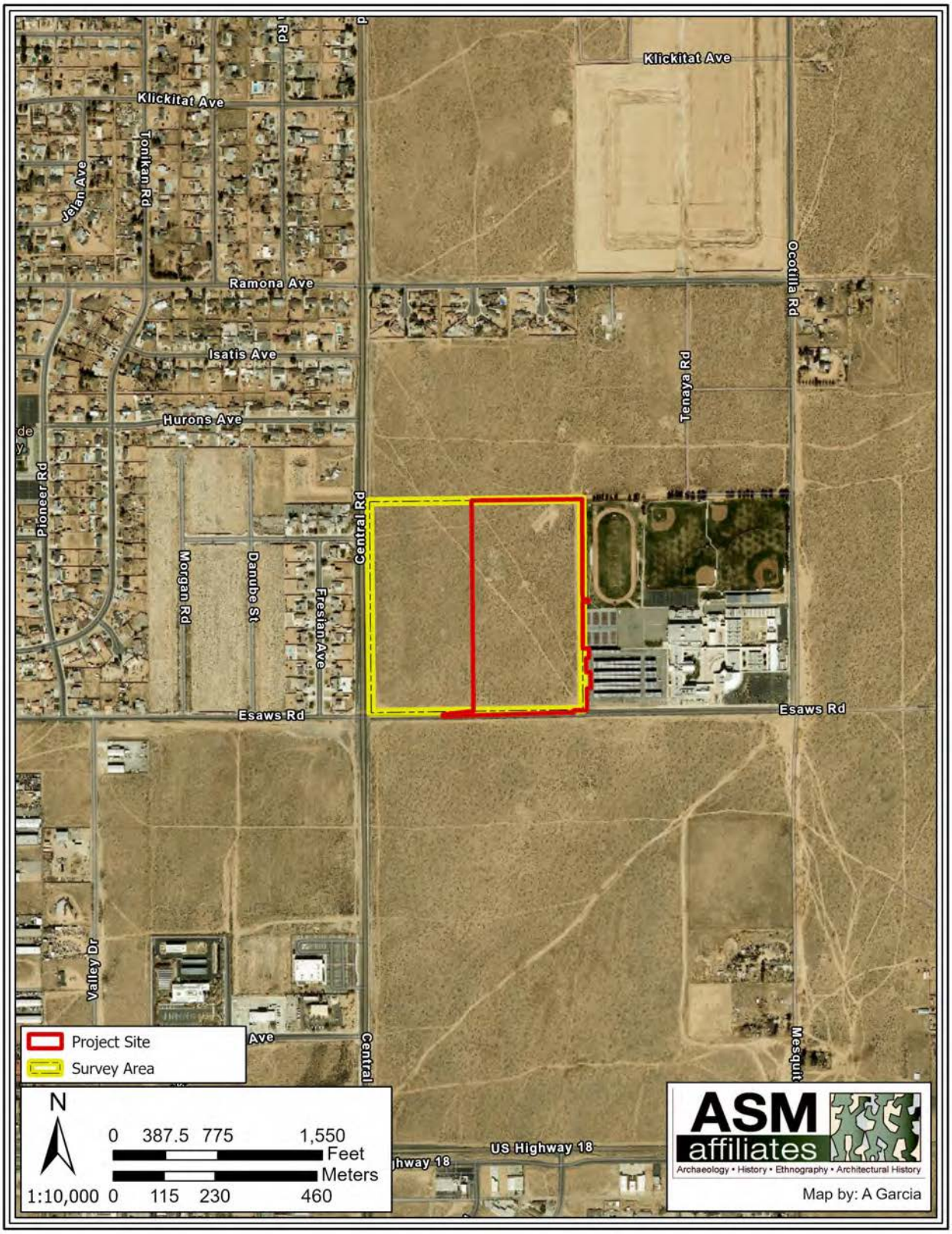


Figure 3. Survey/study area projected on aerial image.



Figure 4. Overview from southeast corner.



Figure 5. Overview from northeast corner.



Figure 6. Overview from northwest corner.



Figure 7. Overview from southwest corner.

ATTACHMENT B
SCCIC Summary Tables

Table 1: SCCIC Summary Table, Reports

ReportNum	DocAddlCitLetter	Status	OtherIDs	Xrefs	Authors	CitYear	CitMonth	CitTitle	CitPublisher	CitPages	CitMaps	ReportType	InventorySize	InventoryDisclosure	InventoryCollection	InventoryNotes	Resources	ResourceCount	HasInformals	Counties	Maps	Address	PLSS
SB-04804					McKenna, Jeanette	2008		Results of Phase I Cultural Resources Investigation for the Central 6 Highway 18, LLC Project Area, Approx. 120 Acres in Apple Valley, San Bernardino County, CA	McKenna et al.			Archaeological, Field study	120 ac	Not for publication	No			0	No	San Bernardino	APPLE VALLEY NORTH		
SB-05563					Jordan, Stacey C.	2007		Archaeological Survey Report for Southern California Edison Company Apple Valley Storage Overhead Removal Project on the Lakota 12 kV Circuit, San Bernardino County, CA (WO#6473-7214, AM6-7210)	Jones & Stokes	19		Archaeological, Field study	2.97 ac	Not for publication	No			0	No	San Bernardino	APPLE VALLEY NORTH		
SB-06569					Budinger, Fred E., Jr.	2009		Proposed Wireless Device Monopole and Associated Equipment: Tomikan Site; 22400 Headquarters Dr. Apple Valley, California, 92307	Tetra Tech	117		Archaeological, Field study	0.5 ac	Not for publication	No			0	No	San Bernardino	APPLE VALLEY NORTH		
SB-06157					Arslin-Kay, Marnie	2008		Cultural Resource Records Search and Site Visit Results for T-Mobile Facility Candidate IE25530C (GM Towing), 13570 Nomwaket Road, Apple Valley, San Bernardino County, CA	Michael Brandman Associates			Archaeological, Field study	0.7 ac	Not for publication	No			0	No	San Bernardino	APPLE VALLEY SOUTH		
SB-06639					Bai Tang., T. Jacquemain, P. Ballester, & L.H. Shaker	2010		Identification and Evaluation of Historic Properties: Nambicka Pump Station Bypass Sewer Project, Town of Apple Valley, San Bernardino County, CA.	CRM Tech			Archaeological, Field study	51.4 ac	Not for publication	No			0	No	San Bernardino	APPLE VALLEY NORTH		
SB-06776					Mero, Michael, John J. Eddy, and Josh Smallwood	2010		Phase I Cultural Resources Investigation for the Sunlight Partners Solar Project, APNs 3135-101-Various for APN 439-281-35, Town of Apple Valley, San Bernardino County, CA	Applied Earthworks, Inc.			Archaeological, Field study	22.8 ac	Not for publication	No			0	No	San Bernardino	APPLE VALLEY NORTH		
SB-07135					Heidelberg, Kurt and Gabrielle Duff	2011		Archaeological Survey Report for Southern California Edison's Pole Replacement Projects for Six Deteriorated Poles Near Victorville and Barstow (WO# 6023-4600, 1-4842 & 1-4843)	Inland Environmental Associates	19		Archaeological, Field study	0.7 ac	Not for publication	No			0	No	San Bernardino	APPLE VALLEY NORTH		
SB-07139					Schmidt, James J.	2011		Lakota, Cochise and Kenworth 12kV Deteriorated Pole Replacement Project, San Bernardino County, CA	Compass Rose Archaeological Inc			Archaeological, Field study	0.5 ac	Not for publication	No			0	No	San Bernardino	APPLE VALLEY NORTH		
SB-07841					LaForge, Travis B. and Dina M. Bacalli	2013		Archaeological Assessment TCNS ID #100810 Proposed 100-Foot Overall Height Monopine Telecommunication Structure Within an Approximate 50-Foot (15-Meter By 15-Meter) Lease Area, Capital Telecom Site – Apple Valley, CA (Manhasset Road) 13625 Manhasset Road, Apple Valley, San Bernardino County, CA	Environmental Corporation of America			Archaeological, Field study	0.74 ac	Not for publication	No			0	No	San Bernardino	APPLE VALLEY SOUTH		
SB-08111					Binsted, David	2013		Cultural Resources Assessment: Assessor Parcel Number 0439-022-65, Town of Apple Valley, San Bernardino County, California	BCR Consulting	27		Archaeological, Field study	38 ac	Not for publication	No			0	No	San Bernardino	APPLE VALLEY NORTH		

Table 2: SCCIC Summary Table, Resources

PrimaryString	TrinomialString	ResourceName	Status	OtherIDs	Locus	ResType	Age	InfoClass	Attribs	ResourceRestrictions	ResourceCollected	Accessionids	CollectionsFound	ResourceNotes	RecordingEvents	Reports	CountyName	Maps	Address	PLSS	UTM
P-36-012499	CA-SBR-(redacted)					Site	Historic	Survey	AH04, AH07, AT19, EP37	Not for publication	No				2005 (Blumel); 2012 (M. O'Neill); 2013 (A. Bian and A. Elzinga); 2015 (C. Chesteen); 2016 (P. R. Stanton); 2017 (S. Andrews)		San Bernardino	APPLE VALLEY NORTH			
P-36-029680	CA-SBR-(redacted)					Site	Historic	Survey	AH04	Not for publication	No				2016 (N. Gallardo and E. Kennige)		San Bernardino	APPLE VALLEY NORTH			
P-36-033187						Site	Historic	Survey	HP06, HP46	Not for publication	No				2018 (S. Botts)		San Bernardino	APPLE VALLEY NORTH			

Appendix D Phase I Environmental Site Assessment

Appendix

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padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PHASE I ENVIRONMENTAL SITE ASSESSMENT

NEW ATHLETICS COMPLEX
FOR GRANITE HILLS HIGH SCHOOL
APPLE VALLEY, SAN BERNARDINO COUNTY, CALIFORNIA



Prepared for:

PlaceWorks on behalf of
Apple Valley Unified School District

DECEMBER 2024

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

December 30, 2024
Project Number: 2301-4811

Dwayne Mears, Principal
PlaceWorks
3 MacArthur Place, Suite 1100
Santa Ana, California 92707

Subject: Phase I Environmental Site Assessment Report for a New Athletics Complex for Granite Hills High School, Located in Apple Valley, San Bernardino County, California

Dear Mr. Mears,

Padre Associates, Inc. (Padre) at the request of PlaceWorks and on behalf of Apple Valley Unified School District has prepared this Phase I Environmental Site Assessment (ESA) report for a new athletics complex located adjacent to Granite Hills High School. The Subject Property is located northeast of the intersection of Central Road and Esaws Avenue in Apple Valley, San Bernardino County, California.

The Phase I ESA was performed in general accordance with the American Society for testing and Materials (ASTM) Standard Practice Designation E 1527-21, and the school site selection requirements of the California Department of Toxic Substances Control (DTSC).

Padre appreciates the opportunity to provide environmental consulting services to PlaceWorks and Apple Valley Unified School District. If you have any questions or require additional information, please contact the undersigned at (916) 333-5920, Ext. 240.

Sincerely,

PADRE ASSOCIATES, INC.

Alan Churchill, P.G.
Senior Geologist

Alan J. Klein, R.E.P.A., C.P.E.S.C., QSD/QSP
Associate Senior Environmental Scientist

Cc: Jared Bradford, Associate, PlaceWorks
Malia Durand, Associate Principal, PlaceWorks

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1.0 INTRODUCTION

Padre Associates, Inc. (Padre), on behalf of PlaceWorks and Apple Valley Unified School District (USD), completed a Phase I Environmental Site Assessment (ESA) for a new athletics complex for Granite Hills High School. The Subject Property is located at the northeast intersection of Central Road and Esaws Avenue in Apple Valley, San Bernardino, County, California. The Subject Property is identified on **Plate 1 - Site Location** and **Plate 2 – Site Map.**

This ESA was prepared for use by Apple Valley USD as the owner of the Subject Property and as the User of the Phase I ESA. Padre understands that Apple Valley USD plans to construct a new athletics complex at the Subject Property, and that municipal water and sewer will be provided.

This Phase I ESA was completed in accordance with the guidelines outlined in the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments promulgated in 2013 (ASTM E1527-13) with the inclusion of general modifications and revisions outlined in the recently revised and updated ASTM Standard Practice dated November 1, 2021 (ASTM E1527-21), and the U.S. Environmental Protection Agency's All Appropriate Inquiry (AAI). The objective of the ESA was to evaluate whether current or previous land use at or adjacent to the Subject Property may have involved, or resulted in the use, storage, disposal, treatment, and/or release of hazardous substances to the environment, resulting in the determination of a Recognized Environmental Condition (REC) at the Subject Property. A REC is defined by the updated ASTM E1527-21 as *(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 Subject Property due to a release or likely release to the environment; and (3) the presence of hazardous substances or petroleum products in, on, or at the Subject Property under conditions that pose a material threat of a future release to the environment.* The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de-minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Additional key definitions from the updated ASTM E1527-21 standard include the following:

- Activity Use Limitation (AUL) - legal or physical restrictions or limitations on the use of, or access to, a site or facility: (a) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil, soil vapor, groundwater, and / or surface water on the property, or (b) 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.
- *Controlled Recognized Environmental Condition (CREC)* - 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 (i.e., activity and use limitations or other property use limitations).

- *Environment* - includes navigable waters, the waters of the contiguous zone, and the ocean waters; and any other surface water, groundwater, drinking water supply, land surface, or subsurface strata. It should be noted that this ESA did not include a survey of asbestos-containing materials (ACM) or lead-based paint (LBP), nor did it include sampling and chemical analysis of any environmental media at the Subject Property.
- *Historical Recognized Environmental Condition (HREC)* - 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). It should be noted that an HREC is not a Recognized Environmental Condition.
- *Migrate / Migration* - refers to the movement of hazardous substances or petroleum products in any form, including solid and liquid at the surface and subsurface, and vapor in the subsurface.
- *Property Use Limitation (PUL)* - 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 allow hazardous substances or petroleum products to remain in place at concentrations exceeding unrestricted use criteria.

To achieve the objective of the ESA, the following tasks were completed:

- A review of readily available geologic and hydrogeologic literature;
- Historical research including a review of available historical aerial photographs, Sanborn Fire Insurance Maps, historical city directories, and historical topographic maps relating to the Subject Property;
- A site reconnaissance of the Subject Property and adjacent properties;
- Interviews with knowledgeable persons of the Subject Property;
- Public agency records review;
- An environmental database search; and
- The preparation of this report presenting the results of the ESA.

Six appendices are included in this report. Appendix A presents the assessor's parcel map and Flood Insurance Rate Map; Appendix B presents historical aerial photographs and topographic maps; Appendix C presents photographs of the Subject Property at the time of the assessment; Appendix D presents a copy of the completed environmental questionnaire; Appendix E presents the environmental database report obtained from EDR for the Subject Property; and Appendix F presents the presents the qualifications of the environmental assessor responsible for report preparation.

2.0 ENVIRONMENTAL SETTING

The following discussion summarizes the geologic, hydrogeologic, and other relevant data pertaining to the physical setting of the Subject Property.

2.1 SITE LOCATION AND DESCRIPTION

The Subject Property is located in Section 23, Township 5 North, Range 3 West of the U.S. Geological Survey (USGS) 7½ Minute topographic series, Apple Valley North Quadrangle Map (2021). The approximate latitude and longitude near the center of the property are identified as:

- Latitude (North) 34.50989°, (34° 30' 35.60"N)
- Longitude (West) -117.17055°, (117° 10' 13.98"W)

The Subject Property consists of approximately 40-acres of vacant land, which is located adjacent and west to the existing Granite Hills High School. The Subject Property is comprised of six (6) parcels of land identified by the San Bernardino County Assessor's Office as Assessor Parcel Numbers (APNs): 0439-012-19 (9.86-ac), 0439-012-20 (4.9-ac), 0439-012-21 (4.9-ac), 0439-012-22 (10.32-ac), 0439-012-23 (5.0-ac), and 0439-012-24 (5.0-ac). A copy of the assessor's parcel map is presented in **Appendix A**.

2.2 TOPOGRAPHY

Based on a review of the USGS 7.5-minute topographic quadrangle – San Bernardino, California (1993), the Subject Property is relatively level and situated at an approximate elevation of the 2,930-feet above mean sea level (amsl). The Subject Property consists of undeveloped land covered primarily with grasses, brush, and exposed soil. Typically, rainfall would infiltrate into the exposed surface areas, and surface drainage from excessive precipitation would be expected to flow towards storm drain inlets located in adjacent streets.

2.3 GEOLOGY AND HYDROLOGY

The Subject Property is located in the southwest portion of the Mojave Desert geomorphic province of California. The Mojave Desert occupies about 25,000 square miles of southeastern California. It is landlocked, enclosed on the southwest by the San Andreas fault and the Transverse Ranges and on the north and northeast by the Garlock fault, the Tehachapi Mountains, and the Basin and Range geomorphic province. The Nevada state line and the Colorado River form the arbitrary eastern boundary, although the geomorphic province actually extends into southern Nevada and western Arizona. The San Bernardino-Riverside County line is designated as the southern boundary.

Currently, the region is dominated by broad alluviated basins that are mostly aggrading surfaces receiving non-marine continental deposits from adjacent uplands. The deposits are burying the old topography, which was more mountainous. During the late Tertiary, these mountains shed debris to the Pacific Ocean, but with the northward slip of the west side of the

San Andreas Fault and accompanying elevation of the costal ranges, drainage began entering interior basins (Norris and Webb, 1990).

According to the California Division of Mines and Geology, *Geologic Map of the San Bernardino Quadrangle, California, (1:250,000)*, revised 1998, the Subject Property is underlain by Quaternary, Holocene alluvium (undifferentiated).

According to the United States Department of Agriculture (USDA), Natural Resources Conservation Services (NRCS), Web Soil Survey of San Bernardino County, California, Mojave River Area (Websoil, 2024), the surface soil at the Subject Property consists of mostly of Helendale loamy sand (0-2 percent slopes). This soil unit consists of alluvium derived from granitic sources. A typical profile consists of loamy sand to approximately 4-inches transitioning to a sandy loam to approximately 66-inches, and then loamy sand to approximately 70 inches. A small portion (approx. 4.5 acres) at the southwest area of the Subject Property consists of Wasco sandy loam, cool (0-2 percent slopes). A typical profile of this soil unit consists of a sandy loam to approximate depths of 66 inches.

The Subject Property is located within the Upper Mojave River Valley Groundwater Basin. This basin underlies an elongate north-south valley, with the Mojave River flowing (occasionally) through the valley from the San Bernardino Mountains on the south, northward into the Middle Mojave River Valley Groundwater Basin at the town of Helendale. The two primary water-bearing units within the Mojave River Valley Basin system consist of regional Pliocene and younger alluvial fan deposits (fan unit) and of overlying Pleistocene and younger river channel and floodplain deposits, which have been called the floodplain unit, or the floodplain aquifer (DWR, Update 2020).

The depth to groundwater at the Subject Property is unknown, however review of groundwater level data for State Well No. 05N03W22J001S located approximately 1,400 feet southwest of the Subject Property indicates that groundwater in the vicinity of the Subject Property is encountered at depths greater the 100 feet bgs. The groundwater flow direction in the area of the Subject Property is anticipated to flow westerly towards the Mojave River. It should be noted that regional groundwater pumping associated with municipal and/or agricultural production activities may influence groundwater depths and flow direction at various times of the year. Depending on the proximity of nearby wells, actual groundwater depths may vary significantly from those noted.

2.4 FLOODPLAIN

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (*Community Panel Number: 06071C5845H, Effective Date: August 28, 2008),* the Subject Property is located in Zone D (Area of Undetermined Flood Hazard). A copy of the FEMA Flood Insurance Rate Map is presented in **Appendix A**.

2.5 RADON

Radon is a colorless, odorless, tasteless, and radioactive gas that is produced as a natural decay product of uranium. Because of its radioactivity, studies have shown that at elevated concentrations there is a link between radon and lung cancer. Persons living in a building with elevated radon concentrations may have an increased risk of contracting lung cancer over a period of years.

The U.S. Environmental Protection Agency (U.S. EPA) recommends that action be taken to reduce radon levels in homes if levels are 4.0 pico curies per Liter (pCi/L) or higher. Radon levels below 4.0 pCi/L still pose a certain level of risk. Sections 307 and 309 of the Indoor Radon Abatement Act of 1988 (IRAA) directed the U.S. EPA to list and identify areas of the United States with the potential for elevated indoor radon levels. The U.S. EPA's Map of Radon Zones assigns each of the 3,141 counties in the U.S. to one of three zones based on radon potential:

- Zone 1 (red) counties have a predicted average indoor radon screening level greater than 4 pCi/L (highest potential);
- Zone 2 (orange) counties have a predicted average indoor radon screening level between 2 and 4 pCi/L (moderate potential);
- Zone 3 (yellow) counties have a predicted average indoor radon screening level less than 2 pCi/L (lowest potential).

According to the U.S. EPA map of California radon zones, San Bernardino County is identified as a Zone 2 (orange) county. Zone 2 counties have a predicted average indoor radon screening level greater than 2 pCi/L and less than 4 pCi/L. According to the California Indoor Radon Test Results (updated February 2016) for Zip Code 92307, 33 radon tests were conducted with 2 sites reported to have radon levels ≥ 4 pCi/L. Therefore, the potential for radon hazard at the Subject Property is considered moderate and is dependent on site-design and building construction specifications.

2.6 OIL AND GAS WELLS

The California Geologic Energy Management Division (CalGEM) oversees the drilling, operation, maintenance, and plugging and abandonment of oil wells, natural gas wells, and geothermal wells. The CalGEM regulatory program emphasizes the wise development of oil, natural gas, and geothermal resources in the state of California through sound engineering practices that protect the environment, prevent pollution, and ensure public safety. Padre reviewed the available CalGEM online mapping system for the Subject Property at the California Department of Conservation webpage (https://www.conservation.ca.gov/calgem/). According to a review of the CalGEM online database and interactive map, there are no reported oil wells, natural gas wells, and/or geothermal wells located within a one-mile radius of the Subject Property.

2.7 NATURALLY OCCURRING ASBESTOS (NOA)

Asbestos is a naturally occurring silicate mineral of the amphibole group that has Asbestos is a naturally occurring silicate mineral of the amphibole group that has historically been utilized for a variety of purposes including fireproofing, due to its fibrous nature, which allowed it to be woven into cloth and formed into various types of construction material. Asbestos is a known carcinogen.

According to the California Department of Conservation, Division of Mines and Geology, Open-File Report 2000-19, dated August 2000, natural occurrences of asbestos are more likely to be encountered in, and immediately adjacent to, areas of ultramafic outcrops (igneous and metamorphic rocks with high iron and magnesium contents).

According to the California Division of Mines and Geology, *Geologic Map of the San Bernardino Quadrangle, California, (1:250,000)*, revised 1998, there are no exposures of potentially asbestos-bearing ultramafic or serpentinized rocks located approximately 10 miles of the Subject Property. Therefore, the potential for NOA to be present at the Subject Property from weathering and deposition of ultrabasic rock originating from outcrops is not considered a REC.

2.8 EARTHQUAKE FAULT ZONES

In 1972 the State of California passed the Alquist-Priolo Earthquake Fault Zoning Act (AP Act) to mitigate the hazard of surface faulting to structures utilized for human occupancy. The AP Act's primary purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The AP Act defines three categories of fault activity; active (demonstrated movement within the last 11,000 years), potentially active (movement within the past 11,000 to 2,000,000 years), and inactive (no movement within the past 2,000,000 years).

Since 1972 the California Geological Survey (CGS) has issued a series of 1"=2,000' scale maps delineating Earthquake Fault Zones (EFZs). Structures proposed within mapped EFZs require geologic investigations to demonstrate that the structures will not be constructed across active faults. If an active fault is identified within the boundaries of the Subject Property, the proposed structures must be set back from the EFZ, generally a distance of 50 feet on either side of the identified fault location. The CGS mapping program is ongoing, and areas not currently identified as being within an EFZ may be included at some later time.

According to the EFZ maps issued by the CGS, the Subject Property is not located within the boundaries of an EFZ, and no active faults are known to cross the Subject Property.

3.0 HISTORICAL SITE CONDITIONS

Based on a review of readily available historical information, Padre has compiled the following history of the Subject Property. The earliest documentation reviewed for site usage was an aerial photograph dated 1953 and a topographic map dated 1932. Copies of historical aerial photographs and topographic maps are presented in **Appendix B**.

3.1 HISTORICAL AERIAL PHOTOGRAPHS

Padre reviewed readily available aerial photographs of the Subject Property, and the surrounding area obtained from EDR for the years 1953, 1959, 1968, 1975, 1984, 1995, 2005, 2009, 2012, 2016, and 2020. The information is summarized below:

1953 The 1953 photograph shows the Subject Property as undeveloped land. There is a small unpaved trail running east-west across the north portion of the Subject Property. A rural residence is located southeast and adjacent to the Subject Property. There are two rural residences further out to the west and northwest; however surrounding properties are generally undeveloped.

1959 The 1959 photograph shows the Subject Property and surrounding areas similar to the 1953 photograph. Central Road is more apparent west and adjacent to the Subject Property.

1968 The 1968 photograph shows the Subject Property and surrounding areas similar to the 1959 photograph.

1975 The 1975 photograph is an infrared photograph and shows to the Subject Property and surrounding areas similar to the 1968 photograph with the exception of additional rural residences further out to the northwest.

1984 The 1984 photograph shows the Subject Property and surrounding properties similar to the similar to the 1975 photograph with the exception of additional rural residences further out to the northwest.

1995 The 1995 photograph shows the Subject Property as undeveloped land. Residential developments have been constructed further to the north and northwest.

2005 The 2005 photograph shows the Subject Property as undeveloped land. Granite Hills High School is present east and adjacent to the Subject Property along Esaws Avenue. Surrounding properties to the north, south, and west are similar to the 1995 photograph.

2009 The 2009 photograph shows the Subject Property and surrounding properties similar to the 2005 photograph with the exception of new residential development on the west side of Central Road.

2012 The 2012 photograph shows the Subject Property and surrounding properties similar to the 2009 photograph.

2016 The 2016 photograph shows the Subject Property and surrounding properties similar to the 2012 photograph.

2020 The 2020 photograph shows the Subject Property and surrounding properties similar to the 2016 photograph.

3.2 UNITED STATES GEOLOGICAL SURVEY TOPOGRAPHIC MAPS

Padre obtained historical topographic maps published by the USGS for the vicinity of the Subject Property. Historical topographic maps dated 1932, 1956/1957, 1970/1971, 1978/1980, 1993, 2012, 2015, 2018, and 2021 were reviewed. A summary of the information presented on each map is presented below.

1932 The 1932 map shows the Subject Property as undeveloped land located east and adjacent to Central Road. Surrounding properties are undeveloped. Highway 18 is located further out to the south.

1956/1957 The 1956/1957 map shows the Subject Property undeveloped land. Esaws Avenue is located south and adjacent to the Subject Property. There is a residence located near the southeast corner of the Subject Property. There are several rural residences observed in the surrounding areas. An increase in residential development is observed further out to the west.

1970/1971 The 1970/1971 map shows the Subject Property and surrounding areas similar to the 1956/1957 map. Further out to the west Apple Valley continues to be developed.

1978/1980 The 1978/1980 map shows the Subject Property and surrounding areas similar to the 1970/1971 map.

1993 The 1993 map shows the Subject Property and surrounding areas similar to the 1978/1980 map with the exception of increased residential development further out to the northwest.

2012 The 2012 map only shows roads and geographical features. The roads indicate that there is a residential development on the west side of Central Road.

2015 The 2015 map identifies the land east of the Subject Property as a school (Granite Hills High School) along Esaws Avenue. Surrounding areas are generally similar to the 2012 map.

2018 The 2018 map shows Meadow Ln. running east-west through the north portion of the Subject Property. Both the 2015 map and the 2021 map do not shows this road. Surrounding areas are similar to the 2015 map.

2021 The 2021 map shows the Subject Property as undeveloped with no road running east-west through the north portion. Surrounding areas are similar to the 2018 map.

3.3 HISTORICAL SANBORN FIRE INSURANCE MAPS

The complete Sanborn Library collection was searched by EDR for the Subject Property. According to EDR, there are no fire insurance maps covering the Subject Property.

3.4 CITY DIRECTORIES

Padre obtained an EDR City Directory Report for the Subject Property which provided Subject Property, which provided a list of physical addresses for Central Road and Esaws Avenue in Apple Valley, California 92307 for the years 1964 through 2020. Granite Hills High School first appears in the 2005 city directory at 22900 Esaws Avenue. A review of the available city directories did not identify any RECs for the Subject Property.

3.5 ENVIRONMENTAL LIENS

Padre reviewed the EDR Environmental Lien and activity use limitations (AULs) search report of available current land title records for environmental cleanup liens and other AULs such as engineering controls and institutional controls. No environmental liens or AULs were identified for the Subject Property. The Subject Property is currently owned by Apple Valley USD.

3.6 EXISTING ENVIRONMENTAL REPORTS

Padre was not provided with, nor did it identify the presence of existing environmental reports for the Subject Property.

4.0 CURRENT SITE CONDITIONS

The current site conditions were assessed to determine current activities and hazardous substances handling and storage at the Subject Property.

4.1 SITE RECONNAISSANCE

On November 25, 2024, Mr. Jerome Summerlin with Padre conducted a site reconnaissance of the Subject Property. The site reconnaissance consisted of accessing the Subject Property via Esaws Avenue, walking the Subject Property, and photographing site features and observing adjacent properties. At the time of the inspection weather conditions were mild and cloudy.

The Subject Property consists of undeveloped land covered primarily with grasses, brush, and exposed soil. Two (what appear to be) dry well/percolation test wells were observed at the northeastern portion of the Subject Property. An overhead power line was observed along the south Subject Property boundary (Esaws Avenue), and an underground natural gas pipeline marker was observed along the west Subject Property boundary (Central Road). Unpaved roads were observed along the south and east Subject Property boundaries.

No petroleum and/or chemical containers were observed, no petroleum and/or chemical stained soils or concrete/asphalt surfaces were observed, and no aboveground or indications of underground petroleum storage tanks were observed at the Subject Property. In addition, no pole-mounted or pad-mounted electrical transformers were observed on or adjacent to the Subject Property. Photographs taken during the course of the site reconnaissance are presented in **Appendix C**.

4.2 UTILITIES

Electricity will be provided to the Subject Property by Southern California Edison; natural gas will be provided by Southwest Gas Corporation; water will be provided by Liberty Utilities Apple Valley; and sewer will be provided by the Town of Apple Valley.

4.3 ASBESTOS-CONTAINING MATERIALS

Padre did not conduct a comprehensive Asbestos-Containing Materials (ACM) survey as part of this Phase I ESA. Properties with residential and/or commercial structures constructed before 1976 may potentially contain ACM. The mitigation and management of ACM is currently regulated by several federal, state, and local agencies.

There currently are no building structures located on the Subject Property, and Padre did not identify the occurrence of former building structures. Therefore, the potential for ACM from building structures/materials at the Subject Property is not considered a REC.

4.4 LEAD-BASED PAINT

Properties containing structures with paint or surface coatings, with the exception of residential structures constructed on or after January 1, 1979 or schools constructed prior to January 1, 1993, may have surfaces coated with lead-based paint. Weathering, scraping, chipping, and abrasion may result in lead to be released to and accumulate in soil around these structures. Therefore, the California Department of Toxic Substances Control (DTSC) School Property Evaluation and Cleanup Division recommends the collection of soil samples to determine if the potential presence of residual lead soil contamination poses a threat to human health and the environment.

There currently are no building structures located on the Subject Property, and Padre did not identify the occurrence of former building structures. Therefore, the potential for lead-based paint from structures/materials at the Subject Property is not considered a REC.

4.5 POLYCHLORINATED BIPHENYLS

Padre did not conduct a comprehensive polychlorinated biphenyls (PCBs) survey as part of this Phase I ESA. The federal Toxic Substances Control Act (TSCA) generally prohibited the domestic manufacturing of polychlorinated biphenyls (PCBs) after 1979; however, hydraulic fluids or dielectric insulating fluids typically found in electrical transformers, hydraulic equipment, capacitors, and similar equipment may contain PCBs if such materials have been present prior to the late 1970s. EPA regulations require that encapsulated surfaces be marked with the yellow

"Caution Contains PCBs" sticker typically used for labeling PCB Transformers (less than 500 parts per million (ppm)).

No pole-mounted or pad-mounted electrical transformers were observed on or adjacent to the Subject Property. Therefore, the potential presence of PCBs in soil at the Subject Property is not considered a REC.

4.6 TERMITICIDES

Organochlorine pesticides (OCPs) were commonly used as insecticides for termite control around structures and typically applied surficially to soil surrounding foundations and injected into the soil in an effort to isolate wood structures from termite nests. Chlordane was used in the United States from 1948 until 1988, when it was banned by the United States Environmental Protection Agency (U.S. EPA). Because of evidence of human exposure and accumulation in body fat, as well as persistence in the environment and effects on wildlife, the U.S. EPA prohibited the use of chlordane in 1988.

DTSC conducted an investigation of three proposed school sites in southern California with residential structures to evaluate the presence and prevalence of chlordane and other OCPs as a result of termiticide application. Additionally, DTSC investigated OCPs from termiticide application at residential properties proposed for school sites in various counties throughout California. The results of the study indicated that it is likely that significant concentrations of OCP residues may exist around structures with wood components built prior to January 1, 1989 and should be evaluated at school sites.

There currently are no building structures located on the Subject Property, and Padre did not identify the occurrence of former building structures. Therefore, the potential for residual OCPs in soil from direct application of termiticides is not considered a REC.

4.7 ENVIRONMENTAL QUESTIONNAIRE

A property owner environmental questionnaire was completed for the Subject Property by Mr. Matthew Schulenerg, Assistant Superintendent of Administrative Services with Apple Valley USD. According to Mr. Schulenerg, Apple Valley USD is the current property owner. APNs 0439-012-23 and -24 were acquired from Omar Baki, Trustee of the Omar and Kay Trust in August 2018; APN 0439-012-19 was acquired from CJC Holdings, LLC and Machseh, LLC in March 2020; and APNs 0439-012-20, -21, and -22 were acquired from Omni 20.12 Apple Valley LLC in March 2021.

According to Mr. Schulenerg, the Subject Property consists of vacant land . Water and sewer services will be constructed as part of the new athletics complex. There are no structures currently located on the property, and he is not aware of historic structures located at the property. Mr. Schulenerg has no knowledge of pesticide use; chemical spills; landfills and/or burn pits; or the presence of underground or aboveground fuel storage tanks at the Subject Property. In addition, Mr. Schulenerg is not aware of fill material being imported to the Subject Property. A copy of the completed environmental questionnaire is presented in **Appendix D**.

4.8 SURROUNDING PROPERTIES

The Subject Property is bordered to the north by undeveloped land, beyond which are residences; to the east by Granite Hills High School; to the south by Esaws Avenue, beyond which is undeveloped land; and to the west by Central Road beyond which is a residential development.

5.0 ENVIRONMENTAL RECORDS REVIEW

Padre contacted the regulatory agencies in the region to determine if soil and groundwater contamination is known or suspected at or near the Subject Property. Regulatory agency databases were obtained from EDR for the Subject Property and properties within one mile.

5.1 PUBLIC RECORDS REVIEW AND AGENCY CONTACTS

Padre contacted the following local agencies for information concerning environmental complaints, accidents, or spills on or in the vicinity of the Subject Property and for safety concerns related to school sites in California.

5.1.1 San Bernardino County Fire Protection District

The San Bernardino County Fire Protection District serves as the Certified Unified Program Agency (CUPA) overseeing hazardous materials use, storage, and disposal including aboveground storage tank (AST) and underground storage tank (UST) regulation within San Bernardino County. The CUPA is charged with the responsibility of conducting compliance inspections for over 8,000 regulated facilities in San Bernardino County. A review of the EDR report provided for the Subject Property indicates that the CUPA has no records for the Subject Property.

5.1.2 State Water Resources Control Board

The State Water Resources Control Board (SWRCB) maintains public information pertaining to Cleanup Program Sites (CPS) and Leaking Underground Storage Tank (LUST) sites through their online database identified as GeoTracker. The Subject Property is not identified in the GeoTracker database. In addition, no properties within a ½-mile radius of the Subject Property are identified in the GeoTracker database.

5.1.3 California Department of Toxic Substances Control

The California Department of Toxic Substances Control (DTSC) maintains the Envirostor database for known or suspected hazardous waste sites in California. The Subject Property is not identified in the Envirostor database. In addition, no properties within a 1-mile radius of the Subject Property are identified in the Envirostor database.

5.2 ENVIRONMENTAL DATABASE INFORMATION

Padre obtained environmental agency database information from EDR. The EDR report is included as **Appendix E**. The databases were reviewed to identify registrations and documented environmental incidents regarding the site and nearby properties within a one-mile radius of the Subject Property. Padre also attempted to locate unplottable sites that EDR did not locate because of incomplete or incorrect address information. The following sections summarize our findings.

5.2.1 National Priorities List - Federal Superfund

The National Priorities List is a U.S. Environmental Protection Agency (U.S. EPA) listing of private, state, and federally owned sites which have been included on the federal Superfund list for remediation.

- Neither the Subject Property nor properties located within a 1-mile radius are identified on the Nation Priorities List.

5.2.2 U.S. Superfund Enterprise Management System (SEMS)

The U.S. EPA's SEMS Listings (formerly known as CERCLIS) are a compilation of sites that have been brought to the attention of the U.S. EPA, through various means, as being possible sites of hazardous waste activity. The SEMS listings are an information database and not necessarily an action list.

- Neither the Subject Property nor properties located within a 1-mile radius are identified on the SEMS List.

5.2.3 RCRA-TSDF

The U.S. EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA-Transportation, Storage, and Disposal Facilities (TSDF) database is a compilation by the U.S. EPA of reporting facilities that transport, treat, store, or dispose of hazardous waste.

- Neither the Subject Property nor properties located within a ½-mile radius of the Subject Property are identified on the RCRA-TSDF List.

5.2.4 RCRA - LQG's

The U.S. EPA's RCRA Program identifies and tracks large quantity generators (LQG's). LQG's generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg acutely hazardous waste per month.

- Neither the Subject Property nor properties located within a ¼-mile radius of the Subject Property are identified on the RCRA-LQG's List.

5.2.5 RCRA - SQG's

The U.S. EPA's RCRA Program identifies and tracks small quantity generators (SQG's). SQG's generate between 100 kg and 1,000 kg of hazardous waste per month.

- Neither Subject Property nor properties located within a ¼-mile radius are identified on the RCRA-SQG's List.

5.2.6 Emergency Response Notification System

The Emergency Response Notification System (ERNS) contains records on releases of oil and hazardous substances reported to the U.S. EPA and National Response Center of the U.S. Coast Guard.

- The Subject Property is not identified on the ERNS List.

5.2.7 RCRA-CORRACTS Facilities

The U.S. EPA's Resource Conservation and Recovery Act (RCRA) Corrective Action Sites Listing contains information pertaining to hazardous waste treatment, storage, and disposal facilities (RCRA TSD) which have conducted, or are currently conducting, a corrective action(s) as regulated under RCRA.

- Neither the Subject Property nor properties located within a 1-mile radius of the Subject Property are identified on the RCRA-CORRACTS List.

5.2.8 CA SWF/LF

State and Tribal; landfill and/or solid waste disposal site listings. The Solid Waste Facility/Landfill facility (SWF/LF), solid waste information system (SWIS) maintains records of active, closed and inactive landfills.

- Neither the Subject Property nor properties located within a ½-mile radius are identified on the CA SWF/LF List.

5.2.9 UST

USTs are regulated under Subtitle I of RCRA and must be registered with the state department responsible for administering the UST program. In California, the State Water Resources Control Board has compiled a listing of UST sites. Active UST facilities lists are gathered from local regulatory agencies.

- Neither the Subject Property nor properties located within a ¼-mile radius are identified on the UST.

5.2.10 Historical UST

The Hazardous Substance Storage Container Database is a historical listing of UST sites and is maintained by the California State Water Resources Control Board.

- Neither the Subject Property nor properties located within a ¼-mile radius are identified on the Historical UST List.

5.2.11 CA FID UST

The California Facility Inventory Database (CA FID) UST contains a historical listing of active and inactive underground storage tank locations from the State Water Resources Control Board.

- Neither the Subject Property nor properties located within a ¼-mile radius are identified on the CA FID UST List.

5.2.12 Leaking Underground Storage Tank

The California Regional Water Quality Control Board is the agency with jurisdiction over leaking underground storage tanks (LUSTs) in the region of the site.

- Neither the Subject Property nor properties located within a ½-mile radius are identified on the LUST list.

5.2.13 AST List

The Aboveground Storage Tank (AST) lists facilities with registered aboveground petroleum storage tanks, compiled by the State Water Resources Control Board (SWRCB).

- Neither the Subject Property nor properties located within a ¼-mile radius of the Subject Property are identified on the AST List.

5.2.14 US Eng Controls

The US Engineering Controls list consists of sites with engineering controls in place that 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.

- Neither the Subject Property nor properties located within a ½-mile radius are identified on the US ENG Controls List.

5.2.15 US Inst Controls

The US Institutional Controls list consists of sites with institutional controls in place that 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 onsite. Deed restrictions are generally required as part of institutional controls.

- Neither the Subject Property nor properties located within a ½-mile radius are identified on the US INST Controls List.

5.2.16 Historic Cal-Sites

The State of California Historic Cal-Sites database contains potential or confirmed hazardous substance release properties. In 1996, the California Environmental Protection Agency reevaluated and significantly reduced the number of sites in the Cal-sites database.

- Neither the Subject Property nor properties located within a 1-mile radius of the Subject Property are identified on the Historic Cal-Sites List.

5.2.17 WMUD/SWAT

The Waste Management Unit Database System (WMUDS) is used by the State Water Resources Control Boards for program tracking and inventory of waste management units. The Solid Waste Assessment Test Program (SWAT) is a database maintained by the California Water Resources Control Board for information on the ground water monitoring of sanitary landfills.

- Neither the Subject Property nor properties located within a ½-mile radius are identified on the WMUDS/SWAT List.

5.2.18 California Hazardous Materials Incident Reporting System

The California Hazardous Materials Incident Reporting System (CHMIRS) is maintained by the California Office of Emergency Services (OES) and contains information on reported hazardous materials accidental releases or spills.

- The Subject Property is not identified on the CHMIRS List.

5.2.19 CERCLIS-NFRAP

The Comprehensive Environmental Response, Compensation, and Liability Information System - No Further Remedial Action Planned (CERCLIS-NFRAP) database is a list of sites that were removed CERCLIS in 1995. These sites may have been removed due to the following: after an initial investigation, no contamination was found; contamination was removed quickly without the need to place the site on the NPL; or the contamination was not serious enough to require Federal Superfund action or NPL consideration. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

- Neither the Subject Property nor properties located within a ½ -mile radius of the Subject Property are identified on the CERCLIS-NFRAP List.

5.2.20 Voluntary Cleanup Program

The Voluntary Cleanup Program database is maintained by the Department of Toxic Substances Control (DTSC). The VCP database contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have requested that DTSC oversee the investigation and/or cleanup activities and have agreed to provide coverage for DTSC's Costs.

- Neither the Subject Property nor properties located within a ½ -mile radius of the Subject Property are identified on the VCP List.

5.2.21 Hazardous Waste Information System

The Hazardous Waste Information System (HAZNET) database is developed from copies of hazardous waste manifests required for proper disposal of wastes and received each year by the DTSC.

- Neither the Subject Property nor any other property within a 1-mile radius is identified on the HAZNET List

5.2.22 California SLIC Program

The California SLIC (Spills, Leaks, Investigations, and Cleanup) is designed to protect and restore water quality from spills, leaks and similar discharges. The database is maintained by the State Water Resources Control Board (SWRCB).

- Neither the Subject Property nor properties located within a ½-mile radius of the Subject Property are identified on the SLIC List.

5.2.23 CERS HAZ WASTE

The California Environmental Protection Agency (CalEPA) lists sites which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA Hazardous Waste Generator programs.

- The Subject Property is not identified on the CERS HAZ WASTE List.

- One property located within a ¼-mile radius of the Subject Property is identified on the CERS HAZ WASTE List.

Granite Hills High School located east and adjacent to the Subject Property is identified to have disposed of surplus organics and animal carcasses. This violation appears to the been associated with the disposal of animal carcasses related to science classes offered at the high school. The high school is permitted through the San Bernardino County Fire Protection District, and has been issued inspection violations which appear administrative in nature. Reportedly the violations were corrected. Therefore, his property is not considered a REC.

5.2.24 ENVIROSTOR

The DTSC Site Mitigation and Brownfields Reuse Program (SMBRPs) maintain a database that identifies sites that have known contamination or sites for which there may be reasons to investigate further.

- Neither the Subject Property nor properties located within a 1-mile radius are identified on the ENVIROSTOR List.

6.0 SUMMARY AND CONCLUSIONS

Based on the results of the scope of services performed for this Phase I ESA, Padre has prepared the following summary and conclusions regarding the Subject Property.

6.1 CURRENT CONDITIONS AND HISTORIC SITE BACKGROUND

The Subject Property consists of approximately 40-acres of vacant land, which is located adjacent and west of Granite Hills High School. The Subject Property is comprised of six (6) parcels of land identified by the San Bernardino County APNs: 0439-012-19 (9.86-ac), 0439-012-20 (4.9-ac), 0439-012-21 (4.9-ac), 0439-012-22 (10.32-ac), 0439-012-23 (5.0-ac), and 0439-012-24 (5.0-ac). The Subject Property is currently owned by the Apple Valley Unified School District.

Padre reviewed the EDR Environmental Lien and activity use limitations (AULs) search report of available current land title records for environmental cleanup liens and other AULs such as engineering controls and institutional controls. No environmental liens or AULs were identified for the Subject Property.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (*Community Panel Number: 06071C5845H, Effective Date: August 28, 2008),* the Subject Property is located in Zone D (Area of Undetermined Flood Hazard).

According to the EFZ maps issued by the CGS, the Subject Property is not located within the boundaries of an EFZ, and no active faults are known to cross the Subject Property (Jennings 2010).

Based on the aerial photographs and historical topographic maps, it appears that the Subject Property has remained undeveloped since at least 1932.

Padre's site reconnaissance on November 25, 2024, observed the Subject Property to be undeveloped and covered primarily with grasses, brush, and exposed soil. No petroleum and/or chemical containers were observed, no petroleum and/or chemical stained soils or concrete/asphalt surfaces were observed, and no aboveground or indications of underground petroleum storage tanks were observed at the Subject Property. In addition no pole-mounted or pad-mounted electrical transformers were observed on or adjacent to the Subject Property.

The Subject Property is bordered to the north by undeveloped land, beyond which are residences; to the east by Granite Hills High School; to the south by Esaws Avenue, beyond which is undeveloped land; and to the west by Central Road beyond which is a residential development.

A review of the EDR Radius Map Report did not identify facilities in the database records search within a one-mile radius of the Subject Property that present a REC to the Subject Property.

6.2 DATA GAPS

All the areas of the Subject Property were accessible to Padre. The information obtained and available to Padre during the preparation of this Phase I ESA is considered acceptable and complete. In general conformance with the scope and limitations of the ASTM E1527-21 Standard, Padre did not identify any significant data gaps in completing this Phase I ESA.

6.3 RECOGNIZED ENVIRONMENTAL CONDITIONS

Padre did not identify any recognized environmental conditions for the Subject Property.

6.4 RECOMMENDATIONS

Based on the information collected and reviewed during the preparation of this Phase I ESA, Padre makes no recommendations for additional assessment or remedial actions regarding the Subject Property at this time.

6.5 CERTIFICATION

We declare that, to the best of our professional knowledge and understanding, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR §312. Additionally, we have the specific qualifications based on education, training, and experience to assess the nature, setting, and of the subject property. We have performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part §312. Qualifications of the environmental assessors responsible for the preparation of this report are presented in **Appendix F**.

7.0 LIMITATIONS

This report has been prepared for the sole benefit of PlaceWorks and Apple Valley USD. No other person(s) may rely on the findings of this report without the expressed written consent of PlaceWorks, Apple Valley USD, and Padre Associates, Inc. In performing our professional services, we have attempted to apply present engineering and scientific judgment and use a level of effort consistent with the standard of practice measured on the date of work and in locale of the Subject Property for similar type studies. Padre Associates, Inc. makes no warranty, express or implied.

The analyses and interpretations presented in this report have been developed based on the results from the review of existing information pertaining to the Subject Property.

The ASTM Standard Practice E 1527-13 and E 1527-21 recognize inherent limitations for Phase I ESAs, including, but not limited to:

- *Uncertainty Not Eliminated.* A Phase I ESA cannot completely eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with any property.

- *Not Exhaustive.* A Phase I ESA is not an exhaustive investigation of the Subject Property and environmental conditions on such Subject Property.
- *Past Uses of the Property.* Phase I requirements only require review of standard historical sources at five-year intervals if readily available. Therefore, past uses of the Property at less than five-year intervals may not be discovered.

Users of this report may refer to ASTM Standard Practice E 1527-13 and E 1527-21 for further information regarding these and other limitations. This report is not definitive and should not be assumed to be a complete and/or specific definition of all conditions above or below grade. Current subsurface conditions may differ from the conditions determined by surface observations, interviews and reviews of historical sources. The most reliable method of evaluating subsurface conditions is through intrusive techniques, which are beyond the scope of this report. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, or other Property construction purposes. Any use of this report by any party, beyond the scope and intent of the original parties, shall be at the sole risk and expense of such user.

Padre makes no representation of or warranty that the past or current operations at the Subject Property are, or have been, in compliance with all applicable federal, state and local laws, regulations and codes. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated. Regardless of the findings stated in this report, Padre is not responsible for consequences or conditions arising from facts not fully disclosed to Padre during the assessment.

An independent data research company provided the government agency database referenced in this report. Information on surrounding area properties was requested for approximate minimum search distances and is assumed to be correct and complete unless obviously contradicted by Padre's observations or other credible referenced sources reviewed during the assessment. Padre shall not be liable for any such database firm's failure to make relevant files or documents properly available, to properly index files, or otherwise to fail to maintain or produce accurate or complete records.

Padre used reasonable efforts to identify evidence of aboveground and underground storage tanks and ancillary equipment on the Subject Property during the assessment. "Reasonable efforts" were limited to observation of accessible areas, review of referenced public records and interviews. These reasonable efforts may not identify subsurface equipment or evidence hidden from view by objects including, but not limited to, paving, construction activities, stored materials, and landscaping.

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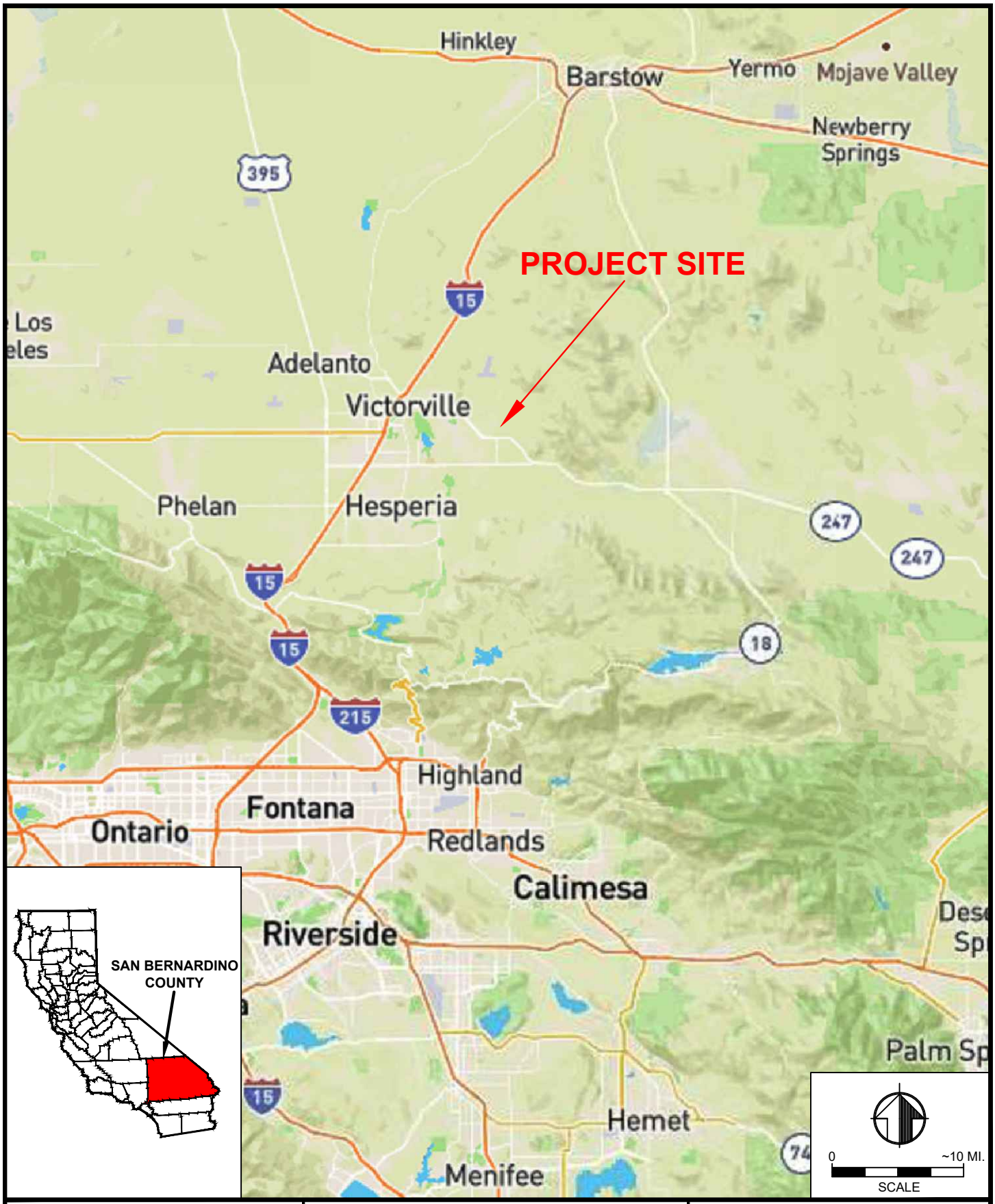
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PLATES



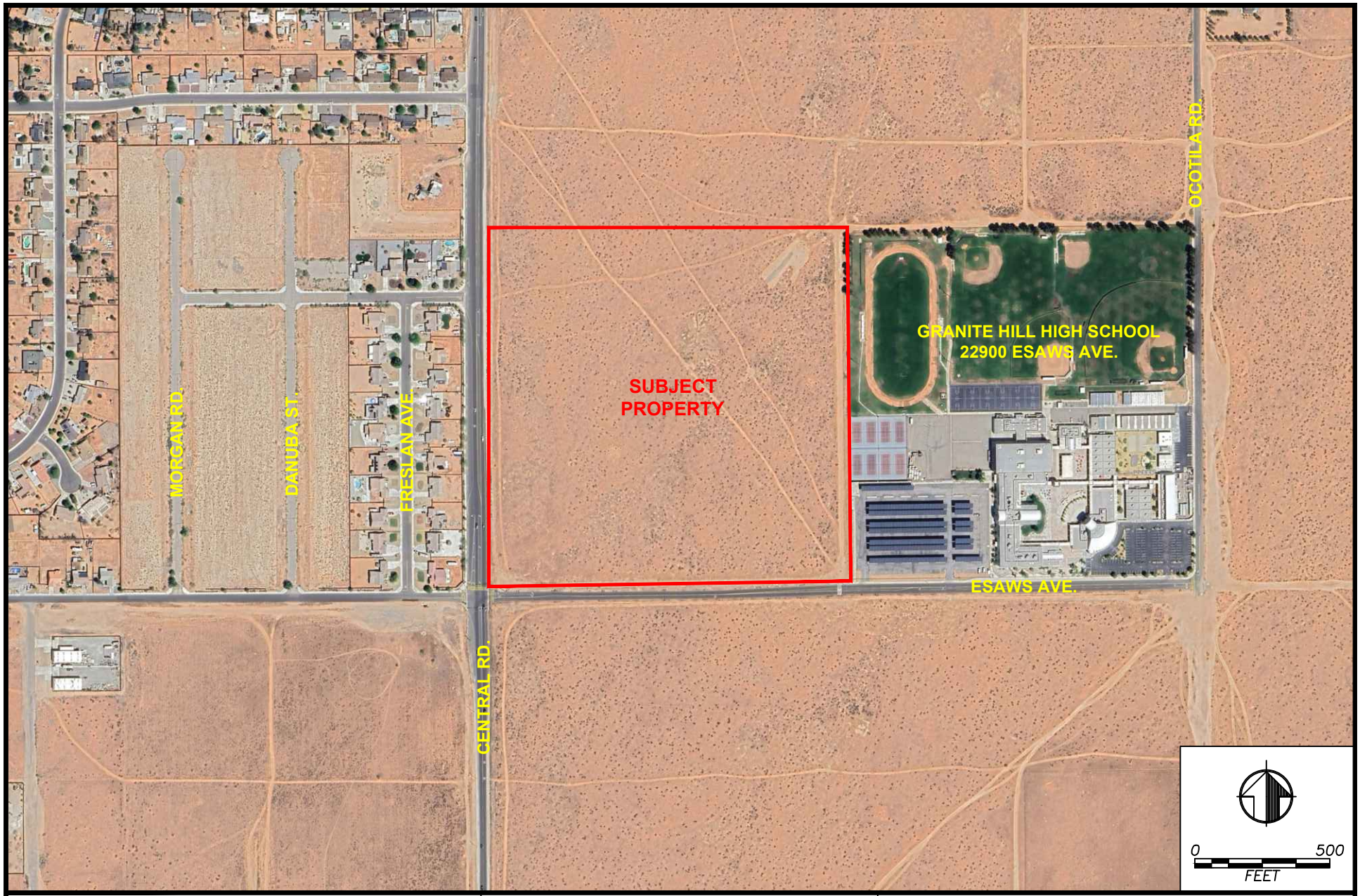
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ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

NEW ATHLETICS COMPLEX
GRANITE HILLS HIGH SCHOOL
APPLE VALLEY, CALIFORNIA

PROJECT NO.	DATE	DR. BY	APP. BY
2301-4811	11/21/24	AC	AJK

PLATE 1

SITE LOCATION



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GOOGLE EARTH IMAGERY (5/23)

NEW ATHLETICS COMPLEX
GRANITE HILLS HIGH SCHOOL
APPLE VALLEY, CALIFORNIA

PROJECT NO.	DATE	DR. BY	APP. BY
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PLATE 2

SITE MAP

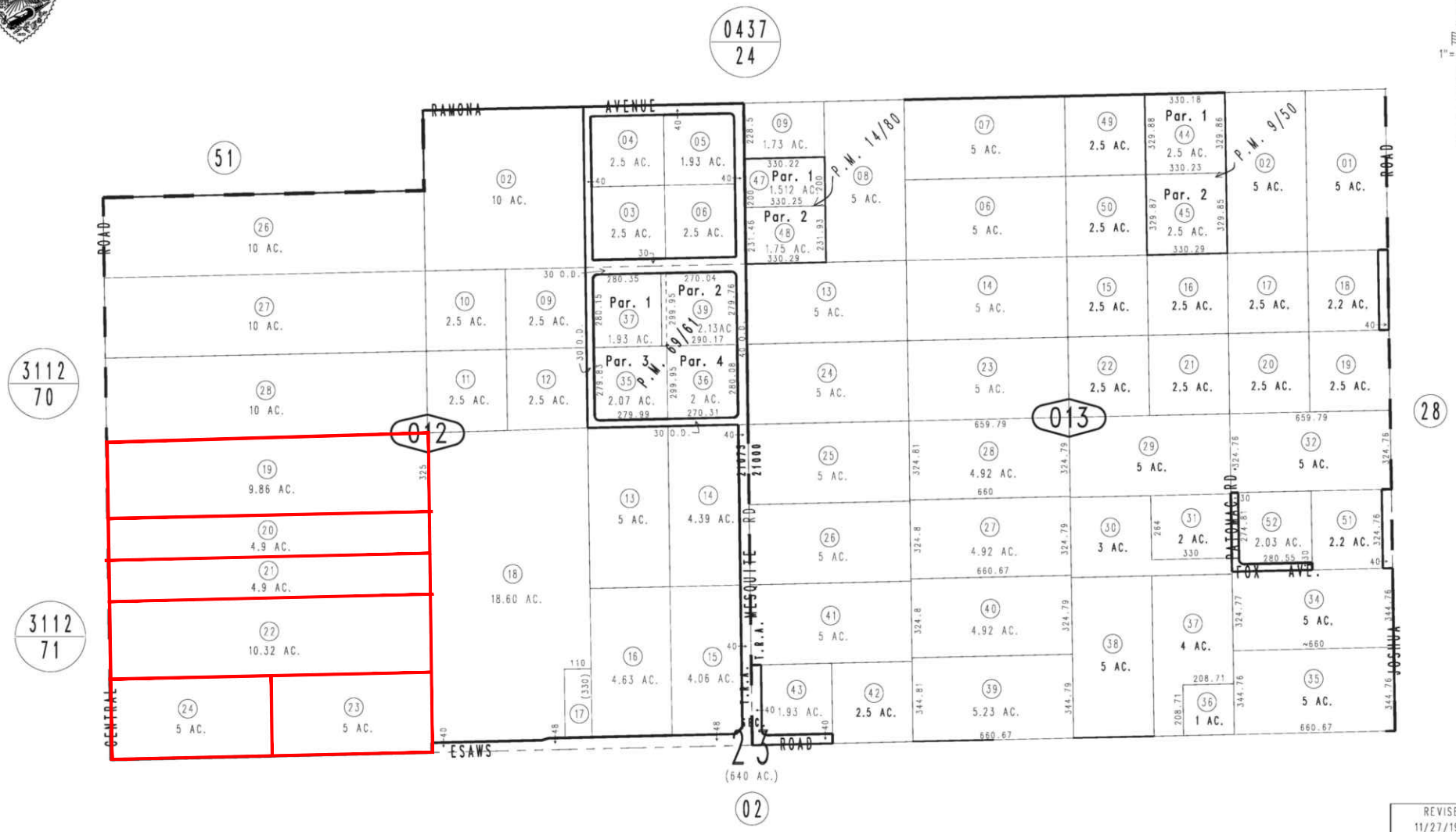
APPENDIX A

ASSESSOR'S PARCEL MAP
AND FLOOD INSURANCE RATE MAP

THIS MAP IS FOR THE PURPOSE OF AD VALOREM TAXATION ONLY.

N.1/2 Sec.23, T.5N.,R.3W., S.B.B.&M.

Town of Apple Valley 0439-01
Tax Rate Area
21000,21075



Parcel Map No. 5511, P.M. 69/61
Parcel Map No. 1416, P.M. 14/80
Parcel Map No. 1093, P.M. 9/50

May 2004

Assessor's Map
Book 0439 Page 01
San Bernardino County

REVISED
11/27/19 KA

National Flood Hazard Layer FIRMette

FEMA

117°10'33"W 34°30'50"N



117°9'55"W 34°30'21"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000 D-32

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

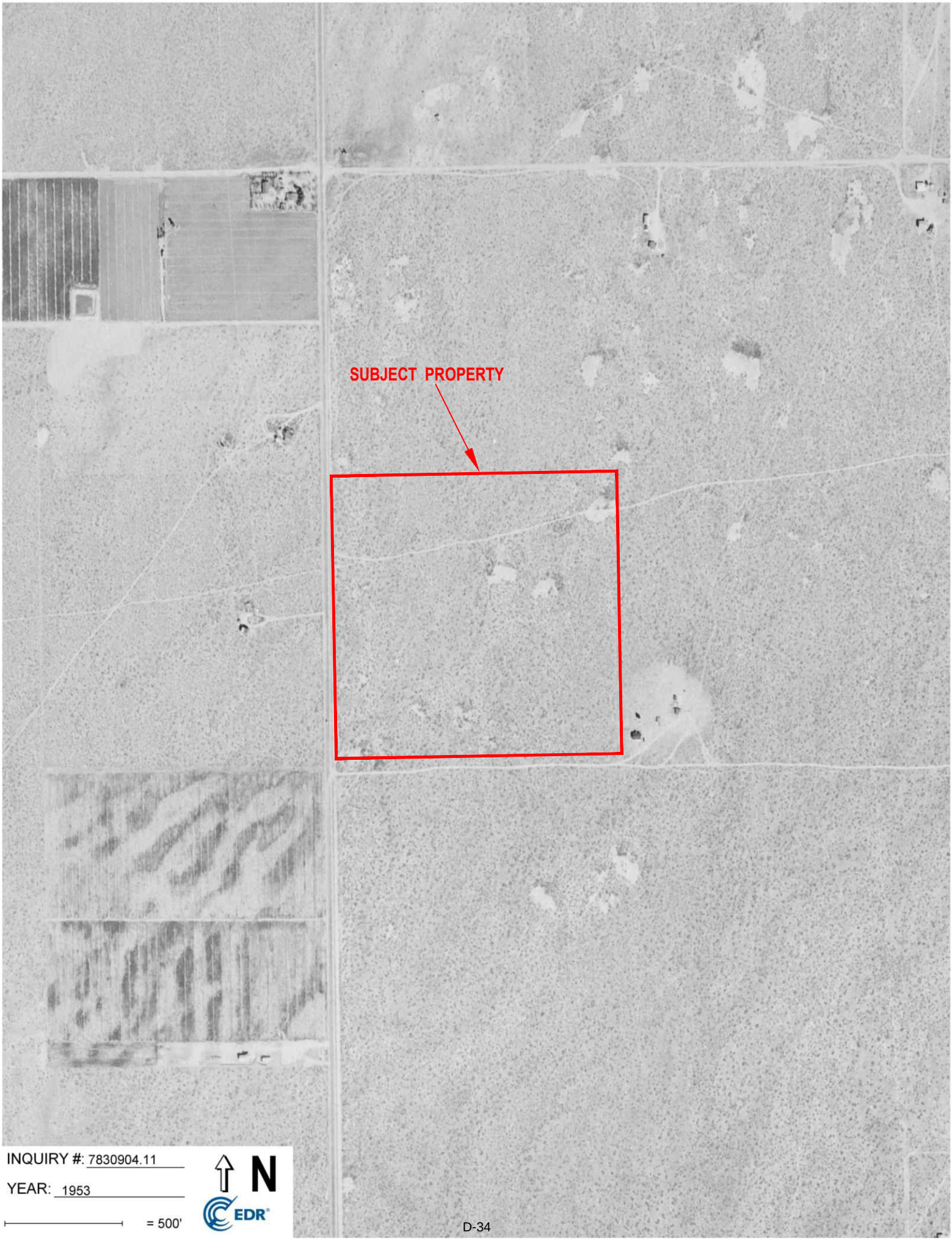
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

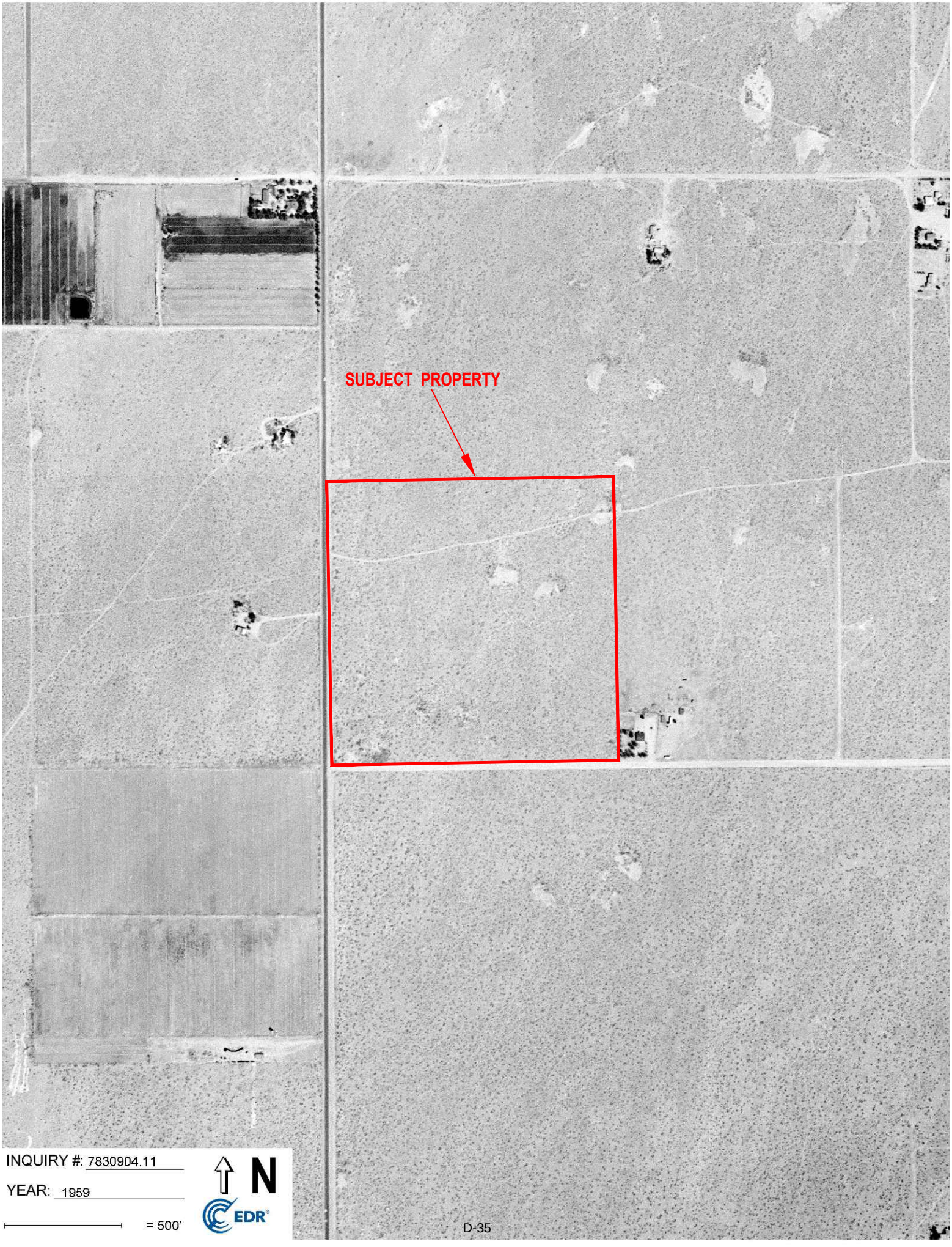
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/20/2024 at 1:31 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX B

HISTORICAL AERIAL PHOTOGRAPHS AND TOPOGRAPHIC MAPS


SUBJECT PROPERTY
INQUIRY #: 7830904.11
YEAR: 1953
= 500'
N
EDR



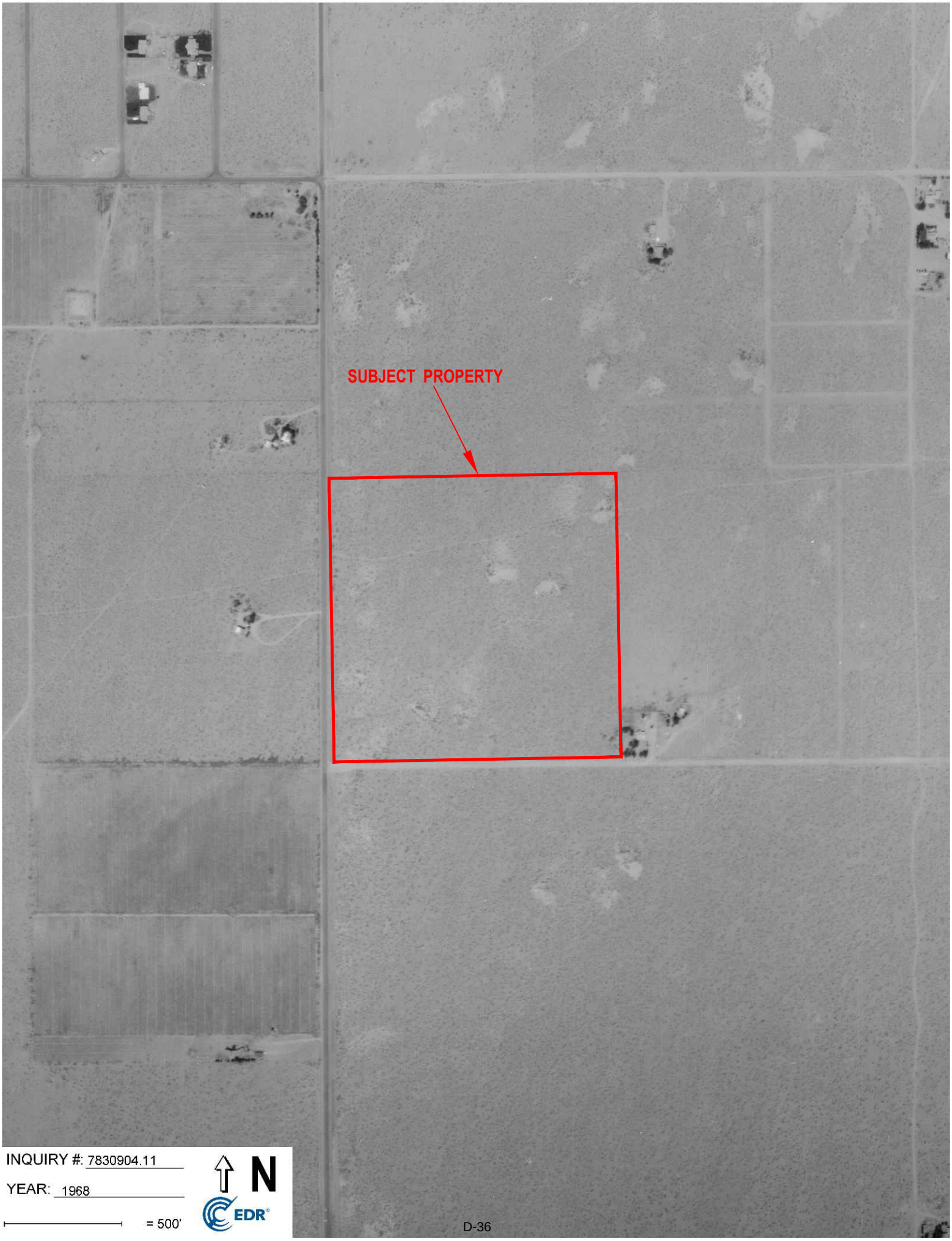
INQUIRY #: 7830904.11

YEAR: 1959

= 500'

N

EDR



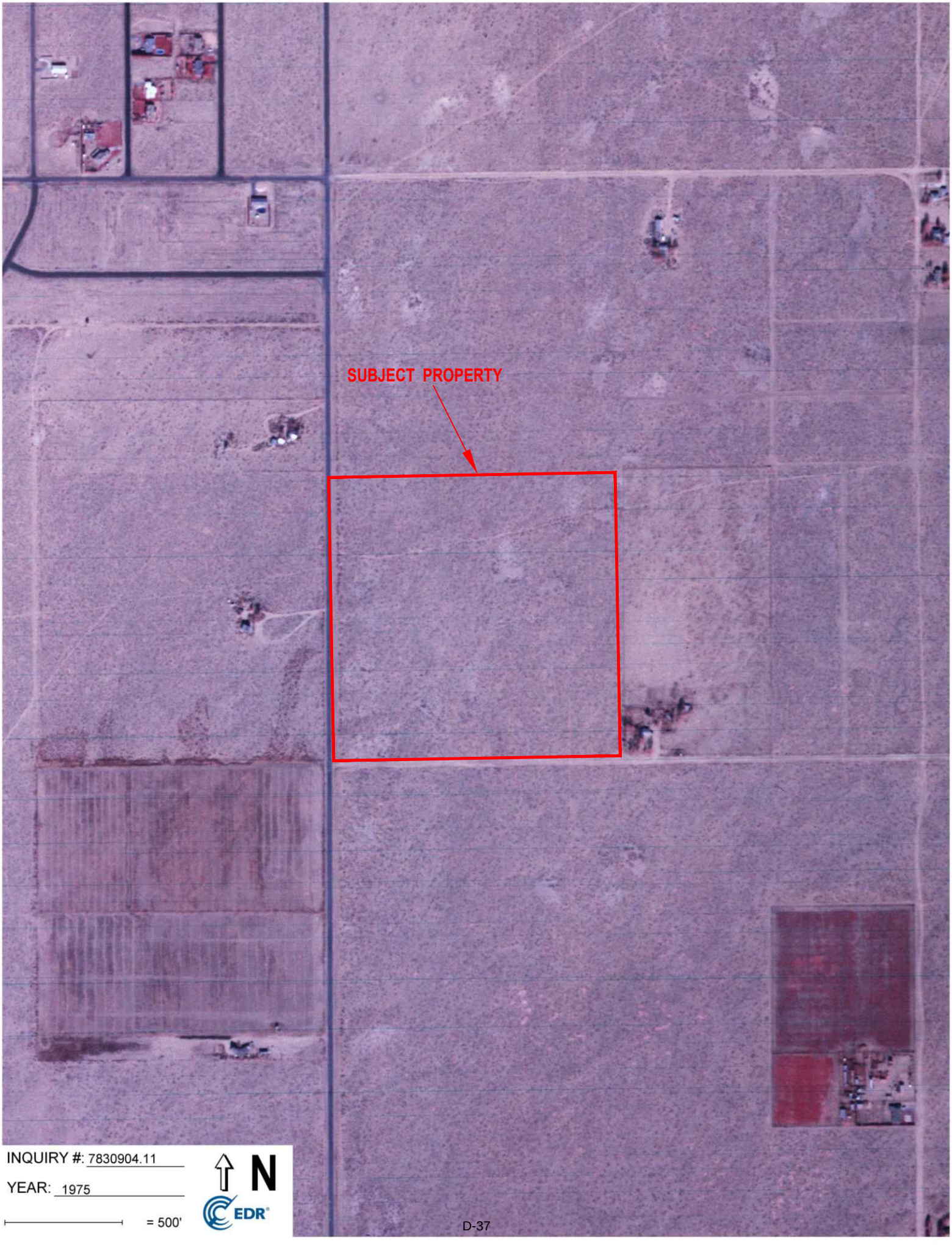
INQUIRY #: 7830904.11

YEAR: 1968

= 500'

N

EDR



INQUIRY #: 7830904.11

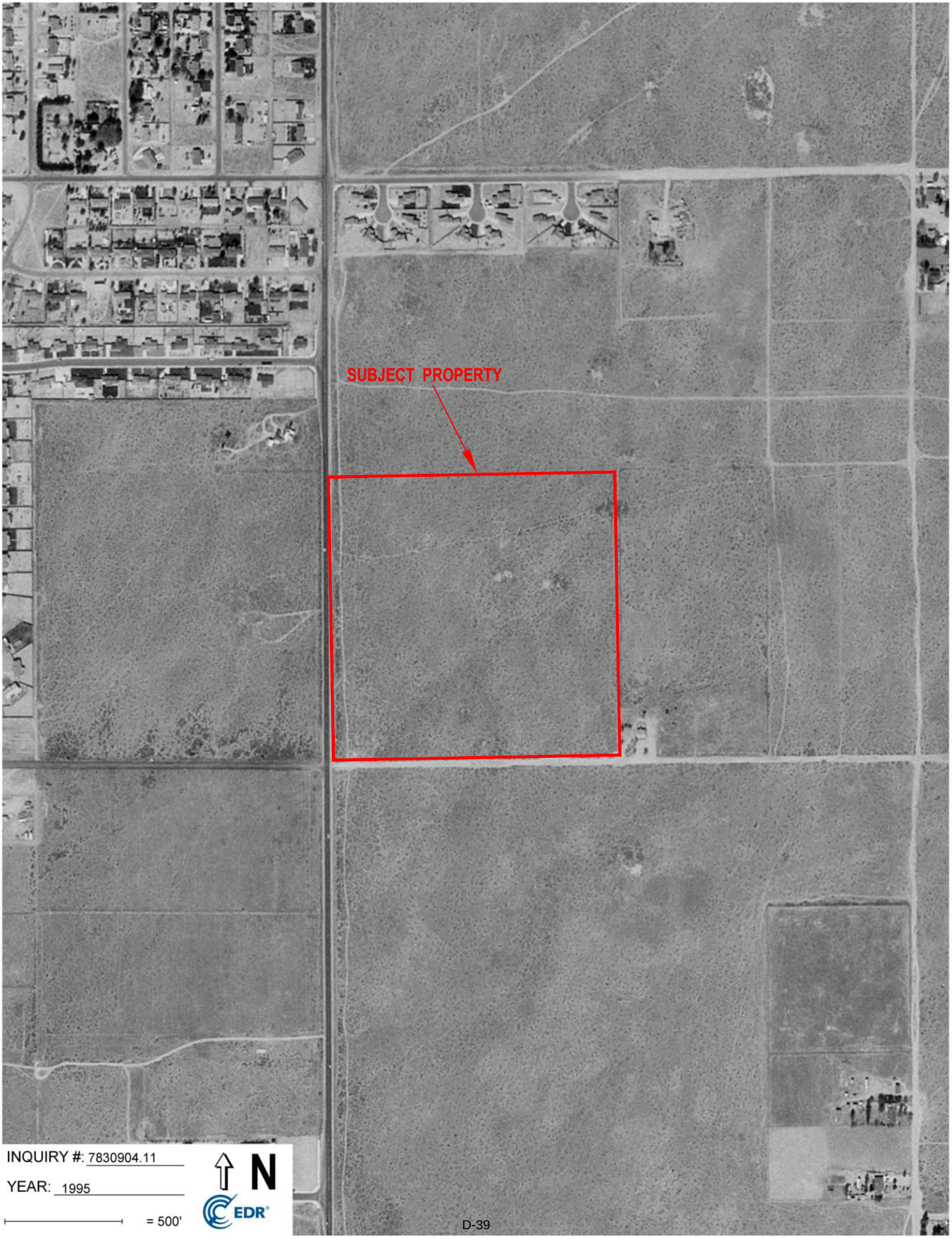
YEAR: 1975

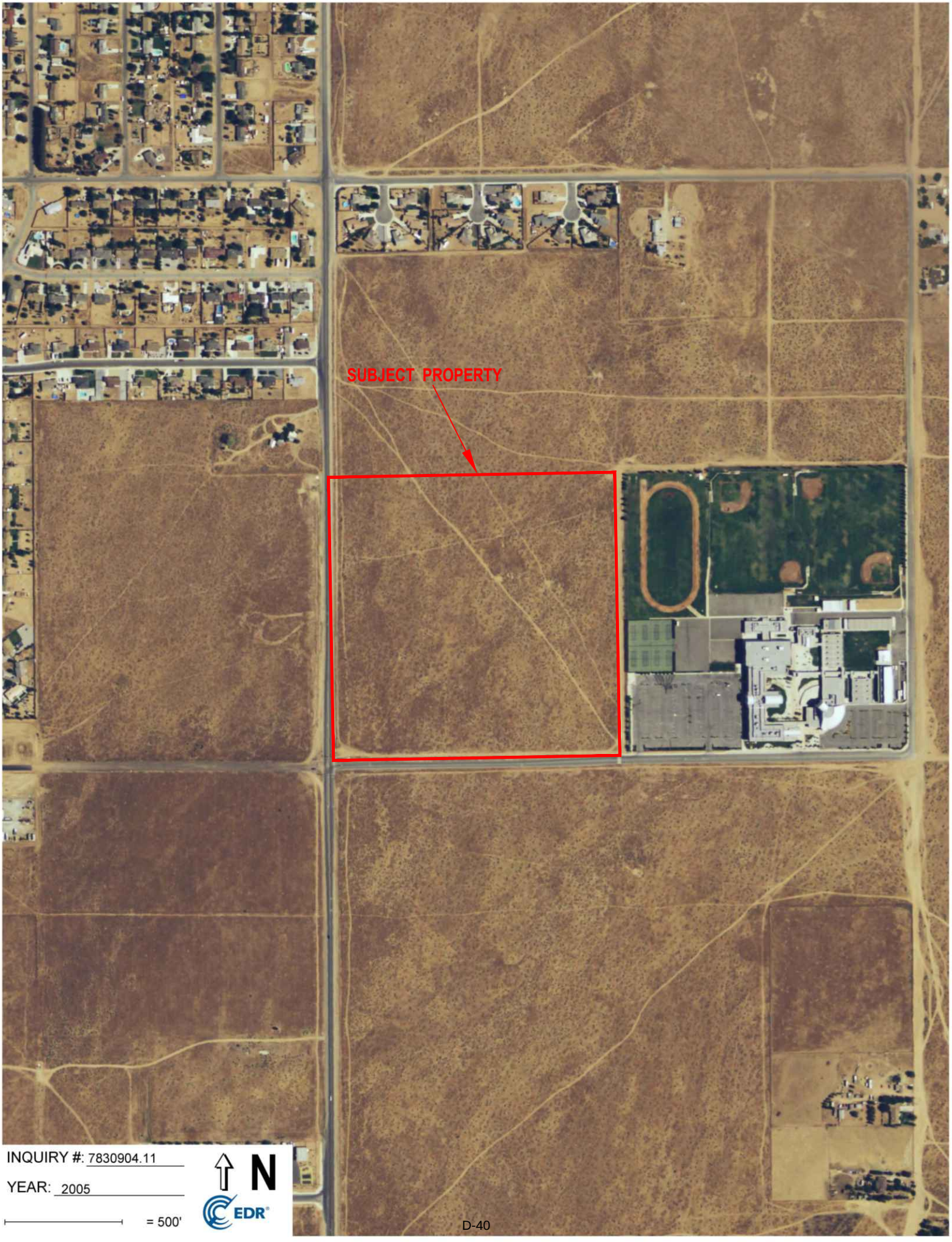
= 500'

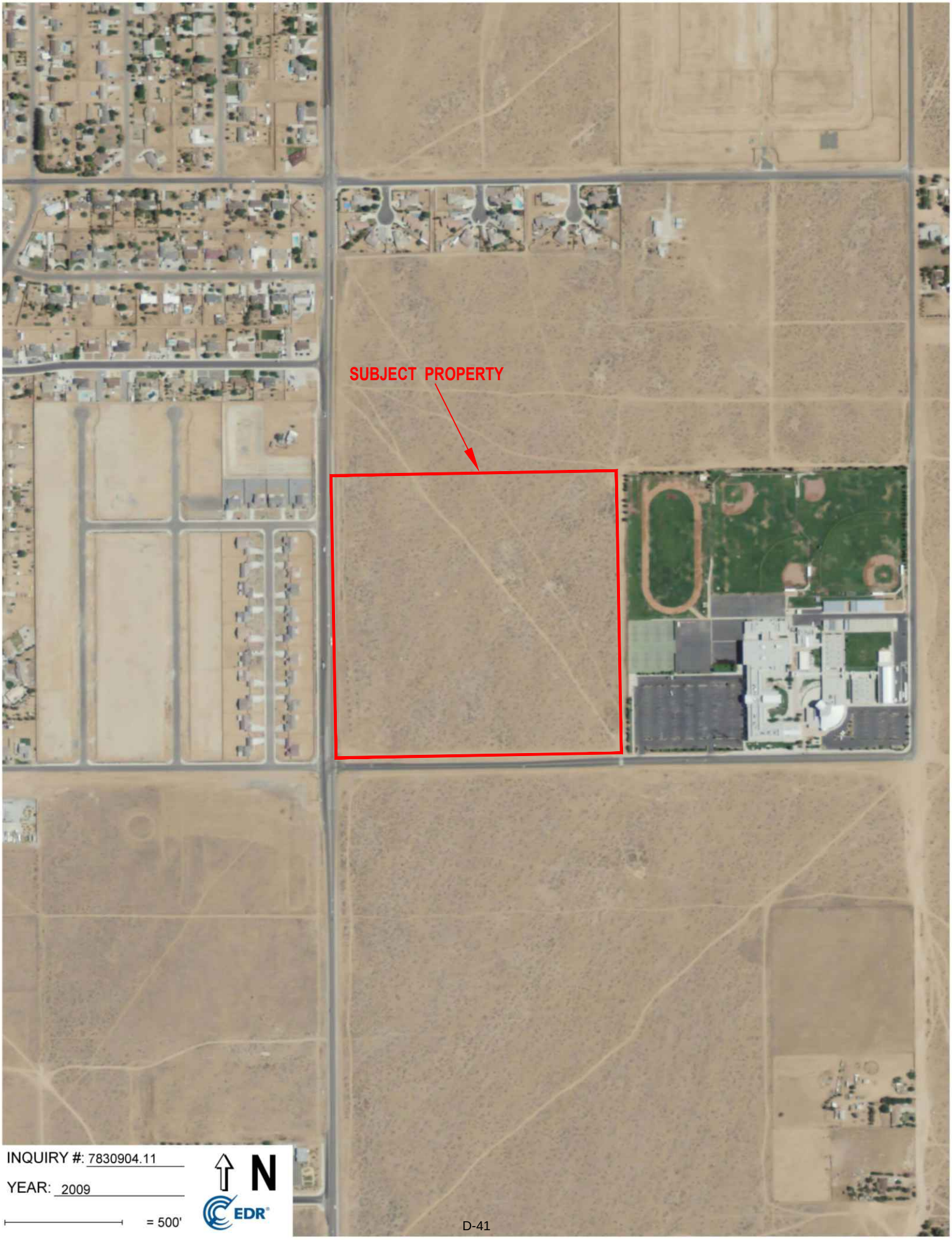
N

EDR

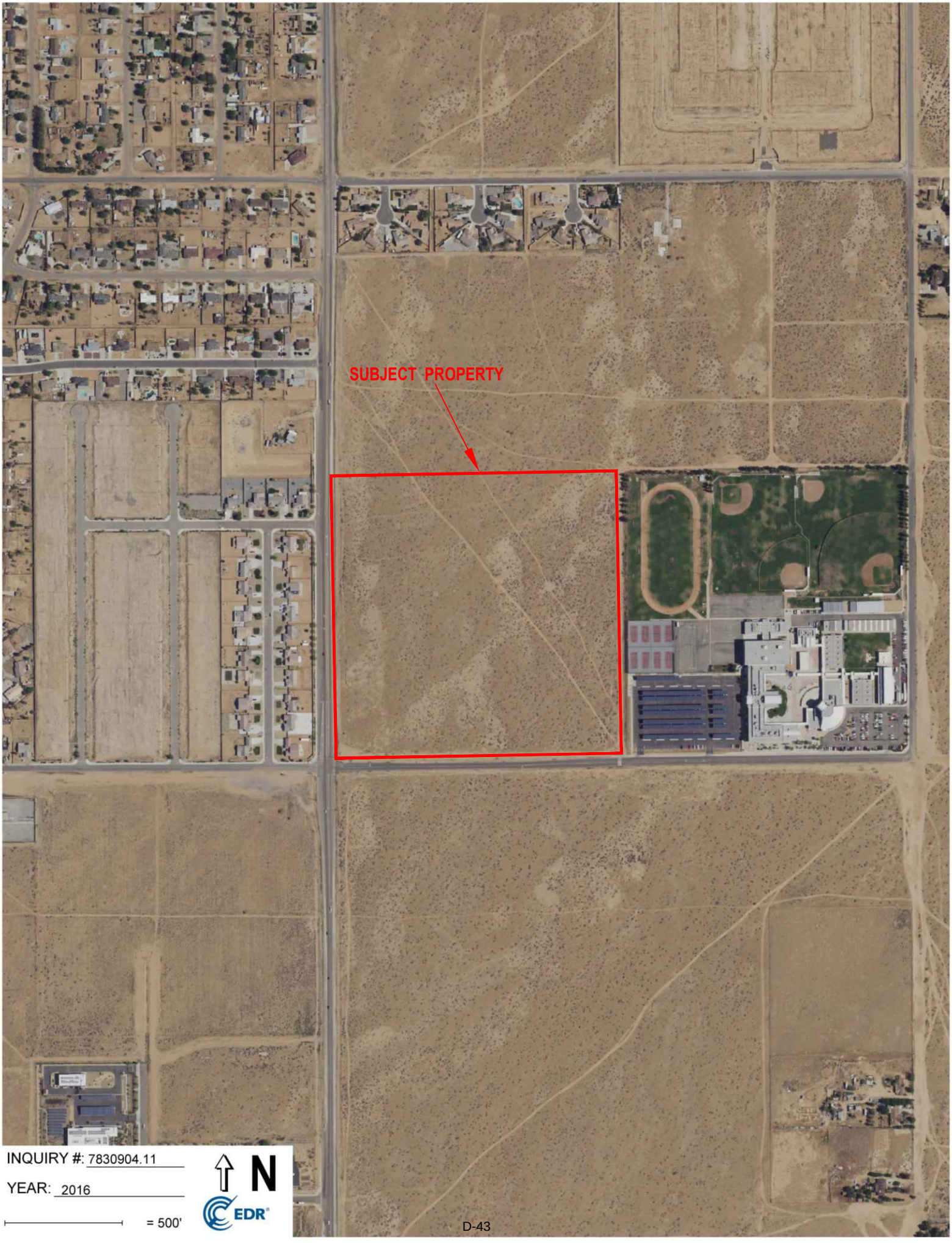

SUBJECT PROPERTY
INQUIRY #: 7830904.11
YEAR: 1984
= 500'
N
EDR

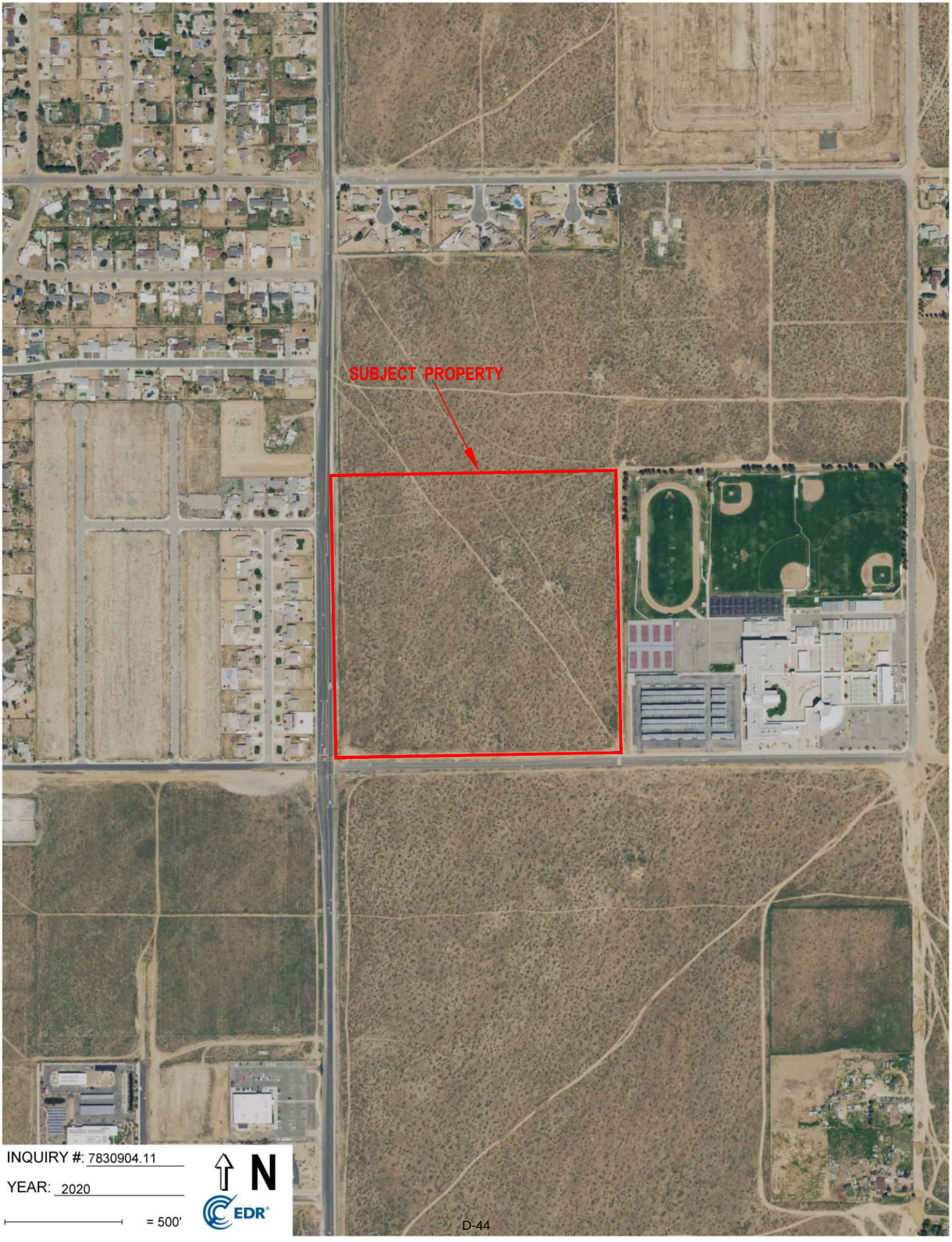

SUBJECT PROPERTY
INQUIRY #: 7830904.11
YEAR: 1995
= 500'
N
EDR

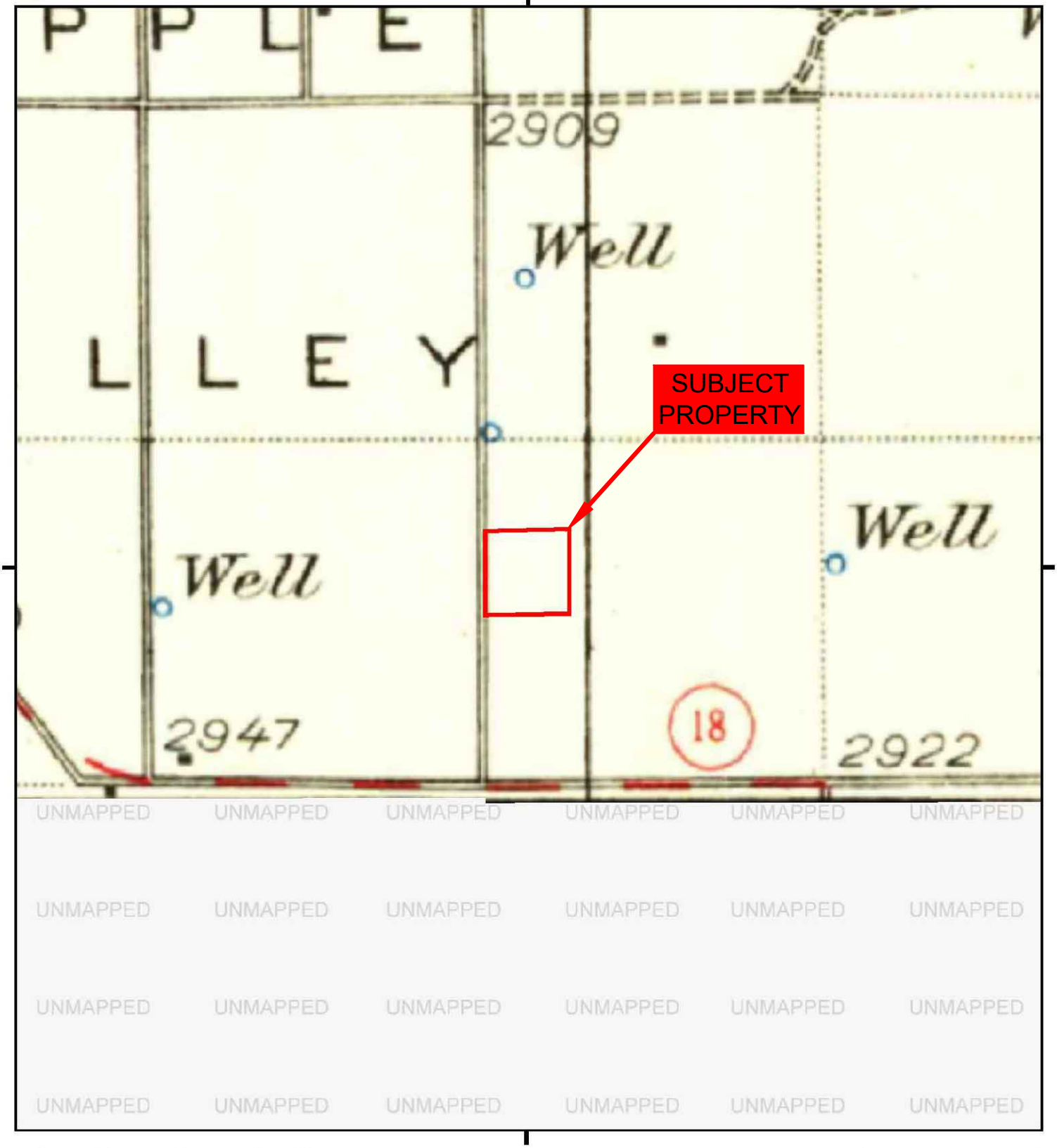

SUBJECT PROPERTY
INQUIRY #: 7830904.11
YEAR: 2005
= 500'
N
EDR


SUBJECT PROPERTY
INQUIRY #: 7830904.11
YEAR: 2009
= 500'
N
EDR


SUBJECT PROPERTY
INQUIRY #: 7830904.11
YEAR: 2012
= 500'
N
EDR


SUBJECT PROPERTY
INQUIRY #: 7830904.11
YEAR: 2016
= 500'
N
EDR


SUBJECT PROPERTY
INQUIRY #: 7830904.11
YEAR: 2020
= 500'
N
EDR



UNMAPPED

This report includes information from the following map sheet(s).

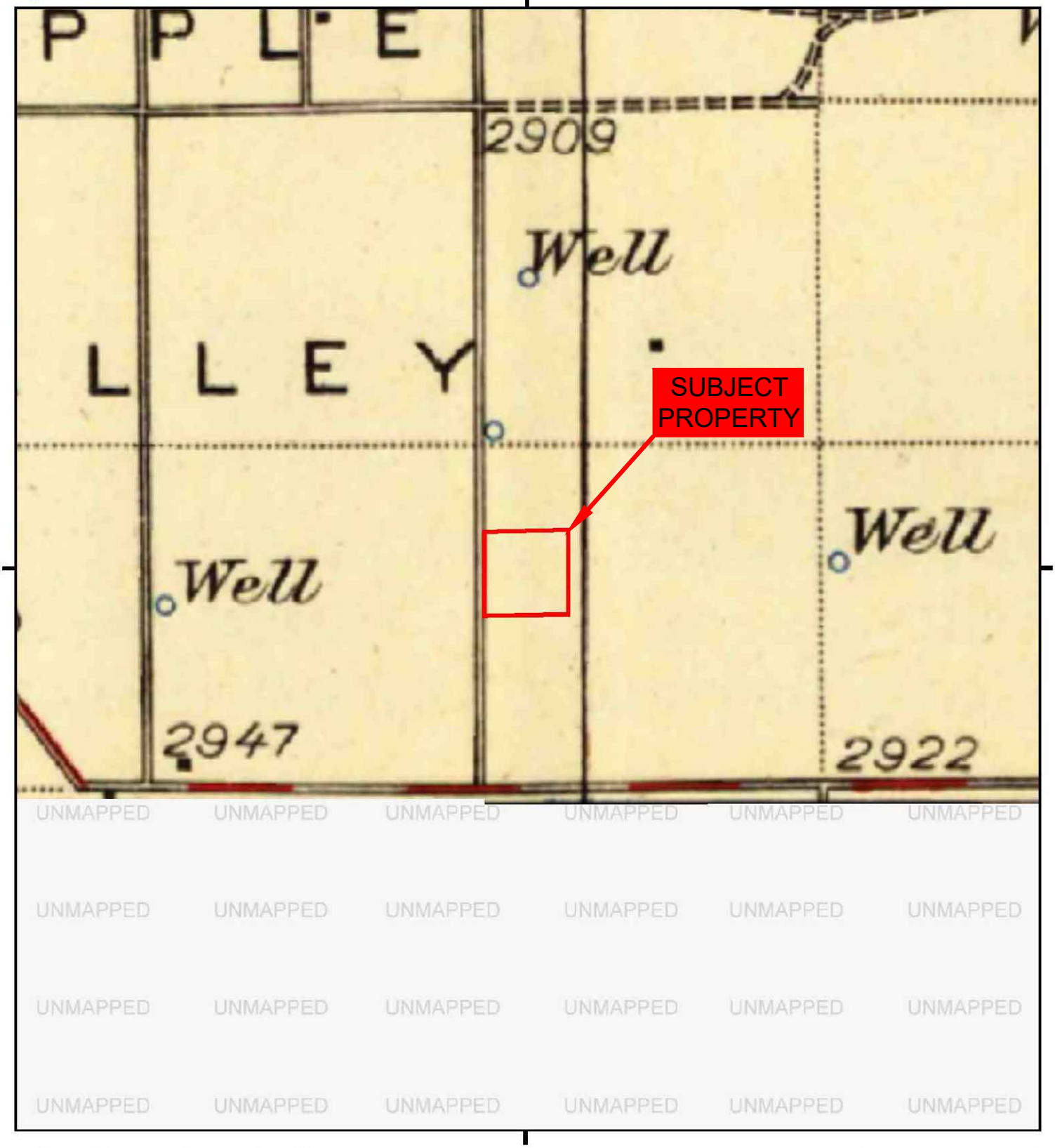
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Barstow, 1932, 30-minute

SITE NAME: Granite Hills H.S. - New Athletics Comple
ADDRESS: Central Rd. / Esaws Ave.
Apple Valley, CA 92307
CLIENT: Padre Associates, Inc

N



This report includes information from the following map sheet(s).

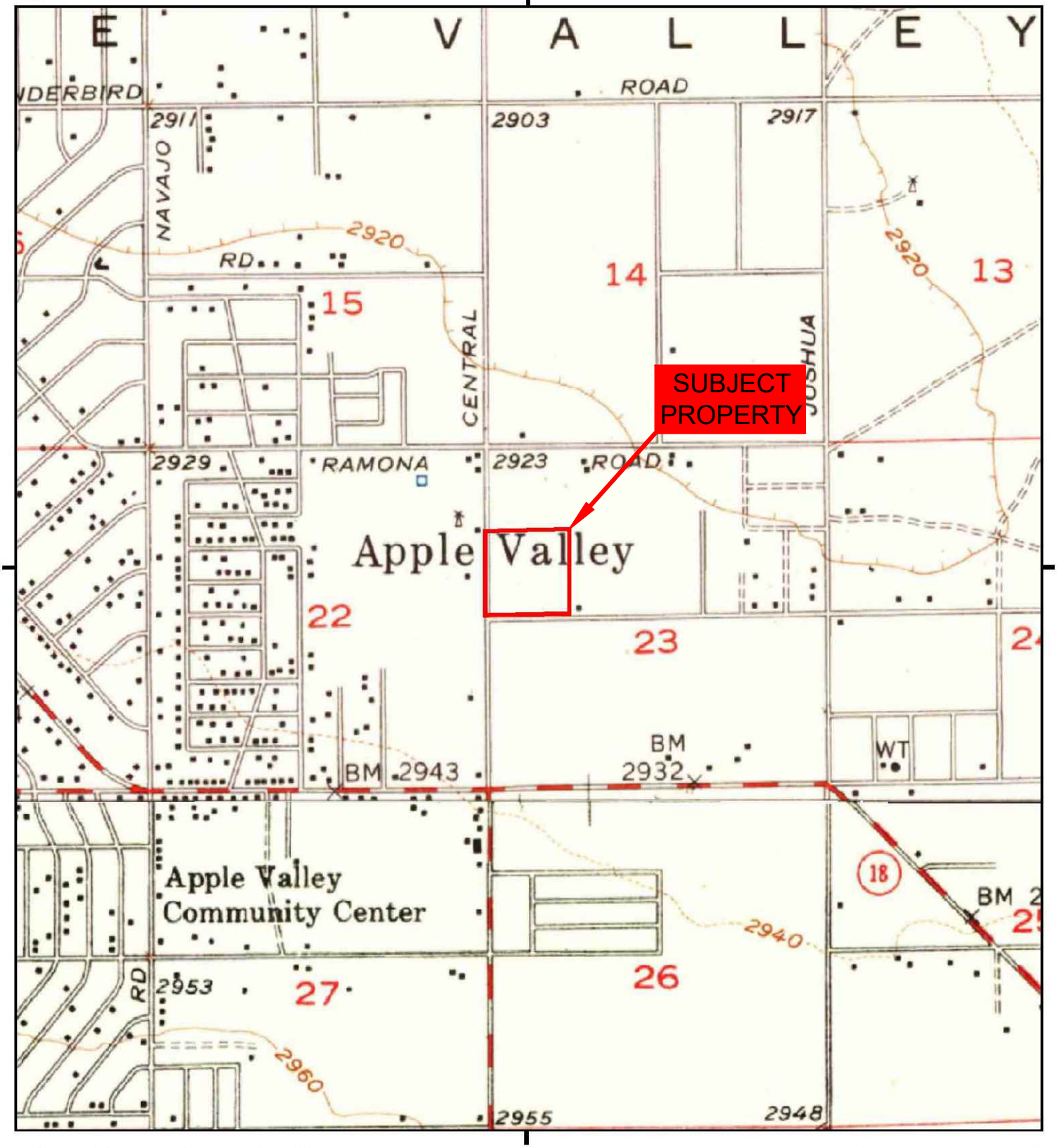
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Barstow, 1934, 30-minute

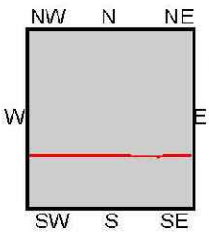
SITE NAME: Granite Hills H.S. - New Athletics Comple
ADDRESS: Central Rd. / Esaws Ave.
Apple Valley, CA 92307
CLIENT: Padre Associates, Inc

N



This report includes information from the following map sheet(s).

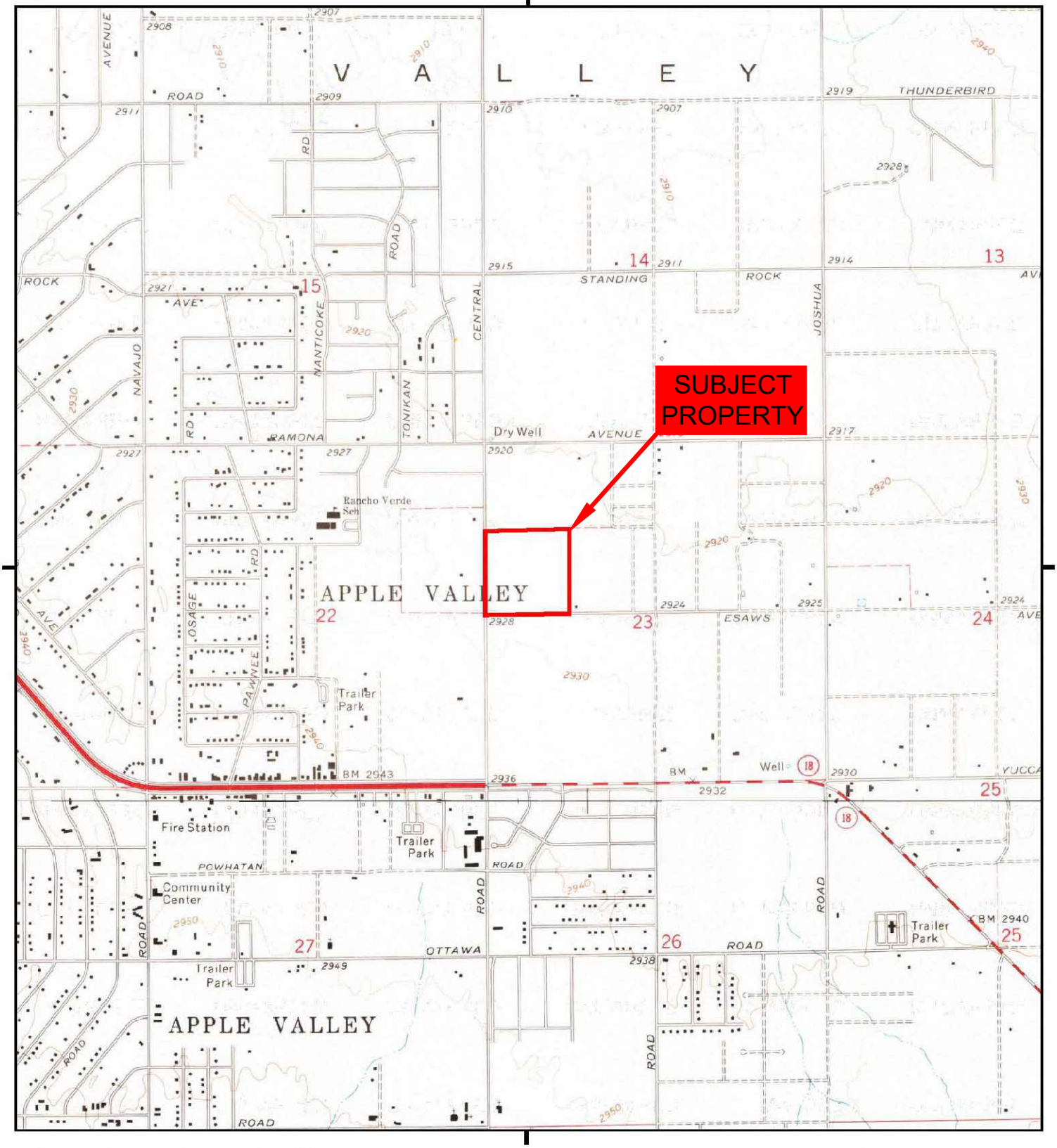
0 Miles 0.25 0.5 1 1.5



TP, Apple Valley, 1957, 15-minute
S, Lake Arrowhead, 1956, 15-minute

SITE NAME: Granite Hills H.S. - New Athletics Comple
ADDRESS: Central Rd. / Esaws Ave.
Apple Valley, CA 92307
CLIENT: Padre Associates, Inc

N



This report includes information from the following map sheet(s).

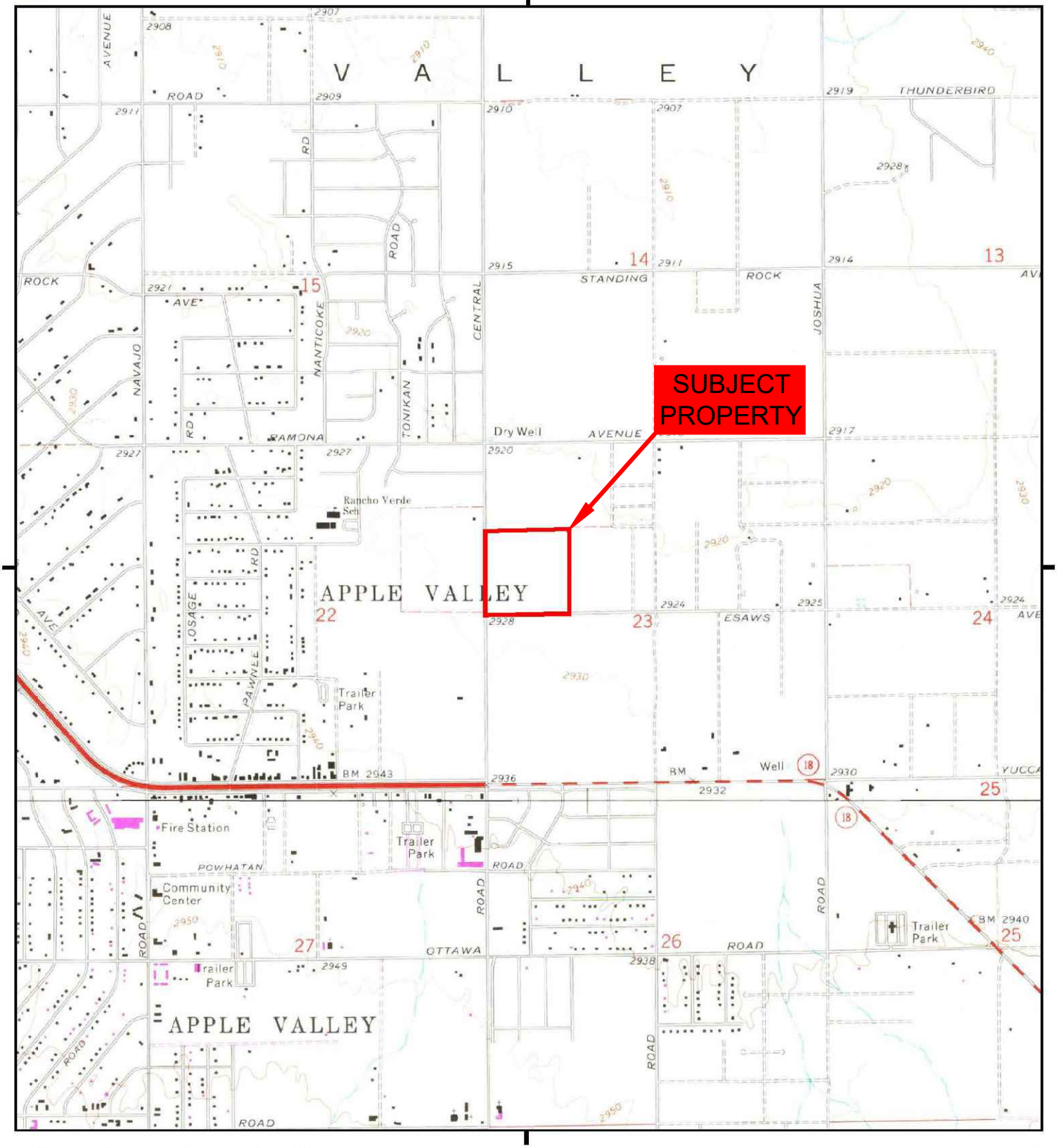
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Apple Valley North, 1970, 7.5-minute
S, Apple Valley South, 1971, 7.5-minute

SITE NAME: Granite Hills H.S. - New Athletics Comple
ADDRESS: Central Rd. / Esaws Ave.
Apple Valley, CA 92307
CLIENT: Padre Associates, 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

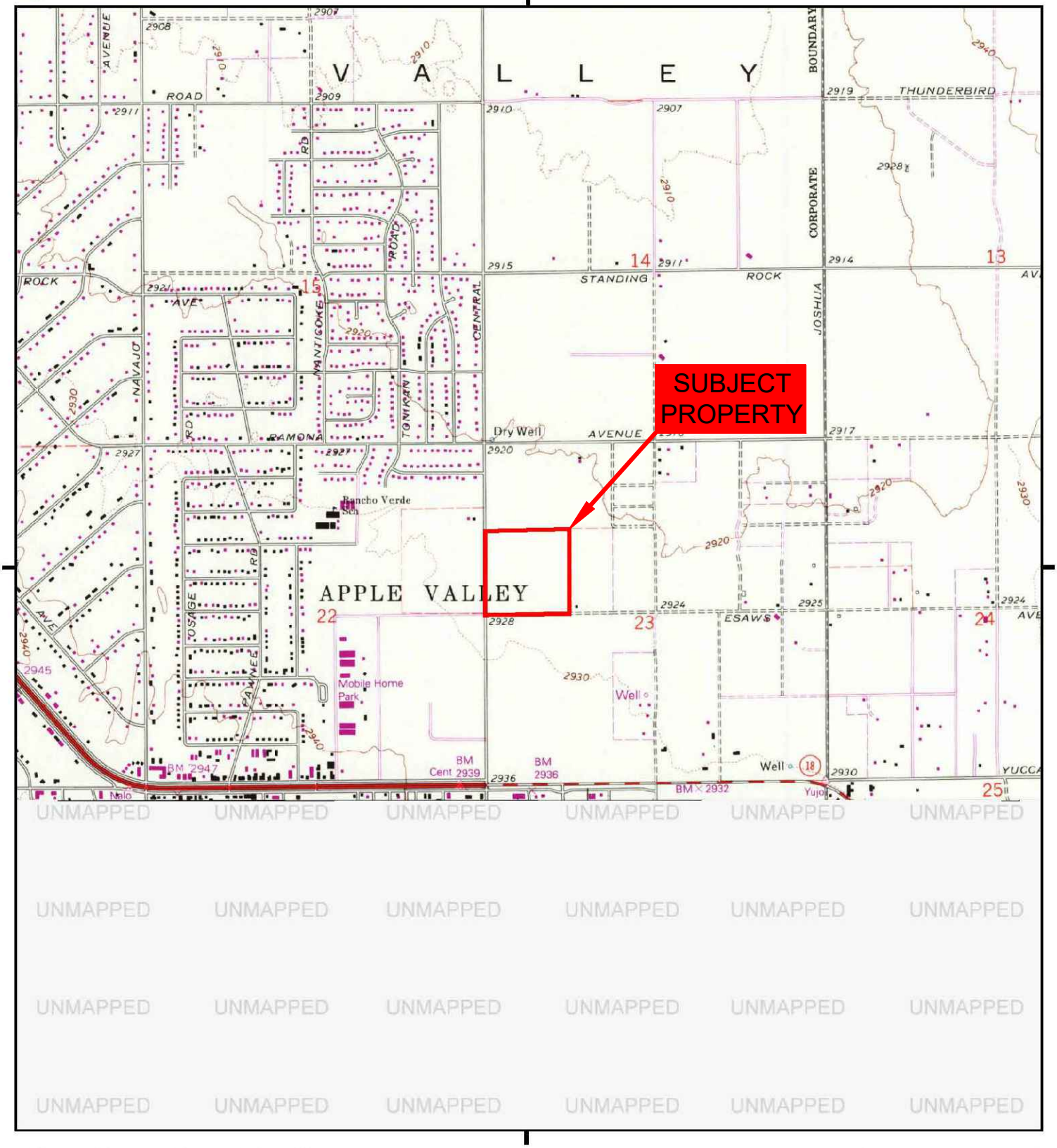
TP, Apple Valley North, 1978, 7.5-minute
S, Apple Valley South, 1980, 7.5-minute

SITE NAME: Granite Hills H.S. - New Athletics Comple
ADDRESS: Central Rd. / Esaws Ave.
Apple Valley, CA 92307
CLIENT: Padre Associates, Inc

N

Historical Topo Map

1993



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

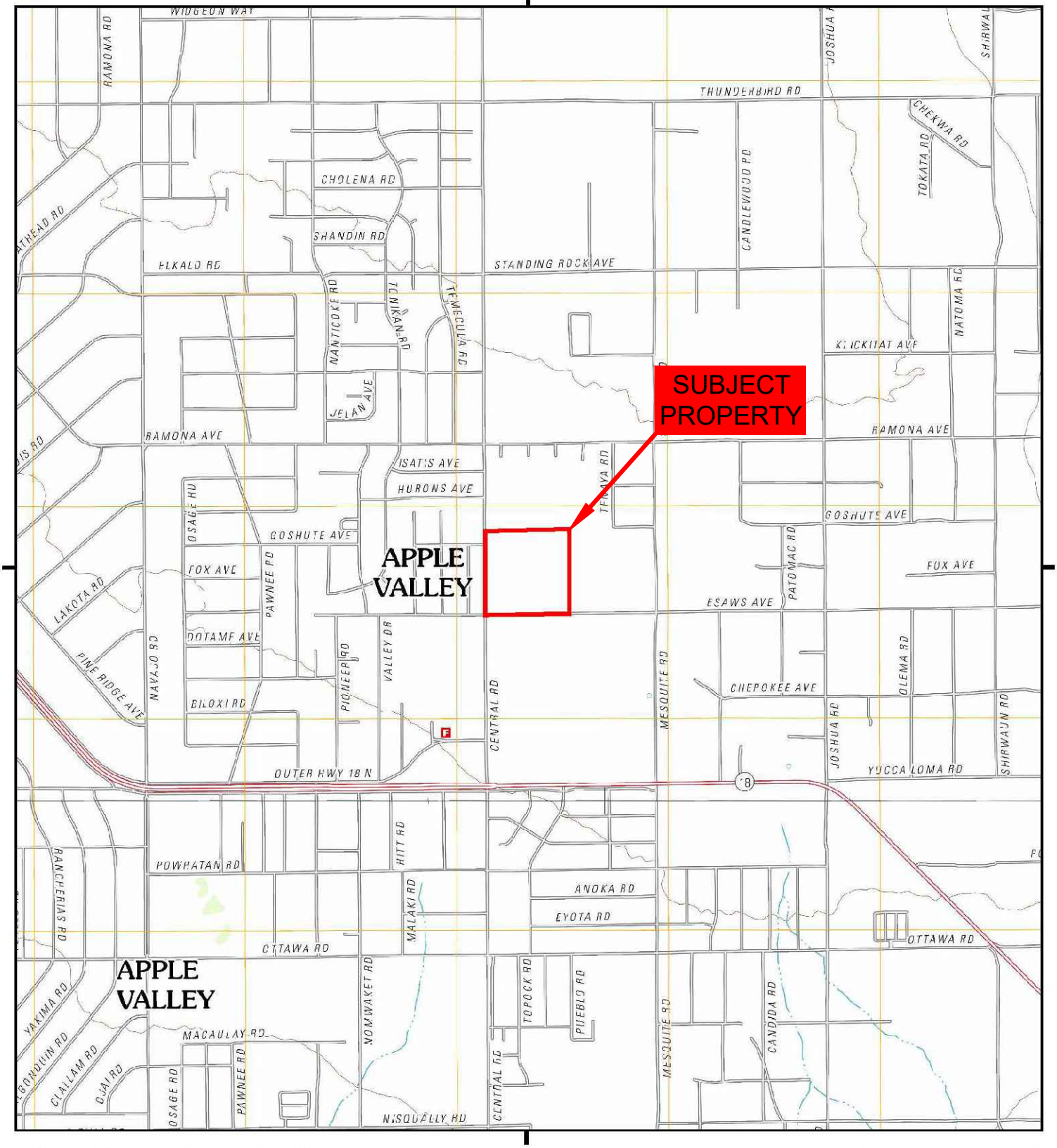
TP, Apple Valley North, 1993, 7.5-minute

SITE NAME: Granite Hills H.S. - New Athletics Comple
ADDRESS: Central Rd. / Esaws Ave.
Apple Valley, CA 92307
CLIENT: Padre Associates, 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

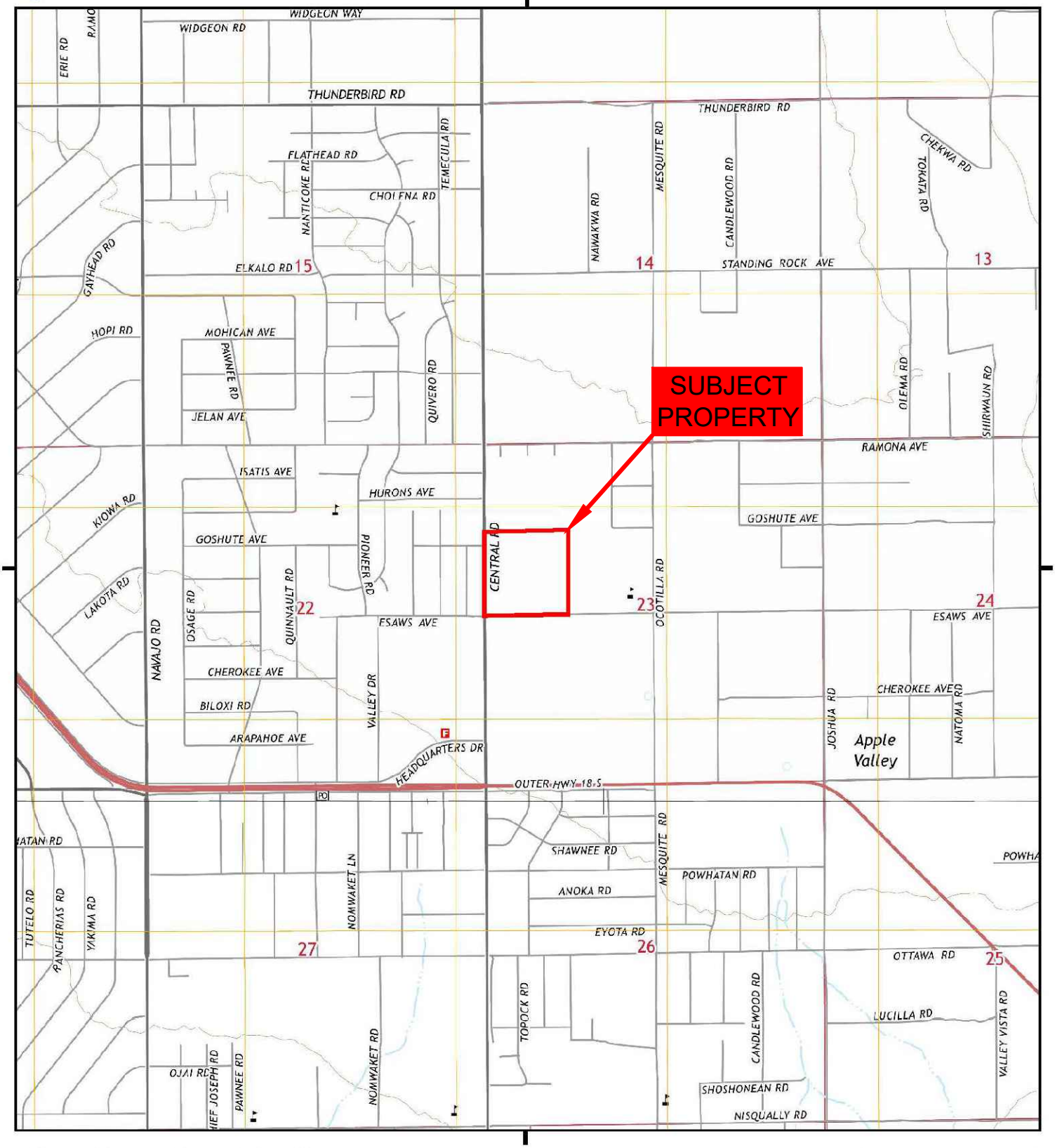
TP, Apple Valley North, 2012, 7.5-minute
S, Apple Valley South, 2012, 7.5-minute

SITE NAME: Granite Hills H.S. - New Athletics Comple
ADDRESS: Central Rd. / Esaws Ave.
Apple Valley, CA 92307
CLIENT: Padre Associates, 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

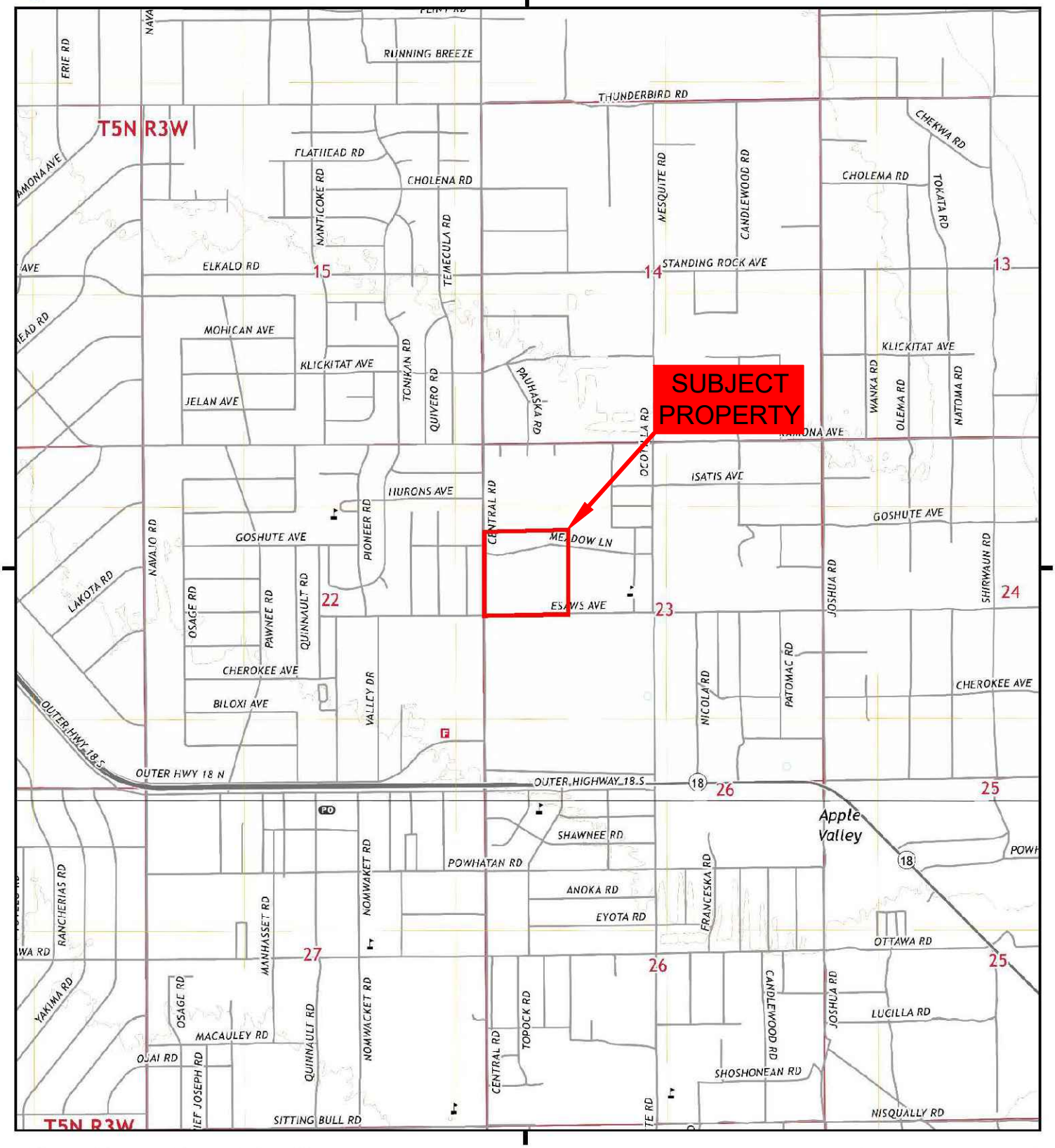
TP, Apple Valley North, 2015, 7.5-minute
S, Apple Valley South, 2015, 7.5-minute

SITE NAME: Granite Hills H.S. - New Athletics Comple
ADDRESS: Central Rd. / Esaws Ave.
Apple Valley, CA 92307
CLIENT: Padre Associates, Inc

N

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

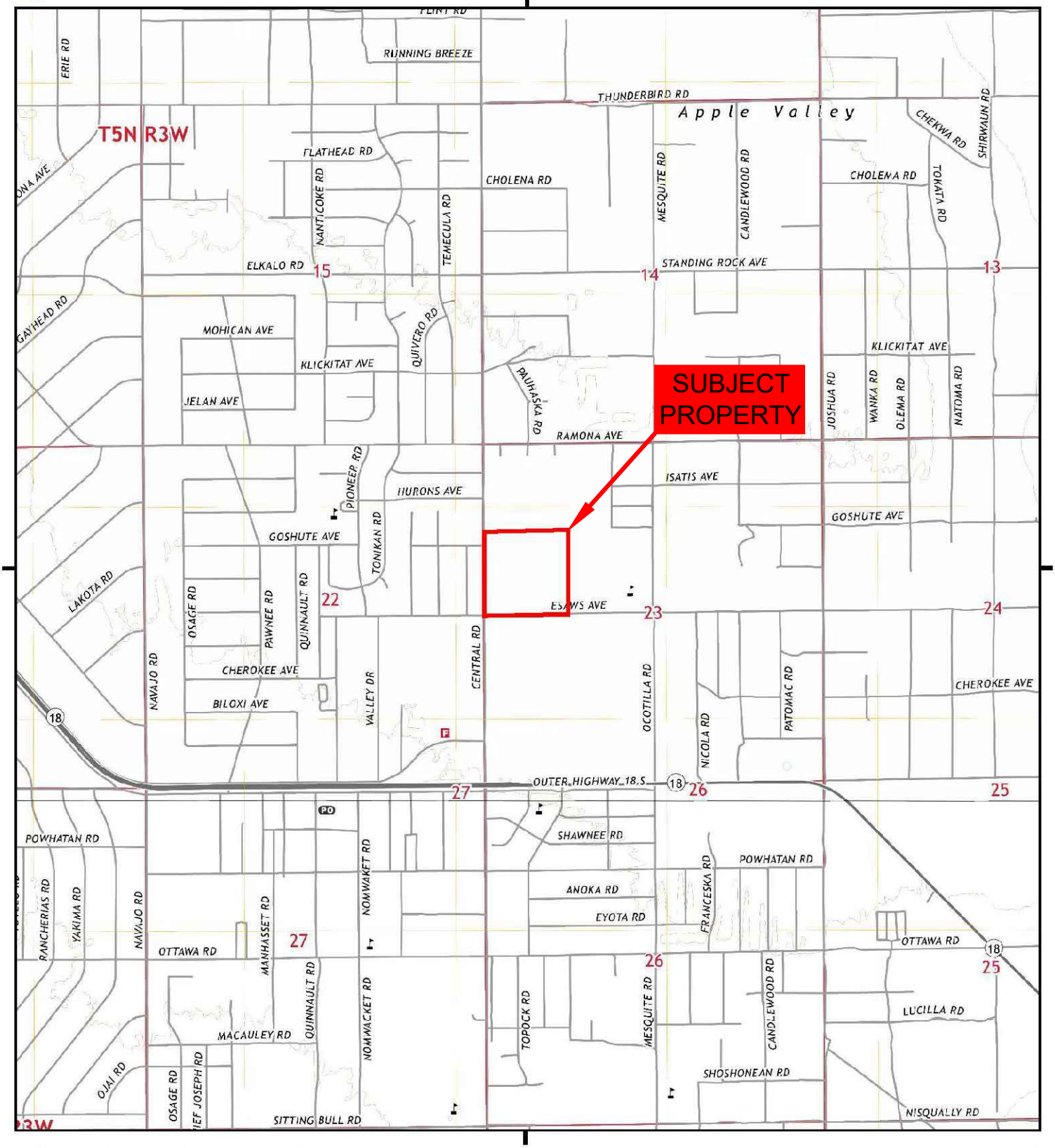
TP, Apple Valley North, 2018, 7.5-minute
S, Apple Valley South, 2018, 7.5-minute

SITE NAME: Granite Hills H.S. - New Athletics Comple
ADDRESS: Central Rd. / Esaws Ave.
Apple Valley, CA 92307
CLIENT: Padre Associates, Inc

N

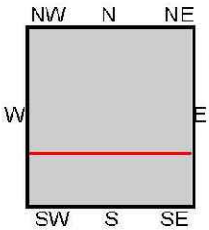
Historical Topo Map

2021



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5



TP, Apple Valley North, 2021, 7.5-minute
S, Apple Valley South, 2021, 7.5-minute

SITE NAME: Granite Hills H.S. - New Athletics Comple
ADDRESS: Central Rd. / Esaws Ave.
Apple Valley, CA 92307
CLIENT: Padre Associates, Inc

APPENDIX C

SITE PHOTOGRAPHS

	
Photo No.1 – View of the Subject Property from the northern portion looking south towards Esaws Avenue.	Photo No.2 – Two dry well / percolation test wells located at the northeastern portion of the Subject Property.
	
Photo No.3 – View of the central portion of the Subject Property. View looking west towards Central Road.	Photo No.4 – View of the southern portion of the Subject Property. View looking south towards Esaws Avenue.

Inspection Date: 11-25-24

	
Photo No.5 – View of the central portion of the Subject Property. View looking north.	Photo No.6 – View of the southern boundary of the Subject Property adjacent to Esaws Avenue. View looking west.
	
Photo No.7 – Undeveloped land located south of the Subject Property directly across Esaws Avenue.	Photo No.8 – Granite Hills High School campus located adjacent to the eastern boundary of the Subject Property.

Inspection Date: 11-25-24

	
Photo No.9 – Granite Hills High School campus located adjacent to the eastern boundary of the Subject Property.	Photo No.10 – Undeveloped land located adjacent to the northern boundary of the Subject Property.
	
Photo No.11 – Pipeline marker located along the western boundary of the Subject Property adjacent to Central Road.	Photo No.12 – Single-family residential development located west of the Subject Property across Central Road.

Inspection Date: 11-25-24

APPENDIX D

ENVIRONMENTAL QUESTIONNAIRE

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Subject Property Environmental Questionnaire

Padre Associates, Inc. (Padre) on behalf of **Apple Valley Unified School District and PlaceWorks** is requesting the completion of the following environmental questionnaire by the property owner and/or a representative of the property owner who is knowledgeable with the Project Site's use/history.

Please answer the following questions to the best of your knowledge. If you need more space, please use the back of the questionnaire or a separate sheet(s) of paper. If the answer to the question is unknown, write "unknown".

Subject Property: NE Intersection of Central Rd. and Esaws Ave., Apple Valley, Ca 92307. Refer to the attached Plate 2 and Assessor's Map.

1. Current property owner: Apple Valley Unified School District
   Contact: Matthew Schulenberg Email / Phone No.: matt_schulenberg@avusd.org 760-247-8001
2. Date of Ownership: see attached
3. Previous property owner: see attached
4. Current Property Use: vacant land
5. Historic Property Use: unknown
6. Are there any building structures currently located onsite? Please provide building use and date of construction: no
7. Have there been any historic building structures that have since been removed? Please provide building use, location and date of removal: unknown
8. Is the property serviced by city water and sewer or private well and septic system: water and sewer will be installed as part of planned project

9. Are there any existing or former pits, ponds, or lagoons used for waste disposal or waste treatment located onsite: no

10. Are there any existing or former petroleum storage tanks (underground or aboveground) located onsite: no

11. Are there any existing or former landfills and/or burn pits located onsite: no

12. List past and present pesticide/herbicide use (List chemicals/yrs): unknown

13. Have any chemical spills and/or incidents occurred onsite: unknown

14. Has fill material (soil) been imported to the property (If yes, please list location, volume, borrow source and date): unknown

15. Are there any existing environmental reports for the Subject Property: unable to locate

16. Are you aware of any environmental incidents associated with adjacent or nearby properties: no

COMPLETED BY:

Signature: Matthew Schulenberg Date: December 27, 2024

Print Name: Matthew Schulenberg

Representing: Apple Valley Unified School District

Email Questionnaire to: Alan J. Klein, Project Manager.
Padre Associates, Inc.
(916) 333-5920 x240
aklein@padreinc.com

Apple Valley Unified School District

Attachment to: Subject Property Environmental Questionnaire

Subject Property: NE intersection of Central Road and Esaws Ave., Apple Valley, Ca 92307

Parcel: 0439-012-19-0-000
Date of Ownership: March 2020
Previous Owner: CJC Holdings, LLC
Machseh, LLC

Parcel: 0439-012-20-0-000
0439-012-21-0-000
0439-012-22-0-000
Date of Ownership: March 2021
Previous Owner: Omni 20.12 Apple Valley LLC

Parcel: 0439-012-23-0-000
0439-012-24-0-000
Date of Ownership: August 2018
Previous Owner: OMAR BAKI, Trustee of the Omar and Kay Trust

APPENDIX E

EDR RADIUS MAP REPORT

Granite Hills H.S. - New Athletics Complex
Central Rd. / Esaws Ave.
Apple Valley, CA 92307

Inquiry Number: 7830904.2s
November 27, 2024

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	9
Orphan Summary	23
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 (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

CENTRAL RD. / ESAWS AVE.
APPLE VALLEY, CA 92307

COORDINATES

Latitude (North):	34.5098900 - 34° 30' 35.60''
Longitude (West):	117.1705500 - 117° 10' 13.98''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	484344.4
UTM Y (Meters):	3818511.0
Elevation:	2929 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	50005268 APPLE VALLEY NORTH, CA
Version Date:	2021
South Map:	50004488 APPLE VALLEY SOUTH, CA
Version Date:	2021

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20200415, 20200501
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
CENTRAL RD. / ESAWS AVE.
APPLE VALLEY, CA 92307

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	MIRA MONTE	CENTRAL ST & ESAWS S	CIWQS	Higher	1 ft.
A2	GRANITE HILLS	NW CORNER OF CENTRAL	CIWQS	Higher	1 ft.
B3	GRANITE HILLS HIGH S	22900 ESAWS RD	RCRA NonGen / NLR	Higher	275, 0.052, SE
B4	APPLE VLY USD GRANIT	22900 ESAWS	CERS HAZ WASTE, San Bern. Co. Permit, CERS	Higher	275, 0.052, SE
B5	GRANITE HILLS HIGH S	22900 ESAWS RD	RCRA NonGen / NLR, E MANIFEST	Higher	275, 0.052, SE

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 hazardous waste facilities

ENVIROSTOR..... EnviroStor Database

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

LUST..... Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC..... Statewide SLIC Cases

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

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Voluntary Cleanup Program Properties

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
ODI..... Open Dump Inventory

DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites ..... Historical Calsites Database
SCH ..... School Property Evaluation Program
CDL ..... Clandestine Drug Labs
Toxic Pits ..... Toxic Pits Cleanup Act Sites
US CDL ..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

SWEEPS UST ..... SWEEPS UST Listing
HIST UST ..... Hazardous Substance Storage Container Database
CA FID UST ..... Facility Inventory Database
CERS TANKS ..... California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information
DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

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
MINES MRDS	Mineral Resources Data System
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
ECHO	Enforcement & Compliance History Information
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
PFAS NPL	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES	Federal Sites PFAS Information
PFAS TRIS	List of PFAS Added to the TRI
PFAS TSCA	PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR	PFAS Contamination Site Location Listing
PFAS WQP	Ambient Environmental Sampling for PFAS
PFAS NPDES	Clean Water Act Discharge Monitoring Information
PFAS PROJECT	NORTHEASTERN UNIVERSITY PFAS PROJECT
PFAS ECHO	Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO FIRE TRAIN	Facilities in Industries that May Be Handling PFAS Listing
PFAS PT 139 AIRPORT	All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC	Aqueous Foam Related Incidents Listing
BIOSOLIDS	ICIS-NPDES Biosolids Facility Data
UST FINDER	UST Finder Database
UST FINDER RELEASE	UST Finder Releases Database
PFAS	PFAS Investigation Site Location Listing
AQUEOUS FOAM	Former Fire Training Facility Assessments Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
CHROME PLATING	Chrome Plating Facilities Listing
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
ICE	Inspection, Compliance and Enforcement
HIST CORTESE	Hazardous Waste & Substance Site List
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
HWTS	Hazardous Waste Tracking System
HAZNET	Facility and Manifest Data
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
HAZMAT ---------- Hazardous Material Facilities
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
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)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---------- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto ---------- EDR Exclusive Historical Auto Stations
EDR Hist Cleaner ---------- EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

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.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 07/10/2024 has revealed that there is 1 CERS HAZ WASTE site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
APPLE VLY USD GRANIT	***22900 ESAWS***	***SE 0 - 1/8 (0.052 mi.)***	***B4***	***13***

Other Ascertainable Records

RCRA NonGen / NLR: 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.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/03/2024 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GRANITE HILLS HIGH S EPA ID:: CAL000391542	22900 ESAWS RD	SE 0 - 1/8 (0.052 mi.)	B3	10
GRANITE HILLS HIGH S EPA ID:: CAC003165617	***22900 ESAWS RD***	***SE 0 - 1/8 (0.052 mi.)***	***B5***	***18***

E MANIFEST: EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

A review of the E MANIFEST list, as provided by EDR, and dated 07/24/2023 has revealed that there is 1 E MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GRANITE HILLS HIGH S	***22900 ESAWS RD***	***SE 0 - 1/8 (0.052 mi.)***	***B5***	***18***

San Bern. Co. Permit: San Bernardino County Fire Department Hazardous Materials Division.

A review of the San Bern. Co. Permit list, as provided by EDR, and dated 08/13/2024 has revealed that there is 1 San Bern. Co. Permit site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
APPLE VLY USD GRANIT Facility Status: ACTIVE Facility Id: FA0013640	***22900 ESAWS***	***SE 0 - 1/8 (0.052 mi.)***	***B4***	***13***

EXECUTIVE SUMMARY

CIWQS: The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

A review of the CIWQS list, as provided by EDR, and dated 08/20/2024 has revealed that there are 2 CIWQS sites within approximately 0.001 miles of the target property.

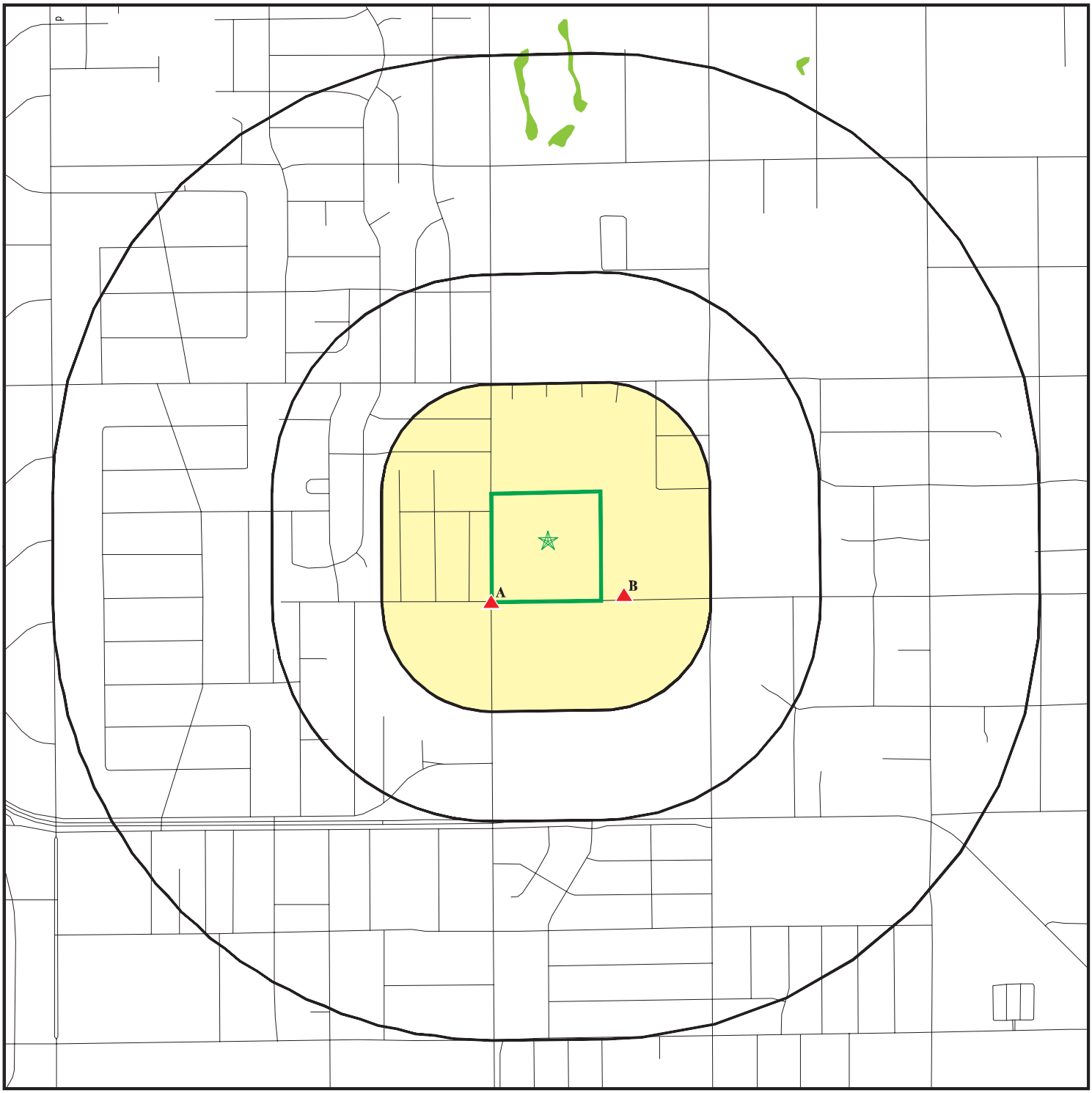
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MIRA MONTE	CENTRAL ST & ESAWS S	0 - 1/8 (0.000 mi.)	A1	9
GRANITE HILLS	NW CORNER OF CENTRAL	0 - 1/8 (0.000 mi.)	A2	9

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

Site Name	Database(s)
	CDL
	CDL
	CDL
APPLE VALLEY MERCURY SITE	SEMS

OVERVIEW MAP - 7830904.2S



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

0 1/4 1/2 1 Miles

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

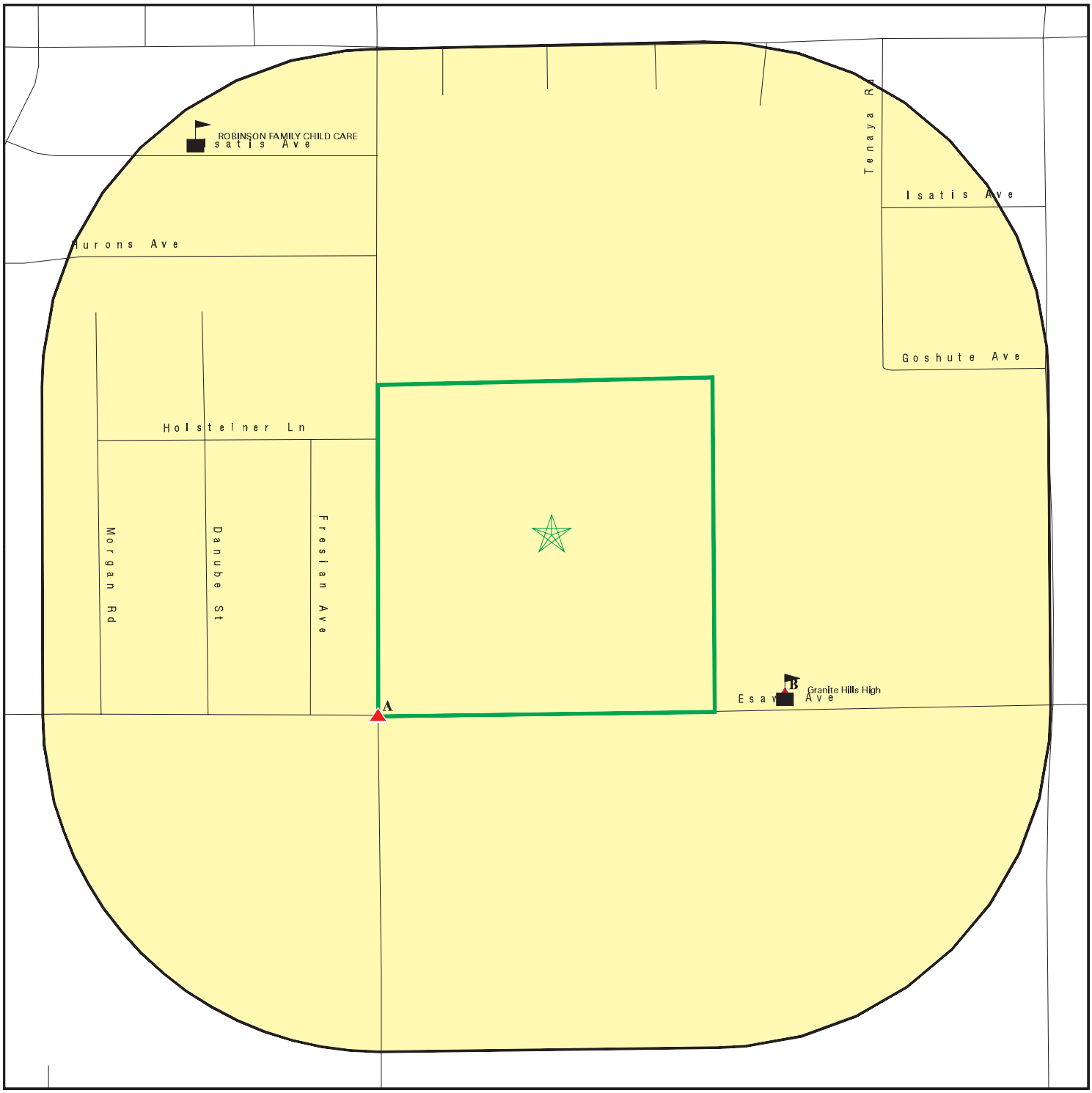
Areas of Concern

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

SITE NAME:	Granite Hills H.S. - New Athletics Complex	CLIENT:	Padre Associates, Inc
ADDRESS:	Central Rd. / Esaws Ave. Apple Valley CA 92307	CONTACT:	Alan Churchill
		INQUIRY #:	7830904.2s
LAT/LONG:	34.50989 / 117.17055	DATE:	November 27, 2024 12:57 pm

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DETAIL MAP - 7830904.2S



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

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:	Granite Hills H.S. - New Athletics Complex	CLIENT:	Padre Associates, Inc
ADDRESS:	Central Rd. / Esaws Ave. Apple Valley CA 92307	CONTACT:	Alan Churchill
		INQUIRY #:	7830904.2s
LAT/LONG:	34.50989 / 117.17055	DATE:	November 27, 2024 12:57 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	0	NR	0
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		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
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								
INDIAN VCP	0.500		0	0	0	NR	NR	0
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
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
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		1	0	NR	NR	NR	1
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
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		2	0	NR	NR	NR	2
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
MINES MRDS	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	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
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS PROJECT	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAIN	0.250		0	0	NR	NR	NR	0
PFAS PT 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	0.001		0	NR	NR	NR	NR	0
UST FINDER	0.250		0	0	NR	NR	NR	0
UST FINDER RELEASE	0.500		0	0	0	NR	NR	0
E MANIFEST	0.250		1	0	NR	NR	NR	1
PFAS	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
CHROME PLATING	0.500		0	0	0	NR	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
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
HWTS	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	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
San Bern. Co. Permit	0.250		1	0	NR	NR	NR	1
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
HAZMAT	0.250		0	0	NR	NR	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		2	NR	NR	NR	NR	2
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

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
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
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	7	0	0	0	0	7

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **MIRA MONTE** **CIWQS** **S121655977**
CENTRAL ST & ESAWS ST **N/A**
< 1/8 **APPLE VALLEY, CA 92307**
1 ft.

Site 1 of 2 in cluster A

Relative: CIWQS:
Higher

Name:	Mira Monte
Address:	CENTRAL ST & ESAWS ST
City,State,Zip:	APPLE VALLEY, CA 92307
Agency:	IndyMac Federal Bank
Agency Address:	155 N Lake Ave, Pasadena, CA 91101
Place/Project Type:	Construction - Residential
SIC/NAICS:	Not reported
Region:	6V
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	6B36C354229
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	12/19/2008
Termination Date:	09/02/2010
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

Actual:
2931 ft.

A2 **GRANITE HILLS** **CIWQS** **S121641669**
NW CORNER OF CENTRAL RD & ESAWS AVENUE **N/A**
< 1/8 **APPLE VALLEY, CA 92307**
1 ft.

Site 2 of 2 in cluster A

Relative: CIWQS:
Higher

Name:	Granite Hills
Address:	NW CORNER OF CENTRAL RD & ESAWS AVENUE
City,State,Zip:	APPLE VALLEY, CA 92307
Agency:	Apple Valley Investments LLC
Agency Address:	32823 Hwy 79 S, Temecula, CA 92592
Place/Project Type:	Construction - Residential, Utility, Transportation
SIC/NAICS:	Not reported
Region:	6V
Program:	CONSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	99-08DW
WDID:	6B36C336472
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	09/09/2005
Termination Date:	08/23/2007
Expiration/Review Date:	Not reported
Design Flow:	Not reported

Actual:
2931 ft.

GRANITE HILLS (Continued) **S121641669**

Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

B3 **GRANITE HILLS HIGH SCHOOL** **RCRA NonGen / NLR** **1026054632**
SE **22900 ESAWS RD** **CAL000391542**
< 1/8 **APPLE VALLEY, CA 92307**
0.052 mi.
275 ft. **Site 1 of 3 in cluster B**

Relative: **Higher**
Actual: **2929 ft.**

RCRA Listings:

Date Form Received by Agency:	20230412
Handler Name:	Granite Hills High School
Handler Address:	Esaws Rd
Handler City,State,Zip:	APPLE VALLEY, CA 92307
EPA ID:	CAL000391542
Contact Name:	ADAM POWELL
Contact Address:	ESAWS RD
Contact City,State,Zip:	APPLE VALLEY, CA 92307
Contact Telephone:	760-247-8001 x73910
Contact Fax:	Not reported
Contact Email:	ADAM_POWELL@AVUSD.ORG
Contact Title:	Not reported
EPA Region:	09
Land Type:	District
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	ESAWS RD
Mailing City,State,Zip:	APPLE VALLEY, CA 92307
Owner Name:	Apple Valley Unified School District
Owner Type:	District
Operator Name:	Apple Valley Unified School District
Operator Type:	District
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N

GRANITE HILLS HIGH SCHOOL (Continued) **1026054632**

Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20230425
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	APPLE VALLEY UNIFIED SCHOOL DISTRICT
Legal Status:	District
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	12555 NAVAJO RD
Owner/Operator City,State,Zip:	APPLE VALLEY, CA 92308
Owner/Operator Telephone:	760-247-8001
Owner/Operator Telephone Ext:	20751
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	APPLE VALLEY UNIFIED SCHOOL DISTRICT
Legal Status:	District
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	12555 NAVAJO RD
Owner/Operator City,State,Zip:	APPLE VALLEY, CA 92308
Owner/Operator Telephone:	760-247-8001
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	760-247-4103
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	APPLE VALLEY UNIFIED SCHOOL DISTRICT
Legal Status:	District
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	12555 NAVAJO RD

GRANITE HILLS HIGH SCHOOL (Continued) **1026054632**

Owner/Operator City,State,Zip: APPLE VALLEY, CA 92308
Owner/Operator Telephone: 760-247-8001
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: 760-247-4103
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: APPLE VALLEY UNIFIED SCHOOL DISTRICT
Legal Status: District
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 12555 NAVAJO RD
Owner/Operator City,State,Zip: APPLE VALLEY, CA 92308
Owner/Operator Telephone: 760-247-8001
Owner/Operator Telephone Ext: 20751
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20200213
Handler Name: GRANITE HILLS HIGH SCHOOL / APPLE VALLEY UNIFIED SCHOOL DISTRICT
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20230412
Handler Name: GRANITE HILLS HIGH SCHOOL
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 61111
NAICS Description: ELEMENTARY AND SECONDARY SCHOOLS

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

B4 **APPLE VLY USD GRANITE HILLS HS** **CERS HAZ WASTE** **S111311484**
SE **22900 ESAWS** **San Bern. Co. Permit** **N/A**
< 1/8 **APPLE VALLEY, CA 92307** **CERS**
0.052 mi.
275 ft. **Site 2 of 3 in cluster B**

Relative:
Higher

Actual:
2929 ft.

CERS HAZ WASTE:
Name: APPLE VLY USD GRANITE HILLS HS
Address: 22900 ESAWS
City,State,Zip: APPLE VALLEY, CA 92307
Site ID: 6230
CERS ID: 10311874
CERS Description: Hazardous Waste Generator

San Bern. Co. Permit:
Name: APPLE VLY USD GRANITE HILLS HS
Address: 22900 ESAWA
City,State,Zip: APPLE VALLEY, CA 92307
Region: SAN BERNARDINO
Facility ID: FA0013640
Owner: APPLE VLY UNIFIED SCHOOL DIST
Permit Number: PT0024820
Permit Category: CONDITIONALLY EXEMPT SM QTY GENERATOR
Facility Status: ACTIVE
Expiration Date: 09/30/2024

Name: APPLE VLY USD GRANITE HILLS HS
Address: 22900 ESAWA
City,State,Zip: APPLE VALLEY, CA 92307
Region: SAN BERNARDINO
Facility ID: FA0013640
Owner: APPLE VLY UNIFIED SCHOOL DIST
Permit Number: PT0024630
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 09/30/2024

CERS:
Name: APPLE VLY USD GRANITE HILLS HS
Address: 22900 ESAWS
City,State,Zip: APPLE VALLEY, CA 92307
Site ID: 6230
CERS ID: 10311874
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 6230
Site Name: APPLE VLY USD GRANITE HILLS HS
Violation Date: 04-12-2023
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.
Violation Notes: Returned to compliance on 04/25/2023. OBSERVATION: EPA ID number CAL000391542 was inactive at the time of inspection. EPA ID number reactivated 4/25/2023.
Violation Division: San Bernardino County Fire Department
Violation Program: HW

APPLE VLY USD GRANITE HILLS HS (Continued) **S111311484**

Violation Source: CERS,

Site ID: 6230
Site Name: APPLE VLY USD GRANITE HILLS HS
Violation Date: 10-23-2013
Citation: HSC 6.67 Multiple - California Health and Safety Code, Chapter 6.67, Section(s) Multiple
Violation Description: Haz Waste Generator Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 10/23/2013. Failure to obtain an EPA ID Number (CCR 66262.12(a))
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Site ID: 6230
Site Name: APPLE VLY USD GRANITE HILLS HS
Violation Date: 01-18-2017
Citation: HSC 6.5 Multiple - California Health and Safety Code, Chapter 6.5, Section(s) Multiple
Violation Description: Hazardous Waste Generator Program - Administration/Documentation - General
Violation Notes: Returned to compliance on 02/07/2017. Failure to obtain an EPA ID Number (CCR 66262.12(a)) Waste ID inactive.
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

Site ID: 6230
Site Name: APPLE VLY USD GRANITE HILLS HS
Violation Date: 10-23-2013
Citation: HSC 6.95 25505(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)
Violation Description: Owner/Operator failed to complete and/or submit a Hazardous Materials Business Plan when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 lbs/200 cubic feet.
Violation Notes: Returned to compliance on 12/11/2013. BP verifed on CERS
Violation Division: San Bernardino County Fire Department
Violation Program: HMRRP
Violation Source: CERS,

Site ID: 6230
Site Name: APPLE VLY USD GRANITE HILLS HS
Violation Date: 02-04-2020
Citation: 22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description: Failure to obtain an Identification Number prior to treating, storing, disposing of, transporting or offering for transportation any hazardous waste.
Violation Notes: Returned to compliance on 02/24/2020. OBSERVATION: The generator's EPA ID number is inactive. A hazardous waste generator shall not treat, store, dispose of, transport or offer for transportation, hazardous waste without an active EPA ID number. CORRECTIVE ACTION: Submit documentation to the CUPA demonstrating that you have reactivated the facility's EPA ID number.
Violation Division: San Bernardino County Fire Department
Violation Program: HW
Violation Source: CERS,

APPLE VLY USD GRANITE HILLS HS (Continued) **S111311484**

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-12-2023
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	San Bernardino County Fire Department
Eval Program:	HMRRP
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-12-2023
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	San Bernardino County Fire Department
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-23-2013
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	granite hills gen insp
Eval Division:	San Bernardino County Fire Department
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	10-23-2013
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	granite hills handler insp
Eval Division:	San Bernardino County Fire Department
Eval Program:	HMRRP
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	01-18-2017
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	HANDLER INSPECTION
Eval Division:	San Bernardino County Fire Department
Eval Program:	HMRRP
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	01-18-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	GENERATOR INSPECTION
Eval Division:	San Bernardino County Fire Department
Eval Program:	HW
Eval Source:	CERS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	02-04-2020

APPLE VLY USD GRANITE HILLS HS (Continued) **S111311484**

Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 02-04-2020
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: San Bernardino County Fire Department
Eval Program: HW
Eval Source: CERS,

Enforcement Action:
Site ID: 6230
Site Name: APPLE VLY USD GRANITE HILLS HS
Site Address: 22900 ESAWS
Site City: APPLE VALLEY
Site Zip: 92307
Enf Action Date: 01-18-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HW
Enf Action Source: CERS,

Site ID: 6230
Site Name: APPLE VLY USD GRANITE HILLS HS
Site Address: 22900 ESAWS
Site City: APPLE VALLEY
Site Zip: 92307
Enf Action Date: 10-23-2013
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HMRRP
Enf Action Source: CERS,

Site ID: 6230
Site Name: APPLE VLY USD GRANITE HILLS HS
Site Address: 22900 ESAWS
Site City: APPLE VALLEY
Site Zip: 92307
Enf Action Date: 10-23-2013
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: San Bernardino County Fire Department
Enf Action Program: HW
Enf Action Source: CERS,

APPLE VLY USD GRANITE HILLS HS (Continued) **S111311484**

Affiliation:

Affiliation Type Desc:	Identification Signer
Entity Name:	Scott Barnes
Entity Title:	Plant Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Legal Owner
Entity Name:	APPLE VLY UNIFIED SCHOOL DIST
Entity Title:	Not reported
Affiliation Address:	12555 NAVAJO RD
Affiliation City:	APPLE VALLEY
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92308-9230
Affiliation Phone:	(760) 247-8000,

Affiliation Type Desc:	Property Owner
Entity Name:	APPLE VALLEY USD
Entity Title:	Not reported
Affiliation Address:	12555 Navajo Road
Affiliation City:	Apple Valley
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92308
Affiliation Phone:	(760) 247-8001,

Affiliation Type Desc:	Document Preparer
Entity Name:	Kendall Birkett, Keenan & Associates
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Environmental Contact
Entity Name:	Colette Rozhon
Entity Title:	Not reported
Affiliation Address:	12555 Navajo Road
Affiliation City:	Apple Valley
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92308
Affiliation Phone:	,

Affiliation Type Desc:	CUPA District
Entity Name:	San Bernardino County Fire
Entity Title:	Not reported
Affiliation Address:	620 South E Street
Affiliation City:	San Bernardino
Affiliation State:	CA

APPLE VLY USD GRANITE HILLS HS (Continued) **S111311484**

Affiliation Country: Not reported
Affiliation Zip: 92415-0153
Affiliation Phone: (909) 386-8401,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 22900 Esaws Road
Affiliation City: APPLE VALLEY
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 92307
Affiliation Phone: ,

Affiliation Type Desc: Operator
Entity Name: Granite Hills High Scool
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (760) 961-2290,

Affiliation Type Desc: Parent Corporation
Entity Name: APPLE VALLEY USD
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

B5 **GRANITE HILLS HIGH SCHOOL/APPLE VALLEY UNIFIED SCH** **RCRA NonGen / NLR** **1027201791**
SE **22900 ESAWS RD** **E MANIFEST** **CAC003165617**
< 1/8 **APPLE VALLEY, CA 92307**
0.052 mi.
275 ft. **Site 3 of 3 in cluster B**

Relative: RCRA Listings:
Higher
Actual: Date Form Received by Agency: 20220310
2929 ft. Handler Name: Granite Hills High School/Apple Valley Unified School District
Handler Address: 22900 Esaws Rd
Handler City,State,Zip: APPLE VALLEY, CA 92307
EPA ID: CAC003165617
Contact Name: AL SHANEFIELD
Contact Address: 22900 ESAWS RD
Contact City,State,Zip: APPLE VALLEY, CA 92307
Contact Telephone: 760-961-2200
Contact Fax: Not reported
Contact Email: SERVICES@ENVLOGS.COM
Contact Title: Not reported
EPA Region: 09
Land Type: Not reported
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported

GRANITE HILLS HIGH SCHOOL/APPLE VALLEY UNIFIED SCHOOL DISTRI (Continued) **1027201791**

Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Not reported
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	22900 ESAWS RD
Mailing City,State,Zip:	APPLE VALLEY, CA 92307
Owner Name:	Apple Valley Unified School Dist
Owner Type:	Other
Operator Name:	Al Shanefield
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20220311
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: AL SHANEFIELD	
Legal Status:	Other

GRANITE HILLS HIGH SCHOOL/APPLE VALLEY UNIFIED SCHOOL DISTRI (Continued) **1027201791**

Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 22900 ESAWS RD
Owner/Operator City,State,Zip: APPLE VALLEY, CA 92307
Owner/Operator Telephone: 760-961-2200
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: APPLE VALLEY UNIFIED SCHOOL DIST
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 12555 NAVAJO RD
Owner/Operator City,State,Zip: APPLE VALLEY, CA 92308
Owner/Operator Telephone: 760-247-8001
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20220310
Handler Name: GRANITE HILLS HIGH SCHOOL/APPLE VALLEY UNIFIED SCHOOL DISTRICT
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E MANIFEST:
Manifest Tracking Number: 021980457JJK
Last Updated Date: 20220324
Shipped Date: 20220310
Received Date: 20220310
Manifest Status: Signed
Submission Type: DataImage5Copy
Origin Type: Service
Generator EPA ID: CAC003165617

GRANITE HILLS HIGH SCHOOL/APPLE VALLEY UNIFIED SCHOOL DISTRI (Continued) **1027201791**

Generator Name:	Granite Hills High School
Generator Location Street Number:	Not reported
Generator Location Street 1:	22900 ESAWS ROAD
Generator Location Street 2:	Not reported
Generator Location City:	APPLE VALLEY
Generator Location State:	CA
Generator Location Zip:	92307
Generator Mail Street Number:	Not reported
Generator Mail Street 1:	22900 Esaws Road
Generator Mail Street 2:	Not reported
Generator Mail City:	Apple Valley
Generator Mail Zip:	92307
Generator Mail State:	CA
Generator Contact Company Name:	Not reported
Designated Facility EPA ID:	CAD982444481
Designated Facility Name:	Hazmat Tsdf Inc, Former Filter Recycling Services Inc
Designated Facility Mail Street Number:	180
Designated Facility Mail Street 1:	Not reported
Designated Facility Mail Street 2:	WEST MONTE AVENUE
Designated Facility Mail City:	RIALTO
Designated Facility Mail Zip:	92316
Designated Facility Mail State:	CA
Designated Facility Location Street Number:	180
Designated Facility Location Street 1:	WEST MONTE AVENUE
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	RIALTO
Designated Facility Location Zip:	92316
Designated Facility Location State:	CA
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

State Waste:

Manifest Tracking Number:	021980457JJK
Waste Line Number:	1
State Waste Code Owner:	CA
State Waste Code:	331
State Waste:	Off-specification, aged, or surplus organics

Transporter:

Manifest Tracking Number:	021980457JJK
Transporter Line Number:	1
Transporter EPA ID:	CAR000172460
Transporter Name:	Environmental Logistics Inc

Waste Line:

Manifest Tracking Number:	021980457JJK
Waste Line Number:	1
U.S. DOT Hazardous Indicator:	N
U.S. DOT ID Number:	Not reported
U.S. DOT Description:	Not reported
Non-Hazardous Waste Description:	Non-RCRA Hazardous Waste Solid (Animal Carcasses)
Number of Containers:	2
Container Type Code:	CF
Container Type Description:	Fiber or plastic boxes, cartons, cases
Waste Quantity:	100

GRANITE HILLS HIGH SCHOOL/APPLE VALLEY UNIFIED SCHOOL DISTRI (Continued) **1027201791**

Quantity Unit of Measure Code:	P
Quantity Unit of Measure Description:	Pounds
Waste Quantity, in Tons:	0.05
Acute Waste Quantity, in Tons:	0
Non-Acute Waste Quantity, in Tons:	0.05
Waste Quantity, in Kilograms:	45.3515
Acute Waste Quantity, in Kilograms:	0
Non-Acute Waste Quantity, in Kilorgrams:	45.3515
Management Method Code:	H141
Management Method Description:	STORAGE, BULKING AND/OR TRANSFER OFF SITE
Waste Residue Indicator:	N
Quantity Discrepancy Indicator:	N
Waste Type Discrepancy Indicator:	N
Waste Density:	Not reported
Waste Density Unit of Measure Code:	Not reported
Waste Density Unit of Measure Description:	Not reported
Form Code:	Not reported
Form Code Description:	Not reported
Source Code:	Not reported
Source Code Description:	Not reported
Waste Minimization Code:	Not reported
Waste Minimization Code Description:	Not reported
Consent Number:	Not reported
EPA Waste Indicator:	N

Count: 4 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
APPLE VALLEY	1005440852	APPLE VALLEY MERCURY SITE	HURONS AVE., PIONEER RD., & IS	92307	SEMS
APPLE VALLEY	S107526643		1/4 MILE W OF WREN & CENTRAL		CDL
APPLE VALLEY	S107539538		NEAR STODDARD WELLS & CENTRAL	92307	CDL
APPLE VALLEY	S107540001		ON PAPAGO ROAD, 1200' WEST OF	92307	CDL

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: 09/25/2024
Date Data Arrived at EDR: 10/01/2024
Date Made Active in Reports: 10/23/2024
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 11/01/2024
Next Scheduled EDR Contact: 01/06/2025
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 09/25/2024
Date Data Arrived at EDR: 10/01/2024
Date Made Active in Reports: 10/23/2024
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 11/01/2024
Next Scheduled EDR Contact: 01/06/2025
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: 09/25/2024
Date Data Arrived at EDR: 10/01/2024
Date Made Active in Reports: 10/23/2024
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 11/01/2024
Next Scheduled EDR Contact: 01/06/2025
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: 06/07/2024
Date Data Arrived at EDR: 06/25/2024
Date Made Active in Reports: 09/19/2024
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 09/24/2024
Next Scheduled EDR Contact: 01/09/2025
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: 09/25/2024
Date Data Arrived at EDR: 10/01/2024
Date Made Active in Reports: 10/23/2024
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/01/2024
Next Scheduled EDR Contact: 01/20/2025
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: 09/25/2024
Date Data Arrived at EDR: 10/01/2024
Date Made Active in Reports: 10/23/2024
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/01/2024
Next Scheduled EDR Contact: 01/20/2025
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: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
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: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
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: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
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: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
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: 07/15/2024
Date Data Arrived at EDR: 07/17/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 84

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 11/13/2024
Next Scheduled EDR Contact: 02/17/2025
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: 07/24/2024
Date Data Arrived at EDR: 08/08/2024
Date Made Active in Reports: 08/15/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/15/2024
Next Scheduled EDR Contact: 12/02/2024
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: 07/24/2024
Date Data Arrived at EDR: 08/08/2024
Date Made Active in Reports: 08/15/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 11/15/2024
Next Scheduled EDR Contact: 03/03/2025
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: 06/11/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 09/04/2024
Number of Days to Update: 79

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
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: 07/22/2024
Date Data Arrived at EDR: 07/22/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/22/2024
Next Scheduled EDR Contact: 02/03/2025
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: 07/22/2024
Date Data Arrived at EDR: 07/22/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/22/2024
Next Scheduled EDR Contact: 02/03/2025
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: 08/05/2024
Date Data Arrived at EDR: 08/06/2024
Date Made Active in Reports: 10/28/2024
Number of Days to Update: 83

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 11/06/2024
Next Scheduled EDR Contact: 02/17/2025
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

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 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 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 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: 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: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
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 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 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

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/11/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
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: 03/15/2024
Date Data Arrived at EDR: 03/19/2024
Date Made Active in Reports: 06/17/2024
Number of Days to Update: 90
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
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: 02/13/2024
Date Data Arrived at EDR: 03/05/2024
Date Made Active in Reports: 06/03/2024
Number of Days to Update: 90
Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/04/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
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: 09/05/2024
Next Scheduled EDR Contact: 12/23/2024
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: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 04/11/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 09/10/2024
Next Scheduled EDR Contact: 12/30/2024
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: 07/22/2024
Date Data Arrived at EDR: 07/22/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 79
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/22/2024
Next Scheduled EDR Contact: 02/03/2025
Data Release Frequency: Quarterly

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

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: 06/17/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 09/10/2024
Number of Days to Update: 85
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/10/2024
Date Data Arrived at EDR: 06/11/2024
Date Made Active in Reports: 09/04/2024
Number of Days to Update: 85
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/11/2024
Next Scheduled EDR Contact: 12/23/2024
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: 10/16/2024
Next Scheduled EDR Contact: 02/03/2025
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 04/04/2024
Date Data Arrived at EDR: 04/05/2024
Date Made Active in Reports: 04/15/2024
Number of Days to Update: 10

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 10/30/2024
Next Scheduled EDR Contact: 02/17/2025
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/17/2024
Next Scheduled EDR Contact: 02/03/2025
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 11/19/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 02/07/2024
Date Data Arrived at EDR: 11/13/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 6
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 11/13/2024
Next Scheduled EDR Contact: 02/03/2025
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: 05/20/2024
Date Data Arrived at EDR: 08/19/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 51
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/22/2024
Next Scheduled EDR Contact: 03/03/2025
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/22/2024
Date Data Arrived at EDR: 07/22/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 79
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/22/2024
Next Scheduled EDR Contact: 02/03/2025
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: 12/31/2022
Date Data Arrived at EDR: 03/21/2024
Date Made Active in Reports: 06/12/2024
Number of Days to Update: 83
Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 11/19/2024
Next Scheduled EDR Contact: 02/10/2025
Data Release Frequency: Varies

CERS HAZ WASTE: California Environmental Reporting System Hazardous 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: 07/10/2024
Date Data Arrived at EDR: 07/10/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 2

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

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: 05/20/2024
Date Data Arrived at EDR: 08/19/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 51

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/22/2024
Next Scheduled EDR Contact: 03/03/2025
Data Release Frequency: Quarterly

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: 07/29/2024
Date Data Arrived at EDR: 07/30/2024
Date Made Active in Reports: 10/17/2024
Number of Days to Update: 79

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 10/24/2024
Next Scheduled EDR Contact: 02/10/2025
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 07/10/2024
Date Data Arrived at EDR: 07/10/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 2

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
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

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: 05/31/2024
Date Data Arrived at EDR: 06/21/2024
Date Made Active in Reports: 09/11/2024
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/19/2024
Next Scheduled EDR Contact: 03/10/2025
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: 09/25/2024
Date Data Arrived at EDR: 10/01/2024
Date Made Active in Reports: 10/23/2024
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 11/01/2024
Next Scheduled EDR Contact: 01/06/2025
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: 08/22/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/14/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 06/24/2024
Number of Days to Update: 7

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
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: 07/19/2024
Date Data Arrived at EDR: 07/22/2024
Date Made Active in Reports: 10/08/2024
Number of Days to Update: 78

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
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: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
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: 06/03/2024
Date Data Arrived at EDR: 06/07/2024
Date Made Active in Reports: 06/20/2024
Number of Days to Update: 13
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
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: 07/31/2024
Date Data Arrived at EDR: 08/12/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 58
Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 11/12/2024
Next Scheduled EDR Contact: 02/24/2025
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: 10/10/2024
Next Scheduled EDR Contact: 01/20/2025
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: 10/03/2024
Next Scheduled EDR Contact: 01/13/2025
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: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 11/04/2024
Next Scheduled EDR Contact: 02/17/2025
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: 06/10/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 09/04/2024
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA Watch List

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 10/24/2024
Next Scheduled EDR Contact: 02/10/2025
Data Release Frequency: No Update Planned

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: 10/31/2024
Next Scheduled EDR Contact: 02/10/2025
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: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 10/03/2024
Next Scheduled EDR Contact: 12/23/2024
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: 12/31/2022
Date Data Arrived at EDR: 11/13/2023
Date Made Active in Reports: 02/07/2024
Number of Days to Update: 86
Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/14/2024
Next Scheduled EDR Contact: 02/24/2025
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/11/2024
Date Data Arrived at EDR: 07/11/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 1
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/24/2024
Date Data Arrived at EDR: 11/01/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 18

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 11/01/2024
Next Scheduled EDR Contact: 12/09/2024
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 07/12/2024
Date Data Arrived at EDR: 07/17/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/09/2024
Next Scheduled EDR Contact: 01/27/2025
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: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/01/2024
Next Scheduled EDR Contact: 02/10/2025
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: 05/23/2024
Date Data Arrived at EDR: 07/02/2024
Date Made Active in Reports: 09/26/2024
Number of Days to Update: 86

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 01/13/2025
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: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
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: 10/12/2024
Date Data Arrived at EDR: 10/17/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 33

Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 10/09/2024
Next Scheduled EDR Contact: 01/27/2025
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: 12/31/2022
Date Data Arrived at EDR: 11/27/2023
Date Made Active in Reports: 02/22/2024
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
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: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
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: 10/31/2024
Next Scheduled EDR Contact: 02/10/2025
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: 09/18/2024
Next Scheduled EDR Contact: 01/06/2025
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: 10/16/2024
Next Scheduled EDR Contact: 02/03/2025
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2024
Date Data Arrived at EDR: 07/08/2024
Date Made Active in Reports: 09/26/2024
Number of Days to Update: 80
Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
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: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11
Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 11/22/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546
Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/01/2024
Next Scheduled EDR Contact: 01/13/2025
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: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98
Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 10/24/2024
Next Scheduled EDR Contact: 02/10/2025
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: 05/08/2024
Date Data Arrived at EDR: 08/14/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 14
Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/14/2024
Next Scheduled EDR Contact: 02/24/2025
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 09/25/2024
Date Data Arrived at EDR: 10/01/2024
Date Made Active in Reports: 10/23/2024
Number of Days to Update: 22
Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 11/01/2024
Next Scheduled EDR Contact: 01/06/2025
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: 08/06/2024
Date Data Arrived at EDR: 08/14/2024
Date Made Active in Reports: 08/15/2024
Number of Days to Update: 1

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 11/18/2024
Next Scheduled EDR Contact: 03/03/2025
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: 10/01/2024
Date Data Arrived at EDR: 10/02/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 7

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 11/13/2024
Next Scheduled EDR Contact: 03/03/2025
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: 05/02/2024
Date Data Arrived at EDR: 08/20/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 50

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/22/2024
Next Scheduled EDR Contact: 03/03/2025
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/22/2024
Next Scheduled EDR Contact: 03/03/2025
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 69

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Quarterly

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 08/23/2022
Date Data Arrived at EDR: 11/22/2022
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 98

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 11/22/2024
Next Scheduled EDR Contact: 03/03/2025
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/13/2024
Date Data Arrived at EDR: 08/20/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 8

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/23/2024
Date Data Arrived at EDR: 06/28/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 10/01/2024
Next Scheduled EDR Contact: 01/13/2025
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: 11/13/2024
Next Scheduled EDR Contact: 03/03/2025
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/06/2023
Date Data Arrived at EDR: 09/13/2023
Date Made Active in Reports: 12/11/2023
Number of Days to Update: 89

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/03/2024
Next Scheduled EDR Contact: 01/20/2025
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/13/2024
Date Data Arrived at EDR: 08/13/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 57

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 11/08/2024
Next Scheduled EDR Contact: 02/24/2025
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 10/17/2024
Next Scheduled EDR Contact: 02/03/2025
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

PFAS PROJECT: NORTHEASTERN UNIVERSITY PFAS PROJECT

The PFAS Contamination Site Tracker records qualitative and quantitative data from each site in a chart, specifically examining discovery, contamination levels, government response, litigation, health impacts, media coverage, and community characteristics. All data presented in the chart were extracted from government websites, such as state health departments or the Environmental Protection Agency, and news articles.

Date of Government Version: 05/19/2023
Date Data Arrived at EDR: 04/05/2024
Date Made Active in Reports: 06/06/2024
Number of Days to Update: 62

Source: Social Science Environmental Health Research Institute
Telephone: N/A
Last EDR Contact: 09/05/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

PFAS ECHO FIRE TRAIN: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

PFAS PT 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/01/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 01/13/2025
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: 12/16/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/10/2017
Number of Days to Update: 63

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: No Update Planned

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: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Varies

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data

The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 10/13/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 10/23/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Varies

UST FINDER RELEASE: UST Finder Releases Database

US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/31/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 79

Source: Environmental Protecton Agency
Telephone: 202-564-0394
Last EDR Contact: 11/06/2024
Next Scheduled EDR Contact: 02/17/2025
Data Release Frequency: Semi-Annually

UST FINDER: UST Finder Database

EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 106

Source: Environmental Protection Agency
Telephone: 202-564-0394
Last EDR Contact: 11/06/2024
Next Scheduled EDR Contact: 02/17/2025
Data Release Frequency: Varies

E MANIFEST: Hazardous Waste Electronic Manifest System

EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

Date of Government Version: 07/24/2023
Date Data Arrived at EDR: 04/18/2024
Date Made Active in Reports: 06/06/2024
Number of Days to Update: 49

Source: Environmental Protection Agency
Telephone: 833-501-6826
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS sites included in the Envirostor and GeoTracker databases. Locations of potential sources of per - and polyfluoroalkyl substances (PFAS). This does not mean that PFAS has been produced, used, or discharged at these sites.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 09/03/2024
Number of Days to Update: 6

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

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: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/12/2024
Number of Days to Update: 76

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

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

CHROME PLATING: Chrome Plating Facilities Listing

This listing represents chrome plating facilities the California State Water Resources Control Board staff identified as possibly being a source of Per- and polyfluoroalkyl substance (PFAS) contamination. Sites and locations were identified by staff with the Division of Water Quality in the California State Water Board. Data was collected from the CA Air Resources Board 2013 and 2018 - Cr VI emission survey, CA Emission Inventory, CA HAZ Waste discharge database and by reviewing storm water permits. Former chrome plating sites are also included that are open site investigation or remediation cases with the Regional Water Quality Control Boards and the Department of Toxic Substances Control.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/12/2024
Number of Days to Update: 76

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/17/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 09/10/2024
Number of Days to Update: 85

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

CUPA LIV-PLE: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 02/14/2024
Date Data Arrived at EDR: 02/21/2024
Date Made Active in Reports: 05/08/2024
Number of Days to Update: 77

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 11/05/2024
Next Scheduled EDR Contact: 02/17/2025
Data Release Frequency: Varies

DRYCLEAN CALAVERAS: Calaveras County Environmental Management Agency Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Calaveras County Environmental Management Agency.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1412

Source: Calaveras County Environmental Management Agency
Telephone: 209-754-6399
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN N COAST: North Coast Unified Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the North Coast Unified Air Quality Management District.

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473

Source: North Coast Unified Air Quality Management District
Telephone: 707-443-3093
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SANTA BARB: Santa Barbara County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Santa Barbara County Air Pollution Control District.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475

Source: Santa Barbara County Air Pollution Control District
Telephone: 805-961-8867
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN TEHAMA: Tehama County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Tehama County Air Pollution Control District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1468

Source: Tehama County Air Pollution Control District
Telephone: 530-527-3717
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
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: 08/28/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 11/19/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Annually

DRYCLEAN SHASTA: Shasta County Air Quality Management District District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Shasta County Air Quality Management District.

Date of Government Version: 08/29/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69

Source: Shasta County Air Quality Management District
Telephone: 530-225-5674
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN EAST KERN: Eastern Kern Air Pollution Control District District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Eastern Kern Air Pollution Control District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: Eastern Kern Air Pollution Control District
Telephone: 661-862-9684
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN JOAQUIN: San Joaquin Valley Air Pollution Control District District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the San Joaquin Valley Air Pollution Control District.

Date of Government Version: 08/22/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: San Joaquin Valley Air Pollution Control District
Telephone: 559-230-6001
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN GLENN: Glenn County Air Pollution Control District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Glenn County Air Pollution Control District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 77

Source: Glenn County Air Pollution Control District
Telephone: 530-934-6500
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BUTTE: Butte County Air Quality Management DistrictDrycleaner Facility Listing

Butte County Air Quality Management DistrictDrycleaner Facility Listing.

Date of Government Version: 09/10/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 11/25/2024
Number of Days to Update: 75

Source: Butte County Air Quality Management District
Telephone: 530-332-9400
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN FEATHER RVR: Feather River Air Quality Management District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Feather River Air Quality Management District.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 06/05/2023
Number of Days to Update: 88

Source: Feather River Air Quality Management District
Telephone: 530-634-7659
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
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: 05/29/2024
Date Data Arrived at EDR: 11/07/2024
Date Made Active in Reports: 11/22/2024
Number of Days to Update: 15

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 11/07/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Varies

DRYCLEAN N SONOMA: Norther Sonoma County County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sonoma County Air Pollution Control District.,

Date of Government Version: 08/23/2024
Date Data Arrived at EDR: 08/26/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 71

Source: Santa Barbara County Air Pollution Control District
Telephone: 707-433-5911
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN GRANT: Grant Recipients List
Assembly Bill 998 (AB 998) established the Non-Toxic Dry Cleaning Incentive Program to provide financial assistance to the dry cleaning industry to switch from systems using perchloroethylene (Perc), an identified toxic air contaminant and potential human carcinogen, to non-toxic and non-smog forming alternatives.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/26/2024
Date Made Active in Reports: 04/16/2024
Number of Days to Update: 81

Source: California Air Resources Board
Telephone: 916-323-0006
Last EDR Contact: 10/24/2024
Next Scheduled EDR Contact: 02/03/2025
Data Release Frequency: Varies

DRYCLEAN YOLO-SOLANO: Yolo-Solano Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Yolo-Solano Air Quality Management District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/26/2024
Date Made Active in Reports: 11/06/2024
Number of Days to Update: 72

Source: Yolo-Solano Air Quality Management District
Telephone: 530-757-3650
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN LAKE: Lake County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Lake County Air Quality Management District,

Date of Government Version: 02/15/2024
Date Data Arrived at EDR: 02/16/2024
Date Made Active in Reports: 05/02/2024
Number of Days to Update: 76

Source: Lake County Air Quality Management District
Telephone: 707-263-7000
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 08/14/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 11/13/2024
Next Scheduled EDR Contact: 03/03/2025
Data Release Frequency: Varies

DRYCLEAN SAN DIEGO: San Diego County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Diego County Air Pollution Control District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 77
Source: San Diego County Air Pollution Control District
Telephone: 858-586-2616
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MENDOCINO: Mendocino County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mendocino County Air Quality Management District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 09/03/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 71
Source: Mendocino County Air Quality Management District
Telephone: 707-463-4354
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SACRAMENTO: Sacramento Metropolitan Air Quality Management DistrictDrycleaner Facility Listing
A listing of drycleaner facility locations, for the Sacramento Metropolitan Air Quality Management District.

Date of Government Version: 09/03/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69
Source: Sacramento Metropolitan Air Quality Management District
Telephone: 916-874-3958
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN IMPERIAL: Imperial County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Imperial County Air Pollution Control District

Date of Government Version: 04/25/2023
Date Data Arrived at EDR: 04/26/2023
Date Made Active in Reports: 07/14/2023
Number of Days to Update: 79
Source: Imperial County Air Pollution Control District
Telephone: 442-265-1800
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN LUIS OB: San Luis Obispo County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Luis Obispo County Air Pollution Control District.

Date of Government Version: 01/03/2024
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/20/2024
Number of Days to Update: 76
Source: San Luis Obispo County Air Pollution Control District
Telephone: 805-781-5756
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN PLACER: Placer County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Placer County Air Quality Management District.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 89
Source: Placer County Air Quality Management District
Telephone: 530-745-2335
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BAY AREA: Bay Area Air Quality Management District Drycleaner Facility Listing
Bay Area Air Quality Management District Drycleaner Facility Listing.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1432
Source: Bay Area Air Quality Management District
Telephone: 415-516-1916
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MOJAVE: Mojave Desert Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mojave Desert Air Quality Management District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75
Source: Mojave Desert Air Quality Management District
Telephone: 760-245-1661
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN N SIERRA: Northern Sierra Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sierra Air Quality Management District,

Date of Government Version: 08/22/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75
Source: Northern Sierra Air Quality Management District
Telephone: 530-274-9350
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MONTERY BAY: Monterey Bay Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Monterey Bay Air Quality Management District.

Date of Government Version: 09/09/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 11/26/2024
Number of Days to Update: 76
Source: Monterey Bay Air Quality Management District
Telephone: 831-647-9411
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AMADOR: Amador Air District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Amador Air Quality Management District

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77
Source: Amador Air Quality Management District
Telephone: 209-257-0112
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN VENTURA: Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Ventura County Air Pollution Control District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/14/2024
Number of Days to Update: 78
Source: Ventura County Air Pollution Control District
Telephone: 805-645-1421
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
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: 12/31/2022
Date Data Arrived at EDR: 06/11/2024
Date Made Active in Reports: 09/03/2024
Number of Days to Update: 84
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/11/2024
Next Scheduled EDR Contact: 12/23/2024
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/15/2024
Date Data Arrived at EDR: 07/16/2024
Date Made Active in Reports: 10/08/2024
Number of Days to Update: 84
Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Varies

FIN ASSURANCE 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 07/10/2024
Date Data Arrived at EDR: 07/11/2024
Date Made Active in Reports: 09/27/2024
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/09/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Varies

FIN 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: 08/07/2024
Date Data Arrived at EDR: 08/14/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 14

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 10/30/2024
Next Scheduled EDR Contact: 02/17/2025
Data Release Frequency: Varies

ICE: Inspection, Compliance and Enforcement
Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/12/2024
Date Data Arrived at EDR: 08/12/2024
Date Made Active in Reports: 10/28/2024
Number of Days to Update: 77

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 11/08/2024
Next Scheduled EDR Contact: 02/24/2025
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: 08/12/2024
Date Data Arrived at EDR: 08/12/2024
Date Made Active in Reports: 10/28/2024
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/08/2024
Next Scheduled EDR Contact: 02/24/2025
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 07/02/2024
Date Made Active in Reports: 09/25/2024
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/01/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Quarterly

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: 07/19/2024
Date Data Arrived at EDR: 07/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 11/07/2024
Next Scheduled EDR Contact: 01/13/2025
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: 12/31/2023
Date Data Arrived at EDR: 07/02/2024
Date Made Active in Reports: 09/25/2024
Number of Days to Update: 85

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/03/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Annually

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/03/2024
Date Data Arrived at EDR: 09/04/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 70

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/04/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 07/26/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/06/2024
Number of Days to Update: 76

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/05/2024
Date Data Arrived at EDR: 08/06/2024
Date Made Active in Reports: 10/28/2024
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 11/05/2024
Next Scheduled EDR Contact: 02/17/2025
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 08/22/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/06/2024
Number of Days to Update: 76

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/30/2024
Number of Days to Update: 2
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/05/2024
Date Data Arrived at EDR: 09/06/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 68
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/05/2024
Next Scheduled EDR Contact: 12/23/2024
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: 10/24/2024
Next Scheduled EDR Contact: 02/10/2025
Data Release Frequency: Annually

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 09/02/2024
Date Data Arrived at EDR: 09/04/2024
Date Made Active in Reports: 09/05/2024
Number of Days to Update: 1
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/04/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
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: 10/03/2024
Next Scheduled EDR Contact: 01/13/2025
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: 11/07/2024
Next Scheduled EDR Contact: 02/24/2025
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: 09/10/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/03/2024
Date Data Arrived at EDR: 09/04/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 09/04/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System
The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 08/20/2024
Date Data Arrived at EDR: 08/20/2024
Date Made Active in Reports: 08/22/2024
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data
The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 07/10/2024
Date Data Arrived at EDR: 07/10/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 2

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)
Non-Case Information sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)
Other Oil & Gas Projects sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
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: 08/28/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 08/29/2024
Number of Days to Update: 1

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 12/26/2023
Date Made Active in Reports: 03/19/2024
Number of Days to Update: 84

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 10/24/2024
Next Scheduled EDR Contact: 02/10/2025
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: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 03/01/2024
Date Data Arrived at EDR: 03/19/2024
Date Made Active in Reports: 06/11/2024
Number of Days to Update: 84

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 09/10/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/24/2024
Next Scheduled EDR Contact: 02/10/2025
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 07/22/2024
Date Data Arrived at EDR: 07/23/2024
Date Made Active in Reports: 10/10/2024
Number of Days to Update: 79

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/17/2024
Next Scheduled EDR Contact: 02/03/2025
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/08/2024
Date Made Active in Reports: 04/26/2024
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/17/2024
Next Scheduled EDR Contact: 02/03/2025
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 02/03/2025
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: 09/26/2024
Next Scheduled EDR Contact: 01/06/2025
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 10/09/2024
Next Scheduled EDR Contact: 01/27/2025
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: 11/06/2024
Next Scheduled EDR Contact: 02/24/2025
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 07/11/2024
Date Data Arrived at EDR: 07/16/2024
Date Made Active in Reports: 10/03/2024
Number of Days to Update: 79

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/09/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 11/06/2024
Next Scheduled EDR Contact: 02/24/2025
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 07/30/2024
Date Data Arrived at EDR: 08/01/2024
Date Made Active in Reports: 10/17/2024
Number of Days to Update: 77

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 11/07/2024
Next Scheduled EDR Contact: 02/10/2025
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 07/30/2024
Date Data Arrived at EDR: 08/01/2024
Date Made Active in Reports: 10/17/2024
Number of Days to Update: 77

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 11/07/2024
Next Scheduled EDR Contact: 02/10/2025
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: 11/06/2024
Next Scheduled EDR Contact: 02/24/2025
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 07/26/2024
Date Data Arrived at EDR: 07/29/2024
Date Made Active in Reports: 08/08/2024
Number of Days to Update: 10

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/03/2024
Next Scheduled EDR Contact: 01/20/2025
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/09/2024
Next Scheduled EDR Contact: 01/27/2025
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: 09/05/2024
Next Scheduled EDR Contact: 12/23/2024
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/02/2024
Date Data Arrived at EDR: 07/08/2024
Date Made Active in Reports: 07/10/2024
Number of Days to Update: 2

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/09/2024
Date Data Arrived at EDR: 07/09/2024
Date Made Active in Reports: 09/27/2024
Number of Days to Update: 80

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/04/2024
Next Scheduled EDR Contact: 01/20/2025
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/02/2024
Next Scheduled EDR Contact: 01/02/2025
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: 09/10/2024
Next Scheduled EDR Contact: 12/30/2024
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: 05/14/2024
Date Data Arrived at EDR: 07/09/2024
Date Made Active in Reports: 09/27/2024
Number of Days to Update: 80

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 10/10/2024
Next Scheduled EDR Contact: 01/20/2025
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 09/10/2024
Number of Days to Update: 85

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2024
Date Data Arrived at EDR: 06/17/2024
Date Made Active in Reports: 09/10/2024
Number of Days to Update: 85
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/17/2024
Next Scheduled EDR Contact: 12/30/2024
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation LA County List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/21/2024
Date Data Arrived at EDR: 07/16/2024
Date Made Active in Reports: 10/07/2024
Number of Days to Update: 83
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 10/17/2024
Next Scheduled EDR Contact: 01/27/2025
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: 10/02/2024
Next Scheduled EDR Contact: 01/20/2025
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: 10/09/2024
Next Scheduled EDR Contact: 01/27/2025
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: 04/16/2024
Date Data Arrived at EDR: 04/17/2024
Date Made Active in Reports: 07/12/2024
Number of Days to Update: 86
Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/09/2024
Next Scheduled EDR Contact: 01/27/2025
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: 11/06/2024
Next Scheduled EDR Contact: 02/24/2025
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: 09/18/2024
Next Scheduled EDR Contact: 01/06/2025
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: 11/13/2024
Next Scheduled EDR Contact: 03/03/2025
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 10/08/2024
Date Data Arrived at EDR: 10/09/2024
Date Made Active in Reports: 10/31/2024
Number of Days to Update: 22

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 10/04/2024
Next Scheduled EDR Contact: 02/24/2025
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: 11/13/2024
Next Scheduled EDR Contact: 03/03/2025
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: 10/17/2024
Next Scheduled EDR Contact: 01/06/2025
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/13/2024
Next Scheduled EDR Contact: 03/03/2025
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/13/2024
Next Scheduled EDR Contact: 03/03/2025
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 04/23/2024
Date Data Arrived at EDR: 04/25/2024
Date Made Active in Reports: 06/26/2024
Number of Days to Update: 62

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/17/2024
Next Scheduled EDR Contact: 02/03/2025
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups Orange County
Petroleum and non-petroleum spills.

Date of Government Version: 08/06/2024
Date Data Arrived at EDR: 08/08/2024
Date Made Active in Reports: 10/28/2024
Number of Days to Update: 81

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 10/28/2024
Next Scheduled EDR Contact: 02/10/2025
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 08/06/2024
Date Data Arrived at EDR: 08/08/2024
Date Made Active in Reports: 10/28/2024
Number of Days to Update: 81

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 10/28/2024
Next Scheduled EDR Contact: 02/10/2025
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/06/2024
Date Data Arrived at EDR: 08/08/2024
Date Made Active in Reports: 10/29/2024
Number of Days to Update: 82

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 10/28/2024
Next Scheduled EDR Contact: 02/10/2025
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: 08/22/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/06/2024
Number of Days to Update: 76
Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 11/19/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64
Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 10/09/2024
Next Scheduled EDR Contact: 01/27/2025
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: 06/11/2024
Date Data Arrived at EDR: 06/12/2024
Date Made Active in Reports: 06/27/2024
Number of Days to Update: 15
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/05/2024
Next Scheduled EDR Contact: 12/23/2024
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 06/11/2024
Date Data Arrived at EDR: 06/12/2024
Date Made Active in Reports: 06/27/2024
Number of Days to Update: 15
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/05/2024
Next Scheduled EDR Contact: 12/23/2024
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: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/23/2024
Next Scheduled EDR Contact: 01/06/2025
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: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 09/23/2024
Next Scheduled EDR Contact: 01/06/2025
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2024
Date Data Arrived at EDR: 08/01/2024
Date Made Active in Reports: 08/07/2024
Number of Days to Update: 6

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 10/24/2024
Next Scheduled EDR Contact: 02/10/2025
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 08/13/2024
Date Data Arrived at EDR: 08/14/2024
Date Made Active in Reports: 08/20/2024
Number of Days to Update: 6

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 10/28/2024
Next Scheduled EDR Contact: 02/10/2025
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: 08/22/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/06/2024
Number of Days to Update: 76

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 11/20/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2023
Date Data Arrived at EDR: 01/31/2024
Date Made Active in Reports: 04/17/2024
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 10/09/2024
Next Scheduled EDR Contact: 01/27/2025
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: 10/09/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 11/19/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing
Cupa facilities

Date of Government Version: 07/29/2024
Date Data Arrived at EDR: 07/30/2024
Date Made Active in Reports: 10/17/2024
Number of Days to Update: 79
Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 10/24/2024
Next Scheduled EDR Contact: 02/10/2025
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: 10/24/2024
Next Scheduled EDR Contact: 02/10/2025
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: 07/26/2024
Date Data Arrived at EDR: 07/30/2024
Date Made Active in Reports: 10/17/2024
Number of Days to Update: 79
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 10/24/2024
Next Scheduled EDR Contact: 02/10/2025
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: 07/15/2024
Date Data Arrived at EDR: 07/16/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 85
Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 10/16/2024
Next Scheduled EDR Contact: 01/27/2025
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: 09/05/2024
Next Scheduled EDR Contact: 12/23/2024
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 08/07/2024
Date Data Arrived at EDR: 08/08/2024
Date Made Active in Reports: 10/28/2024
Number of Days to Update: 81

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 11/06/2024
Next Scheduled EDR Contact: 02/24/2025
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: 09/05/2024
Next Scheduled EDR Contact: 12/16/2024
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: 11/26/2024
Next Scheduled EDR Contact: 03/17/2025
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 11/06/2024
Next Scheduled EDR Contact: 02/24/2025
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 08/12/2024
Date Data Arrived at EDR: 08/13/2024
Date Made Active in Reports: 10/28/2024
Number of Days to Update: 76

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 11/07/2024
Next Scheduled EDR Contact: 02/24/2025
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 11/13/2024
Next Scheduled EDR Contact: 03/03/2025
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 11/06/2024
Next Scheduled EDR Contact: 02/04/2025
Data Release Frequency: Varies

SITE MIT SANTA CRUZ: Site Mitigation Santa Cruz County List
Sites may become contaminated with toxic chemicals through illegal dumping or disposal, from leaking underground storage tanks, or through industrial or commercial activities.The goal of the site mitigation program is to protect the public health and the environment while facilitating completion of contaminated site clean-up projects in a timely manner.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 20

Source: Santa Cruz Environmental Health Services
Telephone: 831-454-2761
Last EDR Contact: 11/06/2024
Next Scheduled EDR Contact: 02/24/2025
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 11/07/2024
Next Scheduled EDR Contact: 02/24/2025
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: 11/19/2024
Next Scheduled EDR Contact: 03/10/2025
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: 11/19/2024
Next Scheduled EDR Contact: 03/10/2025
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: 09/10/2024
Next Scheduled EDR Contact: 12/30/2024
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: 09/10/2024
Next Scheduled EDR Contact: 12/30/2024
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: 10/02/2024
Next Scheduled EDR Contact: 01/20/2025
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 07/29/2024
Date Data Arrived at EDR: 09/06/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 68

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 11/19/2024
Next Scheduled EDR Contact: 03/10/2025
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/12/2024
Number of Days to Update: 76

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 10/24/2024
Next Scheduled EDR Contact: 02/10/2025
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 07/11/2024
Date Data Arrived at EDR: 07/16/2024
Date Made Active in Reports: 10/03/2024
Number of Days to Update: 79

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/09/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 10/24/2024
Next Scheduled EDR Contact: 02/10/2025
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/09/2024
Next Scheduled EDR Contact: 01/27/2025
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: 07/02/2024
Date Data Arrived at EDR: 07/17/2024
Date Made Active in Reports: 07/23/2024
Number of Days to Update: 6

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/17/2024
Next Scheduled EDR Contact: 01/27/2025
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: 09/18/2024
Next Scheduled EDR Contact: 01/06/2025
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: 10/30/2024
Next Scheduled EDR Contact: 02/17/2025
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 07/02/2024
Date Data Arrived at EDR: 07/18/2024
Date Made Active in Reports: 07/23/2024
Number of Days to Update: 5
Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/17/2024
Next Scheduled EDR Contact: 01/27/2025
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 09/04/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 70
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/04/2024
Next Scheduled EDR Contact: 12/16/2024
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/20/2024
Date Data Arrived at EDR: 06/27/2024
Date Made Active in Reports: 09/24/2024
Number of Days to Update: 89
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 09/18/2024
Next Scheduled EDR Contact: 01/06/2025
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 07/18/2024
Date Data Arrived at EDR: 07/19/2024
Date Made Active in Reports: 10/07/2024
Number of Days to Update: 80
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 10/17/2024
Next Scheduled EDR Contact: 02/03/2025
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/05/2024
Date Data Arrived at EDR: 08/06/2024
Date Made Active in Reports: 10/25/2024
Number of Days to Update: 80
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/05/2024
Next Scheduled EDR Contact: 02/17/2025
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: 09/25/2024
Next Scheduled EDR Contact: 01/13/2025
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: 12/31/2019
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 10/24/2024
Next Scheduled EDR Contact: 02/03/2025
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/03/2024
Next Scheduled EDR Contact: 01/20/2025
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: 11/07/2024
Next Scheduled EDR Contact: 02/24/2025
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: 08/28/2024
Next Scheduled EDR Contact: 12/16/2024
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, 2010 and 2015 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

GRANITE HILLS H.S. - NEW ATHLETICS COMPLEX
CENTRAL RD. / ESAWS AVE.
APPLE VALLEY, CA 92307

TARGET PROPERTY COORDINATES

Latitude (North):	34.50989 - 34° 30' 35.60''
Longitude (West):	117.17055 - 117° 10' 13.98''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	484344.4
UTM Y (Meters):	3818511.0
Elevation:	2929 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	50005268 APPLE VALLEY NORTH, CA
Version Date:	2021
South Map:	50004488 APPLE VALLEY SOUTH, CA
Version Date:	2021

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).

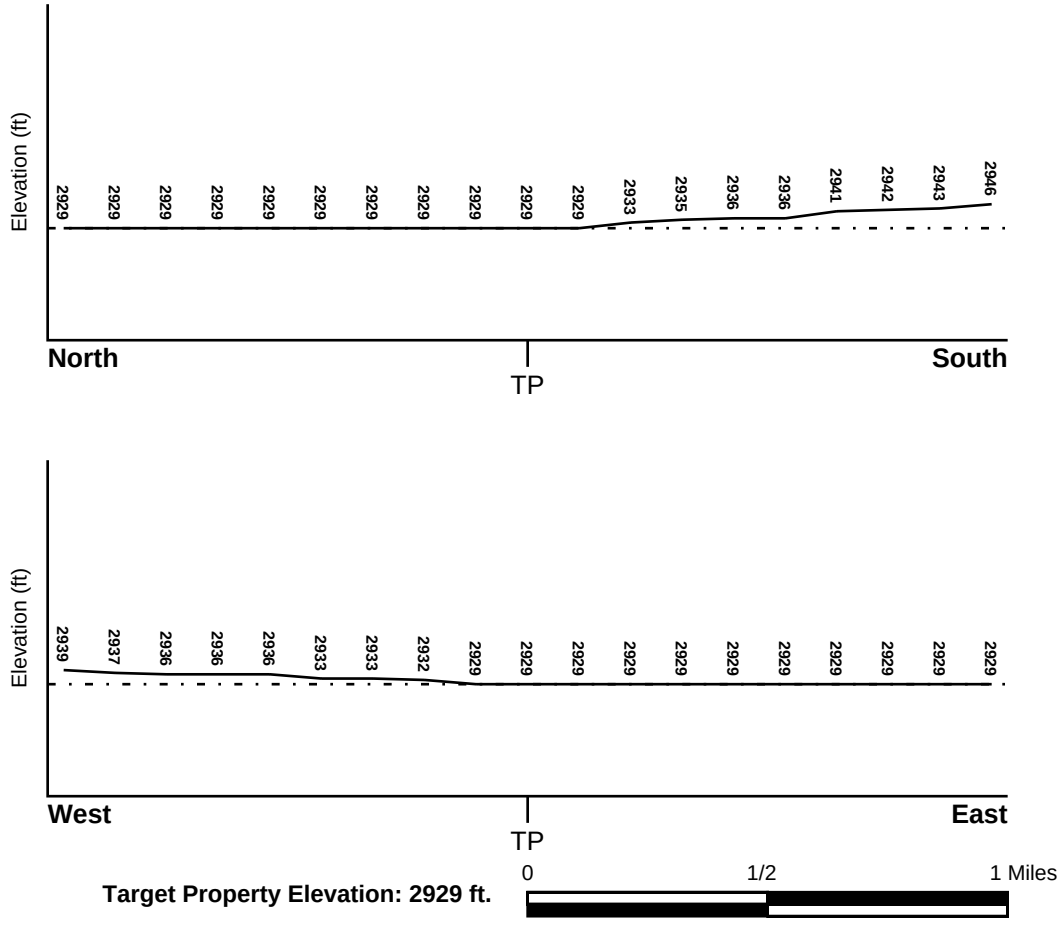
TOPOGRAPHIC INFORMATION

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 NE

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
06071C5845H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06071C5840H	FEMA FIRM Flood data
06071C5845F	FEMA Q3 Flood data
06071C6525F	FEMA Q3 Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NOT AVAILABLE	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

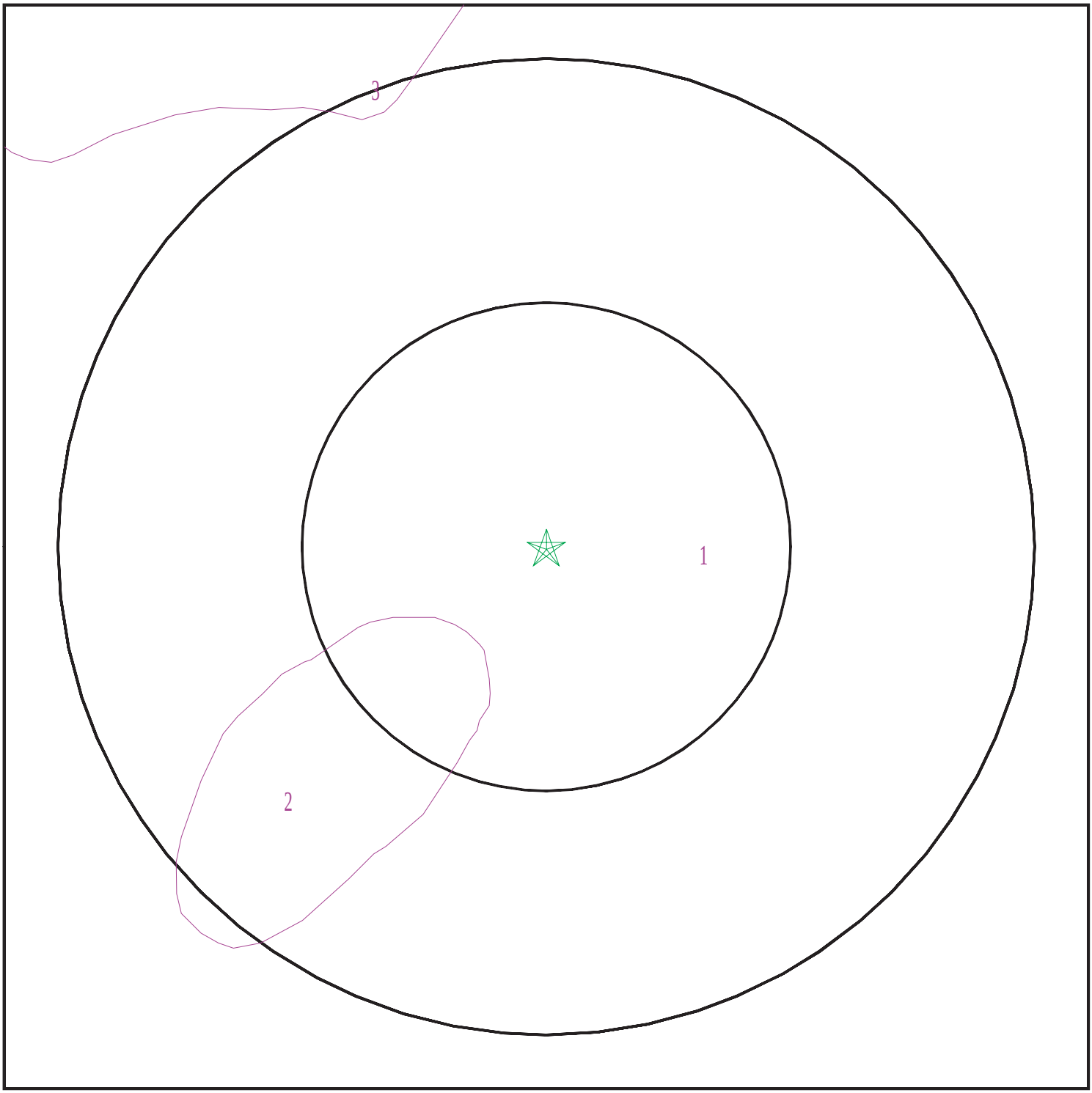
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

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 - 7830904.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Granite Hills H.S. - New Athletics Complex	CLIENT:	Padre Associates, Inc
ADDRESS:	Central Rd. / Esaws Ave. Apple Valley CA 92307	CONTACT:	Alan Churchill
		INQUIRY #:	7830904.2s
LAT/LONG:	34.50989 / 117.17055	DATE:	November 27, 2024 12:57 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: HELENDALE

Soil Surface Texture:
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	3 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 7.4
2	3 inches	29 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 7.4
3	29 inches	66 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 7.4
4	66 inches	70 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: WASCO

Soil Surface Texture:
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	7 inches		Not reported	Not reported	Max: 42 Min: 14	Max: 8.4 Min: 6.6
2	7 inches	59 inches		Not reported	Not reported	Max: 42 Min: 14	Max: 8.4 Min: 6.6

Soil Map ID: 3

Soil Component Name: BRYMAN

Soil Surface Texture:

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	9 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 7.4
2	9 inches	11 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 7.4
3	11 inches	31 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 7.4

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
4	31 inches	46 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 7.4
5	46 inches	98 inches		Not reported	Not reported	Max: 141 Min: 42	Max: 8.4 Min: 7.4

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	USGS40000146422	0 - 1/8 Mile SW
C4	USGS40000146368	1/4 - 1/2 Mile South
B6	USGS40000146469	1/4 - 1/2 Mile NE
E9	USGS40000146335	1/4 - 1/2 Mile SSW
D10	USGS40000146421	1/4 - 1/2 Mile East
F13	USGS40000146479	1/2 - 1 Mile ENE
F15	USGS40000146489	1/2 - 1 Mile NE
G17	USGS40000146367	1/2 - 1 Mile ESE
H18	USGS40000146315	1/2 - 1 Mile SSW
H20	USGS40000146310	1/2 - 1 Mile SSW
I24	USGS40000146425	1/2 - 1 Mile West
L28	USGS40000146265	1/2 - 1 Mile South
L30	USGS40000146266	1/2 - 1 Mile South
J34	USGS40000146420	1/2 - 1 Mile East
35	USGS40000146547	1/2 - 1 Mile North
N37	USGS40000146546	1/2 - 1 Mile NNE
M38	USGS40000146366	1/2 - 1 Mile ESE
39	USGS40000146548	1/2 - 1 Mile NNW
P42	USGS40000146241	1/2 - 1 Mile SSW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
O44	USGS40000146514	1/2 - 1 Mile NE
O45	USGS40000146513	1/2 - 1 Mile NE
O46	USGS40000146517	1/2 - 1 Mile NE
47	USGS40000146516	1/2 - 1 Mile NE
R49	USGS40000146297	1/2 - 1 Mile SE
Q52	USGS40000146382	1/2 - 1 Mile ESE
S54	USGS40000146579	1/2 - 1 Mile NNE
Q55	USGS40000146377	1/2 - 1 Mile ESE
T56	USGS40000146606	1/2 - 1 Mile North
U61	USGS40000146350	1/2 - 1 Mile ESE

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.

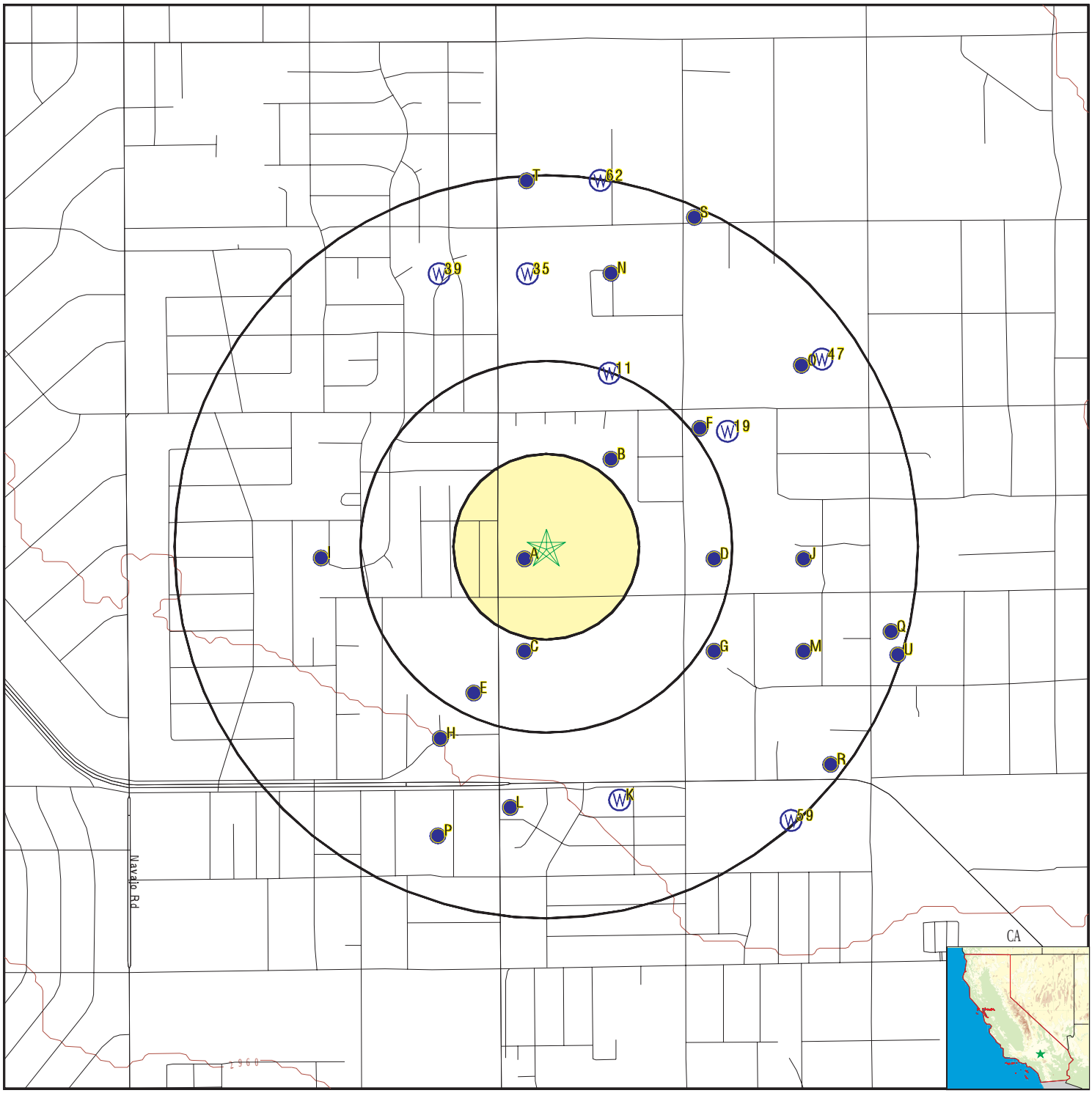
STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	CADWR9000010011	0 - 1/8 Mile WSW
B3	CADWR9000010033	1/4 - 1/2 Mile NNE
C5	CADWR9000009972	1/4 - 1/2 Mile SSW
D7	CADWR9000010010	1/4 - 1/2 Mile East
E8	CADWR9000009942	1/4 - 1/2 Mile SSW
11	5485	1/4 - 1/2 Mile NNE
F12	CADWR9000010048	1/4 - 1/2 Mile NE
G14	CADWR9000009971	1/2 - 1 Mile ESE
F16	CAUSGSN00000260	1/2 - 1 Mile NE
19	CADWR9000010045	1/2 - 1 Mile ENE
I21	CADWR0000025810	1/2 - 1 Mile West
H22	CADWR9000009919	1/2 - 1 Mile SSW
I23	CAUSGSN00007287	1/2 - 1 Mile West
I25	CADDW2000023165	1/2 - 1 Mile West
J26	CADWR9000010009	1/2 - 1 Mile East
K27	5493	1/2 - 1 Mile SSE
L29	CADWR0000025732	1/2 - 1 Mile South
L31	CADWR9000009875	1/2 - 1 Mile SSW
M32	CADWR9000009970	1/2 - 1 Mile ESE
K33	CADDW2000008251	1/2 - 1 Mile SSE
N36	CADWR9000010084	1/2 - 1 Mile North
O40	CADWR9000010064	1/2 - 1 Mile NE
O41	CADWR9000010065	1/2 - 1 Mile NE
P43	CADWR9000009854	1/2 - 1 Mile SSW
Q48	CADWR9000009983	1/2 - 1 Mile ESE
S50	CADWR9000010101	1/2 - 1 Mile NNE
R51	CADWR9000009904	1/2 - 1 Mile SE

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
S53	CAUSGSN00006363	1/2 - 1 Mile NNE
U57	CADWR9000009969	1/2 - 1 Mile ESE
T58	CADWR0000025923	1/2 - 1 Mile North
59	CADWR9000009864	1/2 - 1 Mile SE
T60	CADWR9000010108	1/2 - 1 Mile North
62	CADWR9000010107	1/2 - 1 Mile North

PHYSICAL SETTING SOURCE MAP - 7830904.2s



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:	Granite Hills H.S. - New Athletics Complex	CLIENT:	Padre Associates, Inc
ADDRESS:	Central Rd. / Esaws Ave. Apple Valley CA 92307	CONTACT:	Alan Churchill
		INQUIRY #:	7830904.2s
LAT/LONG:	34.50989 / 117.17055	DATE:	November 27, 2024 12:57 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
SW
0 - 1/8 Mile
Higher

FED USGS **USGS40000146422**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W22A002S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1947	Well Depth:	133
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:	1957-03-28
Feet below surface:	98.0	Feet to sea level:	Not Reported
Note:	Not Reported		

A2
WSW
0 - 1/8 Mile
Higher

CA WELLS **CADWR9000010011**

State Well #:	05N03W22A002S	Station ID:	4966
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

B3
NNE
1/4 - 1/2 Mile
Higher

CA WELLS **CADWR9000010033**

State Well #:	05N03W14N001S	Station ID:	4960
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

C4
South
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000146368**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W22H001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported

Construction Date:	Not Reported	Well Depth:	129
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:	1957-05-01
Feet below surface:	100.66	Feet to sea level:	Not Reported
Note:	Not Reported		

C5
SSW **CA WELLS** **CADWR9000009972**
1/4 - 1/2 Mile
Higher

State Well #:	05N03W22H001S	Station ID:	4967
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

B6
NE **FED USGS** **USGS40000146469**
1/4 - 1/2 Mile
Higher

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W14N001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	85.6
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:	1957-04-25
Feet below surface:	Not Reported	Feet to sea level:	Not Reported
Note:	The site was dry (no water level recorded).		

D7
East **CA WELLS** **CADWR9000010010**
1/4 - 1/2 Mile
Higher

State Well #:	05N03W23C001S	Station ID:	28290
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

E8
SSW
1/4 - 1/2 Mile
Higher

CA WELLS **CADWR9000009942**

State Well #:	05N03W22J001S	Station ID:	4968
Well Name:	WELL 04	Basin Name:	Upper Mojave River Valley
Well Use:	Other	Well Type:	Single Well
Well Depth:	420	Well Completion Rpt #:	Not Reported

E9
SSW
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000146335**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W22J001S	Type:	Well
Description:	DEPTH REPORTED 420' ON 5/11/1957		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1951	Well Depth:	347
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	47	Level reading date:	2004-10-29
Feet below surface:	135.65	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	2004-03-23	Feet below surface:	134.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-10-24	Feet below surface:	135.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-03-03	Feet below surface:	133.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-10-16	Feet below surface:	134.14
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-03-28	Feet below surface:	132.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-10-15	Feet below surface:	132.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-10-25	Feet below surface:	131.65
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-10-16	Feet below surface:	131.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-04-21	Feet below surface:	130.65
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	2000-03-23	Feet below surface:	130.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-04-07	Feet below surface:	130.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-10-26	Feet below surface:	130.38
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-04-09	Feet below surface:	130.36
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-03-11	Feet below surface:	134.78
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-10-23	Feet below surface:	131.00
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-03-24	Feet below surface:	130.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-10-09	Feet below surface:	131.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-05-16	Feet below surface:	130.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-10-18	Feet below surface:	131.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-05-09	Feet below surface:	131.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-11-16	Feet below surface:	132.51
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-05-17	Feet below surface:	132.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-11-17	Feet below surface:	133.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-06-23	Feet below surface:	133.68
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-08-28	Feet below surface:	131.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-02-14	Feet below surface:	125.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-02-24	Feet below surface:	124.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-01	Feet below surface:	124.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1975-04-24	Feet below surface:	126.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1974-11-27	Feet below surface:	124.6
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1973-12-11	Feet below surface:	121.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970	Feet below surface:	112
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969	Feet below surface:	111
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968	Feet below surface:	110
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967	Feet below surface:	109
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966	Feet below surface:	107
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965	Feet below surface:	126
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964	Feet below surface:	125
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963	Feet below surface:	124
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962	Feet below surface:	124
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1961	Feet below surface:	125
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1960-10-11	Feet below surface:	112
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1959-12-21	Feet below surface:	112
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1957-05-01	Feet below surface:	127.25
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1955-09-26	Feet below surface:	120.4
Feet to sea level:	Not Reported	Note:	The site was being pumped.
Level reading date:	1951-06-29	Feet below surface:	101.4
Feet to sea level:	Not Reported	Note:	Not Reported

D10
East
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000146421**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W23C001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported

Construction Date:	1949	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1957-05-02
Feet below surface:	92.73	Feet to sea level:	Not Reported
Note:	Not Reported		

11
NNE
1/4 - 1/2 Mile
Higher

CA WELLS **5485**

Seq:	5485	Prim sta c:	05N/03W-22G01 S
Frds no:	3610003010	County:	36
District:	13	User id:	TAN
System no:	3610003	Water type:	G
Source nam:	WELL 15 - STANDBY	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	343100.0	Longitude:	1171000.0
Precision:	8	Status:	SR
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:	3610003	System nam:	Apple Valley Ranchos Wc
Hqname:	Not Reported	Address:	21760 OTTAWA RD.
City:	APPLE VALLEY	State:	CA
Zip:	92307	Zip ext:	2619
Pop serv:	33236	Connection:	12173
Area serve:	APPLE VALLEY RANCHOS		

F12
NE
1/4 - 1/2 Mile
Higher

CA WELLS **CADWR9000010048**

State Well #:	05N03W23B001S	Station ID:	4970
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

F13
ENE
1/2 - 1 Mile
Higher

FED USGS **USGS40000146479**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W23B003S	Type:	Well
Description:	Not Reported	HUC:	Not Reported
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported

Well Hole Depth Units: Not Reported

G14
ESE
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000009971**

State Well #:	05N03W23F001S	Station ID:	4972
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

F15
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40000146489**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W23B001S	Type:	Well
Description:	Not Reported	HUC:	18090208
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1947	Well Depth:	153
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	7	Level reading date:	2004-03-17
Feet below surface:	117.26	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2002-03-12	Feet below surface:	115.83
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-09	Feet below surface:	115.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-03-11	Feet below surface:	122.8
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.
Level reading date:	1996-04-05	Feet below surface:	115.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-04-19	Feet below surface:	113.77
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1957-05-02	Feet below surface:	82.94
Feet to sea level:	Not Reported	Note:	The site was being pumped.

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

F16
NE
1/2 - 1 Mile
Higher

CA WELLS **CAUSGSN00000260**

Well ID:	USGS-343053117094401	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-343053117094401	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-343053117094401&store_num=		
GeoTracker Data:	Not Reported		

G17
ESE
1/2 - 1 Mile
Higher

FED USGS **USGS40000146367**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W23F001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1957-05-02
Feet below surface:	110.18	Feet to sea level:	Not Reported
Note:	Not Reported		

H18
SSW
1/2 - 1 Mile
Higher

FED USGS **USGS40000146315**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W22K002S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1952	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1957-05-01
Feet below surface:	109.86	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

19
ENE
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000010045**

State Well #:	05N03W23B003S	Station ID:	50148
Well Name:	05N03W23B03	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Single Well
Well Depth:	0	Well Completion Rpt #:	Not Reported

H20
SSW
1/2 - 1 Mile
Higher

FED USGS **USGS40000146310**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W22K001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1954	Well Depth:	130
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

I21
West
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000025810**

Well ID:	05N03W22G001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05N03W22G001S	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=05N03W22G001S&store_num=		
GeoTracker Data:	Not Reported		

H22
SSW
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000009919**

State Well #:	05N03W22K002S	Station ID:	28288
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

I23
West
1/2 - 1 Mile
Higher

CA WELLS **CAUSGSN00007287**

Well ID:	USGS-343035117104901	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-343035117104901	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-343035117104901&store_num=		
GeoTracker Data:	Not Reported		

I24
West
1/2 - 1 Mile
Higher

FED USGS **USGS40000146425**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W22G001S	Type:	Well
Description:	WELL NO. 15	HUC:	18090208
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19660215	Well Depth:	384
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	10	Level reading date:	2002-04-01
Feet below surface:	144	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	2002-03-01	Feet below surface:	143
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-02-01	Feet below surface:	143
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-01-01	Feet below surface:	143
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-04-01	Feet below surface:	141
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-01	Feet below surface:	140
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-02-01	Feet below surface:	140
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-03-13	Feet below surface:	138.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-02-21	Feet below surface:	140.33
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1992-11-18	Feet below surface:	142.69
Feet to sea level:	Not Reported	Note:	Not Reported

I25
West
1/2 - 1 Mile
Higher

CA WELLS **CADDW2000023165**

GAMA:

Well ID:	CA3610003_010_010	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3610003-010
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=CA3610003_010_010&store_num=		
GeoTracker Data:	Not Reported		

J26
East
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000010009**

State Well #:	05N03W23B002S	Station ID:	4971
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

K27
SSE
1/2 - 1 Mile
Lower

CA WELLS **5493**

Seq:	5493	Prim sta c:	05N/03W-26E01 S
Frds no:	3610107007	County:	36
District:	13	User id:	TAN
System no:	3610106	Water type:	G
Source nam:	ANOKA WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	343000.0	Longitude:	1171000.0
Precision:	8	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:	3610106	System nam:	South California Wc - Victorville 04
Hqname:	SCWCO VICTORVILLE NO 4	Address:	3625 WEST 6TH ST
City:	LOS ANGELES	State:	Not Reported
Zip:	90020	Zip ext:	Not Reported
Pop serv:	2850	Connection:	733
Area serve:	APPLE VALLEY		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L28
South
1/2 - 1 Mile
Higher

FED USGS **USGS40000146265**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W27A002S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	165
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:	1956-11-27
Feet below surface:	113.46	Feet to sea level:	Not Reported
Note:	Not Reported		

L29
South
1/2 - 1 Mile
Higher

CA WELLS **CADWR0000025732**

Well ID:	05N03W27A002S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05N03W27A002S	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=05N03W27A002S&store_num=		
GeoTracker Data:	Not Reported		

L30
South
1/2 - 1 Mile
Higher

FED USGS **USGS40000146266**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W27A001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

L31
SSW
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000009875**

State Well #:	05N03W27A002S	Station ID:	9246
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

M32
ESE
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000009970**

State Well #:	05N03W23G001S	Station ID:	28291
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

K33
SSE
1/2 - 1 Mile
Lower

CA WELLS **CADDW2000008251**

GAMA:

Well ID:	CA3610106_007_007	Well Type:	MUNICIPAL
Source:	DDW	Other Names:	3610106-007
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=CA3610106_007_007&store_num=		
GeoTracker Data:	Not Reported		

J34
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000146420**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W23B002S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1955	Well Depth:	177
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:	1957-05-02
Feet below surface:	88.91	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

35
North
1/2 - 1 Mile
Higher

FED USGS **USGS40000146547**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W15H001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

N36
North
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000010084**

State Well #:	05N03W14E001S	Station ID:	28280
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

N37
NNE
1/2 - 1 Mile
Higher

FED USGS **USGS40000146546**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W14E001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	160
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1964-12
Feet below surface:	Not Reported	Feet to sea level:	Not Reported
Note:	The well was destroyed (no water level is recorded).		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

M38
ESE
1/2 - 1 Mile
Higher

FED USGS **USGS40000146366**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W23G001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	122.1
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:	1957-05-02
Feet below surface:	95.02	Feet to sea level:	Not Reported
Note:	Not Reported		

39
NNW
1/2 - 1 Mile
Higher

FED USGS **USGS40000146548**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W15G001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

O40
NE
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000010064**

State Well #:	05N03W14K003S	Station ID:	4959
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

O41
NE
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000010065**

State Well #:	05N03W14K001S	Station ID:	28281
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

P42
SSW
1/2 - 1 Mile
Higher

FED USGS **USGS40000146241**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W22Q001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1957-05-01
Feet below surface:	113.20	Feet to sea level:	Not Reported
Note:	Not Reported		

P43
SSW
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000009854**

State Well #:	05N03W22Q001S	Station ID:	28289
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

O44
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40000146514**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W14K001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported

Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1957-04-25
Feet below surface:	84.78	Feet to sea level:	Not Reported
Note:	Not Reported		

O45
NE **FED USGS** **USGS40000146513**
1/2 - 1 Mile
Higher

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W14K003S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	42
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:	1957-04-25
Feet below surface:	Not Reported	Feet to sea level:	Not Reported
Note:	The well was destroyed (no water level is recorded).		

O46
NE **FED USGS** **USGS40000146517**
1/2 - 1 Mile
Higher

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W14K002S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1951	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

47
NE **FED USGS** **USGS40000146516**
1/2 - 1 Mile
Higher

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W14R001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported

Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19500818	Well Depth:	160
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:	1950-08-25
Feet below surface:	105.0	Feet to sea level:	Not Reported
Note:	Not Reported		

Q48
ESE
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000009983**

State Well #:	05N03W23H005S	Station ID:	28292
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

R49
SE
1/2 - 1 Mile
Higher

FED USGS **USGS40000146297**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W23R001S	Type:	Well
Description:	Not Reported	HUC:	18090208
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	263.7
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	16	Level reading date:	2004-03-23
Feet below surface:	129.03	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	2003-03-03	Feet below surface:	128.17
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2002-03-28	Feet below surface:	127.52
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-04-23	Feet below surface:	127.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-04-21	Feet below surface:	126.43
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-03-23	Feet below surface:	126.10
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1999-04-07	Feet below surface:	120.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-04-09	Feet below surface:	126.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1998-03-11	Feet below surface:	140.21
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1997-03-24	Feet below surface:	126.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-05-16	Feet below surface:	127.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1995-05-09	Feet below surface:	127.40
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-05-17	Feet below surface:	127.29
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-05-20	Feet below surface:	126.85
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-01-05	Feet below surface:	126.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1957-05-02	Feet below surface:	100.82
Feet to sea level:	Not Reported	Note:	Not Reported

S50
NNE
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000010101**

State Well #:	05N03W14G001S	Station ID:	4958
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

R51
SE
1/2 - 1 Mile
Higher

CA WELLS **CADWR9000009904**

State Well #:	05N03W23R001S	Station ID:	4975
Well Name:	05N03W23R01	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Single Well
Well Depth:	264	Well Completion Rpt #:	Not Reported

Q52
ESE
1/2 - 1 Mile
Higher

FED USGS **USGS40000146382**

Organization ID:	USGS-CA
Organization Name:	USGS California Water Science Center

Monitor Location:	005N003W23H005S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1957-05-02
Feet below surface:	91.30	Feet to sea level:	Not Reported
Note:	Not Reported		

S53
NNE **CA WELLS** **CAUSGSN00006363**
1/2 - 1 Mile
Higher

Well ID:	USGS-343122117094501	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-343122117094501	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-343122117094501&store_num=		
GeoTracker Data:	Not Reported		

S54
NNE **FED USGS** **USGS40000146579**
1/2 - 1 Mile
Higher

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W14G001S	Type:	Well
Description:	Not Reported	HUC:	18090208
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Basin and Range basin-fill aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	226
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	26	Level reading date:	1984-10-19
Feet below surface:	111.29	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1984-05-21	Feet below surface:	103.07
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-10-19	Feet below surface:	103.88
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1983-05-26	Feet below surface:	103.11
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-10-20	Feet below surface:	103.46

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1982-05-18	Feet below surface:	102.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1981-10-05	Feet below surface:	103.08
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-11-21	Feet below surface:	102.22
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-08-06	Feet below surface:	102.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-13	Feet below surface:	101.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-06-27	Feet below surface:	101.54
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-03-25	Feet below surface:	94.81
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-10-07	Feet below surface:	95.05
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-03-26	Feet below surface:	94.18
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-10-22	Feet below surface:	93.82
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-04-02	Feet below surface:	93.72
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-11-05	Feet below surface:	93.61
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-04-09	Feet below surface:	93.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-10-26	Feet below surface:	93.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-03-21	Feet below surface:	92.28
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-10-18	Feet below surface:	92.09
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-04-05	Feet below surface:	96.04
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-11-15	Feet below surface:	96.20
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-03-15	Feet below surface:	96.01
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-12-03	Feet below surface:	96.64
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1957-04-25	Feet below surface:	81.64
Feet to sea level:	Not Reported	Note:	Not Reported

Q55
ESE **FED USGS** **USGS40000146377**
1/2 - 1 Mile
Higher

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W23H004S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

T56
North **FED USGS** **USGS40000146606**
1/2 - 1 Mile
Higher

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W15A001S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	2	Level reading date:	1957-04-26
Feet below surface:	83.07	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1952-03-21	Feet below surface:	90.0
Feet to sea level:	Not Reported	Note:	Not Reported

U57
ESE **CA WELLS** **CADWR9000009969**
1/2 - 1 Mile
Higher

State Well #:	05N03W23H001S	Station ID:	38087
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

T58
North
1/2 - 1 Mile
Higher | **CA WELLS** | **CADWR0000025923**

Well ID:	05N03W15A001S	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	05N03W15A001S	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=05N03W15A001S&store_num=		
GeoTracker Data:	Not Reported		

59
SE
1/2 - 1 Mile
Higher | **CA WELLS** | **CADWR9000009864**

State Well #:	05N03W23Q002S	Station ID:	4974
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

T60
North
1/2 - 1 Mile
Higher | **CA WELLS** | **CADWR9000010108**

State Well #:	05N03W15A001S	Station ID:	28282
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

U61
ESE
1/2 - 1 Mile
Higher | **FED USGS** | **USGS40000146350**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005N003W23H002S	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG-ACCURATE +/-500FT		
HUC:	18090208	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basin and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19470611	Well Depth:	153
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
CA WELLS	**CADWR9000010107**

62
North
1/2 - 1 Mile
Higher

State Well #:	05N03W14D001S	Station ID:	4957
Well Name:	Not Reported	Basin Name:	Upper Mojave River Valley
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	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
92307	30	1

Federal EPA Radon Zone for SAN BERNARDINO County: 2

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

Federal Area Radon Information for SAN BERNARDINO COUNTY, CA

Number of sites tested: 18

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.678 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, 2010 and 2015 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.

Geothermal Wells Listing
Department of Conservation
Telephone: 916-445-9686
Geothermal well means a well constructed to extract or return water to the ground after it has been used for heating or cooling purposes. Geothermal wells in California (except for wells on federal leases which are administered by the Bureau of Land Management) are permitted, drilled, operated, and permanently sealed and closed (plugged and abandoned) under requirements and procedures administered by the Geothermal Section of the Department of Conservations Geologic Energy Management Division (CalGEM, formerly DOGGR).

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.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

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

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

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

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

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

STREET AND ADDRESS INFORMATION

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APPENDIX F

QUALIFICATION OF THE ENVIRONMENTAL ASSESSOR

ENVIRONMENTAL ASSESSOR QUALIFICATIONS

The environmental professionals responsible for conducting or reviewing this Phase I ESA and preparing the report include:

Alan J. Klein, R.E.P.A., C.P.E.S.C., QSD/QSP, is a ..... Senior Environmental Scientist with Padre Associates, Inc. He holds a Bachelor of Arts degree in Environmental Studies and Planning from California State University, Sonoma, 1985. Mr. Klein obtained a Professional Certificate in Hazardous Materials Management from the University of California, Santa Barbara in 1992. Mr. Klein is a Registered Environmental Property Assessor; a Certified Professional in Erosion and Sediment Control; and a State of California Qualified SWPPP Developer and Practitioner. Mr. Klein has over 2. years of professional experience performing Phase I environmental site assessments; soil and groundwater assessments; soil and groundwater remediation projects; preliminary endangerment assessments (PEAs); removal actions; risk assessments; preparation and implementation of Storm Water Pollution Prevention Plans (SWPPPs).

Alan Churchill, P.G., is a Senior Geologist with Padre Associates, Inc. He holds a Bachelor of Science degree in Geology and a Minor Degree in Hydrologic Science from the University of California, Davis, March 1996. Mr. Churchill has 20 years of professional experience performing soil, groundwater, and soil gas investigation/remediation projects, underground storage tanks (USTs) removal projects, well abandonments, and soil/ groundwater modeling (environmental fate transport). His responsibilities include specification of project scope, regulatory agency negotiation and compliance, proposal and workplan preparation, field investigation, documentation, risk assessments, and reporting.

DECLARATION

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental Professional*, as defined in §312.10 of 40 CFR §312. I have specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Additionally, the subject Phase I ESA has been performed in conformance with the scope and limitations of ASTM Practice E1527-21.

Appendix E Geologic and Environmental Hazards Assessment

Appendix

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March 2025 | Geologic and Environmental Hazards Assessment

GRANITE HILLS HIGH SCHOOL ATHLETICS PROJECT

Apple Valley Unified School District

Prepared for:

Apple Valley Unified School District
Contact: Matthew Schulenberg, Assistant Superintendent, Administrative Services
12555 Navajo Road
Apple Valley, California 92308
760.247.8001

Prepared by:

PlaceWorks
Contact: Steve Bush, PE, Senior Engineer
3 MacArthur Place, 1100
Santa Ana, California 92707
714.966.9220
info@placeworks.com
www.placeworks.com

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1. Introduction

1.1 INTRODUCTION

The Apple Valley Unified School District (AVUSD or District) proposes to construct a new athletic complex with associated facilities on District owned parcels adjacent to Granite Hills High School (HS), which is located at 22900 Esaws Avenue in the Town of Apple Valley, San Bernardino County, California (Assessor Parcel Number [APN] 043901218). The project site would include approximately 20.7 acres of the undeveloped parcels to the west of the existing Granite Hills HS campus. The State of California's standards for school site selection are found in Title 5 of the California Code of Regulations (CCR) Section 14010, and additional codes and regulations applicable to school facilities that are found in the Education, Government and Public Resources Codes (Ed. Code, Gov't Code and PRC, respectively). This study provides an assessment and supporting documentation of State school facility standards applicable to State-funded new school sites.

In addition to the standards addressed herein, other health and safety requirements are under the purview of the Department of Toxic Substances Control (DTSC). Also, the California Environmental Quality Act (CEQA) requires lead agencies to address the environmental impacts of a project on the environment. These are separate and distinct from the issues addressed in this study, which deal with a site's ability to provide a safe and healthy environment for school use. Documentation of the project's environmental impacts under CEQA and the health and safety evaluation per DTSC are provided under separate reports.

1.2 PROJECT LOCATION

The project site is in the Town of Apple Valley, San Bernardino County, California. The Granite Hills HS campus consists of approximately 36 acres and is part of the Apple Valley Unified School District (see Figure 1, *Regional Location*). As shown in Figure 2, *Local Vicinity* and Figure 3, *Aerial Photograph*, the 20.7-acre project site is north of Esaws Avenue and west of the existing HS and consists of six parcels owned by the District — Assessor Parcel Numbers 043901218, 043901219, 043901220, 043901221, 043901222, 043901223, and 043901224. A small portion (about 0.23 acres) of land along the west side of the Granite Hills HS parcel (APN 043901218) is also part of the project site. The project site consists of undeveloped, vacant land to the west and north, Granite Hills HS to the east, and Esaws Avenue to the south with undeveloped land also present beyond Esaws Avenue to the south.

Local access to the project site is provided by Esaws Avenue to the south and Central Road to the west. Regional access to the project site is provided by State Route 18 (SR-18), approximately 0.60-mile to the south and by Interstate 15 (I-15), approximately 7.60 miles to the northwest (See Figure 2, *Local Vicinity*).

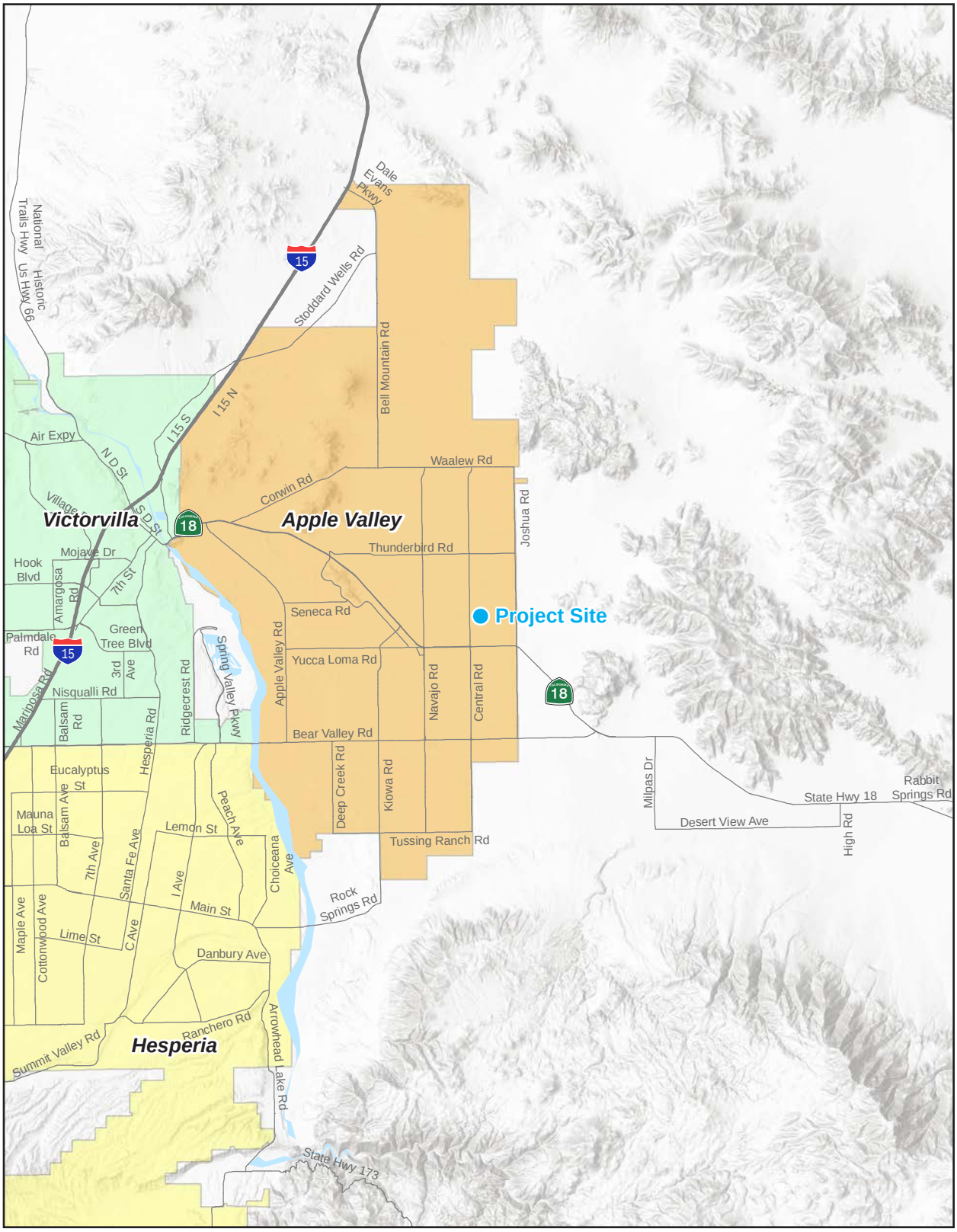
1.3 PROJECT DESCRIPTION

The AVUSD is proposing to construct a new athletic complex with associated facilities on the project site this is adjacent and west of Granite Hills HS and within a small portion of the western side of the campus. The proposed project would install a new track and field with artificial turf, four stadium lights, two football field goal posts, a scoreboard, permanent bleachers to the west and east of the track and field, a concessions building, a teams building, a trash enclosure, a public address (PA) system, four parking lots, a flood control basin, and include walkways and ornamental landscaping design features and vegetation. The proposed project would also include track event infrastructure including a long jump area. New chain link fencing with gates would be installed around the perimeter of the project site and between the eastern portion of the project site and the western portion of the campus. Pedestrian access with a gate would also be installed in between the project site and the western portion of the existing campus.

1.4 CONCLUSIONS/RECOMMENDATIONS

Based on a review of the information sources contained in this report and the results of the Phase I Environmental Site Assessment (ESA) prepared by Padre Associates Inc. (Padre), there are no identified environmental health and safety hazards that would impact the construction and implementation of the project.

Figure 1 - Regional Location



Note: Unincorporated county areas are shown in white.
Source: Generated using ArcMap 2025.

0 3
Scale (Miles)

PlaceWorks

1. Introduction

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Figure 2 - Local Vicinity



Project Boundary

City Boundary

Source: Generated using ArcMap 2025.

0 2,000
Scale (Feet)

PlaceWorks

1. Introduction

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Figure 3 - Aerial Photograph



Source: Nearmap 2024.

PlaceWorks

1. Introduction

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2. State Standards for School Facilities

The State of California's standards for school site selection are found in 5 CCR Section 14010, and additional codes and regulations applicable to school facilities are found in the Education, Government and Public Resources Codes. The following table is a checklist of questions and code citations related to state-funded new school site and new construction approvals.

STATE STANDARDS CHECKLIST FOR STATE-FUNDED SCHOOL FACILITIES – SCHOOL SITE APPROVAL
(Documentation for SFPD 4.0, 4.01–4.03, School Site Approval)

Topic	Code References
Air Quality	
Is the boundary of the proposed school site within 500 feet of the edge of the closest traffic lane of a freeway or busy traffic corridor? If yes, would the project create an air quality health risk due to the placement of the school?	Ed. Code § 17213(c)(2)(C); CCR Title 5 § 14010(q)
Would the project create an air quality hazard due to the placement of a school within one-quarter mile of: (a) permitted and non-permitted facilities identified by the jurisdictional air quality control board or air pollution control district; (b) freeways and other busy traffic corridors; (c) large agricultural operations; and/or (d) a rail yard, which might reasonably be anticipated to emit hazardous air emissions, or handle hazardous or acutely hazardous material, substances, or waste?	Ed. Code § 17213(b); CCR Title 5 § 14010(q)
Geology and Soils	
Does the site contain an active earthquake fault or fault trace, or is the site located within the boundaries of any special studies zone or within an area designated as geologically hazardous in the safety element of the local general plan?	Ed. Code, §§ 17212 and 17212.5; CCR Title 5 § 14010(f)
Would the project involve the construction, reconstruction, or relocation of any school building on the trace of a geological fault along which surface rupture can reasonably be expected to occur within the life of the school building?	Ed. Code § 17212.5
Would the project involve the construction, reconstruction, or relocation of any school building on a site subject to moderate-to-high liquefaction, landslides, or expansive soils?	CCR, Title 5 § 14010(i) School Site Selection and Approval Guide, Appendix H
Are naturally occurring asbestos minerals located at the site?	School Site Selection and Approval Guide, Appendix H
Hazards and Hazardous Materials	
Does the proposed school site contain one or more pipelines, situated underground or aboveground, which carry hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line that is used only to supply natural gas to that school or neighborhood?	Ed. Code § 17213(a)(3)
Is the proposed school site located near an aboveground water or fuel storage tank or within 1,500 feet of an easement of an aboveground or underground pipeline that can pose a safety hazard to the site?	CCR, Title 5 § 14010 (h)

2. Environmental Checklist

Is the school site in an area designated in a city, county, or city and county general plan for agricultural use and zoned for agricultural production, and if so, do neighboring agricultural uses have the potential to result in any public health and safety issues that may affect the pupils and employees at the school site? *(Does not apply to school sites approved by CDE prior to January 1, 1997.)*	Ed. Code § 17215.5
Is the property line of the proposed school site less than the following distances from the edge of respective power line easements: (1) 100 feet of a 50–133 kV line; (2) 150 feet of a 220–230 kV line; or (3) 350 feet of a 500–550 kV line?	CCR, Title 5 § 14010 (c)
Does the project site contain a current or former hazardous waste disposal site or solid waste disposal site and, if so, have the wastes been removed?	Ed. Code § 17213(a)(1)
Is the project site a hazardous substance release site identified by the state Department of Health Services in a current list adopted pursuant to § 25356 for removal or remedial action pursuant to Chapter 6.8 of Division 20 of the Health and Safety Code?	PRC § 21151.8 (a)(1)(B); Ed. Code § 17213(a)(2)
If prepared, has the risk assessment been performed with a focus on children's health posed by a hazardous materials release or threatened release, or the presence of naturally occurring hazardous materials on the school site?	Ed. Code § 17210.1(a)(3)
If a response action is necessary and proposed as part of this project, has it been developed to be protective of children's health, with an ample margin of safety?	Ed. Code § 17210.1(a)(4)
Is the proposed school site situated within 2,000 feet of a significant disposal of hazardous waste?	CCR, Title 5 § 14010 (t)
Is the site within 300 feet of an active oil or natural gas well?	Fire Code § 3406.3.1
Hydrology and Flooding	
Is the project site subject to flooding or dam/tank inundation or street flooding?	Ed. Code §§ 17212 and 17212.5 CCR, Title 5 § 14010 (g) School Site Selection and Approval Guide, Appendix H
Land Use and Planning	
Would the proposed school conflict with any existing or proposed land uses, such that a potential health or safety risk to students would be created?	Ed. Code § 17213 Gov't. Code § 65402 CCR, Title 5 § 14010 (m)
Are there easements on or adjacent to the site that would restrict access or building placement?	CCR, Title 5 § 14010(r)
Is the school site proportionate in its length to width ratio to accommodate the building layout, parking and playfields that can be safely supervised and does not exceed the allowed passing time to classes for the district?	CCR, Title 5 § 14010(j)
Is the site located within the proposed attendance area to encourage student walking and avoid extensive bussing unless bussing for ethnic diversity?	CCR, Title 5 § 14010(n)
Has the district considered environmental factors of light, wind, noise, aesthetics, and air pollution in its site selection process?	CCR, Title 5 § 14010(q)
Is the site within a designated Farmland Security Zone?	Government Code § 51296.5
Noise	
Is the proposed school site located adjacent to or near a major arterial roadway or freeway whose noise generation may adversely affect the educational program?	CCR, Title 5 § 14010 (e)
Public Services	
Does the site promote joint use of parks, libraries, museums, and other public services?	CCR, Title 5, § 14010 (o)
Is the site conveniently located for public services, including but not limited to fire protection, police protection, public transit and trash disposal wherever feasible?	CCR, Title 5, § 14010 (p)
Transportation/Traffic	
Are traffic and pedestrian hazards mitigated per Caltrans' School Area Pedestrian Safety manual?	CCR, Title 5 § 14010 (l)
Is the site easily accessible from arterials and is the minimum peripheral visibility maintained for driveways per Caltrans' Highway Design Manual?	CCR, Title 5 § 14010 (k)

2. Environmental Checklist

Is the proposed school site within 1,500 feet of a railroad track easement?	CCR, Title 5 § 14010 (d)
Is the proposed school site within two nautical miles, measured by air line, of that point on an airport runway or potential runway included in an airport master plan that is nearest to the site? *(Does not apply to school sites acquired prior to January 1, 1966.)*	Ed. Code §§ 17215 (a)&(b)

Note: Any documentation related to the California Environmental Quality Act is provided under separate cover.
This checklist is also applicable to property additions to existing school sites.

2. Environmental Checklist

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3. Environmental Analysis

Section 2 provided a checklist of the State of California's health and safety standards for school sites. This section provides documentation and an evaluation of applicable standards, and mitigation measures where appropriate.

3.1 AIR QUALITY

3.1.1 Is the boundary of the proposed school site within 500 feet of the edge of the closest traffic lane of a freeway or busy traffic corridor? If yes, would the project create an air quality health risk due to the placement of the school?

No Significant Hazard. There are no freeways or busy traffic corridors within 500 feet of the site (Google Earth Pro, 2025). Public Resources Code Section 21151.8(b)(9) and Education Code Section 17213(d)(9) define a "freeway or other busy traffic corridors" as roadways that on an average day have traffic in excess of 50,000 vehicles in a rural area or 100,000 vehicles in an urban area. The traffic counts for the adjacent and nearby roadways (Esaws Avenue and Central Road) are much less than 5,000 vehicles per day (Town of Apple Valley, 2025).

3.1.2 Would the project create an air quality hazard due to the placement of a school within one-quarter mile of: (a) permitted and non-permitted facilities identified by the jurisdictional air quality control board or air pollution control district; (b) freeways and other busy traffic corridors; (c) large agricultural operations; and/or (d) a rail yard, which might reasonably be anticipated to emit hazardous air emissions, or handle hazardous or acutely hazardous material, substances, or waste?

No Significant Hazard. Surrounding land uses within a quarter-mile of the project site are residences, undeveloped land and the existing HS campus. The Mojave Desert Air Quality Management District (MDAQMD) was contacted to identify stationary sources within a quarter-mile radius of project sites that have the potential to generate hazardous air emissions. The MDAQMD confirmed that no permitted sources are within close proximity to the project site (MDAQMD, 2025). Additionally, there are no nearby non-permitted sources and no rail yards, and the site is not within a quarter mile of a freeway or busy traffic corridor (see 3.1.1). Therefore, no stationary sources nor mobile sources would create an air quality hazard at the school site.

3.2 GEOLOGY AND SOILS

The project site is in the southwest portion of the Mojave Desert geomorphic province of California. The Mojave Desert occupies about 25,000 square miles of southeastern California. The region is dominated by broad alleviated basins receiving non-marine continental deposits from adjacent uplands. According to the California Division of Mines and Geology, *Geologic Map of the San Bernardino Quadrangle, California, (1:250,000)*, revised 1998, the project site is underlain by Quaternary, Holocene alluvium (undifferentiated) (Padre, 2024).

3. Environmental Analysis

The Natural Resources Conservation Services (NRCS) Web Soil Survey shows the surface soil at the project site to consist mostly of Helendale loamy sand (0-2 percent slopes). This soil unit consists of alluvium derived from granitic sources. A typical profile consists of loamy sand to approximately 4-inches transitioning to a sandy loam to approximately 66-inches, and then loamy sand to approximately 70 inches. A small portion (approx. 4.5 acres) at the southwest area of the Subject Property consists of Wasco sandy loam, cool (0-2 percent slopes). A typical profile of this soil unit consists of a sandy loam to approximate depths of 66 inches (Padre, 2024).

The project site is within the Upper Mojave River Valley Groundwater Basin. Although the exact depth to groundwater at the project site is unknown, the groundwater well approximately 1,400 feet southwest of the project site indicates that groundwater is greater than 100 feet below ground surface (bgs; Padre, 2024). Although groundwater depths may vary seasonally, it is highly unlikely that groundwater will be encountered during construction activities.

3.2.1 Does the site contain an active earthquake fault or fault trace, or is the site located within the boundaries of any special studies zone or within an area designated as geologically hazardous in the safety element of the local general plan?

No Significant Hazard. According to the Department of Conservation's Earthquake Hazards Zone Application online map (EQ Zapp), the site is not within or immediately adjacent to (i.e., within a few hundred feet) an Alquist-Priolo Earthquake Fault Zone (California Department of Conservation, 2025a). The nearest fault is the Helendale Fault, which is approximately 6.4 miles west of the project site. No active faults are known to cross the project site and the site is not within the boundaries of an Earthquake fault Zone (EFZ; Padre, 2024).

3.2.2 Would the project involve the construction, reconstruction, or relocation of any school building on the trace of a geological fault along which surface rupture can reasonably be expected to occur within the life of the school building?

No Significant Hazard. As stated in Section 3.2.1, no faults are in the immediate vicinity of the site and the site is not within or immediately adjacent to (i.e., within a few hundred feet) an Alquist-Priolo EFZ (California Department of Conservation, 2025a; Padre, 2024).

3.2.3 Would the project involve the construction, reconstruction, or relocation of any school building on a site subject to moderate-to-high liquefaction, landslides, or expansive soils?

No Significant Hazard. Liquefaction refers to loose, saturated sand, or silt deposits that lose their load-supporting capability when subjected to intense shaking. Liquefaction potential exists in areas with relatively loose sandy soils and shallow groundwater (generally less than 50 feet in depth during moderate to strong seismic ground shaking. The San Bernardino Geologic Hazard Map (Plate EH31C) shows the project site is not in an area of identified liquefaction potential (San Bernardino County, 2025). Therefore, liquefaction would not have the potential to impact the project site.

Landslides typically occur on hillsides or in steep terrain. They are influenced by rock or soil type, slope angle, groundwater levels, rainfall, and large earthquakes. The project site is relatively level and there are no significant

elevation changes or unusual geographic features. As stated above, the San Bernardino Geologic Hazards Map (Plate EH31C) indicates that the project site is not located in an area with landslide susceptibility (San Bernardino County, 2025). Therefore, landslide hazards do not have the potential to impact the project site.

Expansive soils swell when they become wet and shrink when they dry out, resulting in the potential for cracked building foundations, structures, utility lines and roads. Expansive soils are typically characterized as clayey material. As stated above in Section 3.2, the project site consists of Helendale loamy sand and Wasco sandy loam, which are not considered to be expansive soils. Additionally, all construction would be performed in compliance with the California Building Code and requirements of the Division of the State Architect (DSA). The DSA will ensure that the improvements are constructed in accordance with applicable recommendations for the on-site soil conditions. Therefore, the project would not be affected by expansive soils.

3.2.4 Are naturally occurring asbestos minerals located at the site?

No Significant Hazard. Asbestos is a naturally occurring silicate mineral that has historically been utilized for a variety of purposes including insulation, fireproofing materials, automotive brakes, and wallboard materials. Asbestos is characterized as a carcinogen. Naturally occurring asbestos (NOA) is associated with ultramafic and serpentine rocks.

According to the USGS geology map for the region (*Geologic Map of the San Bernardino Quadrangle, California, (1:250,000)*), revised 1998, there are no asbestos-bearing ultramafic or serpentine rocks located on or within a 10-mile radius of the project site (Padre, 2024). Therefore, there is no potential for NOA soil exposure at the project site and no potential for airborne exposure from the weathering and deposition of NOA-containing rock located within a 10-mile radius.

3.3 HAZARDS AND HAZARDOUS MATERIALS

3.3.1 Does the proposed school site contain one or more pipelines, situated underground or aboveground, which carry hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line that is used only to supply natural gas to that school or neighborhood?

No Significant Hazard. There are no natural gas transmission lines or hazardous liquid pipelines within a 1,500-foot radius of the project site, according to the National Pipeline Mapping System online mapping database (NPMS, 2025). Additionally, a request for pipeline information was submitted to Southwest Gas to verify that no high-pressure natural gas pipelines are within 1,500 feet of the project site. To date, Southwest Gas has not responded to our request for high-pressure gas line verification. Once a response is received from Southwest Gas, an addendum to this GEHA will be prepared should a high-pressure natural gas pipeline be identified. But based on the available online mapping systems, hazardous substance pipelines do not pose a significant risk to the school site (NPMS, 2025).

3.3.2 Is the proposed school site located near an aboveground water or fuel storage tank or within 1,500 feet of an easement of an aboveground or underground pipeline that can pose a safety hazard to the site?

Aboveground Water or Fuel Storage Tank

No Significant Hazard. Based on results from the Phase I ESA, neither the project site nor properties located within a ¼-mile radius of the site were listed as having aboveground storage tanks (Padre, 2024). Also, an aerial review using Google Earth Pro showed no aboveground water tanks in close proximity to the site.

Hazardous Substance Pipelines

No Significant Hazard. As stated in Section 3.3.1, no high-pressure natural gas pipelines and no chemical or petroleum pipelines were identified within a 1,500-foot radius according to the National Pipeline Mapping System online mapping database (NPMS, 2025). Additionally, a request for pipeline information was submitted to Southwest Gas to verify that no high-pressure natural gas pipelines are within 1,500 feet of the project site. To date, Southwest Gas has not responded to our request for high-pressure gas line verification. Once a response is received from Southwest Gas, an addendum to this GEHA will be prepared should a high-pressure natural gas pipeline be identified. But based on the available online mapping systems, hazardous substance pipelines do not pose a significant risk to the school site (NPMS, 2025).

Water Pipelines

No Significant Hazard. Based on the response from Liberty Utilities, there are four 12-inch diameter water mains within 1,500 feet of the project site (Liberty Utilities 2025). The identified 12-inch water mains are beneath Esaws Avenue, Central Road, Ramona Avenue, and Ocotilla Road. A water line analysis was conducted for the project and is provided in Appendix B. The results of the analysis show that a full-flow rupture of any of the identified water lines would not significantly impact the school site.

3.3.3 Is the school site in an area designated in a city, county, or city and county general plan for agricultural use and zoned for agricultural production, and if so, do neighboring agricultural uses have the potential to result in any public health and safety issues that may affect the pupils and employees at the school site? (Does not apply to school sites approved by CDE prior to January 1, 1997.)

No Significant Hazard. According to the Town of Apple Valley Zoning Map, the project site has a zoning designation of residential-equestrian (R-EQ) and the existing Granite Hills HS campus has a designation of Public Facilities (P-F) (Town of Apple Valley, 2023). The Apple Valley General Plan states that the proposed future land use for the project site and the surrounding parcels would be residential-single family (R-SF) (Town of Apple Valley, 2009). There are no zoned agricultural land uses within a ¼-mile radius of the project site and confirmed with an aerial review using Google Earth Pro. Therefore, there is no potential for public health or safety issues related to agricultural uses in the vicinity of the site.

3.3.4 Is the property line of the proposed school site less than the following distances from the edge of respective power line easements: (1) 100 feet of a 50–133 kV line; (2) 150 feet of a 220–230 kV line; or (3) 350 feet of a 500–550 kV line?

No Significant Hazard. Southern California Edison (SCE) provides electrical service to the project area. A review of SCE power line map indicates that there is an underground 12 kV line along the north side of Esaws Avenue, which is adjacent to the project site (Southern California Edison, 2025). Since this line is less than 50 kV, there are no high voltage (>50 kV) electrical transmission lines within the distances specified above. Therefore, there are no significant hazards associated with powerlines.

3.3.5 Does the project site contain a current or former hazardous waste disposal site or solid waste disposal site and, if so, have the wastes been removed?

No Significant Hazard. Based on a review of the DTSC EnviroStor database and information provided in the Phase I ESA, the site is not located on a current or former hazardous waste disposal site or solid waste disposal site (DTSC, 2025a; Padre, 2024).

3.3.6 Is the project site a hazardous substance release site identified by the state Department of Health Services in a current list adopted pursuant to § 25356 for removal or remedial action pursuant to Chapter 6.8 of Division 20 of the Health and Safety Code?

No Significant Hazard. A review of the Cortese list and other documentation in the Phase I ESA indicates that no hazardous substance release sites were identified within the project site. Additionally, the Phase I ESA did not identify any property within a one-mile radius of the project site (DTSC, 2025b; Padre, 2024).

3.3.7 If prepared, has the risk assessment been performed with a focus on children's health posed by a hazardous materials release or threatened release, or the presence of naturally occurring hazardous materials on the school site?

No Significant Hazard. Based on a review of historical information provided in the Phase I ESA, the project site has been undeveloped, vacant land since 1953. A site reconnaissance by Padre did not find any indication of hazardous material releases nor any naturally occurring hazardous materials at the project site (Padre, 2024). No further action was recommended.

3.3.8 If a response action is necessary and proposed as part of this project, has it been developed to be protective of children's health, with an ample margin of safety?

No Significant Hazard. No removal action would be necessary at the site based on the site history and environmental database research documented in the Phase I ESA (Padre, 2024). The Phase I ESA did not identify any potential hazards of concern that would warrant a response action.

3.3.9 Is the proposed school site situated within 2,000 feet of a significant disposal of hazardous waste?

No Significant Hazard. Based on a 2025 review of the EnviroStor database and the Phase I ESA, the project site is not within 2,000 feet of a significant disposal of hazardous waste (DTSC, 2025a; Padre, 2024).

3.3.10 Is the site within 300 feet of an active oil or natural gas well?

No Significant Hazard. The California Geologic Energy Management Division (CalGEM) oversees the drilling, operation, maintenance, and plugging and abandonment of oil wells, natural gas wells, and geothermal wells. As part of the Phase I ESA, Padre reviewed the available CalGEM online mapping system for the project site at the California Department of Conservation webpage. According to a review of the CalGEM online database and interactive map, there are no reported oil wells, natural gas wells, and/or geothermal wells located within a one-mile radius of the project site (Padre, 2024).

3.4 HYDROLOGY AND FLOODING

The school site is at an approximate elevation of about 2,930 feet above mean sea level (msl) at north latitude 34.50989 and west longitude -117.17055. The project site consists of undeveloped land, with land cover consisting of grasses, brush, and exposed soil. The current drainage direction is to the northwest. Rainfall at the project site is expected to infiltrate into the exposed surface areas. The project will construct a flood control basin at the northern portion of the site to temporarily retain excess runoff and release it in accordance with state and local regulations.

According to the Phase I ESA, the depth to groundwater at the project site is unknown. However, a review of information from a nearby well, located approximately 1,400 feet southwest of the project site, the recorded depth to groundwater is greater than 100 feet below ground surface (bgs) (Padre, 2024). Additionally, groundwater flow is anticipated to flow westerly toward the Mojave River. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (Community Panel Number: 06071C5845H, Effective Date: August 28, 2008), the project site is in Zone D (Area of undetermined flood hazard) (Padre, 2024).

3.4.1 Is the project site subject to flooding or tank/dam inundation or street flooding?

No Significant Hazard. As stated above in Section 3.4, The FEMA Flood Insurance Rate Map Number 06071C5845H, Effective Date: August 28, 2008, the site is located within Zone D, which is an area of undetermined flood hazard.

According to the dam inundation maps provided by the California Department of Water Resources (DWR) and a review of the hydrology section of the San Bernardino County General Plan EIR, the project site is not within a dam inundation zone (Department of Water Resources, 2025; San Bernardino County, 2019). Therefore, there would be no significant hazards associated with dam failure or hydrology at the project site.

3.5 LAND USE AND PLANNING

3.5.1 Would the proposed school conflict with any existing or proposed land uses, such that a potential health or safety risk to students would be created?

No Significant Hazard. The project site is currently undeveloped and is zoned equestrian residential (R-EQ). Surrounding land uses are also zoned residential and the Granite Hills HS campus located to the east is zoned

Public Facilities (P-F) (Town of Apple Valley, 2023). The proposed project would not conflict with existing or proposed land uses that would have the potential to pose a risk to health or safety of students.

3.5.2 Are there easements on or adjacent to the site that would restrict access or building placement?

No Significant Hazard. According to the parcel map provided in the Phase I ESA, no easements that would restrict access or building placement are located on or adjacent to the site (Padre, 2024). Therefore, there is no significant hazard to the project.

3.5.3 Is the school site proportionate in its length to width ratio to accommodate the building layout, parking and playfields that can be safely supervised and does not exceed the allowed passing time to classes for the district?

No Significant Hazard. The proposed project has been designed with four parking lots and sports fields to accommodate the planned sporting activities, including football, soccer, and track and field events. The facility will be completely fenced with a pedestrian access gate between the project site and the Granite Hills HS campus. Therefore, there is no conflict with footprint proportionality or exceedance of passing time to classes.

3.5.4 Has the district considered environmental factors of light, wind, noise, aesthetics, and air pollution in its site selection process?

Light and Wind

No Significant Hazard. The project site would be exposed to standard climate conditions experienced by the High Desert Region of California, which is generally characterized as a semi-arid climate with cool winters and hot, dry summers. Prevailing winds are typically from the west or north and average between 6 and 9 mph, which should not have an impact on the proposed project.

A lighting study has been conducted for the proposed stadium portion of the project to ensure that light spillover and glare would not create issues for residences in the surrounding area. Currently, the land to the north and west is undeveloped, vacant land, and the nearest sensitive receptors are single-family residences on the western side of Central Road. However, the lighting study evaluates light spillover and glare at the project site boundaries with the assumption that there could be future sensitive land uses adjacent to or in close proximity to the project site. Additional details regarding the lighting study are provided in the Initial Study/Mitigated Negative Declaration (IS/MND; PlaceWorks, 2025).

Noise

Noise monitoring was conducted around the project site and modeling was conducted to determine noise levels during stadium events, including a PA system, spectator cheering, and band noise. The results of the noise monitoring and modeling are presented in the IS/MND, which also contains an appendix with the noise results (PlaceWorks, 2025). Noise levels at the sensitive receptors would range from 43.8 dBA to 53.1 dBA if the stadium was at full capacity, and indicate that periodic stadium noise impacts would be less than significant (PlaceWorks, 2025).

Aesthetics

No Significant Hazard. Project development would not degrade the existing visual character of the site. The project site is located west of the existing Granite Hills HS. The surrounding land is currently undeveloped. The proposed project would be consistent with the land uses specified in the Apple Valley Zoning Map (Town of Apply Valley, 2023).

Air Pollution

No Significant Hazard. As stated in Section 3.1.2, MDAQMD did not identify any permitted stationary sources of air emissions within a quarter mile of the project site (see Appendix A). Additionally, there are no rail yards or non-permitted sources nearby, and the site is not within a quarter mile of a freeway or busy traffic corridor (see 3.1.2).

3.5.5 Is the site within a designated Farmland Security Zone?

No Significant Hazard. The project site is not within a Williamson Act agricultural preserve and is not 100 acres or more in size (San Bernardino Valley Agricultural Planning and Preservation Program, 2025). In addition, a review of the California Important Farmland Finder maintained by the California Department of Conservation, Division of Land Resource Protection, does not show the site or surrounding area to be designated as important farmland (California Department of Conservation, 2025b).

3.6 NOISE

3.6.1 Is the proposed school site located adjacent to or near a major arterial roadway or freeway whose noise generation may adversely affect the educational program?

No Significant Hazard. The project site is surrounded by undeveloped land, an existing school site, and rural residential streets. No significant noise from street traffic is expected to impact the project site. As discussed in Section 3.5.4, noise monitoring and modeling was conducted for noise that would be generated during after-school hours athletic events and there was no significant impact to nearby sensitive receptors.

3.7 PUBLIC SERVICES

3.7.1 Does the site promote joint use of parks, libraries, museums, and other public services?

No Significant Hazard. The site could be made available for public use depending on the scheduling of scholastic-related sport uses, and as school programs allow, following school policies and the Civic Center Act promulgated by the California Department of Education (CDE). No impacts to nearby public facilities and services would occur with implementation of the proposed project.

3.7.2 Is the site conveniently located for public services, including but not limited to fire protection, police protection, public transit and trash disposal wherever feasible?

No Significant Hazard. The project site is within the service area of the Apple Valley Fire Protection District and the nearest fire station is approximately 0.5 mile southwest of the project site. The San Bernardino County Sheriff's Department provides law enforcement protection to the Town of Apple Valley and would serve the proposed project site. Victor Valley Transit provides bus service within the Town of Apple Valley. Several of the bus routes have stops at the intersection of Central Road and Highway 18, which is about 0.5 mile southwest of the project site. The project site will have scheduled trash collection by Burrtec Waste Industries. The site is within the service area of this waste disposal company.

3.8 TRANSPORTATION/TRAFFIC

3.8.1 Are traffic and pedestrian hazards mitigated per Caltrans' School Area Pedestrian Safety manual?

No Significant Hazard. A traffic impact study was conducted for the proposed project by Garland Associates and is included as an appendix in the IS/MND (PlaceWorks, 2025). The circulation improvements include a new driveway to access the proposed parking lots, paved walking paths throughout the project site, and new concrete sidewalks along Esaws Avenue. The proposed project is consistent with the goals and policies of the Circulation Element of the Town of Apple Valley's General Plan and would comply with the CDE guidelines for site design, project circulation and emergency access. The emergency access plan would be reviewed and approved by the Apple Valley Fire Protection District. The proposed project would not hinder nor alter vehicle circulation on adjacent roadways and would not interfere with existing bus and bicycle routes. The proposed project would include paving the pedestrian sidewalk along Esaws Avenue supporting and promoting pedestrian mobility.

The project would not have any significant traffic or pedestrian hazards to overcome and sidewalk improvements that are part of the project would enhance pedestrian accessibility.

3.8.2 Is the site easily accessible from arterials and is the minimum peripheral visibility maintained for driveways per Caltrans' Highway Design Manual?

No Significant Hazard. The path of travel and access points would remain unchanged from existing conditions at the school site. However, new parking lots will be included as part of the project to accommodate vehicles traveling to the proposed sports facility and to allow for safe and efficient vehicular circulation. The project site can be accessed from Esaws Avenue, which is a two-lane road south of the project site. The adjacent street is straight and relatively flat for open viewing of oncoming traffic. Driveways would be designed to meet the requirements of the Caltrans Highway Design Manual to ensure minimum peripheral visibility.

3.8.3 Is the proposed school site within 1,500 feet of a railroad track easement?

No Significant Hazard. Based on a review of Google Earth Pro (2025), the project site is not within 1,500 feet of a railroad track easement. Project implementation would not expose people to adverse risks associated with railroad traffic and potential trespassing issues.

3.8.4 Is the proposed school site within two nautical miles, measured by air line, of that point on an airport runway or potential runway included in an airport master plan that is nearest to the site? (Does not apply to school sites acquired prior to January 1, 1966.)

Potentially Significant Hazard. Based on a review of aerial maps (Google Earth Pro, 2025), the project site is not within two nautical miles of an existing airport or proposed airport runway. The closest airport to the project site is the Apple Valley Airport, which is approximately 4.25 miles north of the site.

3.9 EXEMPTIONS TO SITING STANDARDS

3.9.1 Is the district seeking any exemptions to the standards found in CCR, Title 5, § 14010(c-i), (l), (m), (q), (c), (t)?

No Significant Hazard. The District is not seeking any exemptions to the standards found in CCR, Title 5 § 14010(c) through (t).

4. References

California Department of Conservation, 2025a. California Earthquake Hazards Zone Application (EQ Zapp) https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/

California Department of Conservation. 2025b. California Important Farmland Finder. https://maps.conservation.ca.gov/DLRP/CIFF/

California Geological Survey (CGS). 2025. Fault Activity Map of California, https://maps.conservation.ca.gov/cgs/fam/

California Department of Water Resources. 2025. Dam Breach Inundation Map Web Publisher. https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2

Department of Toxic Substances Control (DTSC). 2025a. EnviroStor website. https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Apple+Valley+CA

Department of Toxic Substances Control (DTSC). 2025b. Cortese website. https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29

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Padre Associates, Inc. 2024. Phase I Environmental Site Assessment, New Athletics Complex for Granite Hills High School, Apple Valley, San Bernardino County, California. Dated December 2024.

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4. References

San Bernardino Valley Agricultural Planning and Preservation Program. 2025. Williamson Act Contracts and Agricultural Preserves. https://salc-grant-data-sbcounty.hub.arcgis.com/documents/18a08da2be3b4794bf0aff1e9486e662/explore

Southern California Edison (SCE). 2025. SCE Voltage Identification Report of Proposed or Existing School Site, provided by Phil Hung, P.E., Senior Engineer, EMF – Distribution Engineering for SCE, received February 20, 2025.

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Town of Apple Valley. 2023. 2023 Zoning Map, https://www.applevalley.org/home/showpublisheddocument/33467/638266556298930000

Town of Apple Valley. 2009. Environmental Impact Report, Apple Valley General Plan and Annexations 2008-001 & 2008-002. https://www.applevalley.org/home/showpublisheddocument/24331/636552384686570000

5. List of Preparers

5.1 LEAD AGENCY

Apple Valley Unified School District
12555 Navajo Road
Apple Valley, California 92308
760.247.8001

5.2 PLACEWORKS

PlaceWorks
3 MacArthur Place, Suite 1100
Santa Ana, CA 92707
Tel: 714.966.9220
Email: info@placeworks.com

Steve Bush, PE
Senior Engineer

5. List of Preparers

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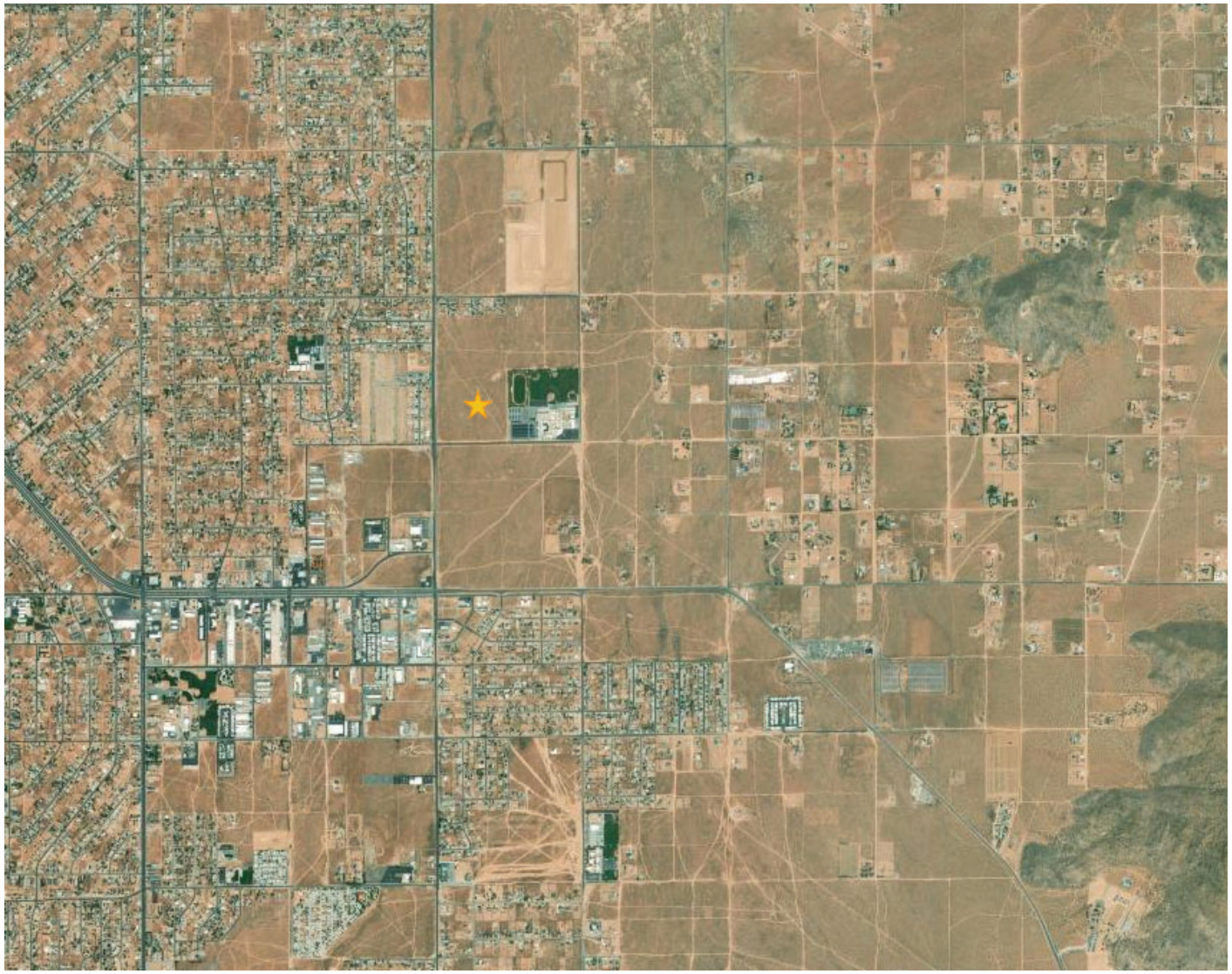
Appendix A. Agency Information

Appendix

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Pipeline and Hazardous Materials Safety Administration

NATIONAL PIPELINE MAPPING SYSTEM



Legend

- Gas Transmission Pipelines
- Hazardous Liquid Pipelines

500 m
1000 ft

Pipelines depicted on this map represent gas transmission and hazardous liquid lines only. Gas gathering and gas distribution systems are not represented.

This map should never be used as a substitute for contacting a one-call center prior to excavation activities. Please call 811 before any digging occurs.

Questions regarding this map or its contents can be directed to npms@dot.gov.

Projection: Geographic

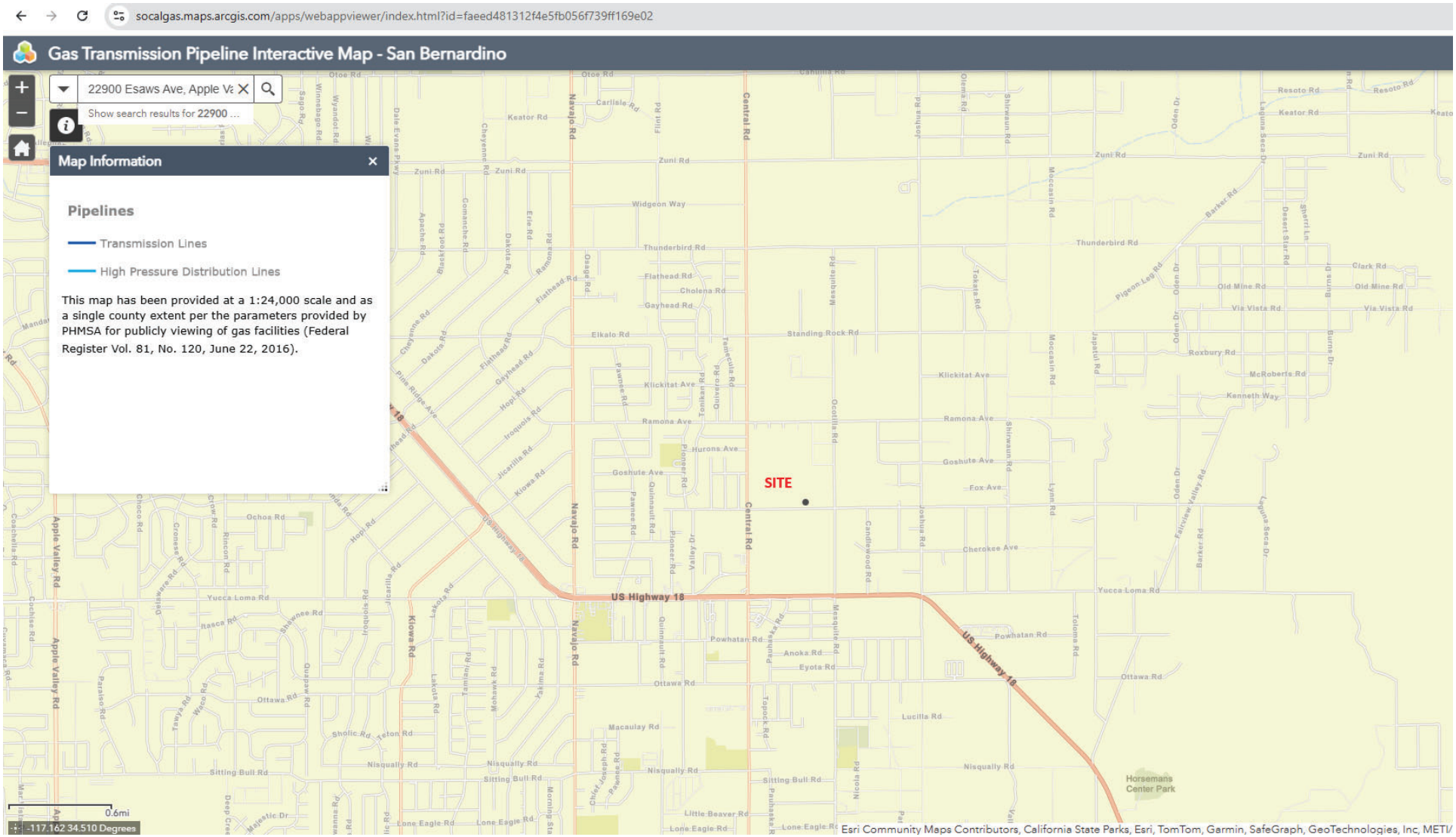
Datum: NAD83

Map produced by the Public Viewer application at www.npms.phmsa.dot.gov

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Date Printed: Jan 03, 2024

811 Know what's below. Call before you dig.


socalgas.maps.arcgis.com/apps/webappviewer/index.html?id=faeed481312f4e5fb056f739ff169e02
Gas Transmission Pipeline Interactive Map - San Bernardino
22900 Esaws Ave, Apple Va
Show search results for 22900 ...
Map Information
Pipelines
Transmission Lines
High Pressure Distribution Lines
This map has been provided at a 1:24,000 scale and as a single county extent per the parameters provided by PHMSA for publicly viewing of gas facilities (Federal Register Vol. 81, No. 120, June 22, 2016).
SITE
US Highway 18
Navajo Rd
Central Rd
Apple Valley Rd
Kiowa Rd
Ottawa Rd
Nisqually Rd
Sitting Bull Rd
Lone Eagle Rd
Horsemans Center Park
0.6mi
-117.162 34.510 Degrees
Esri Community Maps Contributors, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/

From:	Michele Bullock
To:	Madeline Miller
Cc:	Robyn Simpson; Barbara Hayes
Subject:	Public Records Request 2025-02-24-01
Date:	Monday, February 24, 2025 11:43:11 AM
Attachments:	image001.png image002.png

> You don't often get email from mbullock@mdaqmd.ca.gov. Learn why this is important

Good Morning Madeline Miller,

There are no records for the subject property located at 22900 Esaws Ave., Apple Valley, CA., 92307

If you have any questions, please contact Robyn Simpson at rsimpson@mdaqmd.ca.gov

Thank you,
Michele Bullock

Michele Bullock
Records Management Clerk
(760) 245-1661, ext. 2040 *Office*
(760) 245-2699 *Fax*

www.MDAQMD.ca.gov
@MDAQMD on Facebook, Twitter and Instagram

SOUTHERN CALIFORNIA EDISON
An *EDISON INTERNATIONAL*℠ Company

Phil Hung, P.E.
EMF Program Manager
Fullerton Service Center
1851 W Valencia Dr
Fullerton CA 92833
Phone: (626) 633-3415
E-mail: phil.hung@sce.com

SCE Voltage Identification Report of Proposed or Existing School Site

Request Received: **02/12/2025** Received By: **Phil Hung**

Requesting Entity: __ School ___District __X__Consultant ___ School Representative:

Isabel Vega
ivega@placeworks.com
The Planning Center
2850 Inland Empire Boulevard, Suite B
Ontario, California 91764
(909) 989-4449 ext. 22

Nature of Request: Voltage ID ___X___ Msmt. Req. _____ Information _____

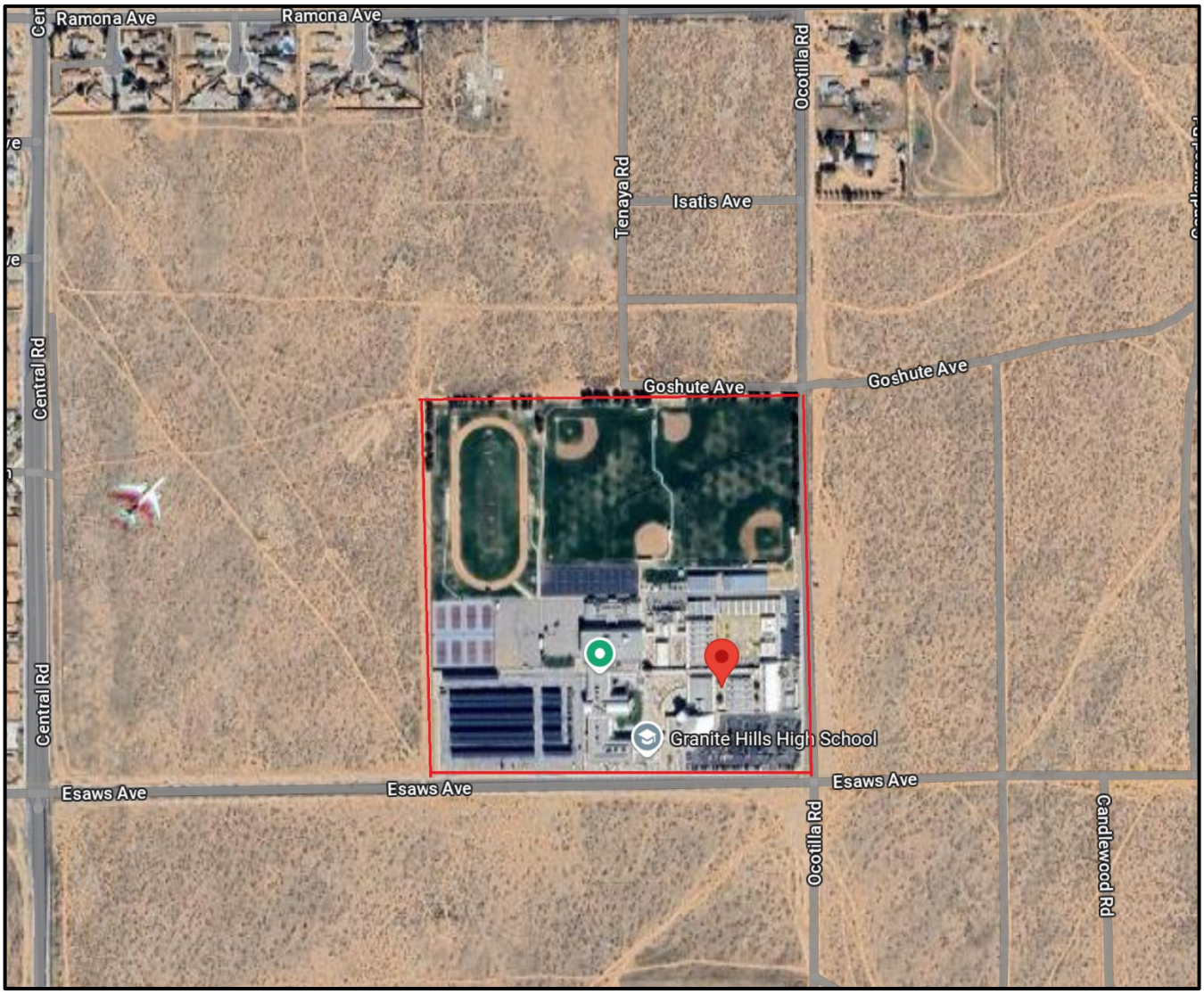
Other: _____

Site Name: **Granite Hills High School**
Site Address: **22900 Esaws Avenue**
City: **Apple Valley, CA 92307**
County: **San Bernardino**
Cross Streets: **Ocotilla Road**

Client: **Apple Valley Unified School District**
12555 Navajo Road
Apple Valley, CA 92308

Photo(s):

Aerial View



Street Views

Looking North West on Esaws Avenue



Looking North on Ocotilla Road



Date of Site Visit: **02/18/2025 (Google Maps)**
Support Action(s) Taken: **SCE system database lookup**

SCE Facilities Identified Within California Code of Regulations (CCR) Title 5 Prescribed Distances:

- **There are no SCE facilities of 50 kV or higher within the CDE Title 5 setback distances**
- **There is an underground 12 kV circuit on Esaws Avenue and Ocotialla Road**

Date(s) responded to Requestor:
02/12/2025: Acknowledged, (E-mail)
02/19/2025: Supplied Information (E-mail)

Outlook

Re: Sent from Snipping Tool

From Steve Bush <sbush@placeworks.com>
Date Fri 2/21/2025 7:31 AM
To Randy Vogel <Randy.Vogel@libertyutilities.com>

Thank you for confirming.

Regards,
STEVE BUSH, PE
Senior Engineer II
510.848.3815 ext. 3316

From: Randy Vogel <Randy.Vogel@libertyutilities.com>
Sent: Friday, February 21, 2025 7:15 AM
To: Steve Bush <sbush@placeworks.com>
Subject: RE: Sent from Snipping Tool

Happy Friday, yes Ramona and Ocotilla are 12” pvc also.

From: Steve Bush <sbush@placeworks.com>
Sent: Friday, February 21, 2025 6:14 AM
To: Randy Vogel <Randy.Vogel@libertyutilities.com>
Subject: Re: Sent from Snipping Tool

Good Morning Randy,
I work with Isabel Vega and have a few follow-up questions regarding your response emails. Can you confirm whether the water lines along Ocotilla Road (east of the existing school site) or along Ramona Rd (north of the school and project area) are 12-inch in diameter or larger? Isabel forwarded me you email stating the lines along Esaws Ave and Central Ave are 12-inch PVC, so we are good there.

Thank you,
STEVE BUSH, PE
Senior Engineer II
PLACEWORKS
510.848.3815 ext. 3316

From: Steve Bush <sbush@placeworks.com>
Sent: Friday, February 21, 2025 5:46 AM
To: Steve Bush <sbush@placeworks.com>
Subject: FW: Sent from Snipping Tool

From: Randy Vogel <Randy.Vogel@libertyutilities.com>
Sent: Wednesday, February 12, 2025 2:50 PM
To: Isabel Vega <ivega@placeworks.com>
Subject: FW: Sent from Snipping Tool

You don't often get email from randy.vogel@libertyutilities.com. Learn why this is important

---

From: Randy Vogel <Randy.Vogel@libertyutilities.com>
Sent: Wednesday, February 12, 2025 2:47 PM
To: Randy Vogel <Randy.Vogel@libertyutilities.com>
Subject: Sent from Snipping Tool



delete this message immediately from your system.

Appendix B. Water Pipeline Evaluation

Appendix

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APPENDIX B

WATER PIPELINE STREET FLOW ANALYSIS

For identified water pipelines located beneath a street with curbing, a pipeline flooding analysis was conducted to determine the depth and location of water flow within the street in the event of a pipeline leak or rupture. The results are provided herein. For this worst-case analysis, it was conservatively assumed that all the water flowing through the pipeline at its maximum capacity would reach the surface. In addition, no credit was taken for the presence of storm drains along these streets.

Release impacts were calculated based on the procedures specified in the CDE manual (CDE 2007). The release rate was determined by multiplying the pipe area by an assumed velocity of 5 feet per second (fps). Then the release rate was compared to the carrying capacity of the street, accounting for longitudinal slope, to determine if the water would be contained within the confines of the street curbing (Jeffers & Associates 2006). The results are provided in Table B-1.

Table B-1 Water Pipeline Flooding Analysis – Street Flow

Pipeline Diameter	Pipeline Location	Release Rate (cfs)	Street Width (ft)	Depth of Flow in Street (in)	Exceeds Street Carrying Capacity?
12-inch	Esaws Avenue	3.93	28	3.6	No
12-inch	Central Road	3.93	76	3.6	No
12-inch	Ramona Avenue	3.93	28	3.6	No
12-inch	Ocotilla Road	3.93	34	3.6	No

Assuming 6-inch curb for collector streets.

Assuming a standard 6-inch curb for collector streets, the water released from a full-flow rupture of any of the 12-inch water mains would be entirely contained within the confines of the curbing and would not result in flooding at the school site.

Based on the results of the water pipeline evaluation, the full flow rupture of any of the pipelines would not result in water depths at the school site that would pose a significant risk to students and staff.

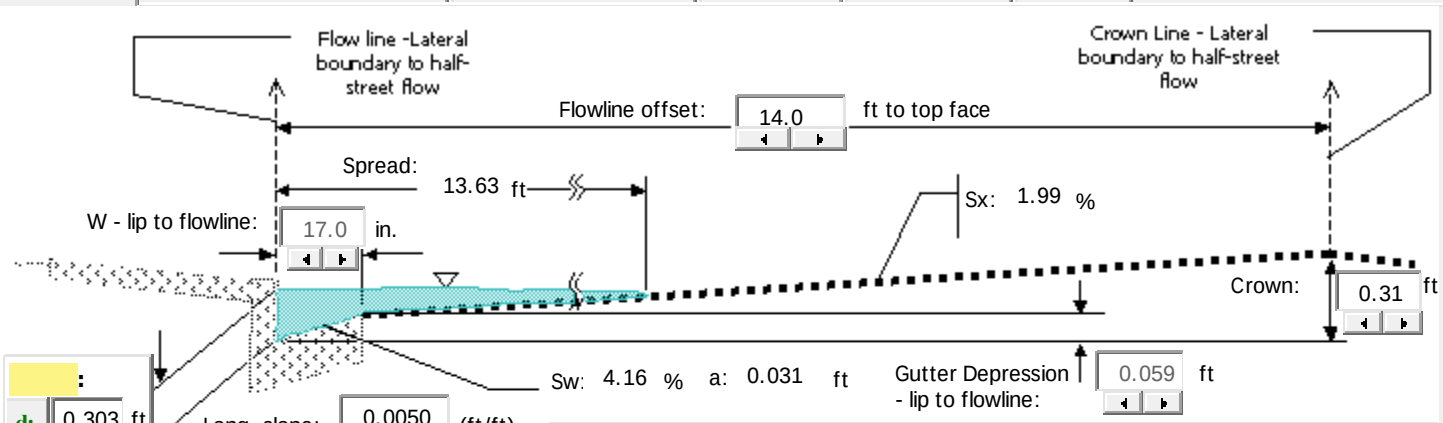
Modified Manning's Equation Solver

Version: 3.0<>10/30/2024 7:08:38 AM

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Print | Save | Quit

Parameters | Composite Triangular Sections | Head - Discharge Table | Assumptions | Inlet Geometry | Disclaimer



Local Parameters:

Local inlet flow line depression: 2.0 in.

Curb Opening Parameters:

C-O Apron wider than gutter: 0 in.

S'w 13.9 % Se: 5.80 %

Length of curb opening inlet: 12.0 ft

Lt: 14.36 ft

80 % Clear Efficiency 86.3 %

Curb opening flowby: 0.54 cfs

P-1-7/8-4

Print Chart 7

Grate Parameters:

Apron wider than grate: 2 in.

Length: 48 in. Width: 22 in.

% Factor 50 % Factor 50

Splash-over Vel: 7.41 ft/s Vel over grate: 1.98 ft/s

Eo: 99.54 %

Rs: 16.00 % Rf: 100.00 %

Side flow captured: 0.04 cfs Frontal captured: 0.27 cfs

Total combined CB flowby: 0.23 cfs

Street Parameters:

K: 55.6

Vel: 2.10 ft/s

Eo: 27.3 %

W/T: 0.1039

Standard Manning's:

Q: 3.23 cfs

K: 45.7

Vel: 1.72 ft/s

Rh: 0.13 ft

Area: 1.87 sf

Street Flow - Esaws Avenue & Ocotilla Road
12-Inch Water Main

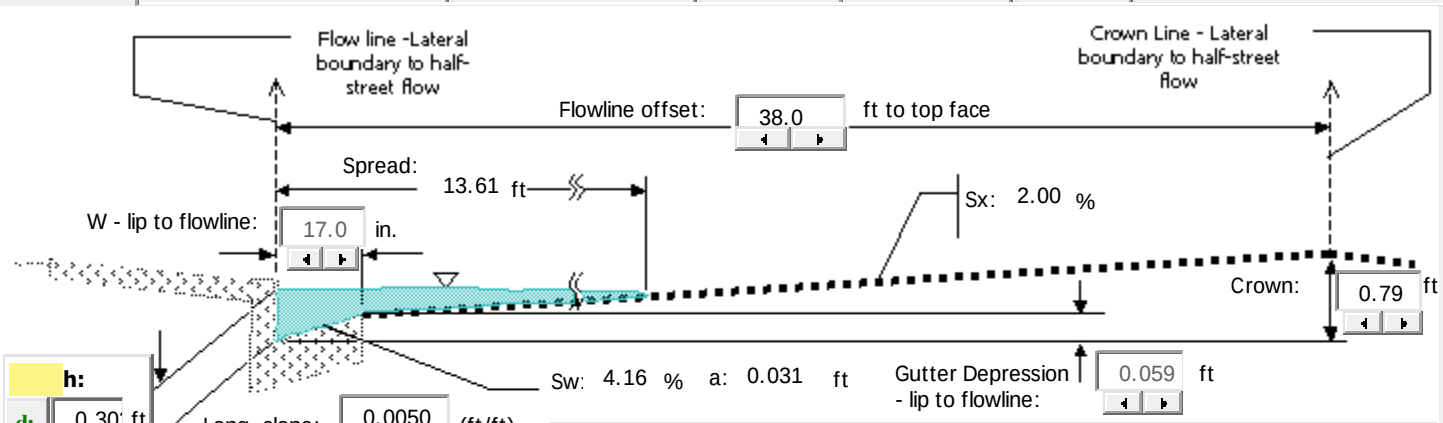
Modified Manning's Equation Solver

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Parameters | Composite Triangular Sections | Head - Discharge Table | Assumptions | Inlet Geometry | Disclaimer



Local Parameters:

Local inlet flow line depression: 2.0 in.

Curb Opening Parameters:

C-O Apron wider than gutter: 0 in.

S'w 13.9 % Se: 5.80 %

Length of curb opening inlet: 12.0 ft

Lt: 14.35 ft

80 % Clear Efficiency 86.3 %

Curb opening flowby: 0.54 cfs

P-1-7/8-4

Print Chart 7

Grate Parameters:

Apron wider than grate: 2 in.

Length: 48 in. Width: 22 in.

% Factor 50 % Factor 50

Splash-over Vel: 7.41 ft/s Vel over grate: 1.98 ft/s

Eo: 99.56 %

Rs: 16.01 % Rf: 100.00 %

Side flow captured: 0.04 cfs Frontal captured: 0.27 cfs

Total combined CB flowby: 0.23 cfs

Street Parameters:

K: 55.6

Vel: 2.10 ft/s

Eo: 27.3 %

W/T: 0.1041

Standard Manning's:

Q: 3.23 cfs

K: 45.7

Vel: 1.73 ft/s

Rh: 0.13 ft

Area: 1.87 sf

Street Flow - Central Road
12-Inch Water Main

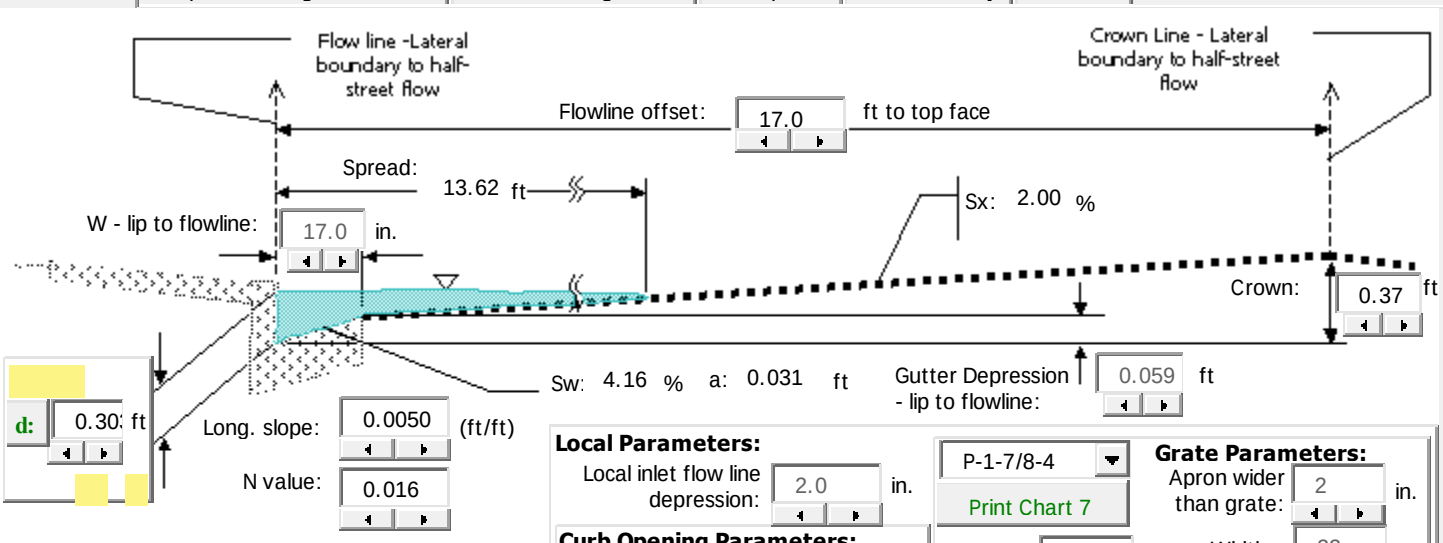
Modified Manning's Equation Solver

Version: 3.0<>10/30/2024 7:08:38 AM

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Print | Save | Quit

Parameters | Composite Triangular Sections | Head - Discharge Table | Assumptions | Inlet Geometry | Disclaimer



Local Parameters:

Local inlet flow line depression: 2.0 in.

Curb Opening Parameters:

C-O Apron wider than gutter: 0 in.

S'w 13.9 % Se: 5.80 %

Length of curb opening inlet: 12.0 ft

Lt: 14.36 ft

80 % Clear Efficiency 86.3 %

Curb opening flowby: 0.54 cfs

P-1-7/8-4

Print Chart 7

Grate Parameters:

Apron wider than grate: 2 in.

Length: 48 in. Width: 22 in.

% Factor 50 % Factor 50

Splash-over Vel: 7.41 ft/s Vel over grate: 1.98 ft/s

Eo: 99.55 %

Rs: 16.00 % Rf: 100.00 %

Side flow captured: 0.04 cfs Frontal captured: 0.27 cfs

Total combined CB flowby: 0.23 cfs

Street Parameters:

K: 55.6

Vel: 2.10 ft/s

Eo: 27.3 %

W/T: 0.1040

Standard Manning's:

Q: 3.23 cfs

K: 45.7

Vel: 1.72 ft/s

Rh: 0.13 ft

Area: 1.87 sf

Street Flow - Ramona Avenue
12-Inch Water Main

Appendix F Fundamentals of Noise

Appendix

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NOISE FUNDAMENTALS

Fundamentals of Noise

NOISE

Noise is most often defined as unwanted sound; whether it is loud, unpleasant, unexpected, or otherwise undesirable. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness."

Noise Descriptors

The following are brief definitions of terminology used in this chapter:

- **Sound.** A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.

- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

- **Decibel (dB).** A unitless measure of sound, expressed on a logarithmic scale and with respect to a defined reference sound pressure. The standard reference pressure is 20 micropascals (20 μPa).

- **Vibration Decibel (VdB).** A unitless measure of vibration, expressed on a logarithmic scale and with respect to a defined reference vibration velocity. In the U.S., the standard reference velocity is 1 micro-inch per second ($1x10^{-6}$ in/sec).

- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

- **Equivalent Continuous Noise Level (L_{eq}); also called the Energy-Equivalent Noise Level.** The value of an equivalent, steady sound level which, in a stated time period (often over an hour) and at a stated location, has the same A-weighted sound energy as the time-varying sound. Thus, the L_{eq} metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.

- **Statistical Sound Level (L_n).** The sound level that is exceeded "n" percent of time during a given sample period. For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the "median sound level." The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the "intrusive sound level." The L_{90} is the sound level exceeded 90 percent of the time and is often considered the "effective background level" or "residual noise level."

- **Maximum Sound Level (L_{max})**. The highest RMS sound level measured during the measurement period.
- **Root Mean Square Sound Level (RMS).** The square root of the average of the square of the sound pressure over the measurement period.
- **Day-Night Sound Level (L_{dn} or DNL).** The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 PM to 7:00 AM.
- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added from 7:00 PM to 10:00 PM and 10 dB from 10:00 PM to 7:00 AM. NOTE: For general community/environmental noise, CNEL and L_{dn} values rarely differ by more than 1 dB (with the CNEL being only slightly more restrictive – that is, higher than the L_{dn} value). As a matter of practice, L_{dn} and CNEL values are interchangeable and are treated as equivalent in this assessment.
- **Peak Particle Velocity (PPV).** The peak rate of speed at which soil particles move (e.g., inches per second) due to ground vibration.
- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.

Characteristics of Sound

When an object vibrates, it radiates part of its energy in the form of a pressure wave. Sound is that pressure wave transmitted through the air. Technically, airborne sound is a rapid fluctuation or oscillation of air pressure above and below atmospheric pressure that creates sound waves.

Sound can be described in terms of amplitude (loudness), frequency (pitch), or duration (time). Loudness or amplitude is measured in dB, frequency or pitch is measured in Hertz [Hz] or cycles per second, and duration or time variations is measured in seconds or minutes.

Amplitude

Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale. Because of the physical characteristics of noise transmission and perception, the relative loudness of sound does not closely match the actual amounts of sound energy. Table 1 presents the subjective effect of changes in sound pressure levels. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud). Changes of 1 to 3 dB are detectable under quiet, controlled conditions, and changes of less than 1 dB are usually not discernible (even under ideal conditions). A 3 dB change in noise levels is considered the minimum change that is detectable with human hearing in outside environments. A change of 5 dB is readily discernible to most people in an exterior environment, and a 10 dB change is perceived as a doubling (or halving) of the sound.

Table 1 Noise Perceptibility

Change in dB	Noise Level
± 3 dB	Barely perceptible increase
± 5 dB	Readily perceptible increase
± 10 dB	Twice or half as loud
± 20 dB	Four times or one-quarter as loud

Source: California Department of Transportation (Caltrans). 2013, September. Technical Noise Supplement ("TeNS").

Frequency

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all, but are "felt" more as a vibration. Similarly, though people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz.

When describing sound and its effect on a human population, A-weighted (dBA) sound levels are typically used to approximate the response of the human ear. The A-weighted noise level has been found to correlate well with people's judgments of the "noisiness" of different sounds and has been used for many years as a measure of community and industrial noise. Although the A-weighted scale and the energy-equivalent metric are commonly used to quantify the range of human response to individual events or general community sound levels, the degree of annoyance or other response also depends on several other perceptibility factors, including:

- Ambient (background) sound level
- General nature of the existing conditions (e.g., quiet rural or busy urban)
- Difference between the magnitude of the sound event level and the ambient condition
- Duration of the sound event
- Number of event occurrences and their repetitiveness
- Time of day that the event occurs

Duration

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called L_{eq}), or alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time; half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_2, L_8 and L_{25} values represent the noise levels that are exceeded 2, 8, and 25 percent of the time or 1, 5, and 15 minutes per hour, respectively. These "n" values are typically used to demonstrate compliance for stationary noise sources with many cities' noise ordinances. Other values typically noted during a noise survey are the L_{min} and L_{max}. These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period, respectively.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law and many local jurisdictions use an adjusted 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or Day-Night Noise Level (L_{dn}). The CNEL descriptor requires that an artificial increment (or "penalty") of 5 dBA be added to the actual noise level for the hours from 7:00 PM to 10:00

PM and 10 dBA for the hours from 10:00 PM to 7:00 AM. The L_{dn} descriptor uses the same methodology except that there is no artificial increment added to the hours between 7:00 PM and 10:00 PM. Both descriptors give roughly the same 24-hour level, with the CNEL being only slightly more restrictive (i.e., higher). The CNEL or L_{dn} metrics are commonly applied to the assessment of roadway and airport-related noise sources.

Sound Propagation

Sound dissipates exponentially with distance from the noise source. This phenomenon is known as "spreading loss." For a single-point source, sound levels decrease by approximately 6 dB for each doubling of distance from the source (conservatively neglecting ground attenuation effects, air absorption factors, and barrier shielding). For example, if a backhoe at 50 feet generates 84 dBA, at 100 feet the noise level would be 79 dBA, and at 200 feet it would be 73 dBA. This drop-off rate is appropriate for noise generated by on-site operations from stationary equipment or activity at a project site. If noise is produced by a line source, such as highway traffic, the sound decreases by 3 dB for each doubling of distance over a reflective ("hard site") surface such as concrete or asphalt. Line source noise in a relatively flat environment with ground-level absorptive vegetation decreases by an additional 1.5 dB for each doubling of distance.

Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. Extended periods of noise exposure above 90 dBA results in permanent cell damage, which is the main driver for employee hearing protection regulations in the workplace. For community environments, the ambient or background noise problem is widespread, through generally worse in urban areas than in outlying, less-developed areas. Elevated ambient noise levels can result in noise interference (e.g., speech interruption/masking, sleep disturbance, disturbance of concentration) and cause annoyance. Since most people do not routinely work with decibels or A-weighted sound levels, it is often difficult to appreciate what a given sound pressure level number means. To help relate noise level values to common experience, Table 2 shows typical noise levels from familiar sources.

Table 2 Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Onset of physical discomfort	120+	
	110	Rock Band (near amplification system)
Jet Flyover at 1,000 feet		
	100	
Gas Lawn Mower at three feet		
	90	
Diesel Truck at 50 feet, at 50 mph		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		
	70	Vacuum Cleaner at 10 feet
Commercial Area		Normal speech at 3 feet
Heavy Traffic at 300 feet	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: California Department of Transportation (Caltrans). 2013, September. Technical Noise Supplement ("TeNS").

Vibration Fundamentals

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is normally associated with activities stemming from operations of railroads or vibration-intensive stationary sources, but can also be associated with construction equipment such as jackhammers, pile drivers, and hydraulic hammers. As with noise, vibration can be described by both its amplitude and frequency. Vibration displacement is the distance that a point on a surface moves away from its original static position; velocity is the instantaneous speed that a point on a surface moves; and acceleration is the rate of change of the speed. Each of these descriptors can be used to correlate vibration to human response, building damage, and acceptable equipment vibration levels. During construction, the operation of construction equipment can cause groundborne vibration. During the operational phase of a project, receptors may be subject to levels of vibration that can cause annoyance due to noise generated from vibration of a structure or items within a structure.

Vibration amplitudes are usually described in terms of either the peak particle velocity (PPV) or the root mean square (RMS) velocity. PPV is the maximum instantaneous peak of the vibration signal and RMS is the

square root of the average of the squared amplitude of the signal. PPV is more appropriate for evaluating potential building damage and RMS is typically more suitable for evaluating human response.

As with airborne sound, annoyance with vibrational energy is a subjective measure, depending on the level of activity and the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Persons accustomed to elevated ambient vibration levels, such as in an urban environment, may tolerate higher vibration levels. Table 3 displays the human response and the effects on buildings resulting from continuous vibration (in terms of various levels of PPV).

Table 3 Human Reaction to Typical Vibration Levels

Vibration Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.006–0.019	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10	Level at which continuous vibration begins to annoy people	Virtually no risk of "architectural" (i.e. not structural) damage to normal buildings
0.20	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling – houses with plastered walls and ceilings
0.4–0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: California Department of Transportation (Caltrans). 2020, April. *Transportation and Construction Vibration Guidance Manual.* Prepared by ICF International.

LOCAL REGULATIONS AND STANDARDS

Chapter 9.73 - Noise Control

9.73.010 - Purpose

A. **Purpose.**

The purpose of this Chapter is to reduce unnecessary, excessive and annoying noise and vibration within the Town. The Town Council finds that this Chapter is necessary to prohibit such noise and vibration generated from or by all sources as specified in this Chapter. Further, the Town Council finds that this Chapter is necessary to maintain quiet in those areas which exhibit low noise levels and to implement programs aimed at reducing noise in those areas within the Town where noise levels are above acceptable values.

The Town Council also finds that certain noise levels and vibrations are detrimental to the public health, safety and welfare, and are contrary to the public interest. Therefore, the Town Council does ordain and declare that creating, maintaining, causing or allowing to be created, caused or maintained, any noise or vibration in a manner prohibited by or not in conformity with the provisions of this Chapter, shall be an infraction or misdemeanor and shall be punishable as such.

9.73.020 - Definitions

A. **Definitions.** All terminology used in this ordinance, not defined below, shall be in conformance with applicable publications of the American National Standards Institute (ANSI) or its successor body.

The following words, phrases and terms as used in this Chapter shall have the meaning as indicated below:

1. **A Weighted Sound Level.** The sound level in decibels as measured on a sound level meter using the A-weighting network. The level so read is designated dBA.
2. **Agricultural Property.** A parcel of real property of not less than ten (10) contiguous acres in size, which is undeveloped for any use other than agricultural purposes.
3. **Ambient Noise Level.** The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal of existing level of environmental noise at a given location.
4. **Commercial Area.** Property which is zoned for commercial purposes, including, but not limited to, retail and wholesale businesses, personal services, and professional offices.
5. **Construction.** Any site preparation, assembly, erection, substantial repair, alteration, or similar action, for or of public or private rights-of-way, structures, utilities or similar property.

6. **Cumulative Period.** An additive period of time composed of individual time segments which may be continuous or interrupted.
7. **Decibel.** A unit for measuring the amplitude of a sound, equal to twenty (20) times the logarithm to the ratio of the sound measured to the reference pressure, which is 20 micropascals.
8. **Demolition.** Any dismantling, intentional destruction or removal of structures, utilities, public or private rights-of-way surfaces, or similar property.
9. **Emergency Work.** Any work performed for the purpose of preventing or alleviating the physical trauma or property damage threatened or caused by an emergency.
10. **Fixed Noise Source.** A stationary device which creates sounds while fixed or motionless, including, but not limited to, residential, agricultural, industrial and commercial machinery and equipment, pumps, fans, compressors, air conditioners, and refrigeration units.
11. **Gross Vehicle Weight Rating (GVWR).** The value specified by the manufacturer as the recommended maximum loaded weight of a single motor vehicle. In cases where trailers and tractors are separable the gross combination weight rating, which is the value specified by the manufacturer as the recommended maximum loaded weight of the combination vehicle, shall be used.
12. **Impulsive Sound.** Sound of short duration, usually less than one (1) second, with an abrupt onset and rapid decay. Examples of sources of impulsive sound include explosions, drop forge impacts, and the discharge of firearms.
13. **Industrial Area.** Property which is zoned for manufacturing and related uses.
14. **Intrusive Noise.** That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency and time of occurrence, tonal or informational content, as well as the prevailing ambient noise level.
15. **Licensed.** The possession of a formal license or a permit issued by the appropriate licensing or permitting agency; or, where no licenses or permits are issued, the sanctioning of the activity by such agency as noted in public record.
16. **Mobile Noise Source.** Any noise source other than a fixed source.
17. **Motor Vehicle.** Motor vehicle shall include any and all self-propelled vehicles as defined in the California Motor Vehicle Code, including all on-highway type motor vehicles subject to registration under said Code, and all off-highway type motor vehicles subject to identification under said Code.
18. **Motorboat.** Any vessel propelled by machinery, whether or not such machinery is the principal source of propulsion, but shall not include a vessel which has a valid marine document issued by the Bureau of Customs of the United States government or any Federal

agency successor thereto (Section 651(d), Harbors and Navigation Code).

19. **Muffler or Sound Dissipating Device.** A device consisting of a series of chambers or baffle plates, or other mechanical design, for the purpose of receiving exhaust gas from an internal combustion engine, and effective in reducing noise.
20. **Noise Control Officer (NCO).** Person or persons designated by the Director of Community Development as responsible for the enforcement of this Chapter.
21. **Noise Disturbance.** Any sound which, as judged by the NCO, (a) endangers or injures the safety or health of human beings or animals, or (b) annoys or disturbs reasonable persons of normal sensitivities, or (c) endangers or injures personal or real property, or (d) violates the factors set forth in Section 9.73.040 of this Chapter. Compliance with the quantitative standards as listed herein shall constitute elimination of a noise disturbance.
22. **Noise Sensitive Zone.** Any area designated in accordance with Section 9.73.060 of this Chapter for the purpose of ensuring exceptional quiet.
23. **Noise Zone.** Any defined areas or regions of a generally consistent land use wherein the ambient noise levels are within a range of five (5) dBA.
24. **Person.** Any individual, association, partnership, or corporation, and includes any officer, employee, department, agency or instrumentality of a State or any political subdivision of a State.
25. **Powered Model Vehicle.** Any self-propelled, airborne, waterborne, or landborne plane, vessel, or vehicle, which is not designed to carry persons, including, but not limited to, any model airplane, boat, car, or rocket.
26. **Public Right-of-Way.** Any street, avenue, boulevard, highway, sidewalk or alley or similar place which is owned or controlled by a governmental entity.
27. **Public Space.** Any real property, or structures thereon, which are owned or controlled by a governmental entity.
28. **Pure Tone.** Any sound which can be judged as audible as a single pitch or a set of single pitches by the Noise Control Officer. For the purposes of this Chapter, a pure tone shall exist if the one-third (1/3) octave band sound pressure level in the band with the tone exceeds the arithmetic average of the sound pressure levels of the two (2) contiguous one-third (1/3) octave bands by five (5) dBA for center frequencies of 500 Hz and above, and by eight (8) dBA for center frequencies between 160 and 400 Hz, and by fifteen (15) dBA for center frequencies less than or equal to 125 Hz.
29. **Real Property Boundary.** An imaginary line along the ground surface, and its vertical extension, which separates the real property owned by one person from that owned by another person, but not including intra-building real property divisions.
30.

Residential Area. Property which is zoned for residential uses.

31. **Sound Amplifying Equipment.** Any device for the amplification of the human voice, music, or any other sound, excluding standard automobile radios when used and heard only by the occupants of the vehicle in which the radio is installed, warning devices on authorized emergency vehicles, or horns or other warning devices on any vehicle used only for traffic safety purposes.
32. **Sound Level Meter.** An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement of sound levels. Such instrument shall meet or exceed the pertinent requirements for type S2A meters contained in the American National Standards Institute specifications for sound level meters, S1.4-1971, or the most recent revision thereof.
33. **Sound Truck.** Any motor vehicle or any other vehicle, regardless of motive power, whether in motion or stationary, having mounted thereon, or attached thereto, any sound amplifying equipment.
34. **Vibration Perception Threshold.** The minimum ground- or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by such direct means as, but not limited to, sensation by touch or visual observation of moving objects. The perception threshold shall be presumed to be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hz.
35. **Weekday.** Any day, Monday through Friday, which is not a legal holiday.

9.73.030 - Noise Control Officer

A. **Authority and Duties of the Noise Control Officer (NCO)**

1. **Lead Agency.** The Director shall designate a Noise Control Officer (NCO) who shall be responsible for administering the noise control program established by this Chapter.
2. **Powers.** In order to implement and enforce this Chapter and for the general purpose of noise abatement and control, NCO shall have, in addition to any other vested authority, the power to:
    a. Conduct, or cause to be conducted, studies, research, and monitoring related to noise, including joint cooperative investigation with public or private agencies, and the application for, and acceptance of, grants;
    b. Review all public and private projects which are likely to cause noise in violation of this ordinance and which are subject to mandatory review or approval by other departments.
        1) Review for compliance with the intent and provisions of this ordinance.
        2) Require sound analyses which identify existing and projected noise sources and associated noise levels.

3) Require the usage of adequate mitigation measures to avoid violation of any provision of this ordinance.

c. Upon presentation of proper credentials, enter and/or inspect any private property, place, report, or records at any time when granted permission by the owner or by some other person with authority to act for the owner. When permission is refused or cannot be obtained, a search warrant may be obtained from a court of competent jurisdiction upon a showing of probable cause to believe that a violation of this ordinance may exist. Such inspection may include the administration of any necessary tests.

d. Prepare recommendations, based upon noise survey data and analytical studies, to be approved by the Town Council, for the designation of zones of similar ambient environmental noise within regions of generally consistent land use. These zones shall be identified in terms of their day and nighttime ambient noise levels and their land use classifications as given in Table 9.73.050-A.

9.73.040 - General Noise Regulations

A. **General Noise Regulations.** Notwithstanding any other provision of this chapter, and in addition thereto, it shall be unlawful for any person to willfully or negligently make or continue, or cause to be made or continued, any loud, unnecessary, or unusual noise which disturbs the peace and quiet enjoyment of any neighborhood or which causes any discomfort or annoyance to any reasonable person of normal sensitivity residing in the area.

The factors which shall be considered in determining whether a violation of the provisions of this section exists shall include, but not be limited to, the following:

1. The sound level of the objectionable noise;
2. The sound level of the ambient noise;
3. The proximity of the noise to residential sleeping facilities;
4. The nature and zoning of the area within which the noise emanates;
5. The number of persons affected by the noise source;
6. The time of day or night the noise occurs;
7. The duration of the noise and its tonal, informational or musical content;
8. Whether the noise is continuous, recurrent, or intermittent;
9. Whether the noise is produced by a commercial or noncommercial activity.

B. **Noise Measurement Procedure**

1. **Receipt of Complaint.** Upon receipt of a complaint from a citizen, the NCO shall, equipped with the appropriate sound level measurement equipment, investigate the complaint. The investigation shall consist of a measurement of the offending noise and the gathering of data

to adequately define the noise problem and shall include the following:

a. Type of noise source;

b. Location of noise source relative to complainant's property;

c. Time period during which noise source is considered by complainant to be intrusive;

d. Total duration of noise produced by noise source;

e. Date and time of noise measurement survey.

2. **Noise Measurement Procedure**

a. Utilizing the "A" weighting scale of the sound level meter and the "slow" meter response (use "fast" response for impulsive type sounds), the noise level shall be measured at a position or positions at any point on the receiver's property.

b. In general, the microphone shall be located four to five feet above the ground; ten feet or more from the nearest reflective surface where possible. However, in those cases where another elevation is deemed appropriate, the latter shall be utilized. If the noise complaint is related to interior noise levels, interior noise measurements shall be made within the affected residential unit. The measurements shall be made at a point at least four feet from the wall, ceiling, or floor nearest the noise source, with windows in the normal seasonal configuration. Calibration of the measurement equipment, utilizing an acoustic calibration, shall be performed immediately prior to recording any noise data.

9.73.050 - External and Internal Noise Standards

A. **External Noise Standards**

1. **Maximum Permissible Sound Levels by Receiving Land Use**

a. The noise standards for the various categories of land use identified by the Noise Control Officer as presented in Table 9.73.050-A shall, unless otherwise specifically indicated, apply to all such property within a designated zone.

b. No person shall produce or cause to be produced any sound at any location within the incorporated Town or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level when measured on any other property, either incorporated or unincorporated, to exceed:

1) The noise standard for that land use as specified in Table 9.73.050-A for a cumulative period of more than thirty (30) minutes in any hour; or

2) The noise standard plus five (5) dBA for a cumulative period of more than fifteen (15) minutes in any hour; or

3) The noise standard plus ten (10) dBA for a cumulative period of more than five (5) minutes in any hour; or

4) The noise standard plus fifteen (15) dBA for a cumulative period of more than one (1) minute in any hour; or

5) The noise standard plus twenty (20) dBA or the maximum measured ambient level, for any period of time.

c. If the measured ambient level differs from that permissible within any of the first four noise limit categories above, the allowable noise exposure standard shall be adjusted in five (5) dBA increments in each category as appropriate to encompass or reflect said ambient noise level.

In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under this category shall be increased to reflect the maximum ambient noise level.

d. If the measurement location is on a boundary between two different zones, the noise level limit applicable to the lower noise zone plus five (5) dBA shall apply.

e. If possible, the ambient noise shall be measured at the same location along the property line utilized in paragraph 9.73.050.A.1.b of this Chapter with the alleged offending noise source inoperative. If, for any reason, the alleged offending noise source cannot be shut down, the ambient noise must be estimated by performing a measurement in the same general area of the source but at a sufficient distance such that the noise from the source is at least ten (10) dBA below the ambient in order that only the ambient level be measured. If the difference between the ambient and the noise source is five (5) to ten (10) dBA, then the level of the ambient itself can be reasonably determined by subtracting a one decibel correction to account for the contribution of the source.

2. **Correction for Character of Sound.** In the event the alleged offensive noise, as judged by the NCO, contains a steady, audible tone such as a whine, screech, or hum, or is a repetitive noise such as hammering or riveting, or contains music or speech conveying informational content, the standard limits set forth in Table 9.73.050-A shall be reduced by five (5) dBA.

Table 9.73.050-A Exterior Noise Limits

EXTERIOR NOISE LIMITS (Levels Not To Be Exceeded More Than 30 Minutes In Any Hour)		
Receiving Land Use Category	Time Period	Noise Level (dBA)

Single Family Residential	10 p.m. - 7 a.m. 7 a.m. - 10 p.m.	40 50
Multiple Dwelling Residential, Public Space	10 p.m. - 7 a.m. 7 a.m. - 10 p.m.	45 50
Limited Commercial & Office	10 p.m. - 7 a.m. 7 a.m. - 10 p.m.	55 60
General Commercial	10 p.m. - 7 a.m. 7 a.m. - 10 p.m.	60 65
Light Industrial Heavy Industrial	Any Time Any Time	70 75

B. **Interior Noise Standards**

1. **Maximum Permissible Dwelling Interior Sound Levels**

a. The interior noise standards for multi-family residential dwellings as presented in Table 9.73.050-B shall apply, unless otherwise specifically indicated, within all such dwellings with windows in their normal seasonal configuration.

Table 9.73.050-B Interior Noise Limits

INTERIOR NOISE LIMITS			
Noise Zone	Type of Land Use	Time Interval	Allowable Interior Noise Level (dBA)
All	Multi-Family	10 p.m. - 7 a.m.	35
	Residential	7 a.m. - 10 p.m.	45

b.

No person shall operate or cause to be operated within a dwelling unit any source of sound or allow the creation of any noise which causes the noise level, when measured inside a neighboring receiving dwelling unit, to exceed:

1) The noise standard as specified in Table 9.73.050-B for a cumulative period of more than five (5) minutes in any hour; or
2) The noise standard plus five (5) dBA for a cumulative period of more than one (1) minute in any hour; or
3) The noise standard plus ten (10) dBA or the maximum measured ambient, for any period of time.

c. If the measured ambient level differs from that permissible within any of the noise limit categories above, the allowable noise exposure standard shall be adjusted in five (5) dBA increments in each category as appropriate to reflect said ambient noise level.

2. **Correction for Character of Sound.** In the event the alleged offensive noise, as judged by the NCO, contains a steady, audible tone such as a whine, screech, or hum, or is a repetitive noise such as hammering or riveting, or contains music or speech conveying informational content, the standard limits set forth in Table 9.73.050-B shall be reduced by five (5) dBA.

9.73.060 - Prohibited Noise and Vibration

No person shall unnecessarily make, continue, or cause to be made or continued, any noise disturbance. The following acts, and the causing or permitting thereof, are declared to be in violation of this ordinance:

A. Operating, playing or permitting the operation or playing of any radio, television, phonograph, drum, musical instrument, or similar device which produces or reproduces sound:
   1. Between the hours of 10 p.m. and 7 a.m. in such a manner as to create a noise disturbance across a residential or commercial real property line or at any time to violate the provisions of Section 9.73.050.A.1., except for cases in which an exception has been issued by the Town.
   2. In such a manner as to exceed the levels set forth for public space in Table 9.73.050-A, measured at a distance of at least fifty (50) feet from such device operating on a public right-of-way or public space.

B. Using or operating for any purpose any loudspeaker, loudspeaker system, or similar device between the hours of 10 p.m. and 7 a.m., such that the sound therefrom creates a noise disturbance across a residential real property line, or at any time violates the provisions of Section 9.73.050.A.1., except for any noncommercial public speaking, public assembly or other activity for which an exception has been issued by the Town.

C.

Offering for sale, selling anything, or advertising by shouting or outcry within any residential or commercial area or noise sensitive zone of the Town except by variance issued by the Town. The provisions of this Section shall not be construed to prohibit the selling by outcry of merchandise, food, and beverages at licensed sporting events, parades, fairs, circuses, or other similar licensed public entertainment events.

D. Owning, possessing or harboring any animal or bird which frequently or for long duration, howls, barks, meows, squawks, or makes other sounds which create a noise disturbance across a residential or commercial real property line or within a noise sensitive zone. This provision shall not apply to public zoos.

E. Loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects between the hours of 10 p.m. and 7 a.m. in such a manner as to cause a noise disturbance across a residential real property line or at any time to violate the provisions of 9.73.050.A.1.

F. **Construction/Demolition**

1. Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7 p.m. and 7 a.m., or at any time on weekends or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real property line, except for emergency work of public service utilities or by variance issued by the Town.

2. **Noise Restrictions at Affected Properties.** Where technically and economically feasible, construction activities shall be conducted in such a manner that the maximum noise levels at affected properties will not exceed those listed in the following schedule:

Table 9.73.060-A Maximum Noise Levels

AT RESIDENTIAL PROPERTIES			
Mobile Equipment: Maximum noise levels for nonscheduled intermittent, short-term operation (less than 10 days) of mobile equipment:			
	TYPE I AREAS SINGLE-FAMILY RESIDENTIAL	**TYPE II AREAS MULTI-FAMILY RESIDENTIAL**	**TYPE III AREAS SEMI-RESIDENTIAL/ COMMERCIAL**

Daily, except Sundays and Legal Holidays, 7 a.m. to 7 p.m.	75 dBA	80 dBA	85 dBA
Daily, 7 p.m. to 7 a.m. and all day Sunday and Legal Holidays	60 dBA	65 dBA	70 dBA
Stationary Equipment: Maximum noise levels for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment:			
	TYPE I AREAS SINGLE FAMILY RESIDENTIAL	**TYPE II AREAS MULTI-FAMILY RESIDENTIAL**	**TYPE III AREAS SEMI-RESIDENTIAL/ COMMERCIAL**
Daily, except Sundays and Legal Holidays, 7 a.m. to 7. p.m.	60 dBA	65 dBA	70 dBA
Daily, 7 p.m. to 7 a.m. and all day Sunday and Legal Holidays	50 dBA	55 dBA	60 dBA
Mobile Equipment: Maximum noise levels for nonscheduled, intermittent, short-term operation of mobile equipment: Daily, including Sundays and legal holidays, all hours: maximum of 85 dBA.			
Stationary Equipment: Maximum noise levels for repetitively scheduled and relatively long-term operation of stationary equipment:			
Daily, including Sundays and legal holidays, all hours: maximum of 75 dBA.			

3. All mobile or stationary internal combustion engine powered equipment or machinery shall be equipped with suitable exhaust and air intake silencers in proper working order.

G. **Vibration.** Operating or permitting the operation of any device that creates a vibration which is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at one hundred fifty (150) feet (46 meters) from the source if on a public space or public right-of-way.

H. **Powered Model Vehicles.** Operating or permitting the operation of powered model vehicles:

1. Between the hours of 7 p.m. and 7 a.m. so as to create a noise disturbance across a residential or commercial real property line or at any time to violate the provisions of paragraph 9.73.050.A.1.
2. In such a manner as to exceed the levels set forth for public space land use in Table 9.73.050-A, measured at a distance not less than 100 feet from any point on the path of a vehicle operating on public space or public right-of-way.

I. **Stationary Nonemergency Signaling Devices**

1. Sounding or permitting the sounding of any electronically-amplified signal from any stationary bell, chime, siren, whistle, or similar device, intended primarily for nonemergency purposes, from any place for more than 10 seconds in any hourly period. Houses of religious worship shall be exempt from this provision.
2. Sound sources covered by this provision and not exempted under subsection 1 above may be exempted by an exception issued by the Town.

J. **Emergency Signaling Devices**

1. The intentional sounding or permitting the sounding outdoors of any fire, burglar, or civil defense alarm, siren, whistle, or similar stationary emergency signaling device, except for emergency purposes or for testing. as provided in subsection 2 below.
2. **Testing**
    a. Testing of a stationary emergency signaling device shall not occur before 7 a.m. or after 7 p.m. Any such testing shall use only the minimum cycle test time. In no case shall such test time exceed 60 seconds.
    b. Testing of the complete emergency signaling system, including the functioning of the signaling device and the personnel response to the signaling device, shall not occur more than once in each calendar month. Such testing shall not occur before 7 a.m. or after 10 p.m. The time limit specified in subsection b.(1) above shall not apply to such complete system testing.
3. Sounding or permitting the sounding of any exterior burglar or fire alarm or any motor vehicle burglar alarm unless such alarm is terminated within 15 minutes of activation.

K. **Noise Sensitive Zones**

1.

Creating or causing the creation of any sound within any noise sensitive zone, so as to exceed the specified land use noise standards set forth in Section 9.73.050.A.1., provided that conspicuous signs are displayed indicating the zone; or

2. Creating or causing the creation of any sound within or adjacent to any noise sensitive zone containing a hospital, nursing home, school, court or other designated area, so as to interfere with the functions of such activity or annoy the occupants in the activity, provided that conspicuous signs are displayed indicating the presence of the zone.

L. **Domestic Power Tools, Machinery**

1. Operating or permitting the operation of any mechanically powered saw, sander, drill, grinder, lawn or garden tool, or similar tool between 10 p.m. and 7 a.m., so as to create a noise disturbance across a residential or commercial real property line.
2. Any motor, machinery, pump, such as swimming pool equipment, etc., shall be sufficiently enclosed or muffled and maintained so as not to create a noise disturbance in accordance with Section 9.73.050.

M. **Residential Air-Conditioning or Air-Handling Equipment.** Operating or permitting the operation of any air-conditioning or air-handling equipment in such a manner as to exceed any of the following sound levels:

Table 9.73.060-B Air Conditioning/Air Handling Equipment

Measurement Location	Units Installed Before 1-1-80	Units Installed On Or After 1-1-80
Any point on neighboring property line, 5 feet above grade level, no closer than 3 feet from any wall	60 dBA	55 dBA
Center of neighboring patio, 5 feet above grade level, no closer than 3 feet from any wall	55 dBA	50 dBA

Outside the neighboring living area window nearest the equipment location, not more than 3 feet from the window opening, but at least 3 feet from any other surface	55 dBA	50 dBA

N. **Places of Public Entertainment.** Operating or permitting the operation or playing of any loudspeaker, musical instrument, motorized racing vehicle, or other source of sound in any place of public entertainment that exceeds 95 dBA as read on the "slow" response of a sound level meter at any point normally occupied by a customer, without a conspicuous and legible sign stating: "WARNING! SOUND LEVELS WITHIN MAY CAUSE HEARING IMPAIRMENT!"

9.73.070 - Motor Vehicles Operating on Public Right-Of-Way

Motor vehicle noise limits on a public rights-of-way are regulated as set forth in the California Motor Vehicle Code, Sections 23130 and 23130.5. Equipment violations which create noise problems are covered under Sections 27150 and 27151. Any peace officer of any jurisdiction in California may enforce these provisions. Therefore, it shall be the policy of the Town to enforce these sections of the California Motor Vehicle Code.

A. **Refuse Collection Vehicles**

1. No person shall collect refuse with a refuse collection vehicle between the hours of 7 p.m. and 7 a.m. within or adjacent to a residential area or noise sensitive zone.
2. No person authorized to engage in waste disposal service or garbage collection shall operate any truck-mounted waste or garbage loading and/or compacting equipment or similar device in any manner so as to create any noise which exceed4ing 80 dBA's. the following levels, measured at a distance of fifty (50) feet from the equipment in an open area.
    a. New equipment purchased or leased on or after December 24, 1994: 80 dBA.
    b. New equipment purchased or leased on or after September 24, 1994: 75 dBA.
    c. Existing equipment, on or after June 24, 1999: 80 dBA.

B. **Motor Vehicle Horns.** It is unlawful for any person to sound a vehicular horn except as a warning signal (Motor Vehicle Code, Section 27001).

C. **Motorized Recreational Vehicles Operating Off Public Rights-of-Way.** No person shall operate or cause to be operated any motorized recreational vehicle off a public right-of-way in such a manner that the sound levels emitted therefrom violate the provisions of paragraph 9.73.050.A.1

of this Chapter. This Section shall apply to all motorized recreational vehicles whether or not duly licensed and registered, including but not limited to commercial or noncommercial racing vehicles, motorcycles, go carts, amphibious craft, campers, snowmobiles and dune buggies, but not including motorboats.

D. **Motorboats.** Operating or permitting the operation of any motorboat in any lake, river, stream, or other waterway in such a manner as to cause a noise disturbance across a residential or commercial real property line or at any time to violate the provisions of paragraph 9.73.050.A.1 of this Chapter.

E. **Standing Motor Vehicles.** No person shall operate or permit the operation of any motor vehicle with a gross vehicle weight rating (GVWR) in excess of ten thousand (10,000) pounds, or any auxiliary equipment attached to such a vehicle, for a period longer than fifteen (15) minutes in any hour while the vehicle is stationary, for reasons other than traffic congestion on a public right-of-way or public space within 150 feet of a residential area or designated noise sensitive zone, between the hours of 10 p.m. and 7 a.m.

9.73.080 - Exemptions

The following activities shall be exempted from the provisions of this Chapter:

A. The emission of sound for the purpose of alerting persons to the existence of an emergency;

B. The emission of sound in the performance of emergency work;

C. Warning devices necessary for the protection of public safety; for example, police, fire and ambulance sirens, and train horns;

D. Regularly scheduled school bands, school athletic and school entertainment events between the hours of 8:45 a.m. and 10:00 p.m., provided a Special Events permit is obtained for band activities on Town streets;

E. Regularly scheduled activities conducted on public parks, public playgrounds, and public or private school grounds. However, the use of public address or amplified music systems is not permitted to exceed the exterior noise standard of adjacent property at the property line;

F. All mechanical devices, apparatus or equipment which are utilized for the protection or salvage of agricultural crops during periods of potential or actual frost damage or other adverse weather conditions;

G. Mobile noise sources associated with agricultural operations, provided such operations take place on Monday through Friday, excepting legal holidays, between the hours of 7:00 a.m. and 6:00 p.m., or on holidays and weekends between the hours of 9:00 a.m. and 6:00 p.m. All other operations shall comply with this chapter;

H. Any activity to the extent that regulation thereof has been preempted by State or Federal law.

9.73.090 - Exceptions

A. The NCO is authorized to grant exceptions from any provision of this ordinance, subject to limitations as to area, noise levels, time limits, and other terms and conditions as the NCO determines are appropriate to protect the public health, safety, and welfare from the noise emanating therefrom. This Section shall in no way affect the duty to obtain any permit or license required by law for such activities.

B. Any person seeking an exception to this Section shall file an application with the NCO. The application shall contain information which demonstrates that bringing the source of sound or activity for which the exception is sought into compliance with this ordinance would constitute an unreasonable hardship on the applicant, on the community, or on other persons. The application shall be accompanied by a fee. A separate application shall be filed for each noise source; provided, however, that several mobile sources under common ownership, or several fixed sources on a single property, may be combined into one application. Notice of an application for an exception shall be noticed according to Town Code. Any individual who claims to be adversely affected by allowance of the exception may file a statement with the NCO containing any information to support his claim. If at any time the NCO finds that a sufficient controversy exists regarding an application, such application shall be scheduled for a public hearing by the Planning Commission.

C. In determining whether to grant or deny the application, the NCO shall balance the hardship on the applicant, the community, and other persons of not granting the variance against the adverse impact on the health, safety, and welfare of persons affected, and any other adverse impacts of granting the variance. Applicants for exceptions and persons contesting exceptions may be required to submit such information as the NCO may reasonably require. In granting or denying an application, the NCO shall keep on public file a copy of the decision and the reasons for denying or granting the exception.

D. Exceptions shall be granted by notice to the applicant containing all necessary conditions, including a time limit on the permitted activity. The exception shall not become effective until all conditions are agreed to by the applicant. Noncompliance with any condition of the exception shall terminate such exception and subject the person holding it to those provisions of this ordinance for which the exception was granted.

E. An exception shall expire 365 days from the date on which it was granted. Application for extension of time limits specified in exceptions or for modification of other substantial conditions shall be treated like applications for initial exceptions under subsection B above.

CONSTRUCTION NOISE MODELING

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/17/2025
Case Description: AVUS-02.0 - Site Preparation

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Receptor	Residential	65.0	60.0	55.0

Description	Impact Device	Usage (%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0
Front End Loader	No	40		79.1	50.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	81.7	80.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/17/2025
Case Description: AVUS-02.0 - Grading

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Receptor	Residential	65.0	60.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50.0	0.0
Grader	No	40	85.0		50.0	0.0
Excavator	No	40		80.7	50.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.0	83.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/17/2025
Case Description: AVUS-02.0 - Building Construction

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Receptor	Residential	65.0	60.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0
Front End Loader	No	40		79.1	50.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	79.1	75.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.6	78.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/17/2025
Case Description: AVUS-02.0 -Paving

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Receptor	Residential	65.0	60.0	55.0

Description	Impact Device	Usage (%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Paver	No	50		77.2	50.0	0.0
Roller	No	20		80.0	50.0	0.0
Paver	No	50		77.2	50.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	80.0	73.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.0	78.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/17/2025
Case Description: AVUS-02.0 -Architectural Coating

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Receptor	Residential	65.0	60.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	50.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

AVUS-02.0 - Construction Noise Modeling Attenuation Calculations

Levels in dBA Leq

Phase	RCNM Reference Noise Level	Receptor to North- Residential	Receptor to East -School Campus	Receptor to South - Residential	Receptor to West - Residential
Distance in feet	*50*	*1,185*	*540*	*1,690*	*850*
Site Prep	81	54	60	50	56
Grading	84	57	63	53	59
Building Construction	79	52	58	48	54
Architectural Coating	74	47	53	43	49
Paving	79	52	58	48	54

Attenuation calculated through Inverse Square Law: Lp(R2) = Lp(R1) - 20Log(R2/R1)

AVUSE-02.0 - Vibration Damage Attenuation Calculations

		Levels, PPV (in/sec)			
	Vibration Reference Level	**Northeast - Residential**	**Receptor to East - School Campus**	**Receptor to South - Residential**	**Receptor to West - Residential**
Distance in feet	**at *25 feet***	*1,185*	*540*	*1,690*	*850*
Vibratory Roller	0.21	0.001	0.002	0.000	0.001
Clam shovel	0.202	0.001	0.002	0.000	0.001
Hoe Ram	0.089	0.000	0.001	0.000	0.000
Large Bulldozer	0.089	0.000	0.001	0.000	0.000
Caisson Drilling	0.089	0.000	0.001	0.000	0.000
Loaded Trucks	0.076	0.000	0.001	0.000	0.000
Jackhammer	0.035	0.000	0.000	0.000	0.000
Small Bulldozer	0.003	0.000	0.000	0.000	0.000

TRAFFIC NOISE MODELING

Traffic Noise Calculator: FHWA 77-108 — **Apple Valley HS Modernization (AVUS-02.0) Existing 2024 Traffic Noise**

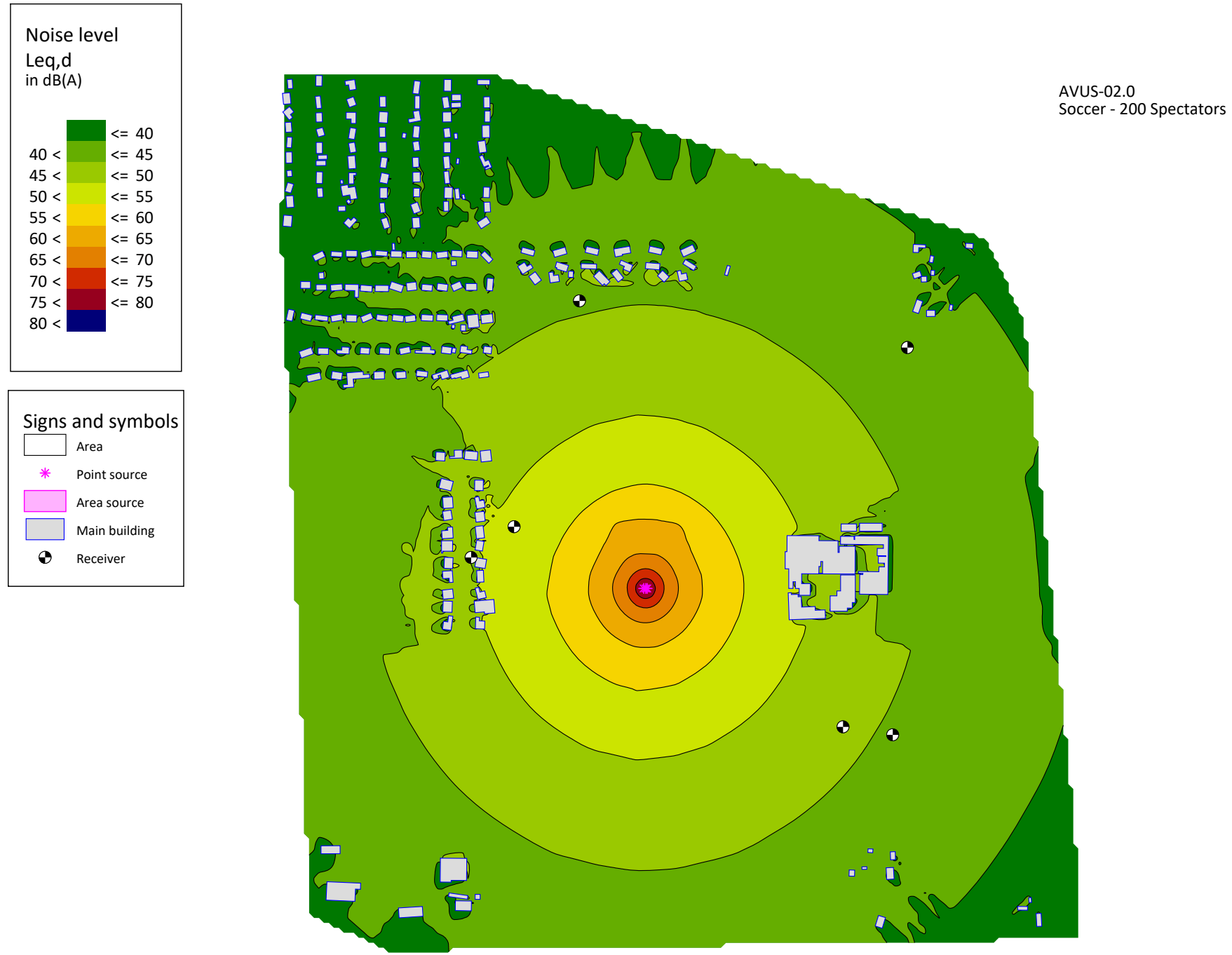
	Output						Inputs													Auto Inputs	
	dBA at 50 feet			Distance to CNEL Contour																	
ID	$L_{eq\text{-}24hr}$	L_{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway	Segment From - To		ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Reciever	Ground Absorption	Lane Distance
1	56.2	59.9	60.3	11	24	52	Esaws Avenue	Pioneer Rd	Central Rd	1,000	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
2	60.4	64.1	64.5	21	46	99	Esaws Avenue	Central Rd	Ocotilla Rd	2,600	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
3	55.8	59.5	59.8	11	23	49	Ocotilla Road	Standing Rock Ave	Ramona Ave	900	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
4	56.2	59.9	60.3	11	24	52	Ocotilla Road	Ramona Ave	Esaws Ave	1,000	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
5	55.8	59.5	59.9	11	23	49	Ramona Avenue	Navajo Rd	Central Rd	1,600	45	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
6	53.3	57.0	57.4	7	15	33	Ramona Avenue	Central Rd	Ocotilla Rd	900	45	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
7	65.6	69.3	69.7	48	102	220	Central Road	Standing Rock Ave	Ramona Ave	7,300	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
8	65.6	69.3	69.7	48	102	220	Central Road	Ramona Ave	Esaws Ave	7,300	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
9	67.9	71.6	72.0	68	146	314	Central Road	Esaws Ave	Happy Trails Highway (SR-18)	12,400	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
10	67.0	70.7	71.1	59	128	276	Central Road	Happy Trails Highway (SR-18)	the South	10,200	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
11	67.8	71.5	71.9	67	144	309	Happy Trails Highway (SR-18)	the West	Central Rd	13,200	50	0.0%	95.5%	2.5%	2.0%	75.0%	10.0%	15.0%	4	Soft	50	0.5	44
12	67.0	70.7	71.1	59	128	275	Happy Trails Highway (SR-18)	Central Rd	the East	9,100	55	0.0%	95.5%	2.5%	2.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20

Traffic Noise Calculator: FHWA 77-108	Apple Valley HS Modernization (AVUS-02.0) Existing 2024 Plus Project Traffic Noise																						
	Output						Inputs															Auto Inputs	
	dBA at 50 feet			Distance to CNEL Contour																			
ID	$L_{eq\text{-}24hr}$	L_{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway	Segment From - To		ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Reciever	Ground Absorption	Lane Distance
1	57.1	60.9	61.2	13	28	60	Esaws Avenue	Pioneer Rd	Central Rd	1,240	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
2	62.9	66.6	67.0	31	68	146	Esaws Avenue	Central Rd	Ocotilla Rd	4,660	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
3	56.3	60.0	60.4	11	25	53	Ocotilla Road	Standing Rock Ave	Ramona Ave	1,020	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
4	57.5	61.3	61.6	14	30	64	Ocotilla Road	Ramona Ave	Esaws Ave	1,360	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
5	56.7	60.4	60.7	12	26	56	Ramona Avenue	Navajo Rd	Central Rd	1,960	45	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
6	54.3	58.0	58.4	8	18	39	Ramona Avenue	Central Rd	Ocotilla Rd	1,140	45	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
7	66.0	69.7	70.1	51	109	235	Central Road	Standing Rock Ave	Ramona Ave	8,030	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
8	66.1	69.8	70.1	51	110	237	Central Road	Ramona Ave	Esaws Ave	8,150	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
9	68.2	71.9	72.3	71	153	330	Central Road	Esaws Ave	Happy Trails Highway (SR-18)	13,370	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
10	67.2	70.9	71.3	61	131	282	Central Road	Happy Trails Highway (SR-18)	the South	10,560	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
11	67.9	71.6	72.0	68	147	317	Happy Trails Highway (SR-18)	the West	Central Rd	13,690	50	0.0%	95.5%	2.5%	2.0%	75.0%	10.0%	15.0%	4	Soft	50	0.5	44
12	67.1	70.8	71.2	60	129	277	Happy Trails Highway (SR-18)	Central Rd	the East	9,220	55	0.0%	95.5%	2.5%	2.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20

Traffic Noise Calculator: FHWA 77-108							Apple Valley HS Modernization (AVUS-02.0) Future 2028 Traffic Noise																
	Output						Inputs															Auto Inputs	
	dBA at 50 feet			Distance to CNEL Contour																			
ID	$L_{eq\text{-}24hr}$	L_{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway	Segment From - To		ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Reciever	Ground Absorption	Lane Distance
1	56.4	60.1	60.5	12	25	54	Esaws Avenue	Pioneer Rd	Central Rd	1,040	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
2	60.5	64.2	64.6	22	47	102	Esaws Avenue	Central Rd	Ocotilla Rd	2,700	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
3	55.9	59.7	60.0	11	23	50	Ocotilla Road	Standing Rock Ave	Ramona Ave	940	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
4	56.4	60.1	60.5	12	25	54	Ocotilla Road	Ramona Ave	Esaws Ave	1,040	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
5	55.9	59.6	60.0	11	23	50	Ramona Avenue	Navajo Rd	Central Rd	1,660	45	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
6	53.5	57.2	57.6	7	16	34	Ramona Avenue	Central Rd	Ocotilla Rd	940	45	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
7	65.7	69.5	69.8	49	105	226	Central Road	Standing Rock Ave	Ramona Ave	7,600	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
8	65.7	69.5	69.8	49	105	226	Central Road	Ramona Ave	Esaws Ave	7,590	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
9	68.0	71.8	72.1	69	150	322	Central Road	Esaws Ave	Happy Trails Highway (SR-18)	12,900	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
10	67.2	70.9	71.3	61	131	283	Central Road	Happy Trails Highway (SR-18)	the South	10,610	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
11	68.0	71.7	72.0	68	147	318	Happy Trails Highway (SR-18)	the West	Central Rd	13,730	50	0.0%	95.5%	2.5%	2.0%	75.0%	10.0%	15.0%	4	Soft	50	0.5	44
12	67.2	70.9	71.3	61	131	282	Happy Trails Highway (SR-18)	Central Rd	the East	9,460	55	0.0%	95.5%	2.5%	2.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20

Traffic Noise Calculator: FHWA 77-108	Apple Valley HS Modernization (AVUS-02.0)Future 2028 Plus Project Traffic Noise																						
	Output						Inputs															Auto Inputs	
	dBA at 50 feet			Distance to CNEL Contour																			
ID	$L_{eq\text{-}24hr}$	L_{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway	Segment From - To		ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Reciever	Ground Absorption	Lane Distance
1	57.3	61.0	61.4	13	29	62	Esaws Avenue	Pioneer Rd	Central Rd	1,280	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
2	63.0	66.7	67.1	32	69	148	Esaws Avenue	Central Rd	Ocotilla Rd	4,760	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
3	56.5	60.2	60.6	12	25	54	Ocotilla Road	Standing Rock Ave	Ramona Ave	1,060	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
4	57.7	61.4	61.8	14	30	66	Ocotilla Road	Ramona Ave	Esaws Ave	1,400	55	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
5	56.8	60.5	60.9	12	27	57	Ramona Avenue	Navajo Rd	Central Rd	2,020	45	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
6	54.5	58.2	58.5	9	19	40	Ramona Avenue	Central Rd	Ocotilla Rd	1,180	45	0.0%	99.8%	0.1%	0.1%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
7	66.1	69.9	70.2	52	112	241	Central Road	Standing Rock Ave	Ramona Ave	8,330	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
8	66.2	69.9	70.3	52	113	243	Central Road	Ramona Ave	Esaws Ave	8,440	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
9	68.4	72.1	72.5	73	157	338	Central Road	Esaws Ave	Happy Trails Highway (SR-18)	13,870	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
10	67.3	71.1	71.4	62	134	289	Central Road	Happy Trails Highway (SR-18)	the South	10,970	55	0.0%	97.0%	2.0%	1.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20
11	68.1	71.8	72.2	70	151	325	Happy Trails Highway (SR-18)	the West	Central Rd	14,220	50	0.0%	95.5%	2.5%	2.0%	75.0%	10.0%	15.0%	4	Soft	50	0.5	44
12	67.2	70.9	71.3	61	132	284	Happy Trails Highway (SR-18)	Central Rd	the East	9,580	55	0.0%	95.5%	2.5%	2.0%	75.0%	10.0%	15.0%	2	Soft	50	0.5	20

SoundPLAN NOISE MODELING


Noise level
Leq,d
in dB(A)
<= 40
40 < <= 45
45 < <= 50
50 < <= 55
55 < <= 60
60 < <= 65
65 < <= 70
70 < <= 75
75 < <= 80
80 <
Signs and symbols
Area
Point source
Area source
Main building
Receiver
AVUS-02.0
Soccer - 200 Spectators

Granite Hills High School Athletics
Assessed receiver levels
Soccer 200

2

Receiver	Usage	Fl	Leq,d dB(A)	Leq,n dB(A)	
ST-1 58.2	SCR	G	42.9	42.8	
ST-2 63.2	SCR	G	45.1	45.1	
ST-3 67.9	SCR	G	51.7	51.6	
ST-4 40.2	SCR	G	46.7	46.7	
ST-5 44.8	SCR	G	46.2	46.2	
ST-6 40.1	SCR	G	44.9	44.9	

Granite Hills High School Athletics
Contribution level - Soccer 200

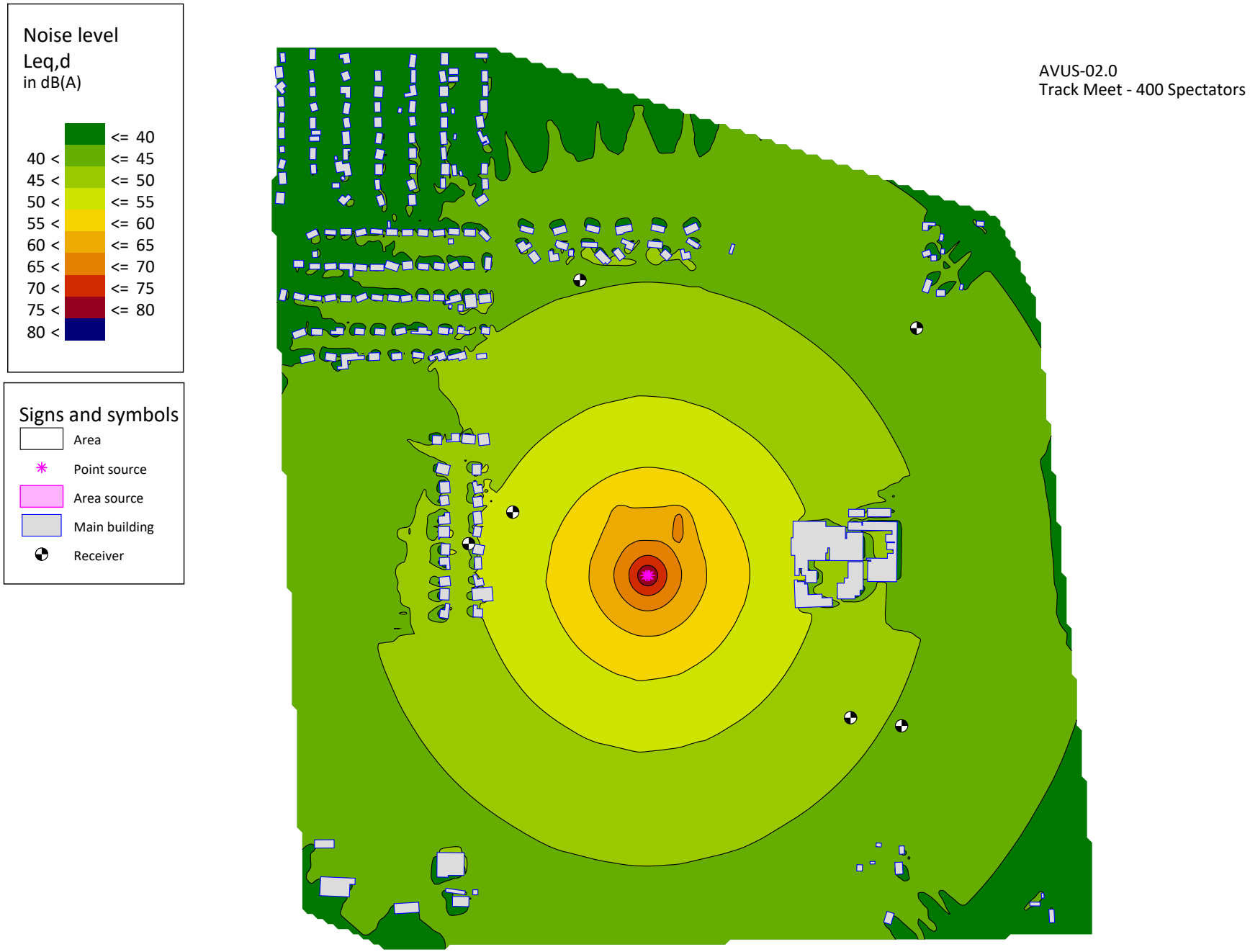
Source	Source group	Source ty	Leq,d dB(A)	Leq,n dB(A)	
Receiver ST-1 58.2 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 49.2 dB(A) Leq,d 42.9 dB(A) Leq,n 42.8 dB(A)					
Away Bleachers	Default industrial noise	Area	21.6	21.6	
Field	Default industrial noise	Area	17.2		
Home Bleachers	Default industrial noise	Area	20.1	20.1	
Referee	Default industrial noise	Area	17.2		
Speaker-2	Default industrial noise	Point	38.0	38.0	
Speaker-3	Default industrial noise	Point	38.0	38.0	
Speaker-1	Default industrial noise	Point	38.0	38.0	
Receiver ST-2 63.2 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 51.5 dB(A) Leq,d 45.1 dB(A) Leq,n 45.1 dB(A)					
Away Bleachers	Default industrial noise	Area	23.4	23.4	
Field	Default industrial noise	Area	19.9		
Home Bleachers	Default industrial noise	Area	24.2	24.2	
Referee	Default industrial noise	Area	19.9		
Speaker-2	Default industrial noise	Point	40.2	40.2	
Speaker-3	Default industrial noise	Point	40.2	40.2	
Speaker-1	Default industrial noise	Point	40.2	40.2	
Receiver ST-3 67.9 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 58.1 dB(A) Leq,d 51.7 dB(A) Leq,n 51.6 dB(A)					
Away Bleachers	Default industrial noise	Area	28.2	28.2	
Field	Default industrial noise	Area	25.7		
Home Bleachers	Default industrial noise	Area	32.7	32.7	
Referee	Default industrial noise	Area	25.7		
Speaker-2	Default industrial noise	Point	46.8	46.8	
Speaker-3	Default industrial noise	Point	46.7	46.7	
Speaker-1	Default industrial noise	Point	46.9	46.9	
Receiver ST-4 40.2 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 53.1 dB(A) Leq,d 46.7 dB(A) Leq,n 46.7 dB(A)					
Away Bleachers	Default industrial noise	Area	23.6	23.6	
Field	Default industrial noise	Area	19.0		
Home Bleachers	Default industrial noise	Area	22.0	22.0	
Referee	Default industrial noise	Area	19.0		
Speaker-2	Default industrial noise	Point	41.9	41.9	
Speaker-3	Default industrial noise	Point	41.9	41.9	
Speaker-1	Default industrial noise	Point	41.8	41.8	
Receiver ST-5 44.8 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 52.6 dB(A) Leq,d 46.2 dB(A) Leq,n 46.2 dB(A)					
Away Bleachers	Default industrial noise	Area	25.6	25.6	
Field	Default industrial noise	Area	22.5		

Granite Hills High School Athletics
Contribution level - Soccer 200

Source	Source group	Source ty	Leq,d dB(A)	Leq,n dB(A)	
Home Bleachers	Default industrial noise	Area	29.1	29.1	
Referee	Default industrial noise	Area	22.5		
Speaker-2	Default industrial noise	Point	41.3	41.3	
Speaker-3	Default industrial noise	Point	41.2	41.2	
Speaker-1	Default industrial noise	Point	41.4	41.4	
Receiver ST-6 40.1 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 51.3 dB(A) Leq,d 44.9 dB(A) Leq,n 44.9 dB(A)					
Away Bleachers	Default industrial noise	Area	22.0	22.0	
Field	Default industrial noise	Area	17.5		
Home Bleachers	Default industrial noise	Area	20.4	20.4	
Referee	Default industrial noise	Area	17.5		
Speaker-2	Default industrial noise	Point	40.1	40.1	
Speaker-3	Default industrial noise	Point	40.2	40.2	
Speaker-1	Default industrial noise	Point	40.1	40.1	

Granite Hills High School Athletics
Octave spectra of the sources in dB(A) - Soccer 200

Name	Source type	l or A	L'w	Lw	KI	KT	DO-Wall	Day histogram	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	16kHz	
		m,m²	dB(A)	dB(A)	dB	dB	dB			dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Away Bleachers	Area	895.02	71.5	101.0	0.0	0.0	0	Crowd during Game 10 min 60*10 sec	American Football, Spectators`s area		75.0	90.1	97.9	93.9	93.6	87.2	78.1		
Field	Area	15957.33	67.0	109.0	0.0	0.0	0	Sporting event	American Football, Players				109.0						
Home Bleachers	Area	1442.05	69.4	101.0	0.0	0.0	0	Crowd during Game 10 min 60*10 sec	American Football, Spectators`s area		75.0	90.1	97.9	93.9	93.6	87.2	78.1		
Referee	Area	15957.33	67.0	109.0	0.0	0.0	0	Sporting event	American Football, Referee`s whistle				109.0						
Speaker-1	Point		124.0	124.0	0.0	0.0	0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	95.7	110.3	113.1	118.7	119.4	116.2	111.0	104.7	83.3	
Speaker-2	Point		124.0	124.0	0.0	0.0	0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	95.7	110.3	113.1	118.7	119.4	116.2	111.0	104.7	83.3	
Speaker-3	Point		124.0	124.0	0.0	0.0	0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	95.7	110.3	113.1	118.7	119.4	116.2	111.0	104.7	83.3	


Noise level
Leq,d
in dB(A)
<= 40
40 < <= 45
45 < <= 50
50 < <= 55
55 < <= 60
60 < <= 65
65 < <= 70
70 < <= 75
75 < <= 80
80 <
Signs and symbols
Area
Point source
Area source
Main building
Receiver
AVUS-02.0
Track Meet - 400 Spectators

Granite Hills High School Athletics
Assessed receiver levels
Track Meet 400

Receiver	Usage	Fl	Leq,d dB(A)	Leq,n dB(A)	
ST-1 58.2	SCR	G	42.9	42.9	
ST-2 63.2	SCR	G	45.1	45.1	
ST-3 67.9	SCR	G	51.7	51.7	
ST-4 40.2	SCR	G	46.8	46.7	
ST-5 44.8	SCR	G	46.3	46.3	
ST-6 40.1	SCR	G	45.0	45.0	

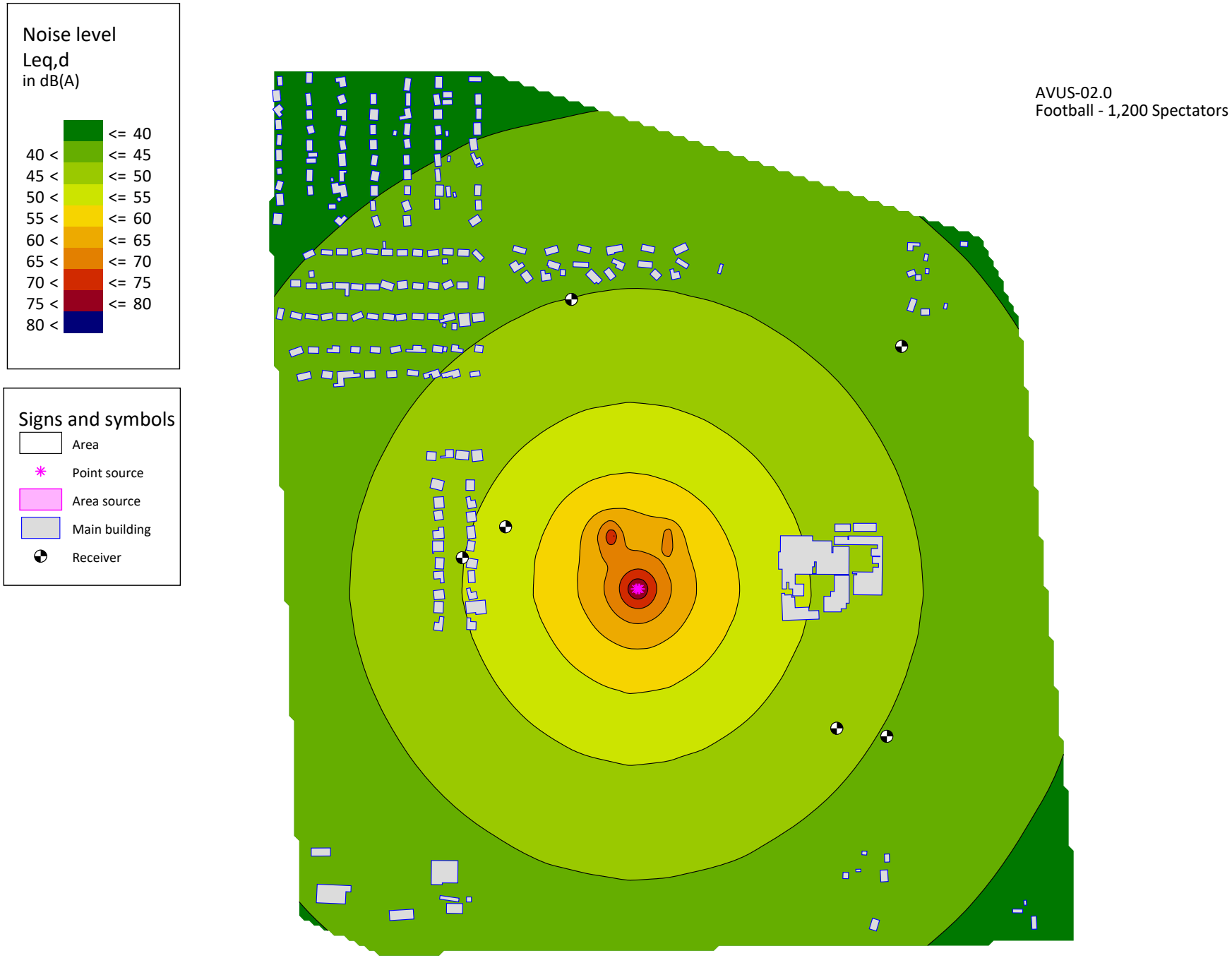
Granite Hills High School Athletics
Contribution level - Track Meet 400

Source	Source group	Source ty	Leq,d dB(A)	Leq,n dB(A)	
Receiver ST-1 58.2 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 49.3 dB(A) Leq,d 42.9 dB(A) Leq,n 42.9 dB(A)					
Away Bleachers	Default industrial noise	Area	26.7	26.7	
Field	Default industrial noise	Area	17.2		
Home Bleachers	Default industrial noise	Area	22.1	22.1	
Speaker-2	Default industrial noise	Point	38.0	38.0	
Speaker-3	Default industrial noise	Point	38.0	38.0	
Speaker-1	Default industrial noise	Point	38.0	38.0	
Receiver ST-2 63.2 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 51.5 dB(A) Leq,d 45.1 dB(A) Leq,n 45.1 dB(A)					
Away Bleachers	Default industrial noise	Area	28.4	28.4	
Field	Default industrial noise	Area	19.9		
Home Bleachers	Default industrial noise	Area	26.2	26.2	
Speaker-2	Default industrial noise	Point	40.2	40.2	
Speaker-3	Default industrial noise	Point	40.2	40.2	
Speaker-1	Default industrial noise	Point	40.2	40.2	
Receiver ST-3 67.9 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 58.1 dB(A) Leq,d 51.7 dB(A) Leq,n 51.7 dB(A)					
Away Bleachers	Default industrial noise	Area	33.2	33.2	
Field	Default industrial noise	Area	25.7		
Home Bleachers	Default industrial noise	Area	34.7	34.7	
Speaker-2	Default industrial noise	Point	46.8	46.8	
Speaker-3	Default industrial noise	Point	46.7	46.7	
Speaker-1	Default industrial noise	Point	46.9	46.9	
Receiver ST-4 40.2 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 53.2 dB(A) Leq,d 46.8 dB(A) Leq,n 46.7 dB(A)					
Away Bleachers	Default industrial noise	Area	28.6	28.6	
Field	Default industrial noise	Area	19.0		
Home Bleachers	Default industrial noise	Area	24.0	24.0	
Speaker-2	Default industrial noise	Point	41.9	41.9	
Speaker-3	Default industrial noise	Point	41.9	41.9	
Speaker-1	Default industrial noise	Point	41.8	41.8	
Receiver ST-5 44.8 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 52.7 dB(A) Leq,d 46.3 dB(A) Leq,n 46.3 dB(A)					
Away Bleachers	Default industrial noise	Area	30.7	30.7	
Field	Default industrial noise	Area	22.5		
Home Bleachers	Default industrial noise	Area	31.1	31.1	
Speaker-2	Default industrial noise	Point	41.3	41.3	
Speaker-3	Default industrial noise	Point	41.2	41.2	

Source	Source group	Source ty	Leq,d dB(A)	Leq,n dB(A)	
Speaker-1	Default industrial noise	Point	41.4	41.4	
Receiver ST-6 40.1 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 51.4 dB(A) Leq,d 45.0 dB(A) Leq,n 45.0 dB(A)					
Away Bleachers	Default industrial noise	Area	27.0	27.0	
Field	Default industrial noise	Area	17.5		
Home Bleachers	Default industrial noise	Area	22.4	22.4	
Speaker-2	Default industrial noise	Point	40.1	40.1	
Speaker-3	Default industrial noise	Point	40.2	40.2	
Speaker-1	Default industrial noise	Point	40.1	40.1	

Granite Hills High School Athletics
Octave spectra of the sources in dB(A) - Track Meet 400

Name	Source type	l or A	L'w	Lw	KI	KT	DO-Wall	Day histogram	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	16kHz	
		m,m²	dB(A)	dB(A)	dB	dB	dB			dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Away Bleachers	Area	975.00	76.1	106.0	0.0	0.0	0	Crowd during Game 10 min 60*10 sec	American Football, Spectators`s area		80.0	95.1	102.9	98.9	98.6	92.2	83.1		
Field	Area	15957.33	67.0	109.0	0.0	0.0	0	Sporting event	American Football, Players				109.0						
Home Bleachers	Area	1313.17	71.8	103.0	0.0	0.0	0	Crowd during Game 10 min 60*10 sec	American Football, Spectators`s area		77.0	92.1	99.9	95.9	95.6	89.2	80.1		
Speaker-1	Point		124.0	124.0	0.0	0.0	0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	95.7	110.3	113.1	118.7	119.4	116.2	111.0	104.7	83.3	
Speaker-2	Point		124.0	124.0	0.0	0.0	0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	95.7	110.3	113.1	118.7	119.4	116.2	111.0	104.7	83.3	
Speaker-3	Point		124.0	124.0	0.0	0.0	0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	95.7	110.3	113.1	118.7	119.4	116.2	111.0	104.7	83.3	


Noise level
Leq,d
in dB(A)
<= 40
40 < <= 45
45 < <= 50
50 < <= 55
55 < <= 60
60 < <= 65
65 < <= 70
70 < <= 75
75 < <= 80
80 <
Signs and symbols
Area
Point source
Area source
Main building
Receiver
AVUS-02.0
Football - 1,200 Spectators

Granite Hills High School Athletics
Assessed receiver levels
Football 1200

2

Receiver	Usage	Fl	Leq,d dB(A)	Leq,n dB(A)	
ST-1 58.2	SCR	G	43.3	43.2	
ST-2 63.2	SCR	G	45.6	45.6	
ST-3 67.9	SCR	G	52.4	52.4	
ST-4 40.2	SCR	G	47.0	47.0	
ST-5 44.8	SCR	G	50.4	50.3	
ST-6 40.1	SCR	G	45.2	45.2	

Granite Hills High School Athletics
Contribution level - Football 1200

9

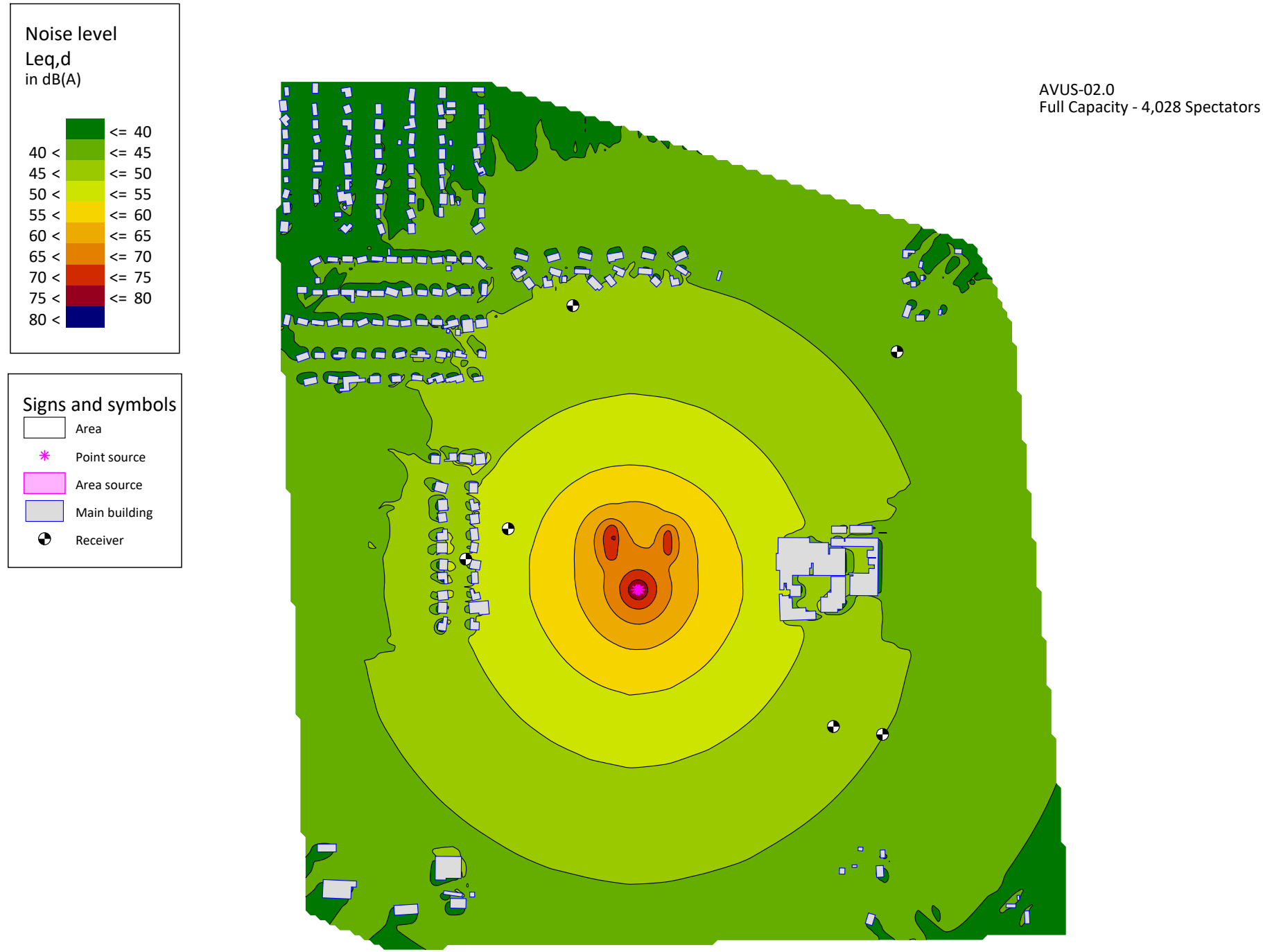
Source	Source group	Source ty	Ldn dB(A)	Leq,d dB(A)	Leq,n dB(A)	
Receiver ST-1 58.2 Fl G Leq,d 43.3 dB(A) Leq,n 43.2 dB(A)						
Away Bleachers	Default industrial noise	Area	33.1	26.7	26.7	
Band	Default industrial noise	Area	36.8	30.4	30.4	
Field	Default industrial noise	Area	15.1	17.2		
Home Bleachers	Default industrial noise	Area	34.5	28.1	28.1	
Speaker-2	Default industrial noise	Point	44.4	38.0	38.0	
Speaker-3	Default industrial noise	Point	44.4	38.0	38.0	
Speaker-1	Default industrial noise	Point	44.4	38.0	38.0	
Receiver ST-2 63.2 Fl G Leq,d 45.6 dB(A) Leq,n 45.6 dB(A)						
Away Bleachers	Default industrial noise	Area	34.8	28.4	28.4	
Band	Default industrial noise	Area	40.6	34.2	34.2	
Field	Default industrial noise	Area	17.8	19.9		
Home Bleachers	Default industrial noise	Area	38.4	32.0	32.0	
Speaker-2	Default industrial noise	Point	46.6	40.2	40.2	
Speaker-3	Default industrial noise	Point	46.6	40.2	40.2	
Speaker-1	Default industrial noise	Point	46.6	40.2	40.2	
Receiver ST-3 67.9 Fl G Leq,d 52.4 dB(A) Leq,n 52.4 dB(A)						
Away Bleachers	Default industrial noise	Area	39.5	33.1	33.1	
Band	Default industrial noise	Area	48.7	42.3	42.3	
Field	Default industrial noise	Area	23.7	25.7		
Home Bleachers	Default industrial noise	Area	46.9	40.5	40.5	
Speaker-2	Default industrial noise	Point	53.2	46.8	46.8	
Speaker-3	Default industrial noise	Point	53.1	46.7	46.7	
Speaker-1	Default industrial noise	Point	53.3	46.9	46.9	
Receiver ST-4 40.2 Fl G Leq,d 47.0 dB(A) Leq,n 47.0 dB(A)						
Away Bleachers	Default industrial noise	Area	35.1	28.7	28.7	
Band	Default industrial noise	Area	38.4	32.0	32.0	
Field	Default industrial noise	Area	17.0	19.0		
Home Bleachers	Default industrial noise	Area	36.4	30.0	30.0	
Speaker-2	Default industrial noise	Point	48.3	41.9	41.9	
Speaker-3	Default industrial noise	Point	48.4	41.9	41.9	
Speaker-1	Default industrial noise	Point	48.2	41.8	41.8	
Receiver ST-5 44.8 Fl G Leq,d 50.4 dB(A) Leq,n 50.3 dB(A)						
Away Bleachers	Default industrial noise	Area	37.1	30.7	30.7	
Band	Default industrial noise	Area	45.3	38.9	38.9	

Granite Hills High School Athletics
Contribution level - Football 1200

Source	Source group	Source ty	Ldn dB(A)	Leq,d dB(A)	Leq,n dB(A)	
Field	Default industrial noise	Area	21.0	23.1		
Home Bleachers	Default industrial noise	Area	43.5	37.1	37.1	
Speaker-2	Default industrial noise	Point	51.4	45.0	45.0	
Speaker-3	Default industrial noise	Point	51.3	44.9	44.9	
Speaker-1	Default industrial noise	Point	51.5	45.1	45.1	
Receiver ST-6 40.1 Fl G Leq,d 45.2 dB(A) Leq,n 45.2 dB(A)						
Away Bleachers	Default industrial noise	Area	33.4	27.0	27.0	
Band	Default industrial noise	Area	37.0	30.6	30.6	
Field	Default industrial noise	Area	15.5	17.5		
Home Bleachers	Default industrial noise	Area	34.8	28.4	28.4	
Speaker-2	Default industrial noise	Point	46.5	40.1	40.1	
Speaker-3	Default industrial noise	Point	46.6	40.2	40.2	
Speaker-1	Default industrial noise	Point	46.5	40.1	40.1	

Granite Hills High School Athletics
Octave spectra of the sources in dB(A) - Football 1200

Name	Source type	l or A	L'w	Lw	KI	KT	LwMax	DO-Wall	Day histogram	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	16kHz	
		m,m²	dB(A)	dB(A)	dB	dB	dB(A)	dB			dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Away Bleachers	Area	942.83	76.3	106.0	0.0	0.0		0	Crowd during Game 10 min 60*10 sec	American Football, Spectators`s area		80.0	95.1	102.9	98.9	98.6	92.2	83.1		
Band	Area	216.83	85.6	109.0	0.0	0.0		0	Band during Game 20% = 12 minutes	Live bands (Pop, Rock, Metal)	94.5	94.0	98.6	103.5	104.3	100.9	96.2	88.7	70.6	
Field	Area	15957.33	67.0	109.0	0.0	0.0		0	Sporting event	American Football, Players				109.0						
Home Bleachers	Area	1292.80	77.9	109.0	0.0	0.0		0	Crowd during Game 10 min 60*10 sec	American Football, Spectators`s area		83.0	98.1	105.9	101.9	101.6	95.2	86.1		
Speaker-1	Point		124.0	124.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	95.7	110.3	113.1	118.7	119.4	116.2	111.0	104.7	83.3	
Speaker-2	Point		124.0	124.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	95.7	110.3	113.1	118.7	119.4	116.2	111.0	104.7	83.3	
Speaker-3	Point		124.0	124.0	0.0	0.0		0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	95.7	110.3	113.1	118.7	119.4	116.2	111.0	104.7	83.3	


Noise level
Leq,d
in dB(A)
<= 40
40 < <= 45
45 < <= 50
50 < <= 55
55 < <= 60
60 < <= 65
65 < <= 70
70 < <= 75
75 < <= 80
80 <
Signs and symbols
Area
Point source
Area source
Main building
Receiver
AVUS-02.0
Full Capacity - 4,028 Spectators

Granite Hills High School Athletics
Assessed receiver levels
Full Capacity

2

Receiver	Usage	Fl	Leq,d dB(A)	Leq,n dB(A)	
ST-1 58.2	SCR	G	43.8	43.8	
ST-2 63.2	SCR	G	46.2	46.2	
ST-3 67.9	SCR	G	53.1	53.1	
ST-4 40.2	SCR	G	47.3	47.3	
ST-5 44.8	SCR	G	48.4	48.4	
ST-6 40.1	SCR	G	45.6	45.6	

Granite Hills High School Athletics
Contribution level - Full Capacity

9

Source	Source group	Source ty	Ldn dB(A)	Leq,d dB(A)	Leq,n dB(A)	A dB	
Receiver ST-1 58.2 Fl G dB(A) Lr,lim dB(A)			Lr,lim dB(A)		Ldn 50.2 dB(A)	Leq,d 43.8 dB(A)	Leq,n 43.8 dB(A)
Away Bleachers	Default industrial noise	Area	39.0	32.6	32.6	0.0	
Band	Default industrial noise	Area	36.8	30.4	30.4	0.0	
Field	Default industrial noise	Area	15.1	17.2		0.0	
Home Bleachers	Default industrial noise	Area	39.4	33.0	33.0	0.0	
Referee	Default industrial noise	Area	15.1	17.2		0.0	
Speaker-2	Default industrial noise	Point	44.4	38.0	38.0	0.0	
Speaker-3	Default industrial noise	Point	44.4	38.0	38.0	0.0	
Speaker-1	Default industrial noise	Point	44.4	38.0	38.0	0.0	
Receiver ST-2 63.2 Fl G dB(A) Lr,lim dB(A)			Lr,lim dB(A)		Ldn 52.6 dB(A)	Leq,d 46.2 dB(A)	Leq,n 46.2 dB(A)
Away Bleachers	Default industrial noise	Area	40.7	34.3	34.3	0.0	
Band	Default industrial noise	Area	40.7	34.2	34.2	0.0	
Field	Default industrial noise	Area	17.8	19.9		0.0	
Home Bleachers	Default industrial noise	Area	43.5	37.1	37.1	0.0	
Referee	Default industrial noise	Area	17.8	19.9		0.0	
Speaker-2	Default industrial noise	Point	46.6	40.2	40.2	0.0	
Speaker-3	Default industrial noise	Point	46.6	40.2	40.2	0.0	
Speaker-1	Default industrial noise	Point	46.6	40.2	40.2	0.0	
Receiver ST-3 67.9 Fl G dB(A) Lr,lim dB(A)			Lr,lim dB(A)		Ldn 59.5 dB(A)	Leq,d 53.1 dB(A)	Leq,n 53.1 dB(A)
Away Bleachers	Default industrial noise	Area	45.6	39.1	39.1	0.0	
Band	Default industrial noise	Area	48.8	42.4	42.4	0.0	
Field	Default industrial noise	Area	23.7	25.7		0.0	
Home Bleachers	Default industrial noise	Area	52.0	45.6	45.6	0.0	
Referee	Default industrial noise	Area	23.7	25.7		0.0	
Speaker-2	Default industrial noise	Point	53.2	46.8	46.8	0.0	
Speaker-3	Default industrial noise	Point	53.1	46.7	46.7	0.0	
Speaker-1	Default industrial noise	Point	53.3	46.9	46.9	0.0	
Receiver ST-4 40.2 Fl G dB(A) Lr,lim dB(A)			Lr,lim dB(A)		Ldn 53.7 dB(A)	Leq,d 47.3 dB(A)	Leq,n 47.3 dB(A)
Away Bleachers	Default industrial noise	Area	41.0	34.5	34.5	0.0	
Band	Default industrial noise	Area	38.4	32.0	32.0	0.0	
Field	Default industrial noise	Area	17.0	19.0		0.0	
Home Bleachers	Default industrial noise	Area	41.3	34.9	34.9	0.0	
Referee	Default industrial noise	Area	17.0	19.0		0.0	
Speaker-2	Default industrial noise	Point	48.3	41.9	41.9	0.0	
Speaker-3	Default industrial noise	Point	48.4	41.9	41.9	0.0	
Speaker-1	Default industrial noise	Point	48.2	41.8	41.8	0.0	

Granite Hills High School Athletics
Contribution level - Full Capacity

Source	Source group	Source ty	Ldn dB(A)	Leq,d dB(A)	Leq,n dB(A)	A dB	
Receiver ST-5 44.8 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 54.8 dB(A) Leq,d 48.4 dB(A) Leq,n 48.4 dB(A)							
Away Bleachers	Default industrial noise	Area	43.0	36.6	36.6	0.0	
Band	Default industrial noise	Area	45.3	38.9	38.9	0.0	
Field	Default industrial noise	Area	20.5	22.5		0.0	
Home Bleachers	Default industrial noise	Area	48.4	42.0	42.0	0.0	
Referee	Default industrial noise	Area	20.5	22.5		0.0	
Speaker-2	Default industrial noise	Point	47.7	41.3	41.3	0.0	
Speaker-3	Default industrial noise	Point	47.6	41.2	41.2	0.0	
Speaker-1	Default industrial noise	Point	47.8	41.4	41.4	0.0	
Receiver ST-6 40.1 Fl G dB(A) Lr,lim dB(A) Lr,lim dB(A) Ldn 52.0 dB(A) Leq,d 45.6 dB(A) Leq,n 45.6 dB(A)							
Away Bleachers	Default industrial noise	Area	39.3	32.9	32.9	0.0	
Band	Default industrial noise	Area	37.0	30.6	30.6	0.0	
Field	Default industrial noise	Area	15.5	17.5		0.0	
Home Bleachers	Default industrial noise	Area	39.7	33.3	33.3	0.0	
Referee	Default industrial noise	Area	15.5	17.5		0.0	
Speaker-2	Default industrial noise	Point	46.5	40.1	40.1	0.0	
Speaker-3	Default industrial noise	Point	46.6	40.2	40.2	0.0	
Speaker-1	Default industrial noise	Point	46.5	40.1	40.1	0.0	

Granite Hills High School Athletics
Octave spectra of the sources in dB(A) - Full Capacity

Name	Source type	l or A	L'w	Lw	KI	KT	DO-Wall	Day histogram	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	16kHz	
		m,m²	dB(A)	dB(A)	dB	dB	dB			dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Away Bleachers	Area	975.00	82.0	111.9	0.0	0.0	0	Crowd during Game 10 min 60*10 sec	American Football, Spectators`s area		85.9	101.0	108.8	104.8	104.5	98.1	89.0		
Band	Area	216.83	85.6	109.0	0.0	0.0	0	Band during Game 20% = 12 minutes	Live bands (Pop, Rock, Metal)	94.5	94.0	98.6	103.5	104.3	100.9	96.2	88.7	70.6	
Field	Area	15957.33	67.0	109.0	0.0	0.0	0	Sporting event	American Football, Players				109.0						
Home Bleachers	Area	1318.33	82.7	113.9	0.0	0.0	0	Crowd during Game 10 min 60*10 sec	American Football, Spectators`s area		87.9	103.0	110.8	106.8	106.5	100.1	91.0		
Referee	Area	15957.33	67.0	109.0	0.0	0.0	0	Sporting event	American Football, Referee`s whistle				109.0						
Speaker-1	Point		124.0	124.0	0.0	0.0	0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	95.7	110.3	113.1	118.7	119.4	116.2	111.0	104.7	83.3	
Speaker-2	Point		124.0	124.0	0.0	0.0	0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	95.7	110.3	113.1	118.7	119.4	116.2	111.0	104.7	83.3	
Speaker-3	Point		124.0	124.0	0.0	0.0	0	Speaker during Game 12 min 36*20 sec	Average Spectrum from 2022-10-07 Survey	95.7	110.3	113.1	118.7	119.4	116.2	111.0	104.7	83.3	

Appendix G Traffic/Transportation Impact Analysis

Appendix

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TRAFFIC/TRANSPORTATION IMPACT ANALYSIS

FOR THE PROPOSED

GRANITE HILLS HIGH SCHOOL ATHLETICS COMPLEX MASTER PLAN

Prepared for

APPLE VALLEY UNIFIED SCHOOL DISTRICT
&
PLACEWORKS

Prepared by

GARLAND ASSOCIATES
16787 Beach Boulevard, Suite 234
Huntington Beach, CA 92647
714-330-8984

JANUARY 2025

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I.
INTRODUCTION AND STUDY METHODOLOGY

This report summarizes the results of a traffic/transportation impact analysis that was conducted for a stadium that is proposed in conjunction with the Athletics Complex Master Plan at Granite Hills High School. The Master Plan is being administered by Apple Valley Unified School District and the high school is located at 22900 Esaws Avenue in the Town of Apple Valley. The high school campus is bounded by Esaws Avenue on the south, Ocotilla Road on the east, and vacant land on the north and west. The proposed stadium would be constructed on vacant land located immediately west of the existing track and field facility, tennis courts, and parking lot between the school campus and Central Road.

The proposed project includes the construction of home and visitor bleachers at the stadium with an overall capacity of 4,028 seats. The project also includes stadium lighting, speakers, concessions building with restrooms, and a teams building. A map showing the location of the school is provided on Figure 1 and the site plan for the proposed stadium project is shown on Figure 2. The proposed project would not result in a change in the number of students attending the high school. The stadium would provide the opportunity for Granite Hills High School to hold home games and other major events at its own campus instead of using a stadium at another high school in the District.

An analysis has been prepared to evaluate the traffic impacts of the proposed project. The methodology for the traffic study, in general, was to 1) establish the existing baseline traffic conditions on the streets that provide access to the school site, 2) project the future baseline traffic conditions for the target year of completion for the proposed project (year 2028), 3) estimate the levels of traffic that would be generated by the stadium for a capacity-level event, and 4) conduct a comparative analysis of traffic conditions with and without the stadium. The stadium analysis is based on Friday evening traffic conditions on the streets and intersections in the proposed project vicinity.

In addition to the traffic impact analysis, the study also addressed the transportation issue areas of the CEQA environmental checklist, which includes an evaluation of the project's impacts on 1) transit, roadway, bicycle, and pedestrian facilities, 2) vehicle miles traveled (VMT), 3) increased hazards or incompatible uses, and 4) emergency access.

The traffic impact analysis addresses the impacts at five intersections in the vicinity of the school site. The study area intersections, the responsible jurisdiction, and the type of traffic control at each intersection are listed below in Table 1.

TABLE 1
STUDY AREA INTERSECTIONS

Intersection	Jurisdiction	Traffic Control
Central Road/Ramona Avenue	Apple Valley	Stop Signs on Ramona Ave
Central Road/Esaws Avenue	Apple Valley	Traffic Signal
Central Road/Happy Trails Highway-State Route 18	Caltrans	Traffic Signal
Ocotilla Road/Ramona Avenue	Apple Valley	Stop Signs on Ramona Ave
Ocotilla Road/Esaws Avenue	Apple Valley	4-Way Stop Signs

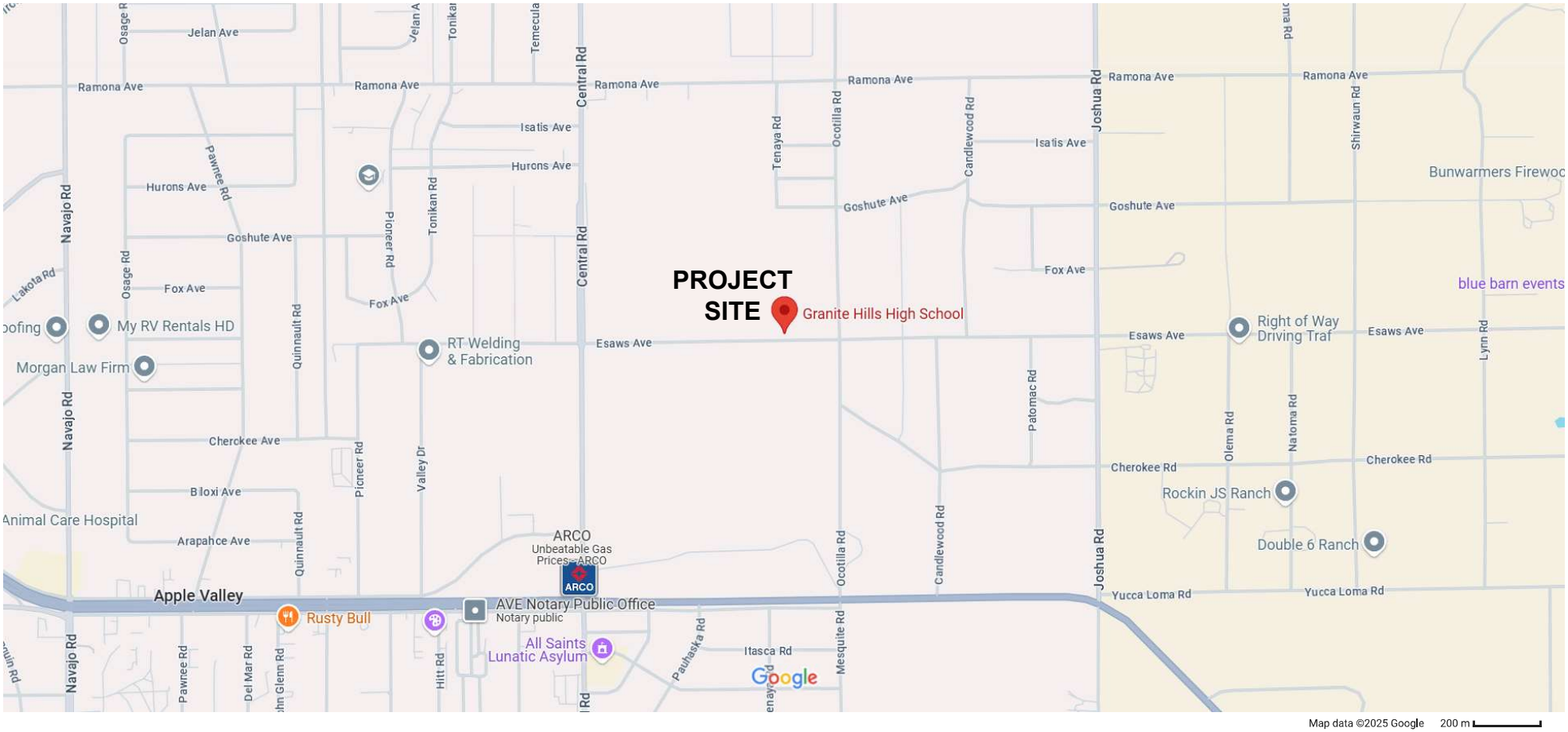
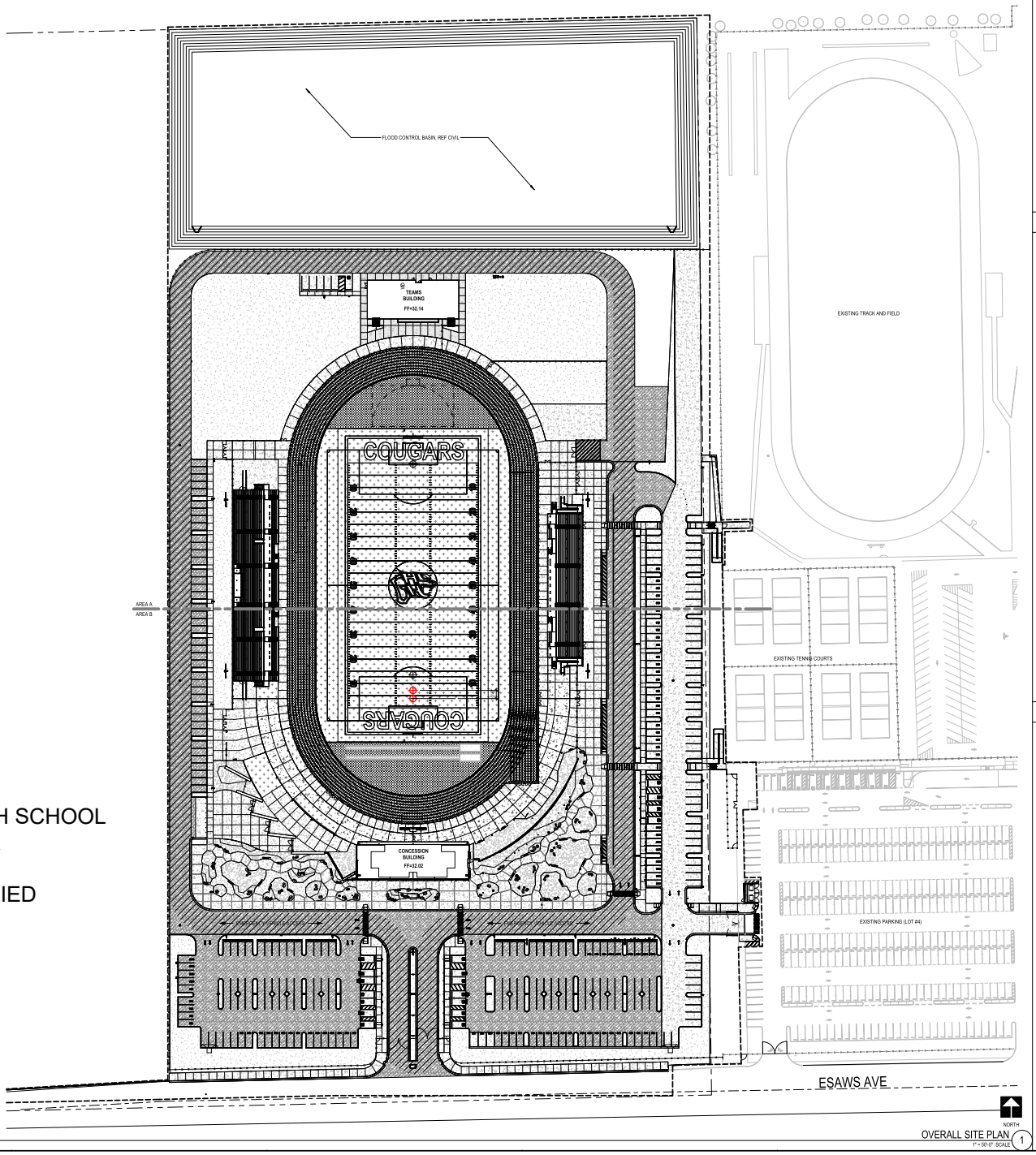


FIGURE 1
LOCATION MAP
GRANITE HILLS HIGH SCHOOL ATHLETICS CENTER
APPLE VALLEY UNIFIED SCHOOL DISTRICT

FIGURE 2
SITE PLAN

GRANITE HILLS HIGH SCHOOL
ATHLETICS CENTER

APPLE VALLEY UNIFIED
SCHOOL DISTRICT



OVERALL SITE PLAN
1" = 50'-0" SCALE

KEYNOTES

DESCRIPTION

GENERAL NOTES

SITE LEGEND

- NEW BUILDING
- ASSUMED/PROPERTY LINE
- LIMIT/SCOPE OF WORK
- CONCRETE PAVING PER CIVIL AND LANDSCAPE DRAWINGS
- ACCENT CONCRETE PAVING PER CIVIL AND LANDSCAPE DRAWINGS
- ASPHALT PAVING PER CIVIL AND LANDSCAPE DRAWINGS
- CRUSHED ROCK GROUNDCOVER PER CIVIL AND LANDSCAPE DRAWINGS
- DECOMPOSED GRANITE PER CIVIL AND LANDSCAPE DRAWINGS
- NATURAL GROUNDCOVER PER CIVIL AND LANDSCAPE DRAWINGS
- ARTIFICIAL TURF PER CIVIL AND LANDSCAPE DRAWINGS
- SYNTHETIC TRACK SURFACE PER CIVIL AND LANDSCAPE DRAWINGS
- FIRE LANE CURB, PAINT MAROON AND EVERY THIRTY (30) FEET THERE SHALL BE WHITE LETTERS SPELLING OUT "NO PARKING - FIRE LANE - CVC 22500.1" ALL LETTERS AND NUMBERS SHALL BE A MINIMUM OF THREE (4) INCHES
- PROPOSED CHAINLINK FENCING REF GATE SCHEDULE FOR HEIGHT
- EXISTING CHAINLINK FENCING

CONSULTANT

SITE PLAN - OVERALL

APPLE VALLEY UNIFIED SCHOOL DISTRICT
GRANITE HILLS HS ATHLETIC COMPLEX
APPLE VALLEY, CA

SEALS

sgh ARCHITECTS

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PROJECT NUMBER: 21/20310
PROJECT STATUS: 90% CONSTRUCTABILITY
ISSUE LOG:
DELTA DATE DESCRIPTION
1 11/8/24 50% CONSTRUCTABILITY

A1.11
50% CONSTRUCTABILITY

C:\Users\sghrd\Documents\21\20310_Granite HS_sdrsrvd12426_rvt

The traffic impact analysis is based on an evaluation of the levels of service at the affected study area intersections. Level of service (LOS) is an industry standard by which the operating conditions of a roadway segment or an intersection are measured. LOS is defined on a scale of A through F with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. LOS A is characterized as having free flowing traffic conditions with no restrictions on maneuvering or operation speeds, where traffic volumes are low and travel speeds are high. LOS F is characterized as having forced flow with many stoppages and low operating speeds. According to the San Bernardino County "Transportation Impact Study Guidelines" (July 9, 2019), which is used for studies in the Town of Apple Valley, LOS A through C represents acceptable conditions, while LOS D, E, and F represent congested, over-capacity conditions. These are the standards for desert region of San Bernardino County. The levels of service at the study area intersections were determined by using the Highway Capacity Manual methodology, which is consistent with the San Bernardino County guidelines.

The levels of service for the intersections in the vicinity of the proposed project were analyzed for the following scenarios: existing conditions (2024), existing conditions plus the proposed project, future baseline conditions without the proposed project for the target year of 2028, and future conditions with the proposed project. The year 2028 was used for the future target year as that is anticipated to be the year of completion for the proposed project.

II.
EXISTING AND FUTURE BASELINE TRAFFIC CONDITIONS

The street network in the vicinity of the school, the existing traffic volumes, and the levels of service at the affected study area intersections are described below.

Street Network

The streets that provide access to the proposed project area include Esaws Avenue, Ocotilla Road, Central Road, Ramona Avenue, and Happy Trails Highway, which is State Route 18. The following paragraphs provide a brief description of the characteristics of these streets. A figure showing the study area street network and the roadway characteristics is provided as Figure 3.

Esaws Avenue

Esaws Avenue is a two lane east-west street that abuts the south side of the school campus. Parking is prohibited on both sides of Esaws Avenue, although there is a pull-out area for bus parking on the north side of the street adjacent to the school. There are no sidewalks on Esaws Avenue except for the segment of the street adjacent to the school, which has a sidewalk on the north side of the street. There are three driveways on the north side of Esaws Avenue that provide access to the school's parking lots plus an additional gated driveway that is available for maintenance and emergency vehicle access. The speed limit on Esaws Avenue is 55 miles per hour (mph), but with a reduced school speed limit of 25 mph when children are present.

Ocotilla Road

Ocotilla Road is a two lane north-south street that abuts the east side of the school campus. Parking is prohibited on both sides of Ocotilla Road and there are no sidewalks except for the segment of the street adjacent to the school, which has a sidewalk on the west side of the street. There are two driveways on the west side of Ocotilla Road that provide access to the school's parking lots. The speed limit on Ocotilla Road is 55 mph, but with a reduced school speed limit of 25 mph when children are present.

Ramona Avenue

Ramona Avenue is a two lane east-west street located approximately one-quarter mile north of the school campus. Parking is permissible on both sides of the street, although only on the shoulder at some locations. There are no sidewalks on the north side of the street and intermittent sidewalks on the south side of the street where the adjacent properties have been developed. Ramona Avenue east of Ocotilla Road is unpaved. The speed limit on Ramona Avenue is 45 mph.

Central Road

Central Road is a two lane north-south street located approximately one-quarter mile west of the school campus. Parking is available on the shoulders and on the street at several locations where the street has been widened adjacent to properties that have been developed. There are no sidewalks except at the locations on the west side where properties have been developed. The speed limit on Central Road is 55 mph.

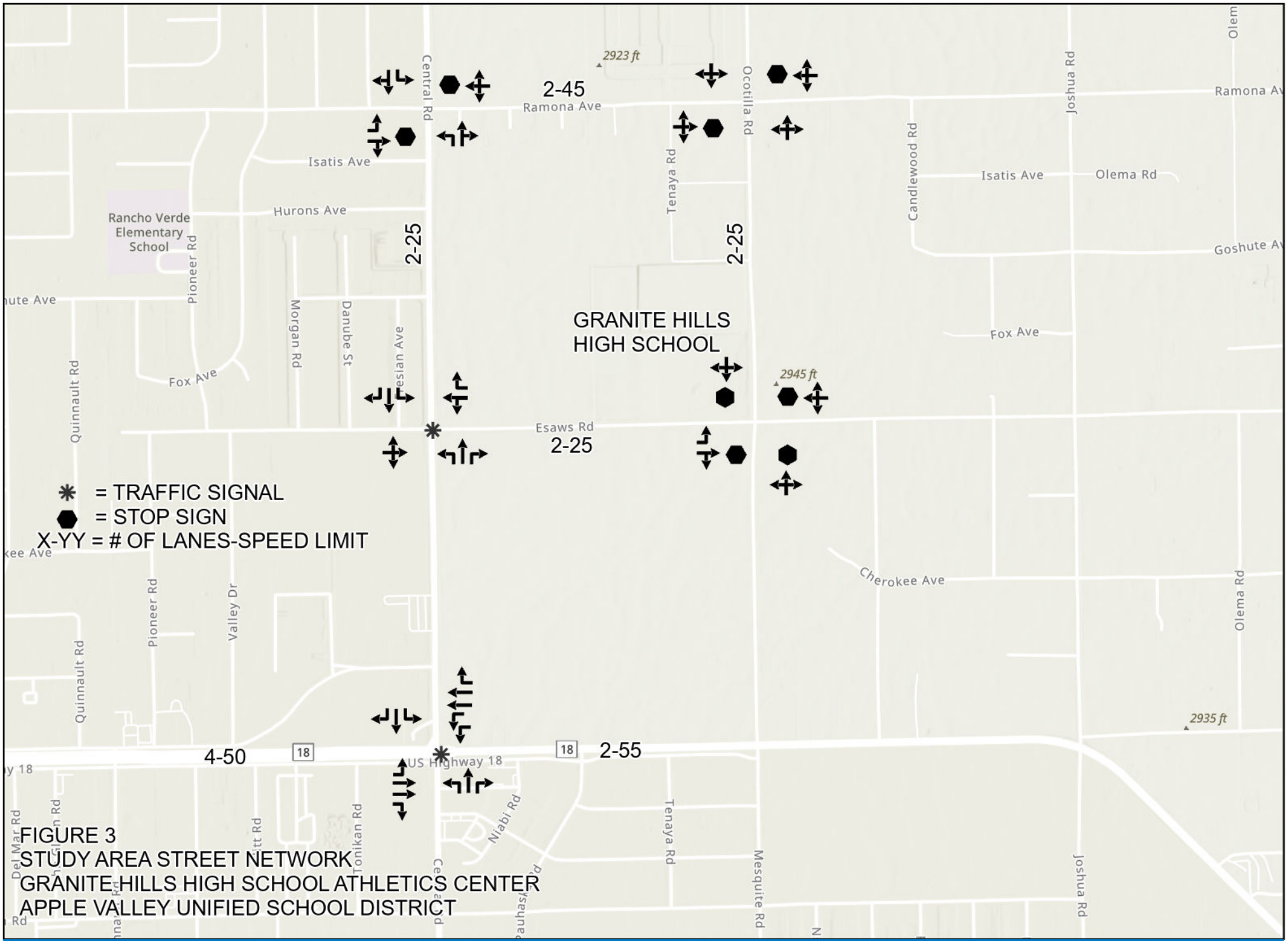


FIGURE 3
STUDY AREA STREET NETWORK
GRANITE HILLS HIGH SCHOOL ATHLETICS CENTER
APPLE VALLEY UNIFIED SCHOOL DISTRICT

Happy Trails Highway/State Route 18

Happy Trails Highway/State Route 18 is a two to four lane east-west street located approximately one-half mile south of the school campus. It has four lanes west of Central Road and two lanes east of Central Road. Parking is available on the shoulders and there are no sidewalks except for a small area on the north side of the street immediately west of Central Road adjacent to a service station. The speed limit on Happy Trails Highway is 50 mph west of Central Road and 55 mph east of Central Road.

Existing Traffic Volumes

Manual traffic counts were taken at the five study area intersections during the Friday evening peak period on December 6, 2024. The peak hour for this analysis refers to the one-hour time period prior to the beginning of an event at the stadium (e.g., a football game) when patrons are traveling to the stadium. The traffic analysis addresses the pre-event time period because the ambient traffic volumes are substantially higher during the pre-event period (generally between 6:00 and 7:00 p.m.) as compared to the post-event period (after 9:00 p.m.). Most high school football games in this district begin at 7:00 p.m. The existing peak hour traffic volumes and turning movements are shown on Figure 4.

Existing Intersection Levels of Service

To quantify the existing baseline traffic conditions, the five study area intersections were analyzed to determine their operating conditions during the Friday evening peak hour. Based on the hourly traffic volumes, the turning movement counts, and the existing number of lanes at each intersection, the average vehicle delay values and corresponding levels of service have been determined for each intersection, as summarized in Table 2.

TABLE 2
EXISTING AND FUTURE INTERSECTION LEVELS OF SERVICE

Intersection	*Delay Value (seconds/vehicle) & Level of Service Friday Evening Pre-Event Peak Hour*	
	Existing Conditions	*2028 Without Project*
SIGNALIZED INTERSECTIONS		
Central Road/Esaws Avenue	11.5 – B	11.4 – B
Central Road/Happy Trails Highway-State Route 18	9.2 – A	9.2 – A
UNSIGNALIZED INTERSECTIONS		
Central Road/Ramona Avenue	10.1 – B	10.2 – B
Ocotilla Road/Ramona Avenue	8.9 – A	8.9 – A
Ocotilla Road/Esaws Avenue	6.99 – A	6.99 – A

The levels of service shown in Table 2 are based on the average vehicle delay values that were calculated for each intersection using the Highway Capacity Software. The relationship between the average delay values and levels of service is shown in Table 3.

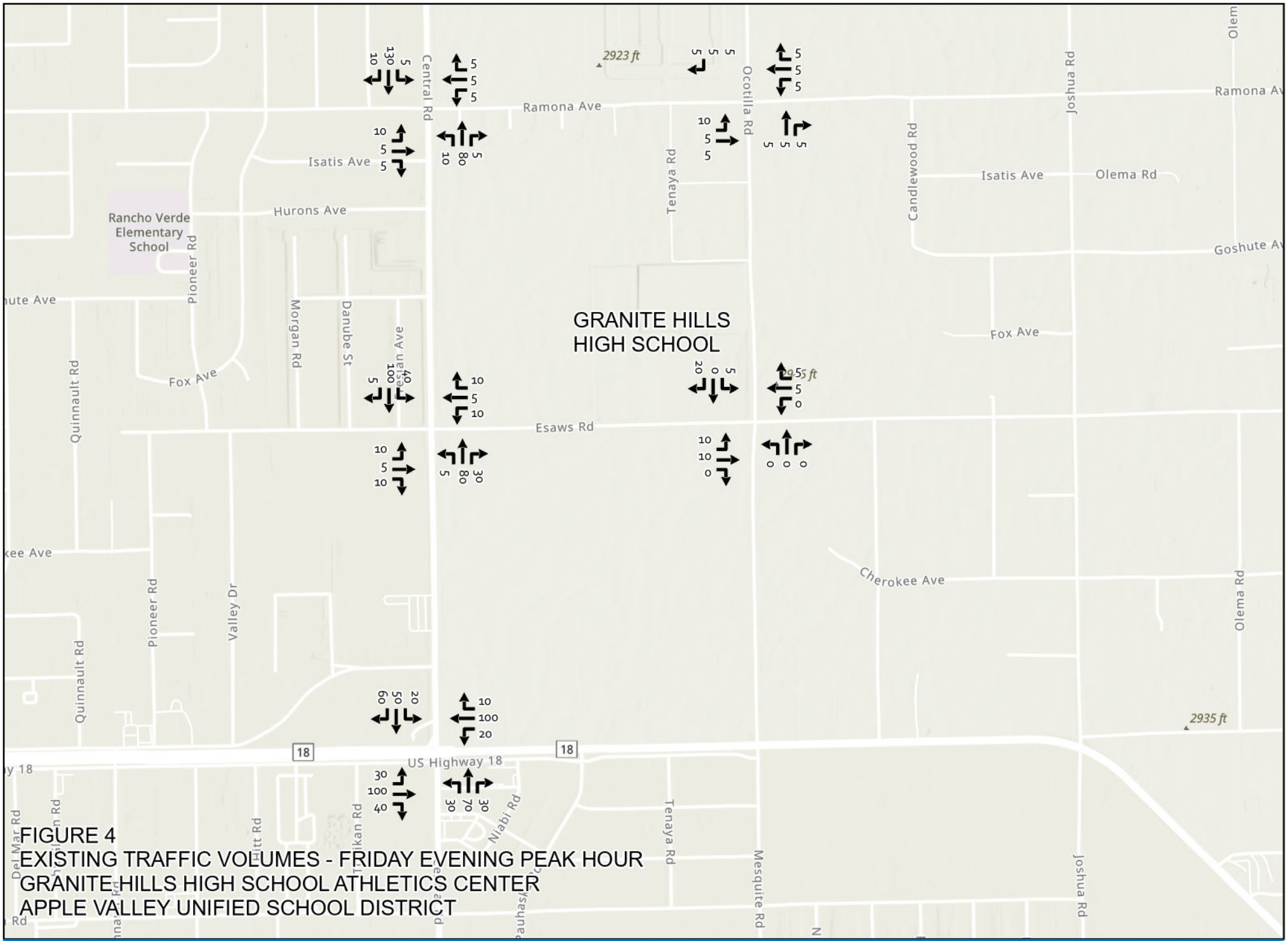


FIGURE 4
EXISTING TRAFFIC VOLUMES - FRIDAY EVENING PEAK HOUR
GRANITE HILLS HIGH SCHOOL ATHLETICS CENTER
APPLE VALLEY UNIFIED SCHOOL DISTRICT

TABLE 3
RELATIONSHIP BETWEEN DELAY VALUES & LEVELS OF SERVICE

Level of Service	*Delay Value (seconds) Signalized Intersections*	*Delay Value (seconds) Unsignalized Intersections*
A	0.0 to 10.0	0.0 to 10.0
B	> 10.0 to 20.0	> 10.0 to 15.0
C	> 20.0 to 35.0	> 15.0 to 25.0
D	> 35.0 to 55.0	> 25.0 to 35.0
E	> 55.0 to 80.0	> 35.0 to 50.0
F	> 80.0	> 50.0

As shown in Table 2, all five of the study area intersections currently operate at acceptable levels of service (LOS A through C) during the Friday evening peak hour. Three intersections operate at LOS A and two intersections operate at LOS B. It should be noted that the delay and LOS values for the intersections with traffic signals and 4-way stop signs represent the average for the entire intersection while the delay and LOS values for the intersections with stop signs only on the side street represent the intersection approach that has the highest level of delay at the stop sign.

Future Baseline Traffic Conditions

As the proposed project is expected to be fully completed in the year 2028, the existing (2024) traffic volumes were expanded by a growth factor of four percent to account for general regional growth and the cumulative impacts of traffic associated with other development projects in the area. This growth factor represents a one percent annual growth rate for four years. The projected traffic volumes for the year 2028 without the proposed project are shown on Figure 5.

Based on the projected peak hour traffic volumes, the turning movement counts, and the existing lane configuration, the future baseline levels of service were calculated for each study area intersection, as summarized in Table 2.

For the target year of 2028, all five of the study area intersections are projected to operate at acceptable levels of service (LOS A through C) as three of the intersections would operate at LOS A and two intersections would operate at LOS B. These traffic conditions represent a Friday evening pre-event peak hour.

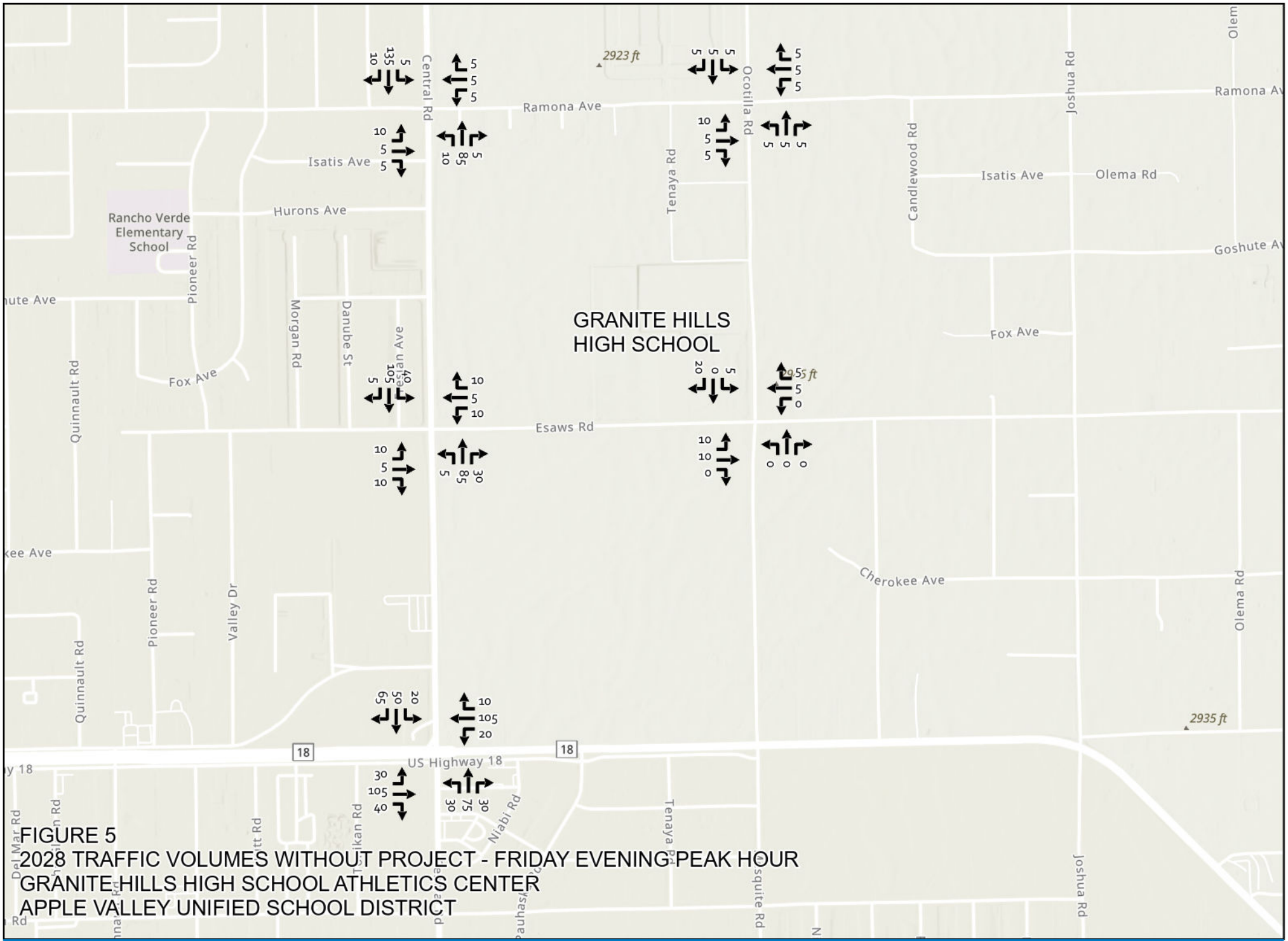


FIGURE 5
2028 TRAFFIC VOLUMES WITHOUT PROJECT - FRIDAY EVENING PEAK HOUR
GRANITE HILLS HIGH SCHOOL ATHLETICS CENTER
APPLE VALLEY UNIFIED SCHOOL DISTRICT

III.
TRAFFIC IMPACT ANALYSIS

This section summarizes the analysis of the proposed project's impacts on study area traffic/transportation conditions. First is a discussion of the significance standards followed by a discussion of project generated traffic and the impacts of the proposed project on traffic volumes and intersection levels of service. This is followed by an analysis of the impacts associated with non-motorized transportation (pedestrians and bicycles) and the findings relative to the CEQA transportation issues.

Standards of Significance

According to the San Bernardino County standards, which are applicable to the Town of Apple Valley, a signalized intersection in the Desert Region would be significantly impacted if a project would result in a change in the level of service from an acceptable LOS A, B, or C, to an unacceptable LOS D, E or F. If a signalized intersection is operating at LOS D, E or F without project traffic, the intersection would be significantly impacted if the project would increase the delay value by 5.0 or more seconds.

An unsignalized intersection would be significantly impacted if the project would change the level of service from an acceptable LOS C or better to LOS D, E, or F or if the project would add 5.0 or more seconds of delay to an intersection that is operating at LOS D, E, or F without project traffic and the project adds 10 or more trips to a minor street approach of if the intersection meets the peak hour traffic signal warrant after the addition of project traffic.

With regard to the CEQA thresholds of significance, Appendix G of the CEQA Guidelines state that a project would normally have a significant effect on the environment if the project could:

T-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities,

T-2 Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses vehicle miles traveled (VMT),

T-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), or

T-4 Result in inadequate emergency access.

Project Generated Traffic

The volumes of traffic that would be generated by the stadium for a capacity-level event (4,028 spectators) were determined in order to estimate the impacts of the proposed project on the study area streets and intersections. The trip generation rates and the anticipated volumes of traffic that would be generated by the stadium for a capacity-level event are shown in Table 4.

The trip generation rates shown in Tables 4 reflect the assumption that the stadium would generate a demand of one vehicle for every four seats (for vehicles that remain parked at the site) and that an additional ten percent of the vehicles arriving at the stadium would drop passengers off then leave. The rate of one vehicle for every four seats is based on the parking requirements in the Town of Apple Valley Municipal Code Section 9.72.020 - Parking and Loading Spaces Required Per Use. The Municipal Code indicates that the parking requirement for places of assembly is one space per four seats.

TABLE 4
PROJECT GENERATED TRAFFIC

Facility	*Evening Hour – Pre-Event*			*Daily Traffic*
	Inbound	*Outbound*	*Total*	
TRIP GENERATION RATES				
Stadium (vehicle trips per spectator)	0.275	0.025	0.30	0.60
GENERATED TRAFFIC VOLUMES				
Proposed Stadium (4,028 spectators)	1,108	101	1,209	2,420

Table 4 indicates that a capacity-level event at the stadium with 4,028 spectators would generate an estimated 1,209 vehicle trips during the peak hour (1,108 inbound and 101 outbound) and 2,420 daily trips. The peak hour for this analysis represents the one-hour time period prior to the beginning of an event when patrons are traveling to the stadium. Approximately the same level of traffic would be generated at the end of an event when patrons are exiting (with the inbound and outbound traffic volumes reversed). A capacity-level event would occur only several times each year, such as a homecoming football game or a graduation ceremony.

The proposed athletics complex would also generate traffic at other times of the day and other days of the week for events such as soccer matches. The patronage levels at these other events would be substantially lower than for a capacity-level football game. So the traffic analysis represents a conservative worst case scenario.

To quantify the increase in traffic at each intersection resulting from a capacity-level event at the proposed stadium, the project generated traffic shown in Table 4 was geographically distributed onto the street network using the directional percentages shown on Figure 6. This distribution assumption is based on the layout of the existing street network, the school attendance boundaries, and the anticipated geographical distribution of the event patrons. The volumes of site generated traffic that would be added to each study area intersection by a capacity-level event at the 4,028-seat stadium are shown on Figure 6.

The volumes of traffic for the existing conditions scenario plus the project generated traffic are shown on Figure 7 and the total volumes of traffic projected for the year 2028 scenario with the proposed stadium are shown on Figure 8. These projected traffic volumes are for the Friday evening pre-event peak hour.

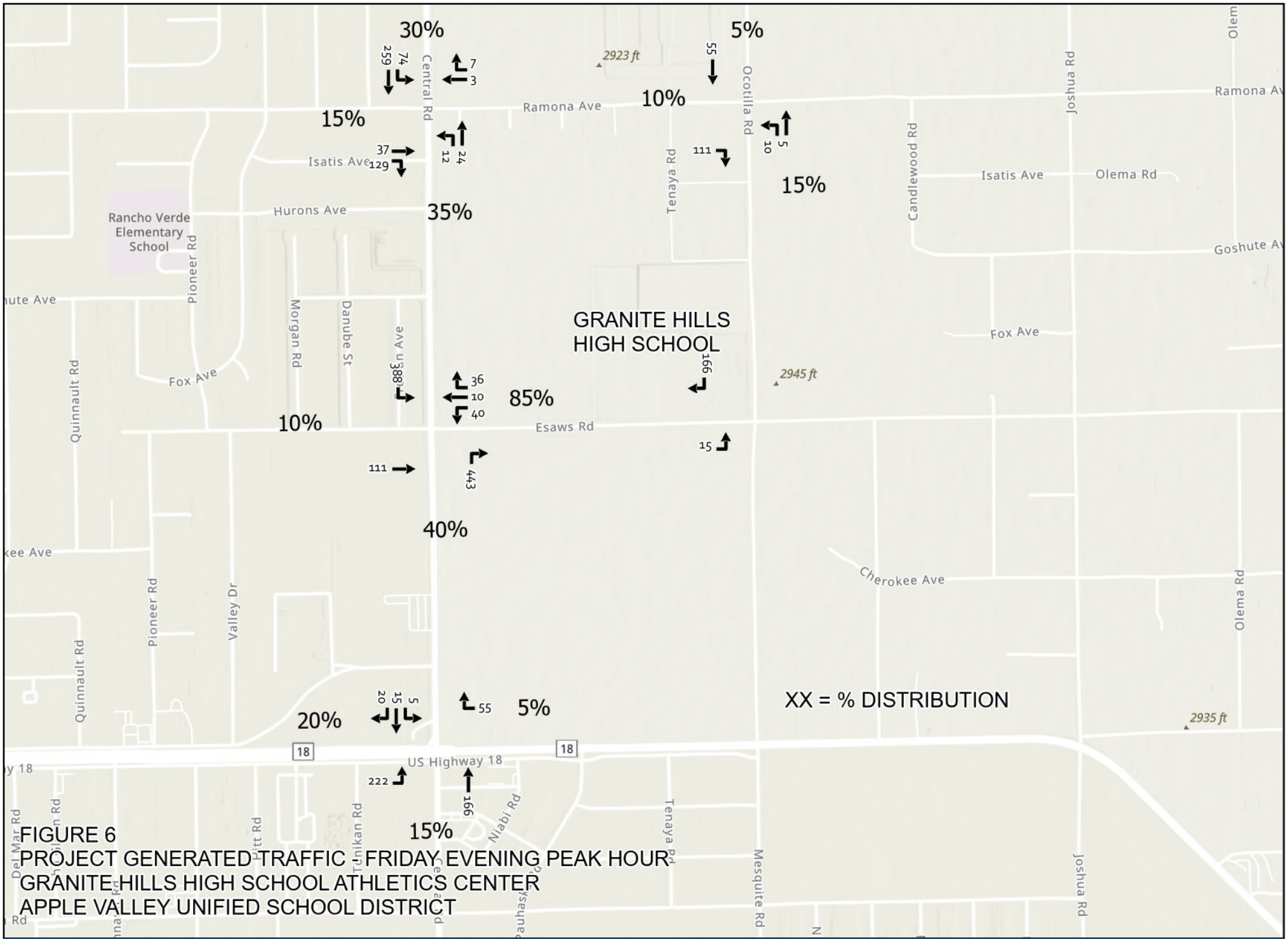


FIGURE 6
PROJECT GENERATED TRAFFIC - FRIDAY EVENING PEAK HOUR
GRANITE HILLS HIGH SCHOOL ATHLETICS CENTER
APPLE VALLEY UNIFIED SCHOOL DISTRICT

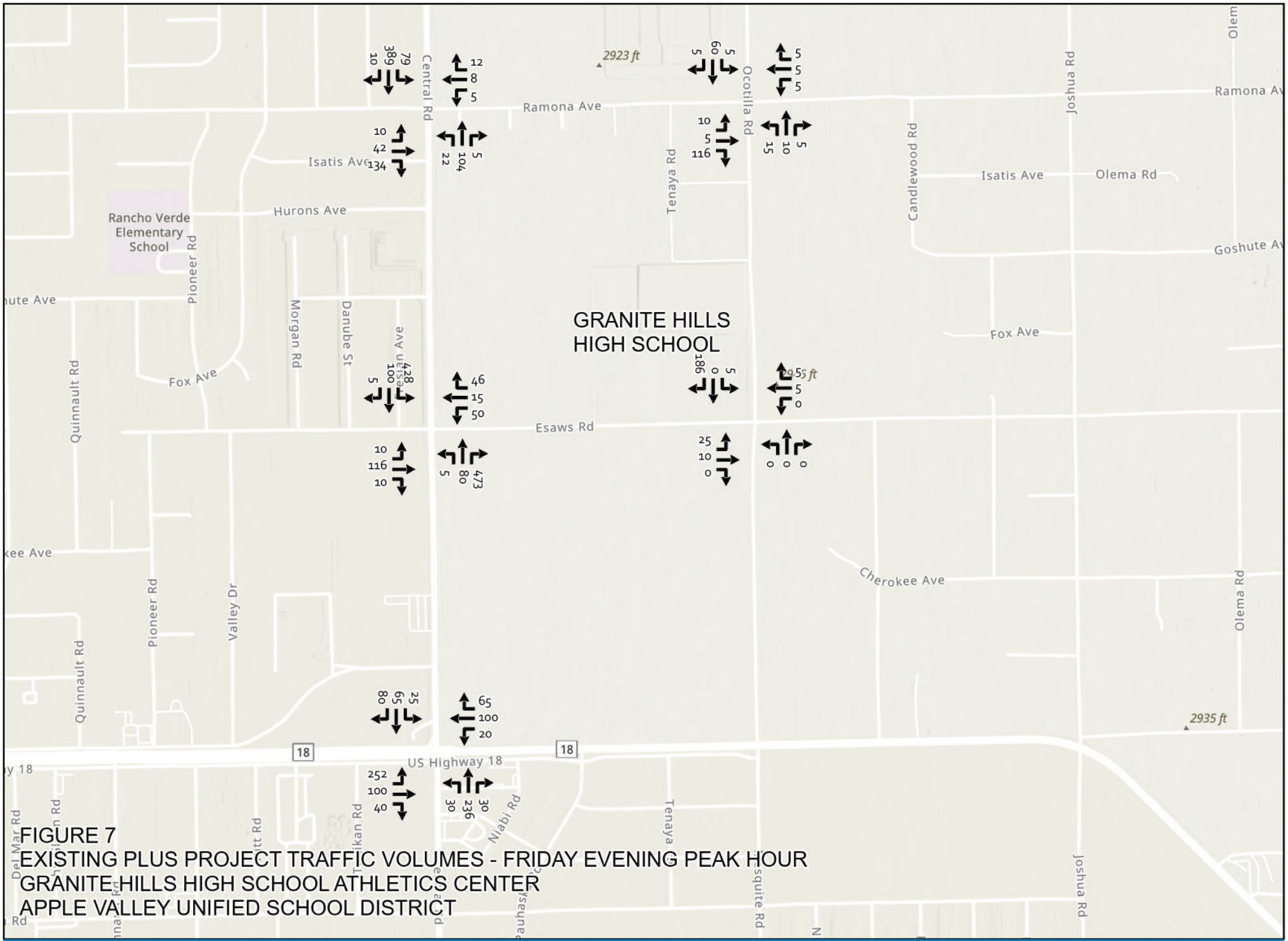


FIGURE 7
EXISTING PLUS PROJECT TRAFFIC VOLUMES - FRIDAY EVENING PEAK HOUR
GRANITE HILLS HIGH SCHOOL ATHLETICS CENTER
APPLE VALLEY UNIFIED SCHOOL DISTRICT

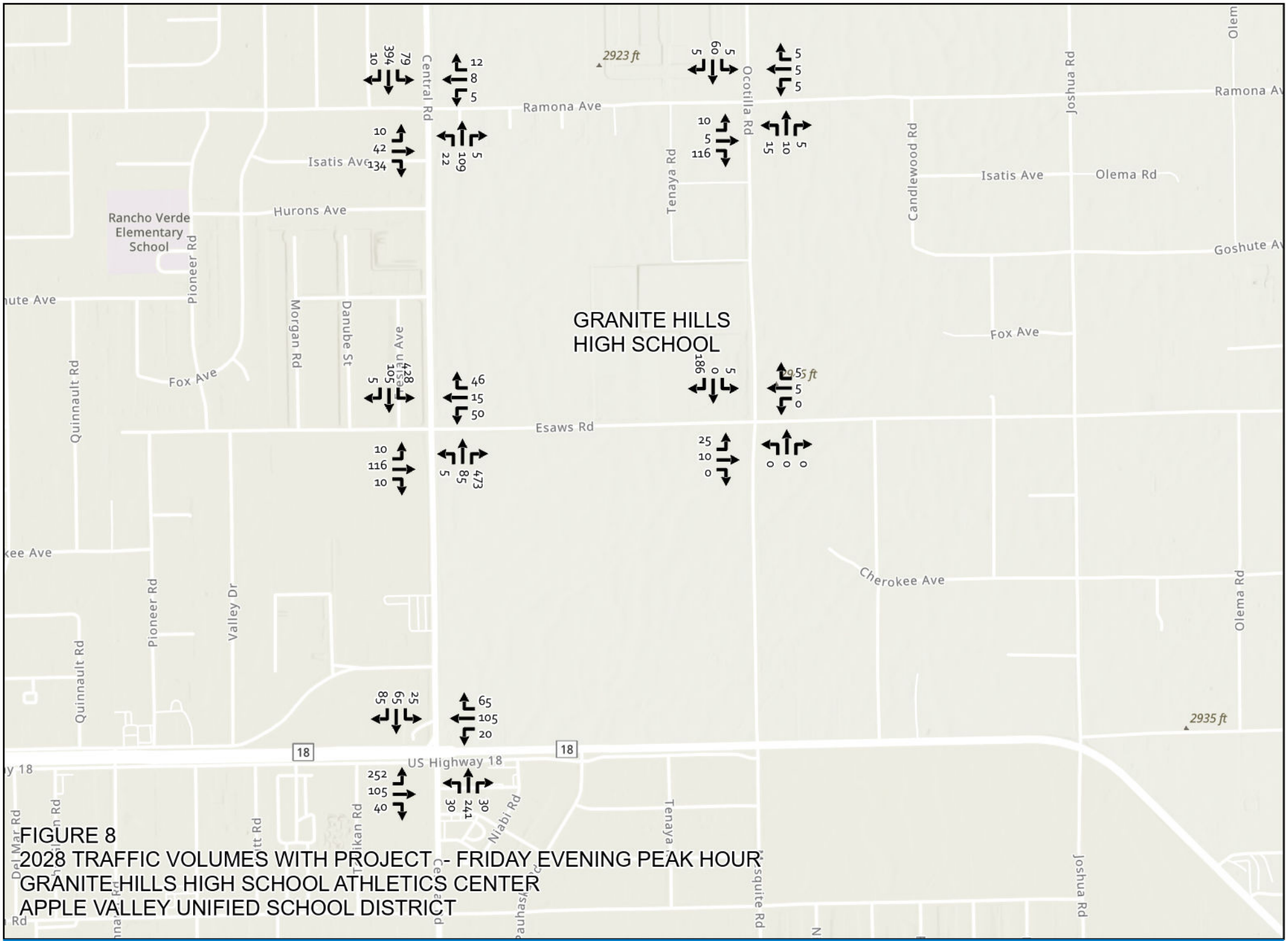


FIGURE 8
2028 TRAFFIC VOLUMES WITH PROJECT - FRIDAY EVENING PEAK HOUR
GRANITE HILLS HIGH SCHOOL ATHLETICS CENTER
APPLE VALLEY UNIFIED SCHOOL DISTRICT

Intersection Impact Analysis

The impact analysis for the five study area intersections was conducted by comparing the delay values and levels of service (LOS) for the "without project" and "with project" scenarios. For the existing conditions scenario, the analysis compares the existing conditions to the conditions with the proposed project.

For the year 2028 scenario, the analysis compares the year 2028 baseline conditions without the proposed project to the year 2028 scenario with the proposed project. The year 2028 was used as the target year for future conditions as that is anticipated to be the year that the proposed project would be completed. The peak hour for the analysis represents the time period during which the stadium would generate the heaviest volumes of traffic (typically between 6:00 and 7:00 p.m.), which does not coincide with the peak period for the ambient traffic volumes, which generally occurs between 4:00 and 6:00 p.m.

The comparative levels of service at the study area intersections for the existing conditions scenario are summarized in Table 5 for the Friday evening peak hour. The table shows the before and after delay values and the levels of service that would occur at each study area intersection. Also shown are the increases in the delay values that would occur as a result of the proposed project. The last column in Table 5 indicates if the intersections would be significantly impacted by the project generated traffic.

The intersection of Central Road and Esaws Avenue, for example, operates with an average delay value of 11.5 seconds per vehicle and LOS B for existing conditions and would operate with an average delay value of 32.2 seconds and LOS C for the existing plus project scenario, which represents an increase in average delay of 20.7 seconds per vehicle. This impact would be less than significant according to the criteria outlined above because the intersection would continue to operate at an acceptable LOS C. Table 5 indicates that none of the study area intersections would be significantly impacted by the traffic that would be generated by the proposed project for a capacity-level event for the existing conditions baseline scenario.

TABLE 5
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE
EXISTING CONDITIONS AS BASELINE

Intersection	*Delay Value & Level of Service*		*Increase In Delay Value*	*Significant Impact*
	Existing Conditions	*Existing plus Project*		
SIGNALIZED INTERSECTIONS				
Central Road/Esaws Avenue	11.5 – B	32.2 – C	20.7	No
Central Road/Happy Trails Highway-SR 18	9.2 – A	12.4 – B	3.2	No
UNSIGNALIZED INTERSECTIONS				
Central Road/Ramona Avenue	10.1 – B	15.8 – C	5.7	No
Ocotilla Road/Ramona Avenue	8.9 – A	9.5 – A	0.6	No
Ocotilla Road/Esaws Avenue	6.99 – A	7.37 – A	0.38	No

The comparative levels of service for the year 2028 analysis scenario are shown in Table 6. Table 6 indicates that none of the study area intersections would be significantly impacted by the traffic that would be generated by the proposed project for a capacity-level event for the year 2028 baseline scenario.

TABLE 6
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE
YEAR 2028 AS BASELINE

Intersection	*Delay Value & Level of Service*		*Increase In Delay Value*	*Significant Impact*
	2028 Without Project	*2028 With Project*		
SIGNALIZED INTERSECTIONS				
Central Road/Esaws Avenue	11.4 – B	32.0 – C	20.6	No
Central Road/Happy Trails Highway-SR 18	9.2 – A	12.5 – B	3.3	No
UNSIGNALIZED INTERSECTIONS				
Central Road/Ramona Avenue	10.2 – B	16.0 – C	5.8	No
Ocotilla Road/Ramona Avenue	8.9 – A	9.5 – A	0.6	No
Ocotilla Road/Esaws Avenue	6.99 – A	7.37 – A	0.38	No

Tables 5 and 6 indicate that the proposed project would not have a significant impact at any of the study area intersections during the evening peak hour based on the significance criteria presented previously because the intersections would continue to operate at LOS C or better during a capacity-level event. As there would be no significant impacts, no capacity-related mitigation measures would be required. It should be noted that this conclusion is based on the assumption that an event would begin at 7:00 p.m. If a capacity-level event were scheduled to begin at 6:00 p.m. on a Monday through Friday, the site-generated traffic would coincide with the peak commuter traffic and the event may result in a significant impact. As the analysis indicates that a capacity-level event with 4,028 spectators would not result in a significant traffic impact, it is concluded that an average event with substantially fewer spectators would likewise not result in a significant traffic impact.

The traffic impacts associated with the stadium would not occur on a daily basis but would occur only when a major event were to be held at the facility, which is typically a high school varsity football game and a graduation (which would occur only once each year). Varsity football games would occur on a Thursday or Friday evening on approximately five to six occasions throughout the year. The analysis addresses the Friday evening scenario because the ambient traffic volumes would typically be higher on Friday as compared to Thursday evening.

In addition to the capacity-level high school events that would be held at the stadium in the fall (primarily varsity football games), the stadium would also be used for track and field events, soccer matches and practice, band activities, and possibly Pop Warner football. As the attendance at these activities would be substantially lower than the capacity-level events that were addressed in the traffic analysis, it is concluded that such activities would result in a less than significant traffic impact.

Non-Motorized Transportation and Transit

The proposed project would generate a demand for non-motorized travel as some event patrons and participants would travel to and from the school as pedestrians or on bicycles. The streets adjacent to the school (Esaws Avenue and Ocotilla Road) have sidewalks on one side of the street along the school frontage; i.e., the north side of Esaws Avenue and the west side of Ocotilla Road. There are no sidewalks, however, on these streets to the north and west of the school site on the street segments that are not adjacent to the school site. Pedestrians at these locations walk along unpaved paths adjacent to the streets. A component of the proposed project would be to construct curb-and-gutter and a sidewalk along the frontage of the athletics complex site on the north side of Esaws Avenue. The signalized intersections of Central Road at Esaws Avenue and Central Road at State Route 18 are equipped with painted crosswalks and traffic signals with pedestrian crossing phases. Bike racks are provided at the school, but there are no bike lanes in the vicinity of the school campus.

With regard to public transit, Victor Valley Transit Authority (VVTA) operates Routes 40 and 43 in the project area. Route 40 runs along Esaws Avenue west of Central Road and along Central Road north of Esaws Avenue. It has bus stops on Esaws Avenue at Central Road and on Central Road at Ramona Avenue. Route 43 runs along State Route 18 west of Central Road and along Central Road south of State Route 18. It has a bus stop on Central Road south of State Route 18. The proposed project would not adversely affect the performance of these transit or non-motorized transportation facilities.

The proposed project would be consistent with policies supporting alternative transportation because busing would typically be provided from the opposing schools during football games and bike racks are currently provided at the school.

Findings Relative to CEQA Transportation Issues

The proposed project involves the construction of a new athletics complex, which includes a football stadium with bleachers, at Granite Hills High School. For the transportation analysis, Appendix G of the CEQA Guidelines states that a proposed project could have a significant effect on the environment if the project would:

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities,

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses vehicle miles traveled (VMT),

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), or

d) Result in inadequate emergency access.

The findings regarding each of these issues are presented in the following sections.

Issue: Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

CEQA Finding: No Impact

The Circulation Element of the Town of Apple Valley General Plan includes specific goals, policies, and programs that offer strategies to provide sustainable transportation networks that are designed to improve the balance between environmental concerns, community objectives, and performance (mobility and safety). The overall goal is to continue to maintain and expand a safe and efficient circulation and transportation system. There are numerous policies and programs that are intended to provide guidance for implementing the overall goals and objectives. The document states that a sustainable transportation system can be advanced by focusing on the following objectives: network connectivity, operational balance, emissions reduction / energy efficiency, pedestrian accommodations, transit readiness, and quality public space.

The proposed athletics complex/stadium project is consistent with the goals, policies, and programs presented in the Circulation Element and the project would not adversely affect the performance of any roadway, transit, or non-motorized (pedestrian and bicycle) transportation facilities. Based on the traffic analysis, the discussion of non-motorized transportation and transit, and a review of the Circulation Element of the Town's General Plan, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Issue: Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses vehicle miles traveled (VMT).

CEQA Finding: Less Than Significant Impact

Vehicle delays and levels of service (LOS) have historically been used as the basis for determining the significance of traffic impacts as standard practice in California Environmental Quality Act (CEQA) documents. On September 27, 2013, SB 743 was signed into law, starting a process that fundamentally changed transportation impact analyses as part of CEQA compliance. SB 743 eliminated auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as the sole basis for determining significant impacts under CEQA. As part of the current CEQA Guidelines, the criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099(b)(1)). Pursuant to SB 743, the California Natural Resources Agency adopted revisions to the CEQA Guidelines on December 28, 2018, to implement SB 743. CEQA Guidelines Section 15064.3 describes how transportation impacts are to be analyzed after SB 743. Under the Guidelines, metrics related to "vehicle miles traveled" (VMT) were required beginning July 1, 2020, to evaluate the significance of transportation impacts under CEQA for development projects, land use plans, and transportation infrastructure projects. State courts ruled that under the Public Resources Code Section 21099, subdivision (b)(2), "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment" under CEQA, except for roadway capacity projects.

The San Bernardino County "Transportation Impact Study Guidelines" include screening criteria that can be used to identify when a proposed project is anticipated to result in a less than significant VMT impact. The document states that projects which serve the local community and have the potential to reduce VMT should not be required to complete a VMT assessment and K-12 schools are included in the list of projects/land uses that are subject to this screening criteria.

As the proposed project is an athletics complex for a high school, it is in the local community category and can be screened from requiring a detailed VMT analysis. In addition, since the project will provide the opportunity for football games and other events to be held at the Granite Hills High School campus instead of stadiums at other schools in the District, it would result in a reduction in vehicle miles traveled because the proposed stadium would be closer to most of the homes in the attendance area as compared to the stadiums where the major activities currently take place. Based on these guidelines, this athletics complex/stadium project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), and would have a less than significant VMT impact.

Issue: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

CEQA Finding: Less Than Significant Impact

The proposed project would not provide any on- or off-site access or circulation features that would create or increase any design hazards or incompatible uses. Access to the school site would be provided by a new driveway on Esaws Avenue for the facility's new parking lot as well as the existing driveways on Esaws Avenue and Ocotilla Road. The design of the new driveway would be subject to review and approval by the Town of Apple Valley staff and all improvements within the school site would be consistent with the criteria of the California Division of the State Architect.

The increased levels of traffic, the increased number of pedestrians, and the increased number of vehicular turning movements that would occur at the driveways and at the nearby intersections would result in an increased number of traffic conflicts and a corresponding increase in the probability of an accident occurring. These impacts would not be significant, however, because the streets, intersections, and driveways are designed to accommodate the anticipated levels of vehicular and pedestrian activity. These streets and intersections have historically been accommodating school-related traffic on a daily basis for the existing school. The proposed project's athletics complex would be compatible with the design and operation of a high school, and the proposed project would not result in any major modifications to the existing access or circulation features at the school other than the construction of a new driveway.

As the existing street network could readily accommodate the anticipated increase in vehicular, pedestrian, and bicycle activity, the proposed project would not substantially increase hazards due to a geometric design feature or incompatible uses.

Issue: Result in inadequate emergency access.

CEQA Finding: No Impact

Emergency access to the school site is provided by three existing driveways on the north side of Esaws Avenue that provide access to the school's parking lots plus an additional gated driveway that is available for emergency vehicle access. Access is also provided by two driveways on the west side of Ocotilla Road that provide access to the school's parking lots. In addition, a new driveway will be provided on the north side of Esaws Avenue that will accommodate access to a new parking lot. The existing and proposed access and circulation features at the school, including the driveways, parking lots, on-site roadways, and fire lanes, would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. The proposed project would be designed to accommodate emergency access to the athletics complex. The new access/circulation features and any modifications to the existing access/circulation features at the school are subject to and must satisfy the District's design requirements and would be subject to approval by the Fire Department and the California Division of the State Architect. Emergency vehicles could easily access the stadium, the other components of the athletics complex, and all other areas of the school via on-site travel corridors. The proposed project would not, therefore, result in inadequate emergency access.

IV.
SUMMARY OF IMPACTS AND CONCLUSIONS

The key findings of the traffic impact analysis are presented below.

- The proposed 4,028-seat stadium would generate an estimated 1,209 vehicle trips during the peak hour (1,108 inbound and 101 outbound) and 2,420 trips per day for a capacity-level event. The peak hour for this analysis represents the one-hour time period prior to the beginning of an event at the stadium when patrons are traveling to the stadium, which would typically occur on a Friday evening between 6:00 and 7:00 p.m. Approximately the same level of traffic would be generated at the end of an event when patrons are exiting (with the inbound and outbound traffic volumes reversed).
- The athletics complex would generate substantially fewer vehicle trips on a typical day of operation for non-football game activities.
- An analysis of five intersections in the vicinity of the school indicates that the traffic generated by the stadium during a capacity-level event would not result in a significant impact at any of the intersections according to the San Bernardino County significance criteria, which is used by the Town of Apple Valley. Similarly, a typical day of activity at the athletics complex/stadium would not result in a significant traffic impact.
- CEQA threshold of significance T-1 asks if the proposed project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The analysis indicates that there would be **no impact** because:

  - The proposed project would not adversely affect the performance or safety of any transit or non-motorized transportation facilities (pedestrians and bicycles) and would not conflict with any adopted plans, policies, or programs relative to these alternative transportation modes,

  - The level of service thresholds would not be exceeded by traffic generated by events at the facility, and

  - The Circulation Element of the Town of Apple Valley General Plan includes specific goals, policies, and programs that offer strategies to provide sustainable transportation networks that are designed to improve the balance between environmental concerns, community objectives, and performance (mobility and safety). The overall goal is to continue to maintain and expand a safe and efficient circulation and transportation system. The proposed project is consistent with the goals, policies, and programs presented in the Circulation Element and would not conflict with a program, plan, ordinance, or policy of the General Plan, including transit, roadway, bicycle, and pedestrian facilities.

- CEQA threshold of significance T-2 asks if the proposed project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses vehicle miles traveled (VMT). The San Bernardino County "Transportation Impact Study Guidelines" includes screening criteria that can be used to identify when a proposed project is anticipated

to result in a less than significant VMT impact. The document states that projects which serve the local community and have the potential to reduce VMT should not be required to complete a VMT assessment. As K-12 schools are included in the list of projects/land uses that are subject to this screening criteria, the proposed project would have a **less than significant impact**. Furthermore, the proposed project would result in a reduction in total vehicle miles traveled because the proposed stadium would be closer to most of the homes in the attendance area as compared to the stadiums where the major activities currently take place.

- CEQA threshold of significance T-3 asks if the proposed project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). The analysis indicates that the streets, intersections, and driveways are designed to accommodate the anticipated levels of vehicular and pedestrian activity and have historically been accommodating school-related traffic. The proposed project would be compatible with the design and operation of a high school and the proposed project would not result in any major modifications to the existing access or circulation features at the school other than providing a new driveway. The proposed project would not, therefore, substantially increase hazards due to a geometric design feature or incompatible uses and would have a **less than significant impact**.
- CEQA threshold of significance T-4 asks if the proposed project would result in inadequate emergency access. The existing and proposed access and circulation features at the school, including the on-site roadways, parking lots, and fire lanes, would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles, and the proposed athletics complex would be designed to accommodate emergency access to the facilities. The proposed project would not result in inadequate emergency access and there would be **no impact**.