

APPENDIX 12

PROJECT SPECIFIC WATER QUALITY MANAGEMENT PLAN

FOR REVIEW ONLY

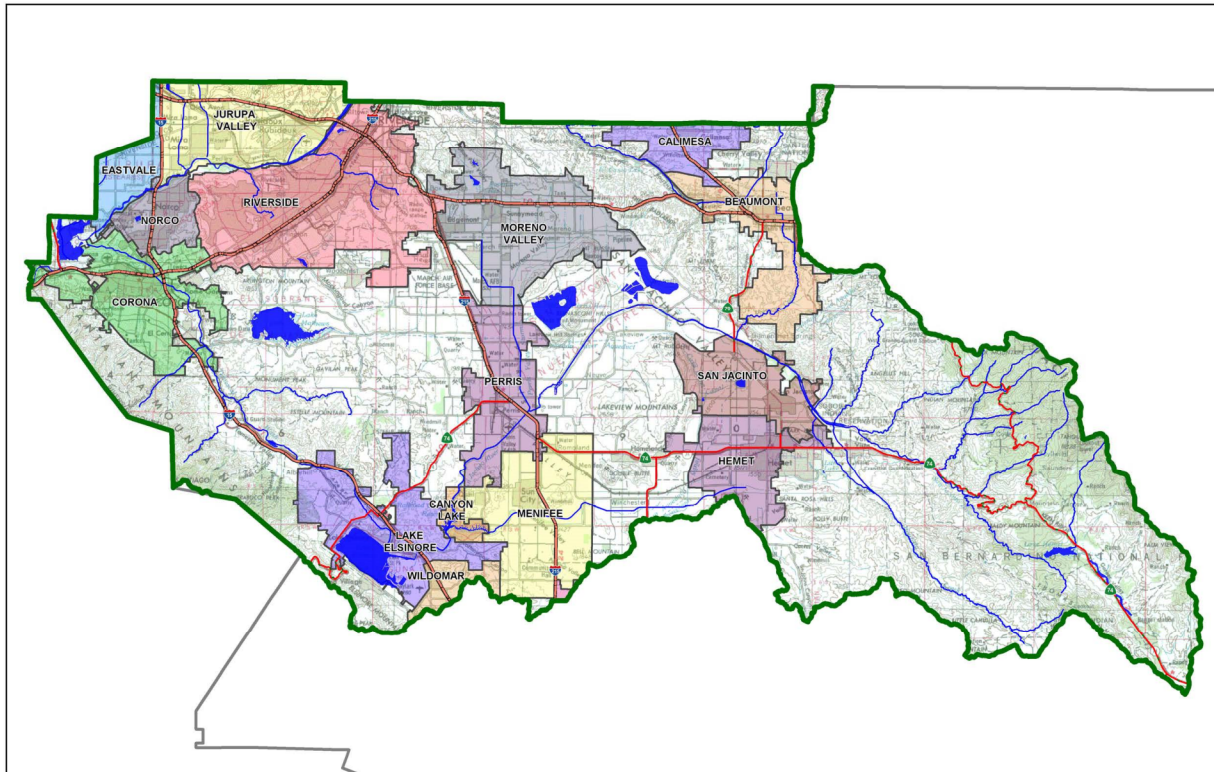
Project Specific Water Quality Management Plan

A Template for Projects located within the Santa Ana Watershed Region of Riverside County

Project Title: Capstone Menifee

Development No: TPM 38139

Design Review/Case No: PLN21-0370



- Preliminary
- Final

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Prepared for Compliance with
Regional Board Order No. R8-2010-0033

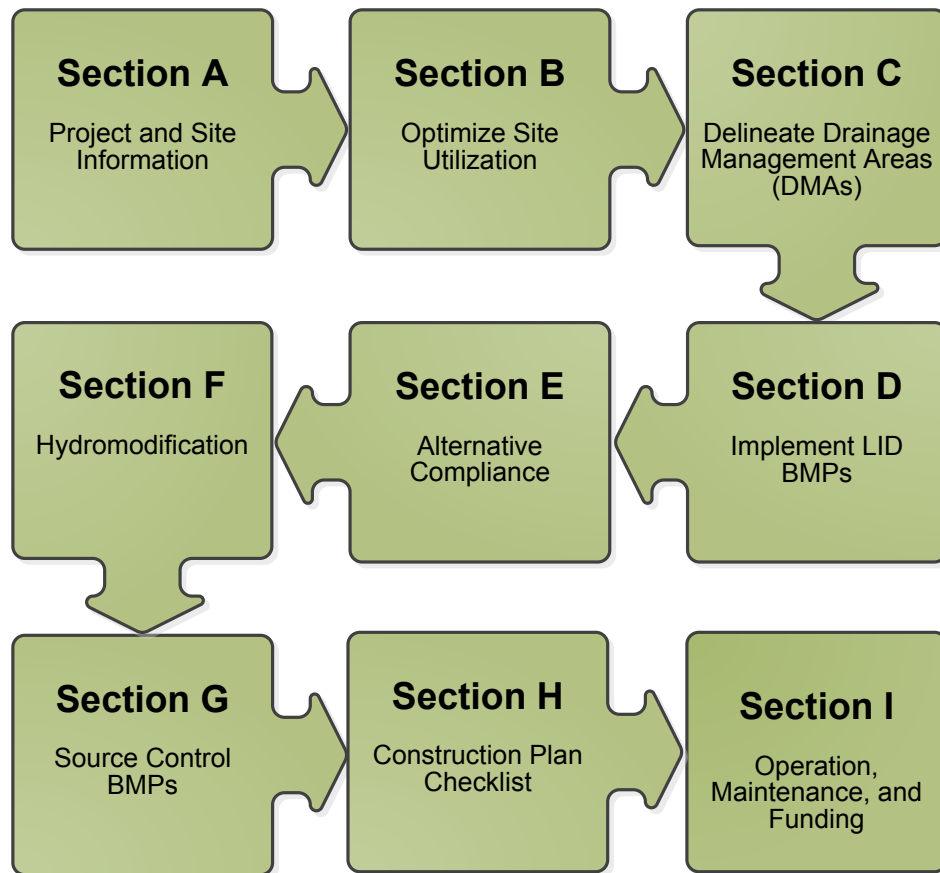
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A Brief Introduction

This Project-Specific WQMP Template for the **Santa Ana Region** has been prepared to help guide you in documenting compliance for your project. Because this document has been designed to specifically document compliance, you will need to utilize the WQMP Guidance Document as your “how-to” manual to help guide you through this process. Both the Template and Guidance Document go hand-in-hand, and will help facilitate a well prepared Project-Specific WQMP. Below is a flowchart for the layout of this Template that will provide the steps required to document compliance.



OWNER'S CERTIFICATION

This Project-Specific Water Quality Management Plan (WQMP) has been prepared for CADO Menifee LLC by Albert A. Webb Associates for the Capstone Menifee project.

This WQMP is intended to comply with the requirements of City of Menifee for (Municipal Code Section 15.01) which includes the requirement for the preparation and implementation of a Project-Specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation and funding of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. In addition, the property owner accepts responsibility for interim operation and maintenance of Stormwater BMPs until such time as this responsibility is formally transferred to a subsequent owner. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity. The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under City of Menifee Water Quality Ordinance (Municipal Code Section 15.01).

"I, the undersigned, certify under penalty of law that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

Owner's Signature

Date

Owner's Printed Name

Owner's Title/Position

PREPARER'S CERTIFICATION

"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan meet the requirements of Regional Water Quality Control Board Order No. R8-2010-0033 and any subsequent amendments thereto."

DRAFT

Preparer's Signature

Date

Sarah Kowalski, P.E.

Preparer's Printed Name

Senior Engineer

Preparer's Title/Position

Preparer's Licensure:



Table of Contents

Section A: Project and Site Information	6
Project Description	6
A.1 Maps and Site Plans.....	7
A.2 Identify Receiving Waters	7
A.3 Additional Permits/Approvals required for the Project:.....	8
Section B: Optimize Site Utilization (LID Principles).....	9
Section C: Delineate Drainage Management Areas (DMAs)S.....	11
Section D: Implement LID BMPs	13
D.1 Infiltration Applicability	13
D.2 Harvest and Use Assessment	14
D.3 Bioretention and Biotreatment Assessment.....	16
D.4 Feasibility Assessment Summaries.....	17
D.5 LID BMP Sizing	18
Section E: Alternative Compliance (LID Waiver Program)	21
E.1 Identify Pollutants of Concern	22
E.2 Stormwater Credits.....	23
E.3 Sizing Criteria	23
E.4 Treatment Control BMP Selection	24
Section F: Hydromodification	25
F.1 Hydrologic Conditions of Concern (HCOC) Analysis.....	25
F.2 HCOC Mitigation	26
Section G: Source Control BMPs	27
Section H: Construction Plan Checklist.....	31
Section I: Operation, Maintenance and Funding	32

List of Tables

Table A.1 Identification of Receiving Waters.....	7
Table A.2 Other Applicable Permits	8
Table C.1 DMA Classifications.....	11
Table C.2 Type 'A', Self-Treating Areas.....	11
Table C.3 Type 'B', Self-Retaining Areas	11
Table C.4 Type 'C', Areas that Drain to Self-Retaining Areas.....	12
Table C.5 Type 'D', Areas Draining to BMPs	12
Table D.1 Infiltration Feasibility	13
Table D.2 LID Prioritization Summary Matrix.....	17
Table D.3 DCV Calculations for LID BMPs	18
Table D.3 DCV Calculations for LID BMPs	19
Table D.3 DCV Calculations for LID BMPs	19
Table D.3 DCV Calculations for LID BMPs	20
Table D.3 DCV Calculations for LID BMPs	20
Table E.1 Potential Pollutants by Land Use Type	22
Table E.2 Water Quality Credits	23
Table E.3 Treatment Control BMP Sizing.....	23
Table E.4 Treatment Control BMP Selection	24
Table F.1 Hydrologic Conditions of Concern Summary	25
Table G.1 Permanent and Operational Source Control Measures.....	27
Table H.1 Construction Plan Cross-reference	31

List of Appendices

Appendix 1: Maps and Site Plans	33
Appendix 2: Construction Plans	- 34 -
Appendix 3: Soils Information.....	35
Appendix 4: Historical Site Conditions	36
Appendix 5: LID Infeasibility.....	37
Appendix 6: BMP Design Details.....	38
Appendix 7: Hydromodification	39
Appendix 8: Source Control	- 40 -
Appendix 9: O&M.....	- 41 -
Appendix 10: Educational Materials.....	- 42 -

Section A: Project and Site Information

PROJECT INFORMATION	
Type of Project:	<i>Commercial/Industrial</i>
Planning Area:	<i>N/A</i>
Community Name:	<i>Capstone Meniffee</i>
Development Name:	<i>Capstone Meniffee</i>
PROJECT LOCATION	
Latitude & Longitude (DMS): <i>33.740653, -117.217270</i>	
Project Watershed and Sub-Watershed: <i>Santa Ana, San Jacinto Valley</i>	
Gross Acres: <i>40.0 AC</i>	
APN(s): <i>330-190-002, 330-190-013, 330-190-003, 330-190-012, 330-190-004, 330-190-011, 330-190-005, 330-190-010</i>	
Map Book and Page No.: <i>Thomas Bros. Map Page 777, Grid G1</i>	
PROJECT CHARACTERISTICS	
Proposed or Potential Land Use(s)	<i>Commercial/Industrial</i>
Proposed or Potential SIC Code(s)	<i>1541, 4225 (see left)</i>
<i>SIC Code 1541 (General Contractors – Industrial Buildings and Warehouses) and SIC Code 4225 (General Warehousing and Storage)</i>	
Area of Project Footprint (SF)	<i>1,603,446</i>
Total Area of <u>proposed</u> Impervious Surfaces within the Project Limits (SF)/or Replacement	<i>1,502,704</i>
Does the project consist of offsite road improvements?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Does the project propose to construct unpaved roads?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Is the project part of a larger common plan of development (phased project)?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
EXISTING SITE CHARACTERISTICS	
Total area of <u>existing</u> Impervious Surfaces within the project limits (SF)	<i>0</i>
Is the project located within any MSHCP Criteria Cell?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
If so, identify the Cell number:	<i>N/A</i>
Are there any natural hydrologic features on the project site?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Is a Geotechnical Report attached?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
If no Geotech. Report, list the NRCS soils type(s) present on the site (A, B, C and/or D)	<i>N/A</i>
What is the Water Quality Design Storm Depth for the project?	<i>0.60</i>

Project Description

The project is located within the Santa Ana River watershed area. The project is proposing an industrial warehouse (approximately 700,037 square feet) on approximately 36.8 net acres of vacant land. Existing elevations across the site vary from 1480' at the southwest corner to 1424.5' at the northeast corner (NAVD88 datum). The site currently slopes down at approximately 3.0% grade to the northeast corner. The existing drainage pattern for the site and the general area is characterized by sheet flow to the northeast towards Ethanac Road.

All onsite flows generated from the project will be collected by proposed underground storage chambers located in the northernmost truck parking. The underground storage chambers will store water for HCOC mitigation and water quality treatment. The water quality volume will be pumped into a water quality

facility for treatment from the chambers. All high intensity flows will overflow into a high flow bypass and gravity flow north via MDP Line A-14a.

All offsite flows will be conveyed by channel, pipe, and street flow along the frontage roads. These roads (Wheat Street, Kuffel Road, and Byers Road) are not currently built and do not intercept offsite run-on. Proposed offsite street improvements will be treated by curb-opening modular wetlands. The street catch basins will be online drainage facilities and will have internal bypass structures for high flow runoff events.

A.1 Maps and Site Plans

When completing your Project-Specific WQMP, include a map of the local vicinity and existing site. In addition, include all grading, drainage, landscape/plant palette and other pertinent construction plans in Appendix 2. At a **minimum**, your WQMP Site Plan should include the following:

- Drainage Management Areas
- Proposed Structural BMPs
- Drainage Path
- Drainage Infrastructure, Inlets, Overflows
- Source Control BMPs
- Buildings, Roof Lines, Downspouts
- Impervious Surfaces
- Standard Labeling

Use your discretion on whether or not you may need to create multiple sheets or can appropriately accommodate these features on one or two sheets. Keep in mind that the Co-Permittee plan reviewer must be able to easily analyze your project utilizing this template and its associated site plans and maps.

A.2 Identify Receiving Waters

Using Table A.1 below, list in order of upstream to downstream, the receiving waters that the project site is tributary to. Continue to fill each row with the Receiving Water's 303(d) listed impairments (if any), designated beneficial uses, and proximity, if any, to a RARE beneficial use. Include a map of the receiving waters in Appendix 1.

Table A.1 Identification of Receiving Waters

Receiving Waters	EPA Approved 303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
San Jacinto River (Reach 3) (HU#802.11)	None	Intermittent: MUN, AGR, GWR, REC1, REC2, WARM, WILD	Not a water body classified as RARE
San Jacinto River (Reach 2) (HU#802.11)	None	AGR, GWR, WILD, MUN, REC1, REC2, WARM	Not a water body classified as RARE
Canyon Lake (HU#802.11, 802.12)	Nutrients, Pathogens	MUN, AGR, GWR, REC1, REC2, WARM, WILD	Not a water body classified as RARE
San Jacinto River (Reach 1) (HU#802.31, 802.32)	None	AGR, GWR, MUN, REC1, REC2, WARM, WILD	Not a water body classified as RARE
Lake Elsinore (HU#802.31)	PCBs, (Organic Compound), Nutrients, Organic Enrichment (Low DO), Sediment Toxicity, Unknown Toxicity	REC1, REC2, WARM, WILD	Not a water body classified as RARE

A.3 Additional Permits/Approvals required for the Project:

Table A.2 Other Applicable Permits

Agency	Permit Required	
State Department of Fish and Game, 1602 Streambed Alteration Agreement	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Cert.	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
US Army Corps of Engineers, CWA Section 404 Permit	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
US Fish and Wildlife, Endangered Species Act Section 7 Biological Opinion	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Statewide Construction General Permit Coverage	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
Statewide Industrial General Permit Coverage	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
Western Riverside MSHCP Consistency Approval (e.g., JPR, DBESP)	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N
Other (please list in the space below as required) Grading Permit	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N

If yes is answered to any of the questions above, the Co-Permittee may require proof of approval/coverage from those agencies as applicable including documentation of any associated requirements that may affect this Project-Specific WQMP.

Section B: Optimize Site Utilization (LID Principles)

Review of the information collected in Section 'A' will aid in identifying the principal constraints on site design and selection of LID BMPs as well as opportunities to reduce imperviousness and incorporate LID Principles into the site and landscape design. For example, **constraints** might include impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, high-intensity land use, heavy pedestrian or vehicular traffic, utility locations or safety concerns. **Opportunities** might include existing natural areas, low areas, oddly configured or otherwise unbuildable parcels, easements and landscape amenities including open space and buffers (which can double as locations for bioretention BMPs), and differences in elevation (which can provide hydraulic head). Prepare a brief narrative for each of the site optimization strategies described below. This narrative will help you as you proceed with your LID design and explain your design decisions to others.

The 2010 Santa Ana MS4 Permit further requires that LID Retention BMPs (Infiltration Only or Harvest and Use) be used unless it can be shown that those BMPs are infeasible. Therefore, it is important that your narrative identify and justify if there are any constraints that would prevent the use of those categories of LID BMPs. Similarly, you should also note opportunities that exist which will be utilized during project design. Upon completion of identifying Constraints and Opportunities, include these on your WQMP Site plan in Appendix 1.

Site Optimization

The following questions are based upon Section 3.2 of the WQMP Guidance Document. Review of the WQMP Guidance Document will help you determine how best to optimize your site and subsequently identify opportunities and/or constraints, and document compliance.

Did you identify and preserve existing drainage patterns? If so, how? If not, why?

Yes, the site topography currently slopes to the northeastern corner of the site. There are no existing storm drain inlets near the perimeter of the property, and the surrounding streets are currently undeveloped. The proposed development will include "half-width plus one lane" street improvements along the west, east, and north sides of the property (Wheat Street, Byers Road, and Kuffel Road, respectively). These street designs will mimic existing drainage patterns, directing flows to the north. Proposed underground storage chambers will be provided at the north end of the property to detain onsite runoff from the site. Overflow from the site will discharge to the proposed MDP Line A-14a, which outlets into the constructed, Flood-maintained open channel north of Ethanac Road.

Did you identify and protect existing vegetation? If so, how? If not, why?

No, the site is currently undeveloped with little or no vegetation. There are no areas of dense vegetation or well-established trees.

Did you identify and preserve natural infiltration capacity? If so, how? If not, why?

No. The entire site is underlain with hydrologic soil groups C and D, yielding poor infiltration rates. Additionally, infiltration testing was performed in northern end of the site. The infiltration rates do not meet the minimum required infiltration rate of 1.6 in/hr as stated in the Riverside County LID Manual in the provided test locations. As such, the existing poor infiltration capacity has not been adversely impacted by the proposed development.

Did you identify and minimize impervious area? If so, how? If not, why?

Yes, impervious area was minimized given the proposed site usage and required materials. The minimum landscaping pervious cover was achieved per code.

Did you identify and disperse runoff to adjacent pervious areas? If so, how? If not, why?

Given the commercial use of the site, very little natural infiltration will occur. However, care will be exercised during precise grading to potentially direct runoff where feasible to any open landscape areas before entering the storm drain system.

Section C: Delineate Drainage Management Areas (DMAs)

Utilizing the procedure in Section 3.3 of the WQMP Guidance Document which discusses the methods of delineating and mapping your project site into individual DMAs, complete Table C.1 below to appropriately categorize the types of classification (e.g., Type A, Type B, etc.) per DMA for your project site. Upon completion of this table, this information will then be used to populate and tabulate the corresponding tables for their respective DMA classifications.

Table C.1 DMA Classifications

DMA Name or ID	Surface Type(s) ¹	Area (Sq. Ft.)	DMA Type
DMA-A			
R-A	Roofs	701,204	D
L-A	Ornamental Landscaping	222,860	D
H-A	Concrete or Asphalt	678,320	D
BMP-A	Ornamental Landscaping	900	D
DMA-B			
B-W	Concrete or Asphalt	44,360	D
B-K-1	Concrete or Asphalt	19,830	D
B-K-2	Concrete or Asphalt	16,310	D
B-B	Concrete or Asphalt	44,800	D
B-SELF-TREAT	Natural Soil (Type D)	15,160	A

¹Reference Table 2-1 in the WQMP Guidance Document to populate this column

Table C.2 Type 'A', Self-Treating Areas

DMA Name or ID	Area (Sq. Ft.)	Stabilization Type	Irrigation Type (if any)
B-SELF-TREAT	15,160	Natural Soil (Type D)	n/a

Table C.3 Type 'B', Self-Retaining Areas

Self-Retaining Area				Type 'C' DMAs that are draining to the Self-Retaining Area		
DMA Name/ ID	Post-project surface type	Area (square feet)	Storm Depth (inches)	DMA Name / ID	[C] from Table C.4	Required Retention Depth (inches)
		[A]	[B]		[C]	

--	--	--	--	--	--	--

$$[D] = [B] + \frac{[B] \cdot [C]}{[A]}$$

Table C.4 Type 'C', Areas that Drain to Self-Retaining Areas

DMA					Receiving Self-Retaining DMA		
DMA Name/ ID	Area (square feet)	Post-project surface type	Runoff factor	Product	DMA name /ID	Area (square feet)	Ratio
	[A]		[B]	[C] = [A] x [B]		[D]	[C]/[D]

Table C.5 Type 'D', Areas Draining to BMPs

DMA Name or ID	BMP Name or ID
<i>DMA-A (R-A, L-A, H-A)</i>	<i>BMP-A – Bioscape Modular Wetland</i>
<i>B-W</i>	<i>B-W – Modular Wetland, Curb Inlet</i>
<i>B-K-1</i>	<i>B-K-1 – Modular Wetland, Curb Inlet</i>
<i>B-K-2</i>	<i>B-K-2 – Modular Wetland, Curb Inlet</i>
<i>B-B</i>	<i>B-B – Modular Wetland, Curb Inlet</i>

Note: More than one drainage management area can drain to a single LID BMP, however, one drainage management area may not drain to more than one BMP.

Section D: Implement LID BMPs

D.1 Infiltration Applicability

Is there an approved downstream ‘Highest and Best Use’ for stormwater runoff (see discussion in Chapter 2.4.4 of the WQMP Guidance Document for further details)? Y N

If yes has been checked, Infiltration BMPs shall not be used for the site. If no, continue working through this section to implement your LID BMPs. It is recommended that you contact your Co-Permittee to verify whether or not your project discharges to an approved downstream ‘Highest and Best Use’ feature.

Geotechnical Report

A Geotechnical Report or Phase I Environmental Site Assessment may be required by the Copermitttee to confirm present and past site characteristics that may affect the use of Infiltration BMPs. In addition, the Co-Permittee, at their discretion, may not require a geotechnical report for small projects as described in Chapter 2 of the WQMP Guidance Document. If a geotechnical report has been prepared, include it in Appendix 3. In addition, if a Phase I Environmental Site Assessment has been prepared, include it in Appendix 4.

Is this project classified as a small project consistent with the requirements of Chapter 2 of the WQMP Guidance Document? Y N

Infiltration Feasibility

Table D.1 below is meant to provide a simple means of assessing which DMAs on your site support Infiltration BMPs and is discussed in the WQMP Guidance Document in Chapter 2.4.5. Check the appropriate box for each question and then list affected DMAs as applicable. If additional space is needed, add a row below the corresponding answer.

Table D.1 Infiltration Feasibility

Does the project site...	YES	NO
...have any DMAs with a seasonal high groundwater mark shallower than 10 feet? If Yes, list affected DMAs:		X
...have any DMAs located within 100 feet of a water supply well? If Yes, list affected DMAs:		X
...have any areas identified by the geotechnical report as posing a public safety risk where infiltration of stormwater could have a negative impact? If Yes, list affected DMAs:		X
...have measured in-situ infiltration rates of less than 1.6 inches / hour? If Yes, list affected DMAs: <i>DMA-A. Refer to attached percolation test for measured rates.</i>	X	
...have significant cut and/or fill conditions that would preclude in-situ testing of infiltration rates at the final infiltration surface? If Yes, list affected DMAs:		X
...geotechnical report identify other site-specific factors that would preclude effective and safe infiltration? Describe here:		X

If you answered “Yes” to any of the questions above for any DMA, Infiltration BMPs should not be used for those DMAs and you should proceed to the assessment for Harvest and Use below.

D.2 Harvest and Use Assessment

Please check what applies:

- Reclaimed water will be used for the non-potable water demands for the project.
- Downstream water rights may be impacted by Harvest and Use as approved by the Regional Board (verify with the Copermitttee).
- The Design Capture Volume will be addressed using Infiltration Only BMPs. In such a case, Harvest and Use BMPs are still encouraged, but it would not be required if the Design Capture Volume will be infiltrated or evapotranspired.

If any of the above boxes have been checked, Harvest and Use BMPs need not be assessed for the site. If neither of the above criteria applies, follow the steps below to assess the feasibility of irrigation use, toilet use and other non-potable uses (e.g., industrial use).

Irrigation Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for Irrigation Use BMPs on your site:

- Step 1: Identify the total area of irrigated landscape on the site, and the type of landscaping used.
Total Area of Irrigated Landscape: 5.18 AC
Type of Landscaping (Conservation Design or Active Turf): Conservation design
- Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for irrigation use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.
Total Area of Impervious Surfaces: 31.6 AC
- Step 3: Cross reference the Design Storm depth for the project site (see Exhibit A of the WQMP Guidance Document) with the left column of Table 2-3 in Chapter 2 to determine the minimum area of Effective Irrigated Area per Tributary Impervious Area (EIATIA).
Enter your EIATIA factor: 0.79
- Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum irrigated area that would be required.
Minimum required irrigated area: 25.0 AC
- Step 5: Determine if harvesting stormwater runoff for irrigation use is feasible for the project by comparing the total area of irrigated landscape (Step 1) to the minimum required irrigated area (Step 4).

Minimum required irrigated area (Step 4)	Available Irrigated Landscape (Step 1)
25.0 AC	5.18 AC

Toilet Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for toilet flushing uses on your site:

Step 1: Identify the projected total number of daily toilet users during the wet season, and account for any periodic shut downs or other lapses in occupancy:

Projected Number of Daily Toilet Users: 100 daily users

Project Type: Commercial/Industrial

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for toilet use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: 31.6 AC

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-1 in Chapter 2 to determine the minimum number of toilet users per tributary impervious acre (TUTIA).

Enter your TUTIA factor: 132 tu/ac

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum number of toilet users that would be required.

Minimum number of toilet users: 4,171 daily users

Step 5: Determine if harvesting stormwater runoff for toilet flushing use is feasible for the project by comparing the Number of Daily Toilet Users (Step 1) to the minimum required number of toilet users (Step 4).

Minimum required Toilet Users (Step 4)	Projected number of toilet users (Step 1)
<i>4,171 daily users</i>	<i>100</i>

Other Non-Potable Use Feasibility

Are there other non-potable uses for stormwater runoff on the site (e.g. industrial use)? See Chapter 2 of the Guidance for further information. If yes, describe below. If no, write N/A.

N/A

Step 1: Identify the projected average daily non-potable demand, in gallons per day, during the wet season and accounting for any periodic shut downs or other lapses in occupancy or operation.

Average Daily Demand: Projected Average Daily Use (gpd)

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for the identified non-potable use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

Total Area of Impervious Surfaces: Insert Area (Acres)

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-3 in Chapter 2 to determine the minimum demand for non-potable uses per tributary impervious acre.

Enter the factor from Table 2-3: Enter Value

Step 4: Multiply the unit value obtained from Step 4 by the total of impervious areas from Step 3 to develop the minimum number of gallons per day of non-potable use that would be required.

Minimum required use: Minimum use required (gpd)

Step 5: Determine if harvesting stormwater runoff for other non-potable use is feasible for the project by comparing the Number of Daily Toilet Users (Step 1) to the minimum required number of toilet users (Step 4).

Minimum required non-potable use (Step 4)	Projected average daily use (Step 1)
Minimum use required (gpd)	Projected Average Daily Use (gpd)

If Irrigation, Toilet and Other Use feasibility anticipated demands are less than the applicable minimum values, Harvest and Use BMPs are not required and you should proceed to utilize LID Bioretention and Biotreatment, unless a site-specific analysis has been completed that demonstrates technical infeasibility as noted in D.3 below.

D.3 Bioretention and Biotreatment Assessment

Other LID Bioretention and Biotreatment BMPs as described in Chapter 2.4.7 of the WQMP Guidance Document are feasible on nearly all development sites with sufficient advance planning.

Select one of the following:

LID Bioretention/Biotreatment BMPs will be used for some or all DMAs of the project as noted below in Section D.4 (note the requirements of Section 3.4.2 in the WQMP Guidance Document).

A site-specific analysis demonstrating the technical infeasibility of all LID BMPs has been performed and is included in Appendix 5. If you plan to submit an analysis demonstrating the technical infeasibility of LID BMPs, request a pre-submittal meeting with the Copermittee to discuss this option. Proceed to Section E to document your alternative compliance measures.

D.4 Feasibility Assessment Summaries

From the Infiltration, Harvest and Use, Bioretention and Biotreatment Sections above, complete Table D.2 below to summarize which LID BMPs are technically feasible, and which are not, based upon the established hierarchy.

Table D.2 LID Prioritization Summary Matrix

DMA Name/ID	LID BMP Hierarchy				No LID (Alternative Compliance)
	1. Infiltration	2. Harvest and use	3. Bioretention	4. Biotreatment	
<i>DMA-A (R-A, L-A, H-A, and BMP-A)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>B-W</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>B-K-1</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>B-K-2</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>B-B</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For those DMAs where LID BMPs are not feasible, provide a brief narrative below summarizing why they are not feasible, include your technical infeasibility criteria in Appendix 5, and proceed to Section E below to document Alternative Compliance measures for those DMAs. Recall that each proposed DMA must pass through the LID BMP hierarchy before alternative compliance measures may be considered.

N/A

D.5 LID BMP Sizing

Each LID BMP must be designed to ensure that the Design Capture Volume will be addressed by the selected BMPs. First, calculate the Design Capture Volume for each LID BMP using the V_{BMP} worksheet in Appendix F of the LID BMP Design Handbook. Second, design the LID BMP to meet the required V_{BMP} using a method approved by the Copermittee. Utilize the worksheets found in the LID BMP Design Handbook or consult with your Copermittee to assist you in correctly sizing your LID BMPs. Complete Table D.3 below to document the Design Capture Volume and the Proposed Volume for each LID BMP. Provide the completed design procedure sheets for each LID BMP in Appendix 6. You may add additional rows to the table below as needed.

Table D.3 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	BMP-A		
	[A]					[B]	[C]	[A] x [C]
R-A	701,204	Roofs	1.0	0.89	625,474			
L-A	222,860	Ornamental Landscaping	0.1	0.11	24,616.7			
H-A	678,320	Concrete or Asphalt	1.0	0.89	605,061.4			
BMP-A	900	Ornamental Landscaping	0.1	0.11	99.4			
	$A_T = \Sigma[A]$				$\Sigma = [D]$	[E]	$[F] = \frac{[D] \times [E]}{12}$	[G]
	1,603,284				1,255,251.5	0.60	62,762.6	63,825

[B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

Table D.4 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas \times Runoff Factor	<i>B-W</i>			
	[A]				[C]				[A] \times [C]
B-W	44,360	Concrete or Asphalt	1.0	0.89	39,569.1	Design Rainfall Intensity (in/hr)	Design Rate, (cfs)	Flow Q_{BMP}	Proposed Flow Rate (cfs)
	$A_T = \Sigma[A]$				$\Sigma = [D]$	[E]	$[F] = \frac{[D] \times [E]}{43,560}$		[G]
	44,360				39,569.1	0.20	0.2		0.23

[B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

Table D.5 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas \times Runoff Factor	<i>B-K-1</i>			
	[A]				[C]				[A] \times [C]
B-K-1	19,830	Concrete or Asphalt	1.0	0.89	17,688.4	Design Rainfall Intensity (in/hr)	Design Rate, (cfs)	Flow Q_{BMP}	Proposed Flow Rate (cfs)
	$A_T = \Sigma[A]$				$\Sigma = [D]$	[E]	$[F] = \frac{[D] \times [E]}{43,560}$		[G]
	19,830				17,688.4	0.20	0.1		0.12

[B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

Table D.6 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas Runoff Factor x	B-K-2			
						Design Rainfall Intensity (in/hr)	Design Rate, (cfs)	Flow Q_{BMP}	Proposed Flow Rate (cfs)
	[A]		[B]	[C]	[A] x [C]				
B-K-2	16,310	Concrete or Asphalt	1.0	0.89	14,548.5				
	$A_T = \Sigma[A]$				$\Sigma = [D]$	[E]	$[F] = \frac{[D] \times [E]}{43,560}$	[G]	
	16,310				14,548.5	0.20	0.1		0.12

[B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

Table D.7 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas Runoff Factor x	B-B			
						Design Rainfall Intensity (in/hr)	Design Rate, (cfs)	Flow Q_{BMP}	Proposed Flow Rate (cfs)
	[A]		[B]	[C]	[A] x [C]				
B-B	44,800	Concrete or Asphalt	1.0	0.89	39,961.6				
	$A_T = \Sigma[A]$				$\Sigma = [D]$	[E]	$[F] = \frac{[D] \times [E]}{43,560}$	[G]	
	44,800				39,961.6	0.20	0.2		0.23

[B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

Section E: Alternative Compliance (LID Waiver Program)

LID BMPs are expected to be feasible on virtually all projects. Where LID BMPs have been demonstrated to be infeasible as documented in Section D, other Treatment Control BMPs must be used (subject to LID waiver approval by the Copermittee). Check one of the following Boxes:

LID Principles and LID BMPs have been incorporated into the site design to fully address all Drainage Management Areas. No alternative compliance measures are required for this project and thus this Section is not required to be completed.

- Or -

The following Drainage Management Areas are unable to be addressed using LID BMPs. A site-specific analysis demonstrating technical infeasibility of LID BMPs has been approved by the Co-Permittee and included in Appendix 5. Additionally, no downstream regional and/or sub-regional LID BMPs exist or are available for use by the project. The following alternative compliance measures on the following pages are being implemented to ensure that any pollutant loads expected to be discharged by not incorporating LID BMPs, are fully mitigated.

E.1 Identify Pollutants of Concern

Utilizing Table A.1 from Section A above which noted your project's receiving waters and their associated EPA approved 303(d) listed impairments, cross reference this information with that of your selected Priority Development Project Category in Table E.1 below. If the identified General Pollutant Categories are the same as those listed for your receiving waters, then these will be your Pollutants of Concern and the appropriate box or boxes will be checked on the last row. The purpose of this is to document compliance and to help you appropriately plan for mitigating your Pollutants of Concern in lieu of implementing LID BMPs.

Table E.1 Potential Pollutants by Land Use Type

Priority Project Categories and/or Project Features (check those that apply)	General Pollutant Categories								
	Bacterial Indicators	Metals	Nutrients	Pesticides	Toxic Organic Compounds	Sediments	Trash & Debris	Oil & Grease	
<input type="checkbox"/> Detached Residential Development	P	N	P	P	N	P	P	P	
<input type="checkbox"/> Attached Residential Development	P	N	P	P	N	P	P	P ⁽²⁾	
<input checked="" type="checkbox"/> Commercial/Industrial Development	P ⁽³⁾	P	P ⁽¹⁾	P ⁽¹⁾	P ⁽⁵⁾	P ⁽¹⁾	P	P	
<input type="checkbox"/> Automotive Repair Shops	N	P	N	N	P ^(4, 5)	N	P	P	
<input type="checkbox"/> Restaurants (>5,000 ft ²)	P	N	N	N	N	N	P	P	
<input type="checkbox"/> Hillside Development (>5,000 ft ²)	P	N	P	P	N	P	P	P	
<input checked="" type="checkbox"/> Parking Lots (>5,000 ft ²)	P ⁽⁶⁾	P	P ⁽¹⁾	P ⁽¹⁾	P ⁽⁴⁾	P ⁽¹⁾	P	P	
<input type="checkbox"/> Retail Gasoline Outlets	N	P	N	N	P	N	P	P	
Project Priority Pollutant(s) of Concern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

P = Potential

N = Not Potential

(1) A potential Pollutant if non-native landscaping exists or is proposed onsite; otherwise not expected

(2) A potential Pollutant if the project includes uncovered parking areas; otherwise not expected

(3) A potential Pollutant is land use involving animal waste

(4) Specifically petroleum hydrocarbons

(5) Specifically solvents

(6) Bacterial indicators are routinely detected in pavement runoff

E.2 Stormwater Credits

Projects that cannot implement LID BMPs but nevertheless implement smart growth principles are potentially eligible for Stormwater Credits. Utilize Table 3-8 within the WQMP Guidance Document to identify your Project Category and its associated Water Quality Credit. If not applicable, write N/A.

Table E.2 Water Quality Credits

Qualifying Project Categories	Credit Percentage ²
N/A	
Total Credit Percentage ¹	

¹Cannot Exceed 50%

²Obtain corresponding data from Table 3-8 in the WQMP Guidance Document

E.3 Sizing Criteria

After you appropriately considered Stormwater Credits for your project, utilize Table E.3 below to appropriately size them to the DCV, or Design Flow Rate, as applicable. Please reference Chapter 3.5.2 of the WQMP Guidance Document for further information.

Table E.3 Treatment Control BMP Sizing

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I _f	DMA Runoff Factor	DMA Area x Runoff Factor	Enter BMP Name / Identifier Here			
						Design Storm Depth (in)	Minimum Design Capture Volume or Design Flow Rate (cubic feet or cfs)	Total Storm Water Credit % Reduction	Proposed Volume or Flow on Plans (cubic feet or cfs)
N/A	[A]		[B]	[C]	[A] x [C]				
	$A_T = \sum[A]$				$\sum = [D]$	[E]	$[F] = \frac{[D] \times [E]}{[G]}$	$[F] \times (1-[H])$	[I]

[B], [C] is obtained as described in Section 2.3.1 from the WQMP Guidance Document

[E] is obtained from Exhibit A in the WQMP Guidance Document

[G] is for Flow-Based Treatment Control BMPs [G] = 43,560, for Volume-Based Control Treatment BMPs, [G] = 12

[H] is from the Total Credit Percentage as Calculated from Table E.2 above

[I] as obtained from a design procedure sheet from the BMP manufacturer and should be included in Appendix 6

E.4 Treatment Control BMP Selection

Treatment Control BMPs typically provide proprietary treatment mechanisms to treat potential pollutants in runoff, but do not sustain significant biological processes. Treatment Control BMPs must have a removal efficiency of a medium or high effectiveness as quantified below:

- **High:** equal to or greater than 80% removal efficiency
- **Medium:** between 40% and 80% removal efficiency

Such removal efficiency documentation (e.g., studies, reports, etc.) as further discussed in Chapter 3.5.2 of the WQMP Guidance Document, must be included in Appendix 6. In addition, ensure that proposed Treatment Control BMPs are properly identified on the WQMP Site Plan in Appendix 1.

Table E.4 Treatment Control BMP Selection

Selected Treatment Control BMP Name or ID ¹	Priority Pollutant(s) of Concern to Mitigate ²	Removal Efficiency Percentage ³
N/A		

¹ Treatment Control BMPs must not be constructed within Receiving Waters. In addition, a proposed Treatment Control BMP may be listed more than once if they possess more than one qualifying pollutant removal efficiency.

² Cross Reference Table E.1 above to populate this column.

³ As documented in a Co-Permittee Approved Study and provided in Appendix 6.

Section F: Hydromodification

F.1 Hydrologic Conditions of Concern (HCOC) Analysis

Once you have determined that the LID design is adequate to address water quality requirements, you will need to assess if the proposed LID Design may still create a HCOC. Review Chapters 2 and 3 (including Figure 3-7) of the WQMP Guidance Document to determine if your project must mitigate for Hydromodification impacts. If your project meets one of the following criteria which will be indicated by the check boxes below, you do not need to address Hydromodification at this time. However, if the project does not qualify for Exemptions 1, 2 or 3, then additional measures must be added to the design to comply with HCOC criteria. This is discussed in further detail below in Section F.2.

HCOC EXEMPTION 1: The Priority Development Project disturbs less than one acre. The Copermitttee has the discretion to require a Project-Specific WQMP to address HCOCs on projects less than one acre on a case by case basis. The disturbed area calculation should include all disturbances associated with larger common plans of development.

Does the project qualify for this HCOC Exemption? Y N

If Yes, HCOC criteria do not apply.

HCOC EXEMPTION 2: The volume and time of concentration¹ of storm water runoff for the post-development condition is not significantly different from the pre-development condition for a 2-year return frequency storm (a difference of 5% or less is considered insignificant) using one of the following methods to calculate:

- Riverside County Hydrology Manual
- Technical Release 55 (TR-55): Urban Hydrology for Small Watersheds (NRCS 1986), or derivatives thereof, such as the Santa Barbara Urban Hydrograph Method
- Other methods acceptable to the Co-Permittee

Does the project qualify for this HCOC Exemption? Y N

If Yes, report results in Table F.1 below and provide your substantiated hydrologic analysis in Appendix 7.

Table F.1 Hydrologic Conditions of Concern Summary

	2 year – 24 hour		
	Pre-condition	Post-condition	% Difference
Time of Concentration	N/A	N/A	N/A
Volume (Cubic Feet)	N/A	N/A	N/A

¹ Time of concentration is defined as the time after the beginning of the rainfall when all portions of the drainage basin are contributing to flow at the outlet.

HCOC EXEMPTION 3: All downstream conveyance channels to an adequate sump (for example, Prado Dam, Lake Elsinore, Canyon Lake, Santa Ana River, or other lake, reservoir or naturally erosion resistant feature) that will receive runoff from the project are engineered and regularly maintained to ensure design flow capacity; no sensitive stream habitat areas will be adversely affected; or are not identified on the Co-Permittees Hydromodification Sensitivity Maps.

Does the project qualify for this HCOC Exemption? Y N

If Yes, HCOC criteria do not apply and note below which adequate sump applies to this HCOC qualifier:

Per City Plan Check, the Regional Water Board is no longer accepting HCOC Exemption 3 for Lake Elsinore and Canyon Lake as sumps. Therefore, HCOC Mitigation is required for this project site.

F.2 HCOC Mitigation

If none of the above HCOC Exemption Criteria are applicable, HCOC criteria is considered mitigated if they meet one of the following conditions:

- a. Additional LID BMPS are implemented onsite or offsite to mitigate potential erosion or habitat impacts as a result of HCOCs. This can be conducted by an evaluation of site-specific conditions utilizing accepted professional methodologies published by entities such as the California Stormwater Quality Association (CASQA), the Southern California Coastal Water Research Project (SCCRWP), or other Co-Permittee approved methodologies for site-specific HCOC analysis.
- b. The project is developed consistent with an approved Watershed Action Plan that addresses HCOC in Receiving Waters.
- c. Mimicking the pre-development hydrograph with the post-development hydrograph, for a 2-year return frequency storm. Generally, the hydrologic conditions of concern are not significant, if the post-development hydrograph is no more than 10% greater than pre-development hydrograph. In cases where excess volume cannot be infiltrated or captured and reused, discharge from the site must be limited to a flow rate no greater than 110% of the pre-development 2-year peak flow.

Be sure to include all pertinent documentation used in your analysis of the items a, b or c in Appendix 7.

The project site does not meet the HCOC exemptions in Section F.1, therefore CMP chamber systems with orifice outlets provided will mitigate flows to be within 10% of the pre-development flows for the 2-year, 24-hour storm event to meet the condition C in Section F.2. There are no offsite flows from the perimeter streets entering the project site. Therefore, the proposed CMP chamber and orifice systems will only mitigate onsite flows. The 2-year, 24-hour unit hydrograph was analyzed for the existing and proposed condition to determine the peak flow rates and volumes. For preliminary sizing during this entitlement phase, the difference in existing and proposed volumes was used to size onsite CMP chamber systems. During final engineering, a routing analysis will need to be performed to determine the required orifice outlet sizing and to demonstrate that the proposed CMP chamber system has substantial volume needed to mitigate flows to existing condition flow rates. See Appendix 7 for the unit hydrograph analysis details.

Section G: Source Control BMPs

Source control BMPs include permanent, structural features that may be required in your project plans — such as roofs over and berms around trash and recycling areas — and Operational BMPs, such as regular sweeping and “housekeeping”, that must be implemented by the site’s occupant or user. The MEP standard typically requires both types of BMPs. In general, Operational BMPs cannot be substituted for a feasible and effective permanent BMP. Using the Pollutant Sources/Source Control Checklist in Appendix 8, review the following procedure to specify Source Control BMPs for your site:

1. **Identify Pollutant Sources:** Review Column 1 in the Pollutant Sources/Source Control Checklist. Check off the potential sources of Pollutants that apply to your site.
2. **Note Locations on Project-Specific WQMP Exhibit:** Note the corresponding requirements listed in Column 2 of the Pollutant Sources/Source Control Checklist. Show the location of each Pollutant source and each permanent Source Control BMP in your Project-Specific WQMP Exhibit located in Appendix 1.
3. **Prepare a Table and Narrative:** Check off the corresponding requirements listed in Column 3 in the Pollutant Sources/Source Control Checklist. In the left column of Table G.1 below, list each potential source of runoff Pollutants on your site (from those that you checked in the Pollutant Sources/Source Control Checklist). In the middle column, list the corresponding permanent, Structural Source Control BMPs (from Columns 2 and 3 of the Pollutant Sources/Source Control Checklist) used to prevent Pollutants from entering runoff. **Add additional narrative** in this column that explains any special features, materials or methods of construction that will be used to implement these permanent, Structural Source Control BMPs.
4. **Identify Operational Source Control BMPs:** To complete your table, refer once again to the Pollutant Sources/Source Control Checklist. List in the right column of your table the Operational BMPs that should be implemented as long as the anticipated activities continue at the site. Copermittee stormwater ordinances require that applicable Source Control BMPs be implemented; the same BMPs may also be required as a condition of a use permit or other revocable Discretionary Approval for use of the site.

Table G.1 Permanent and Operational Source Control Measures

Potential Sources of Runoff pollutants	Permanent Structural Source Control BMPs	Operational Source Control BMPs
<i>A. On-site storm drain catch basins and grated inlets. Locations are shown on the PWQMP Exhibit in Appendix 1.</i>	<i>On-site storm drain signage will utilize language, “No Dumping Drains to River”, or equally approved text that is consistent with the City of Perris’ requirements. Landscape area drains surrounded by vegetation will not be signed. Catch Basin Markers may be available from the Riverside County Flood Control and Water District Conservation District, call 951-955-1200 to verify.</i>	<i>Maintain and periodically repaint or replace inlet markings. Provide stormwater pollution prevention information to new site owners, lessees, or operators. See applicable operational BMPs in Fact Sheet SC-44, “Drainage System Maintenance,” in Appendix 10 (CASQA Stormwater Quality Handbook at www.cabmphandbooks.com Include the following in lessee agreements: “Tenants shall not allow anyone to discharge</i>

	<p><i>On-site drainage structures, including all storm drain clean outs, area drains, inlets, catch basins, inlet & outlet structures, forebays, & water treatment control basins shall be inspected and maintained on a regular basis to insure their operational adequacy.</i></p>	<p><i>anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains”</i></p> <p><i>Maintenance should include removal of trash, debris, & sediment and the repair of any deficiencies or damage that may impact water quality.</i></p>
<i>B. Interior floor drains and elevator shaft sump</i>	<i>The interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer</i>	<i>Inspect and maintain drains to prevent blockages and overflow.</i>
<i>C. Landscape/Outdoor Pesticide Use</i>	<p><i>The final landscape shall be designed to accomplish all of the following:</i></p> <p><i>Preserve existing native trees, shrubs and ground cover to the maximum extent possible.</i></p> <p><i>Design landscape to minimize irrigation and runoff, to promote surface infiltration where appropriate and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.</i></p> <p><i>Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. Consider using pest-resistant plants, especially adjacent to hardscape.</i></p> <p><i>To ensure successful establishments, select plants appropriate to site, soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency and plant interactions.</i></p> <p><i>Pesticide usage should be at a necessary minimum and be consistent with the instructions contained on product labels and with the regulations administered by the State Department of Pesticide Regulation.</i></p> <p><i>Pesticides should be used at an absolute minimum or not at all in the retention/infiltration basin. If used, it should not be applied in close proximity to the rainy season.</i></p>	<p><i>Maintain landscaping using minimum or no pesticides</i></p> <p><i>See applicable operational BMPs in “What you should know for... Landscape and Gardening” at http://rcflood.org/stormwater and Appendix 10.</i></p> <p><i>Provide IPM information to new owners, lessees and operators.</i></p> <p><i>Landscape maintenance should include mowing, weeding, trimming, removal of trash & debris, repair of erosion, re-vegetation, and removal of cut & dead vegetation.</i></p> <p><i>Irrigation maintenance should include the repair of leaky or broken sprinkler heads, the maintaining of timing apparatus accuracy, and the maintaining of shut off valves in good working order.</i></p>
<i>D. Refuse Trash Storage</i>	<i>Trash container storage areas shall be paved with an impervious</i>	<i>Adequate number of receptacles shall be provided. Inspect</i>

<p>areas</p>	<p>surface, designed not to allow run-on from adjoining areas, designed to divert drainage from adjoining roofs and pavements from the surrounding area, and screened or walled to prevent off-site transport of trash.</p> <p>Trash dumpsters (containers) shall be leak proof and have attached covers or lids.</p> <p>Trash enclosures shall be roofed per City standards and the details on the PWQMP Exhibit in Appendix 1.</p> <p>Trash compactors shall be roofed and set on a concrete pad per City standards. The pad shall be a minimum of one foot larger all around than the trash compactor and sloped to drain to a sanitary sewer line. Connection of trash area drains to the MS4 is prohibited.</p> <p>See CASQA SD-32 BMP Fact Sheets in Appendix 10 for additional information.</p> <p>Signs shall be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.</p>	<p>receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered.</p> <p>Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs.</p> <p>Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site.</p> <p>See Fact Sheet SC-34, in Appendix 10, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbook at www.cabmphandbooks.com</p>
<p>E. Loading Docks</p>	<p>Loading docks will not be covered and are 4 feet above finished pavement surface.</p> <p>Spill kits are to be kept on-site at all times per SC-11.</p>	<p>Move loaded and unloaded items indoors as soon as possible. Inspect for accumulated trash and debris. Implement good housekeeping procedures on a regular basis. Sweep areas clean instead of using wash water.</p> <p>Loading docks will be kept in a clean and orderly condition, through a regular program of sweeping and litter control, and immediate clean up of any spills or broken containers. Property owner will ensure that loading docks will be swept as needed. Cleanup procedures will not include the use of wash-down water. Property owner will be responsible for implementation of loading dock housekeeping procedures See the Fact Sheet SC-30, in Appendix 10, "Outdoor Loading and Unloading" in the CASQA Stormwater Quality Handbooks at</p>

		www.cabmphandbooks.com
<i>F. Fire Sprinkler Test Water</i>	<i>Provide a means to drain fire sprinkler test water to the sanitary sewer.</i>	<i>See the note in the Fact Sheet SC-41, in Appendix 10, "Building and Grounds Maintenance", in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com</i>
<i>G. Miscellaneous Drain or Wash Water or Other Sources</i> <i>Boiler drain lines</i> <i>Condensate drain lines</i> <i>Rooftop equipment</i> <i>Drainage sumps</i> <i>Roofing, gutters and trim</i> <i>Other sources</i>	<i>Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system</i> <i>Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur.</i> <i>Condensate drain lines may not discharge to the storm drain system.</i> <i>Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment.</i> <i>Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water.</i> <i>Avoid roofing, gutters and trim made of copper or other unprotected metals that may leach into runoff.</i> <i>Include controls for other sources as specified by local reviewer.</i>	
<i>H. Plazas, sidewalks, and parking lots</i>	<i>Spill kits are to be kept on-site at all times per SC-11.</i>	<i>Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.</i>

Section H: Construction Plan Checklist

Populate Table H.1 below to assist the plan checker in an expeditious review of your project. The first two columns will contain information that was prepared in previous steps, while the last column will be populated with the corresponding plan sheets. This table is to be completed with the submittal of your final Project-Specific WQMP.

Table H.1 Construction Plan Cross-reference

BMP No. or ID	BMP Identifier and Description	Corresponding Plan Sheet(s)
*	*	*

Note that the updated table — or Construction Plan WQMP Checklist — is **only a reference tool** to facilitate an easy comparison of the construction plans to your Project-Specific WQMP. Co-Permittee staff can advise you regarding the process required to propose changes to the approved Project-Specific WQMP.

**To be included in final WQMP*

Section I: Operation, Maintenance and Funding

The Copermittee will periodically verify that Stormwater BMPs on your site are maintained and continue to operate as designed. To make this possible, your Copermittee will require that you include in Appendix 9 of this Project-Specific WQMP:

1. A means to finance and implement facility maintenance in perpetuity, including replacement cost.
2. Acceptance of responsibility for maintenance from the time the BMPs are constructed until responsibility for operation and maintenance is legally transferred. A warranty covering a period following construction may also be required.
3. An outline of general maintenance requirements for the Stormwater BMPs you have selected.
4. Figures delineating and designating pervious and impervious areas, location, and type of Stormwater BMP, and tables of pervious and impervious areas served by each facility. Geo-locating the BMPs using a coordinate system of latitude and longitude is recommended to help facilitate a future statewide database system.
5. A separate list and location of self-retaining areas or areas addressed by LID Principles that do not require specialized O&M or inspections but will require typical landscape maintenance as noted in Chapter 5, pages 85-86, in the WQMP Guidance. Include a brief description of typical landscape maintenance for these areas.

Your local Co-Permittee will also require that you prepare and submit a detailed Stormwater BMP Operation and Maintenance Plan that sets forth a maintenance schedule for each of the Stormwater BMPs built on your site. An agreement assigning responsibility for maintenance and providing for inspections and certification may also be required.

Details of these requirements and instructions for preparing a Stormwater BMP Operation and Maintenance Plan are in Chapter 5 of the WQMP Guidance Document.

Maintenance Mechanism: WQMP Covenant and Agreement

Will the proposed BMPs be maintained by a Home Owners' Association (HOA) or Property Owners Association (POA)?

Y N

Include your Operation and Maintenance Plan and Maintenance Mechanism in Appendix 9. Additionally, include all pertinent forms of educational materials for those personnel that will be maintaining the proposed BMPs within this Project-Specific WQMP in Appendix 10.

*Onsite BMP-A, a Bioscape Modular Wetlands, will be privately maintained by the property owner. Additionally, the underground storage chambers and lift station will likewise be privately maintained by the property owner. Offsite BMPs (B-W, B-K-1, B-K-2, and B-B), Modular Wetlands – curb inlets, will be within the public right of way and will be maintained by a public agency. **More information will be provided in final engineering.***

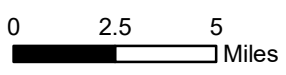
Appendix 1: Maps and Site Plans

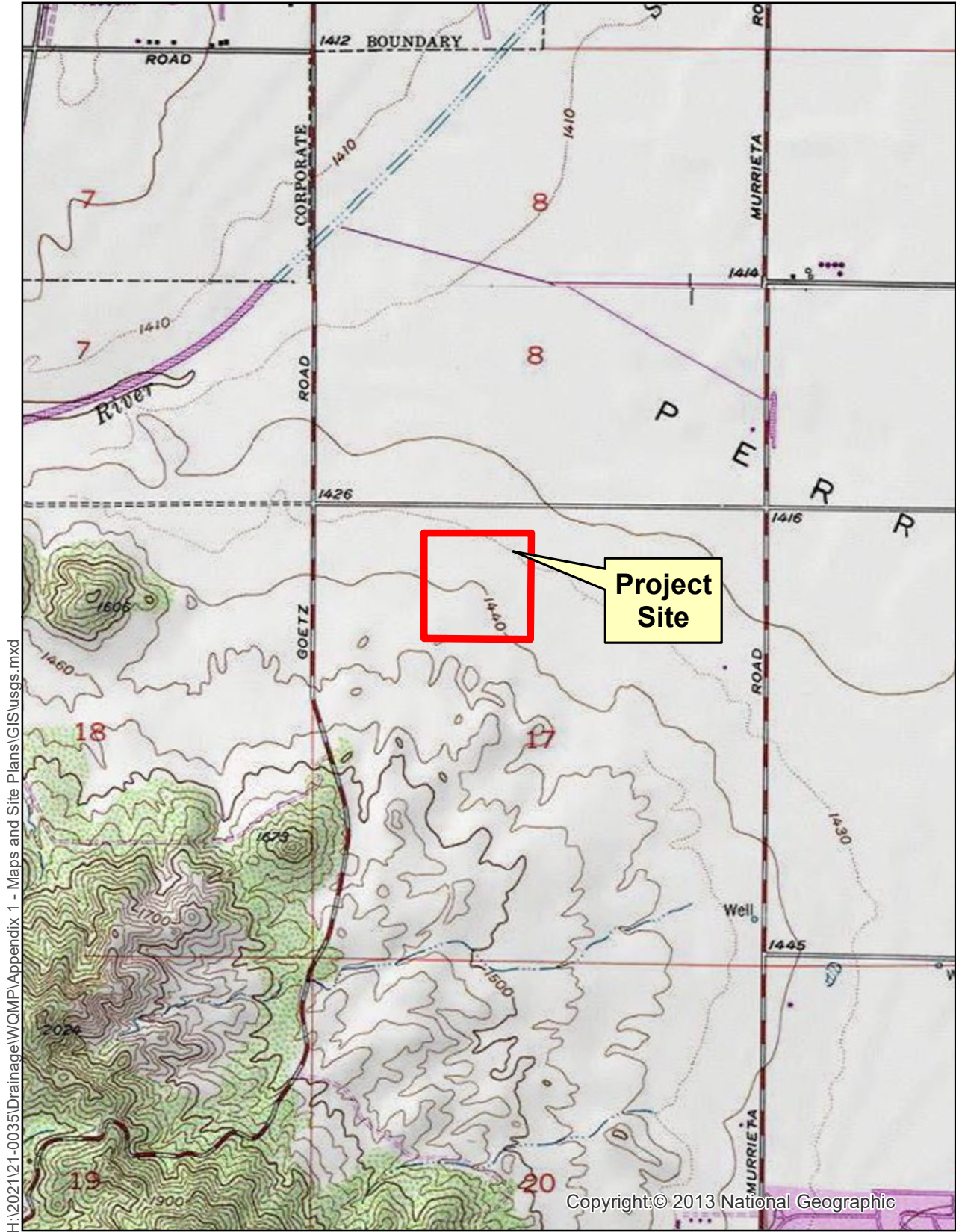
Location Map, WQMP Site Plan and Receiving Waters Map



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Figure 1. Vicinity Map





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Sources: ESRI / USGS 7.5min Quad
 DRGs: PERRIS / STEELE PEAK

Figure 2. USGS Topography Map

0 1,000 2,000
 Feet

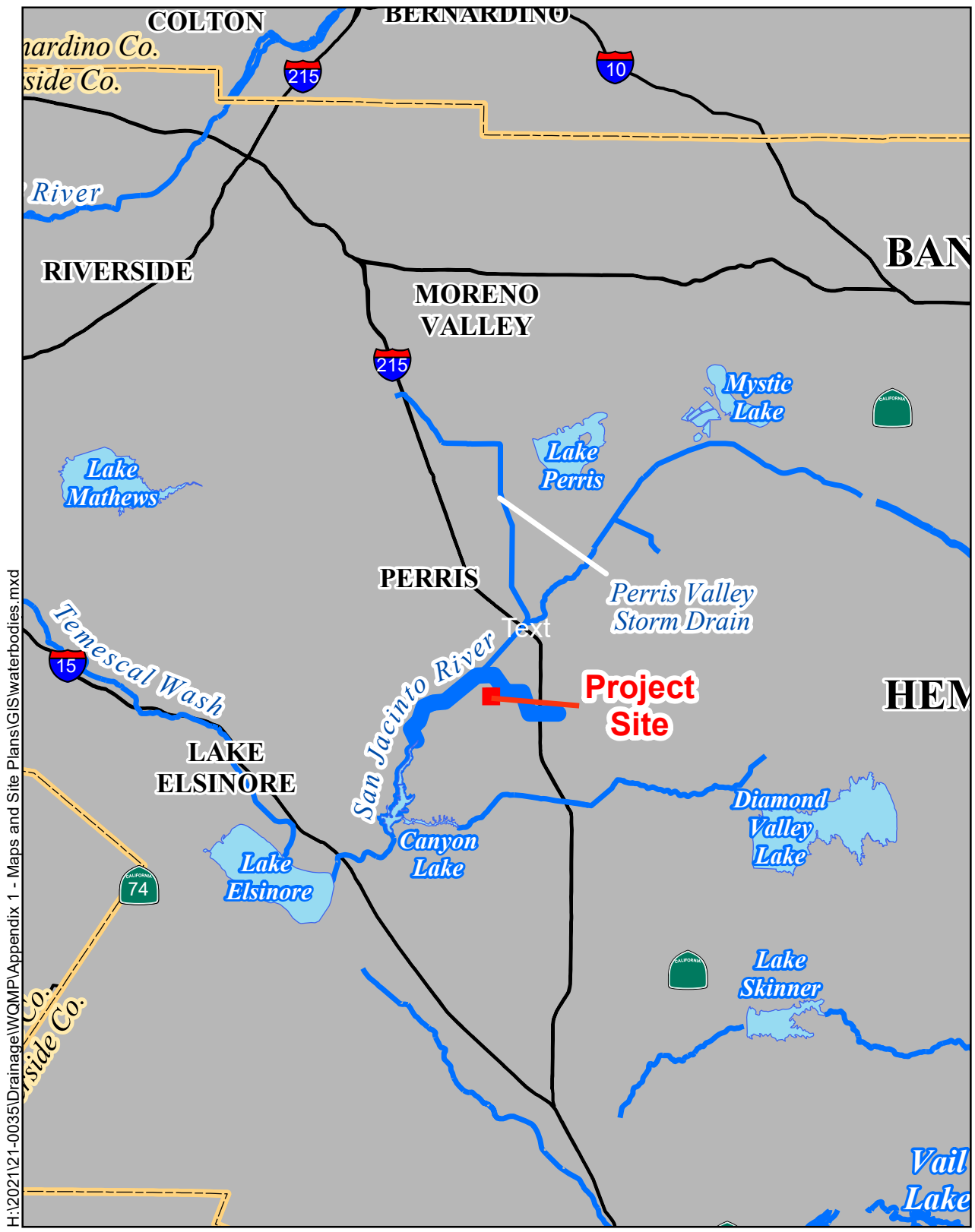


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Sources: County of Riverside GIS, 2013;
Eagle Aerial, April 2012.

Figure 3. Aerial Photograph



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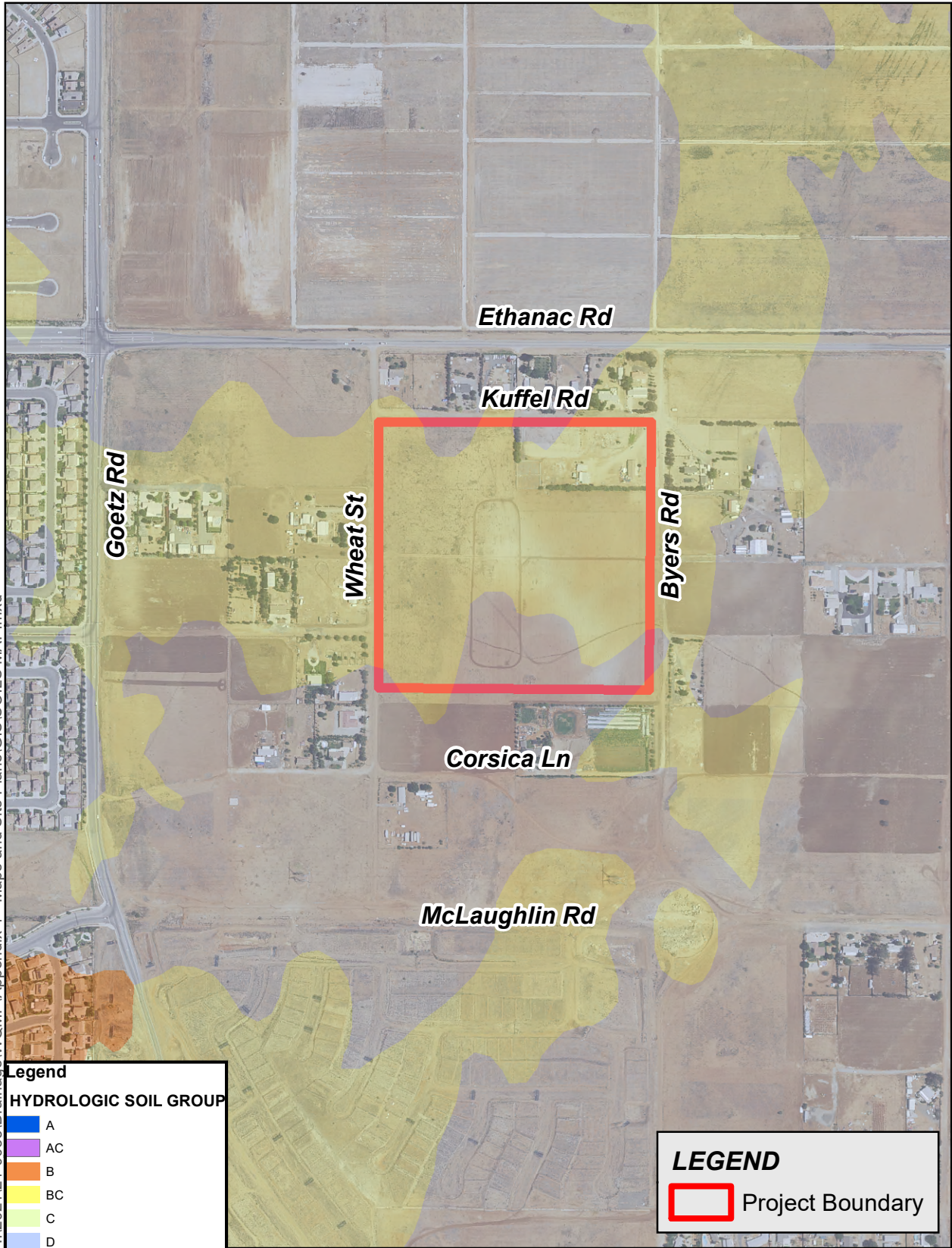
Sources: USGS 30 Meter DEM;
USGS Digital Line Graph

Figure 4. Receiving Waterbodies



Flowpath

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Legend

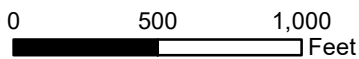
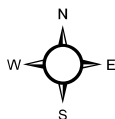
HYDROLOGIC SOIL GROUP

A
AC
B
BC
C
D

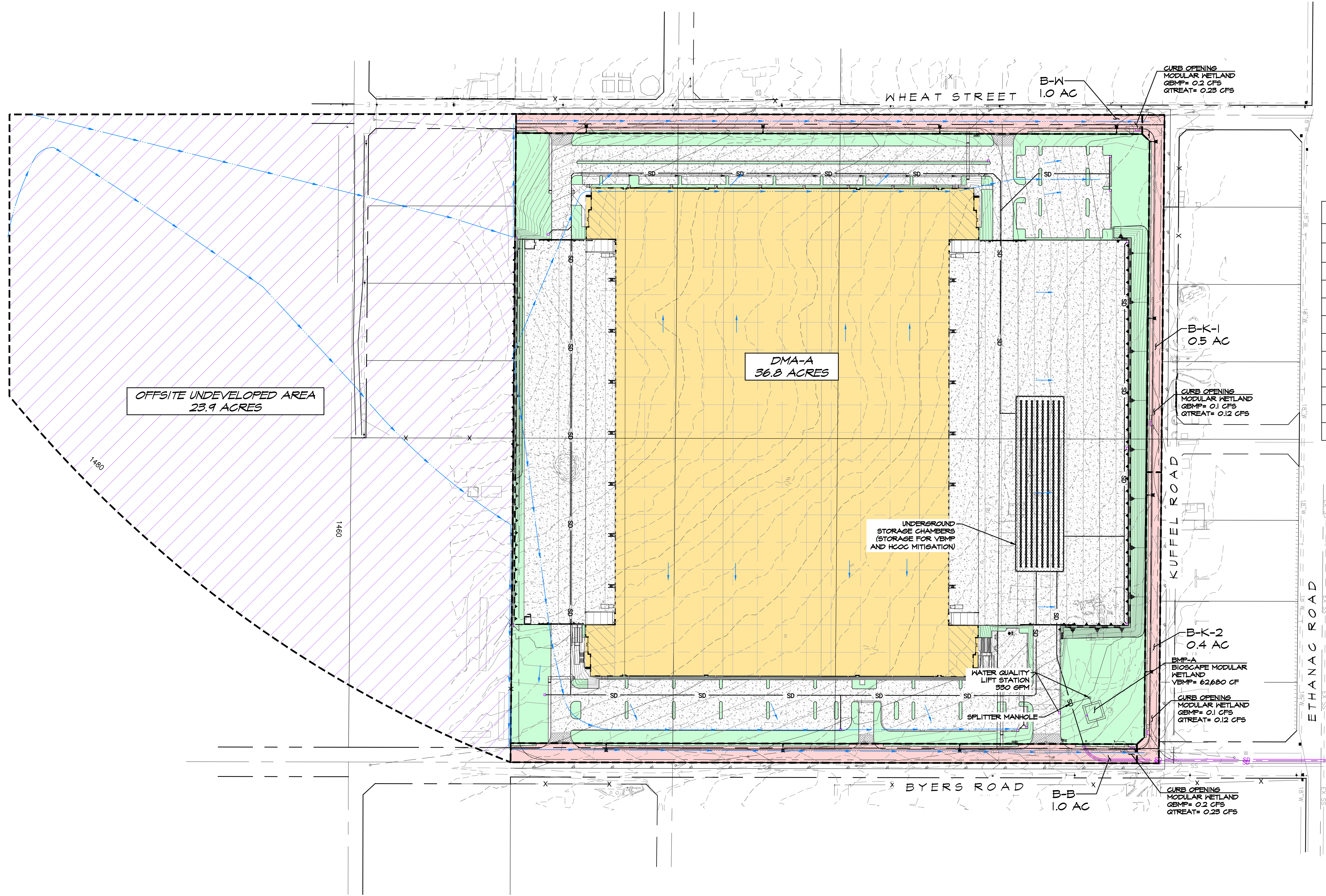
LEGEND

	Project Boundary
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Eagle Aerial, April 2010;
 Riverside County GIS, 2012
 RCFC&WCD Hydology Manual Plate C-1.30



Soils Map
 Perris Valley Logisitic Center



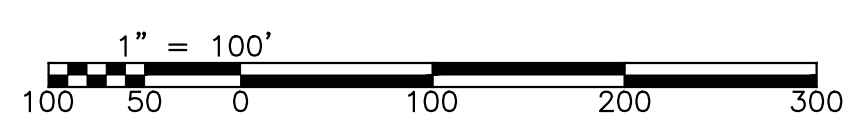
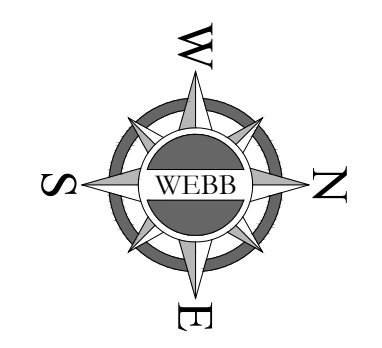
LEGEND

- DRAINAGE MANAGEMENT BOUNDARY
- ROOF
- LANDSCAPING
- CONCRETE OR ASPHALT
- OFF-SITE LANDSCAPE (SELF-TREATING)
- OFF-SITE HARDSCAPE
- OFF-SITE UNDEVELOPED
- HQ BASIN
- FLOW DIRECTION

DRAINAGE MANAGEMENT AREA SUMMARY

LEGEND	DMA-ID	DMA-TYPE	AREA (SF)
DMA-A (ON-SITE)			
■	R-A	ROOF	701,204
■	L-A	LANDSCAPE	222,860
■	H-A	HARDSCAPE	678,320
■	BMP-A	LANDSCAPE	900
DMA-B (OFF-SITE)			
■	B-W	HARDSCAPE	44,360
■	B-K-1	HARDSCAPE	19,830
■	B-K-2	HARDSCAPE	16,310
■	B-B	HARDSCAPE	44,800
■	B-SELF-TREAT	LANDSCAPE	15,160

NOTE: OFFSITE UNDEVELOPED TRIBUTARY AREA (B-SELF-TREAT) IS BEING DIRECTED AWAY FROM OUR PROJECT SITE AND DOES NOT REQUIRE TREATMENT.

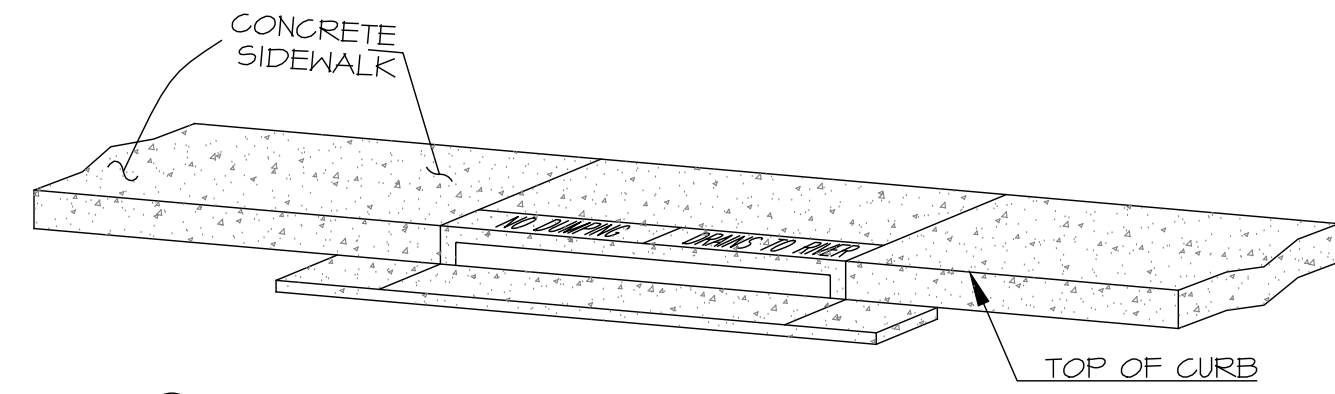
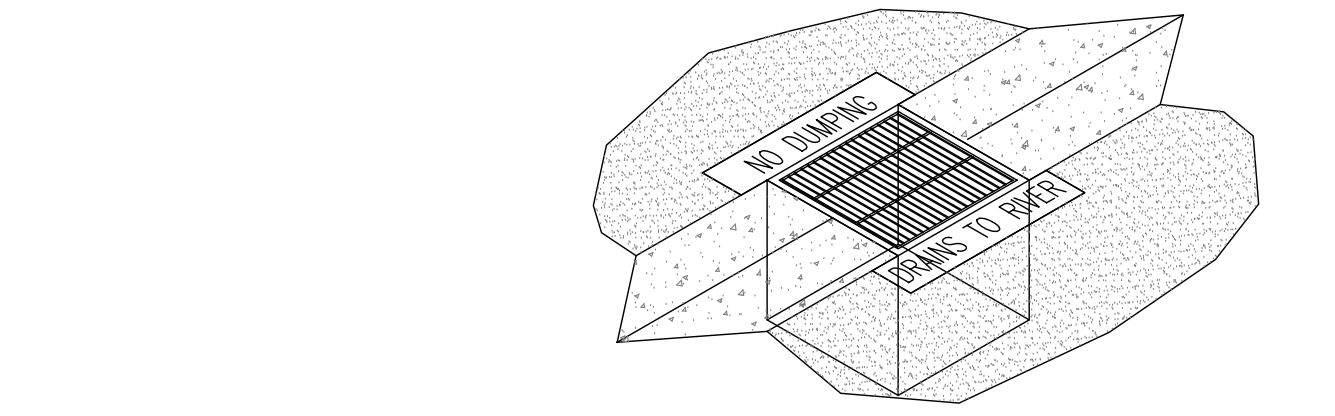


CITY OF MENIFEE

POST-CONSTRUCTION SITE PLAN
CAPSTONE MENIFEE

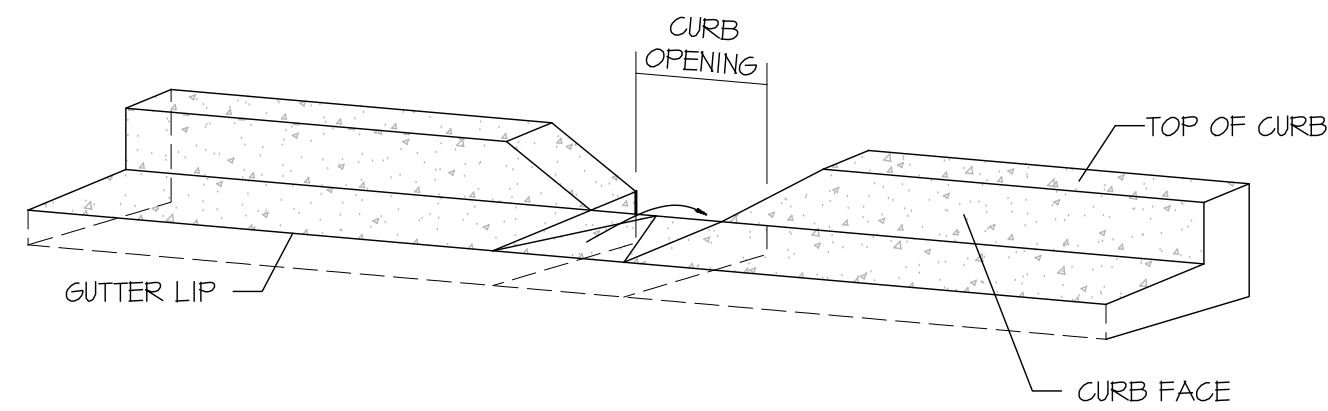
SCALE: 1"=100'	ALBERT A. WEBB ASSOCIATES	ENGINEERING CONSULTANTS 3788 McCRAY STREET RIVERSIDE, CA 92506 PH. (951) 696-1070 FAX (951) 788-1256	W.O. 21-0035 SHEET 1 OF 2 SHEETS DWG. NO.
DATE: 10/20/2022	DESIGNED: ABE	CHECKED: SKK	PLN CK REF: F.B.

PRELIMINARY

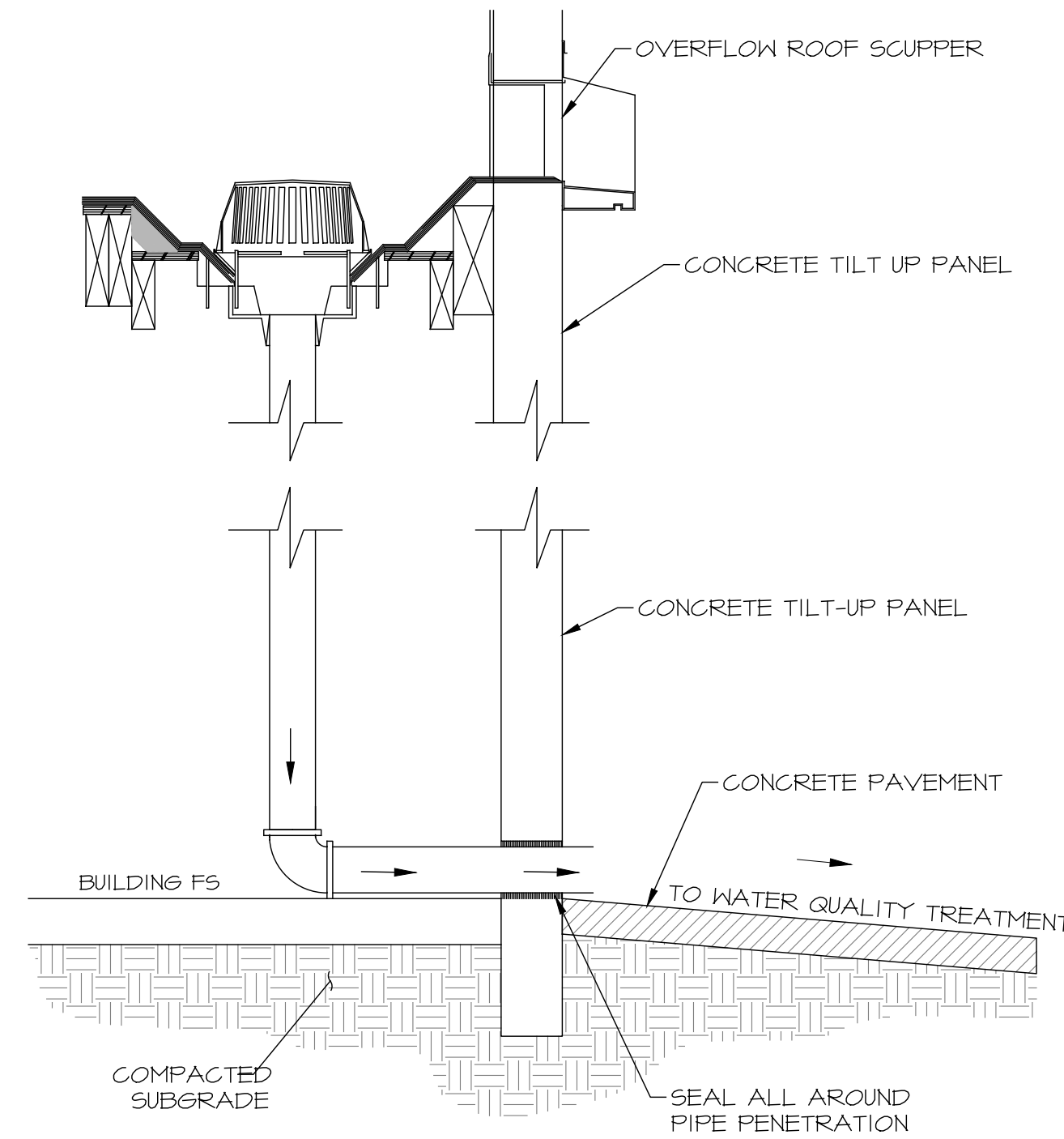


- 1 STENCILS TO HAVE 2" LETTERS AS FOLLOWS: "NO DUMPING - DRAINS TO RIVER"
- 2 PLACE BOTH STENCILS CENTERED WITHIN THE CATCHBASIN OPENINGS AND WITHIN THE TOP OF THE CURB.
- 3 SPRAY BOTH STENCILS WITH WHITE PAINT.
- 4 REMOVE STENCILS WHEN PAINT IS DRY.

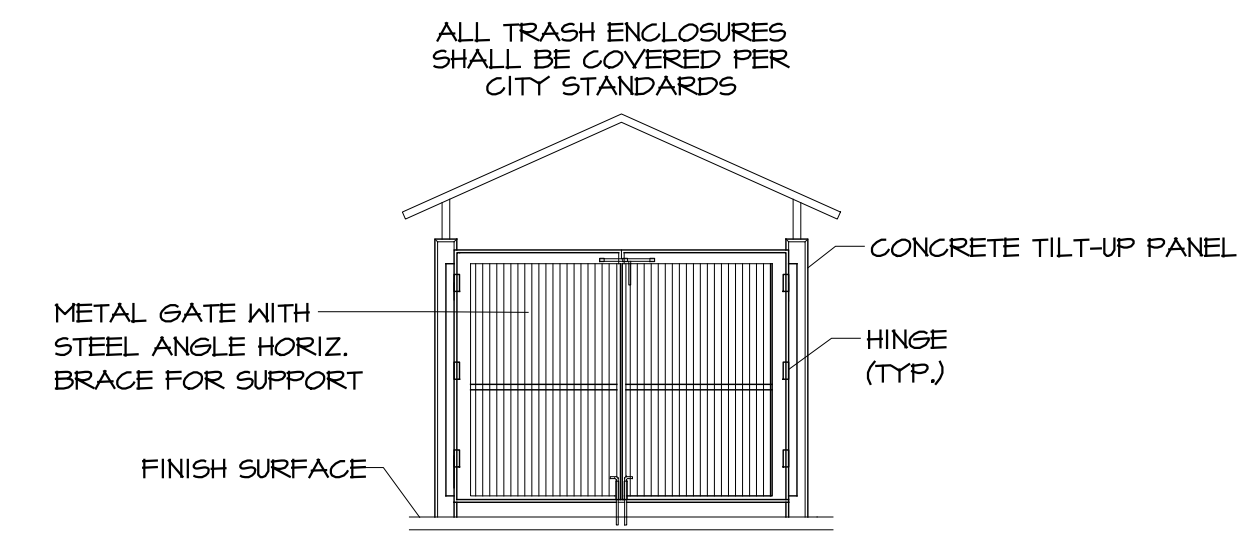
CATCH BASIN STENCILING DETAIL
N.T.S.



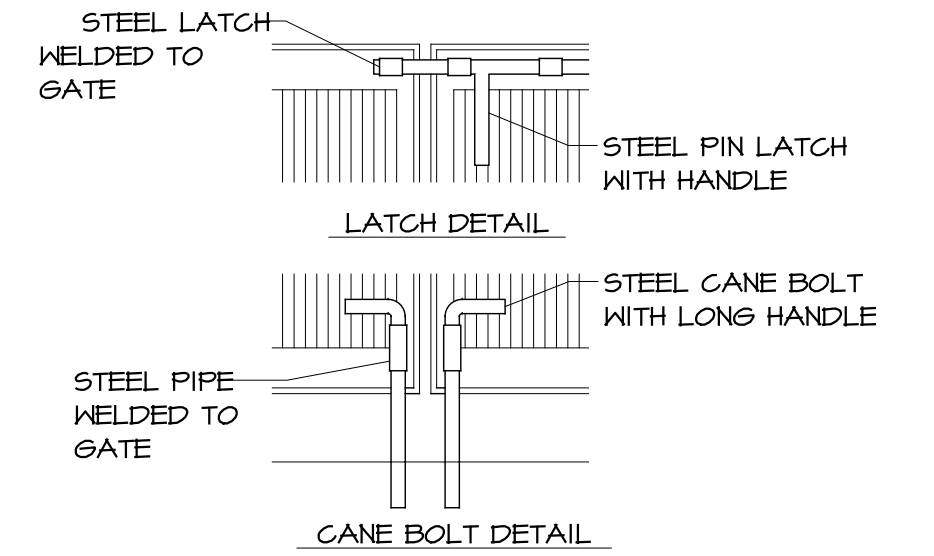
TYPICAL CURB OPENING DETAIL
N.T.S.



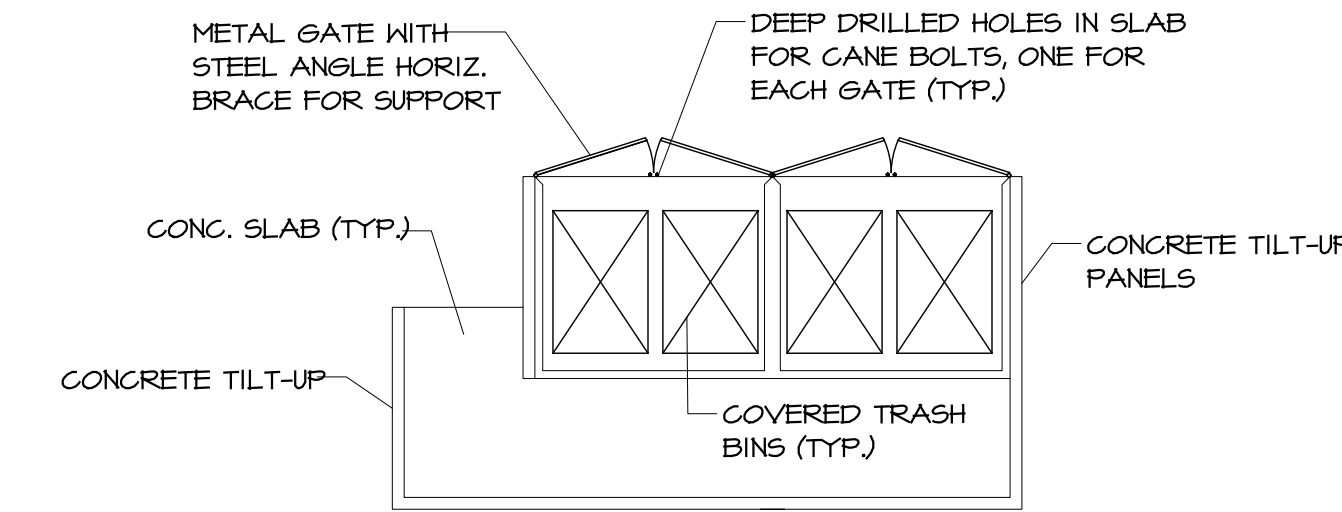
ROOF DRAIN DETAIL
N.T.S.



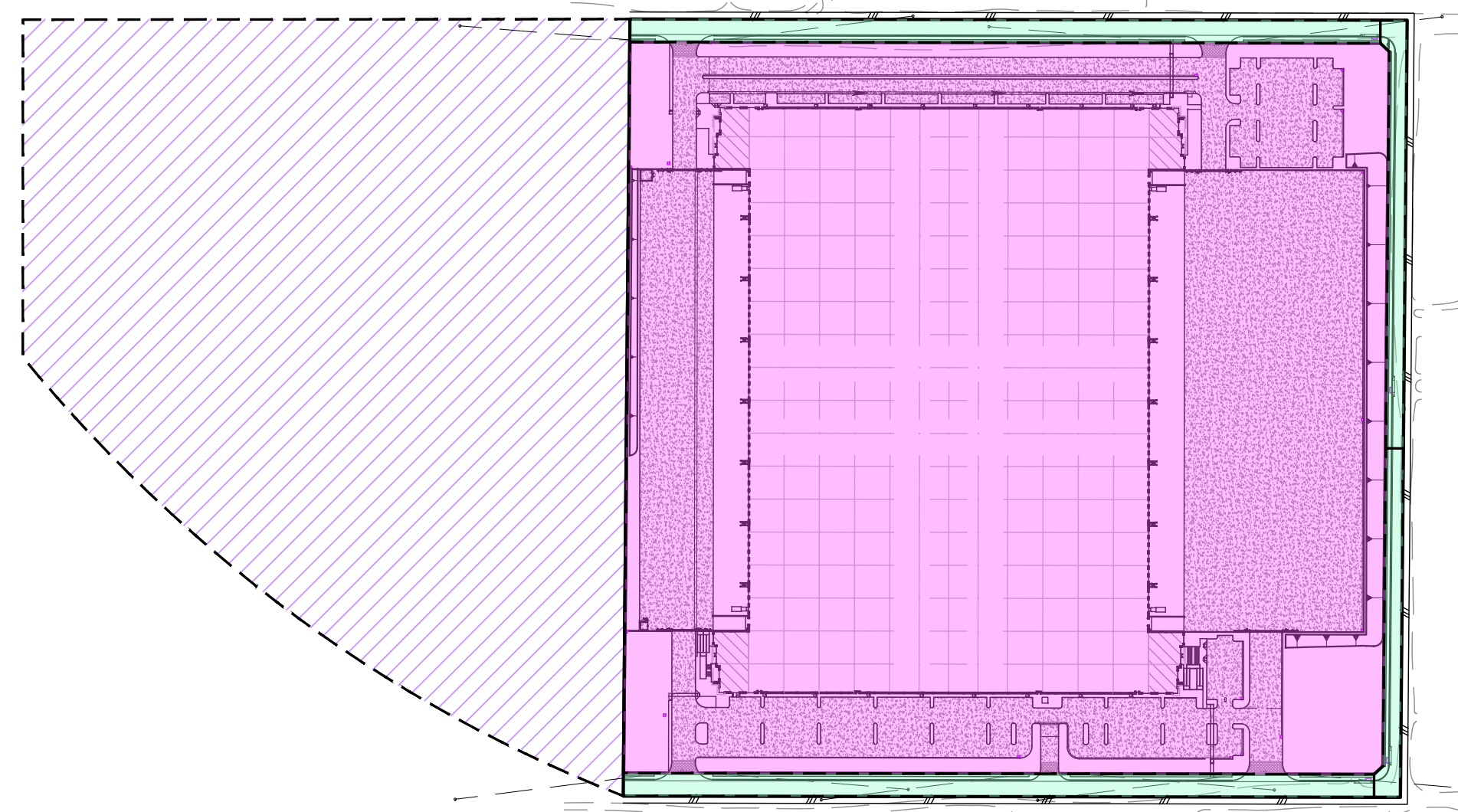
TRASH ENCLOSURE GATE ELEVATION
N.T.S.



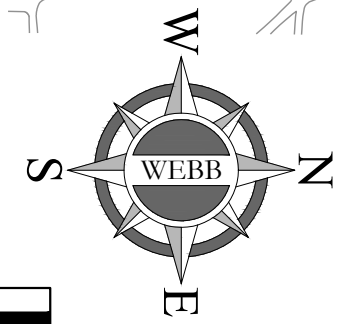
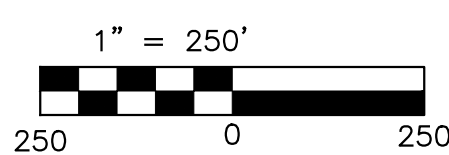
TRASH ENCLOSURE GATE LATCHES DETAIL
N.T.S.



TRASH ENCLOSURE PLAN DETAIL
N.T.S.

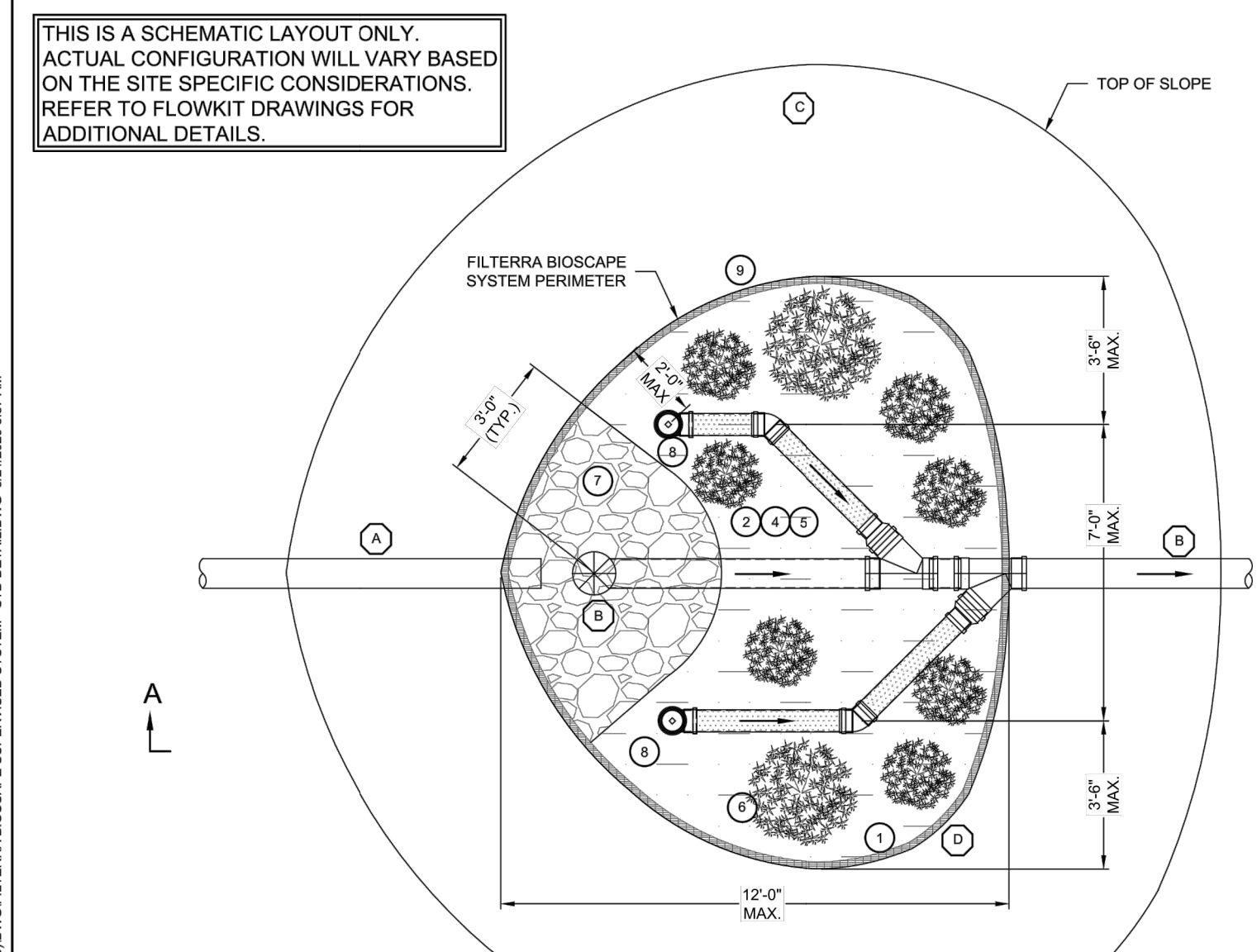


- LEGEND**
- DRAINAGE MANAGEMENT BOUNDARY
 - DMA-A
 - DMA-B
 - OFF-SITE UNDEVELOPED

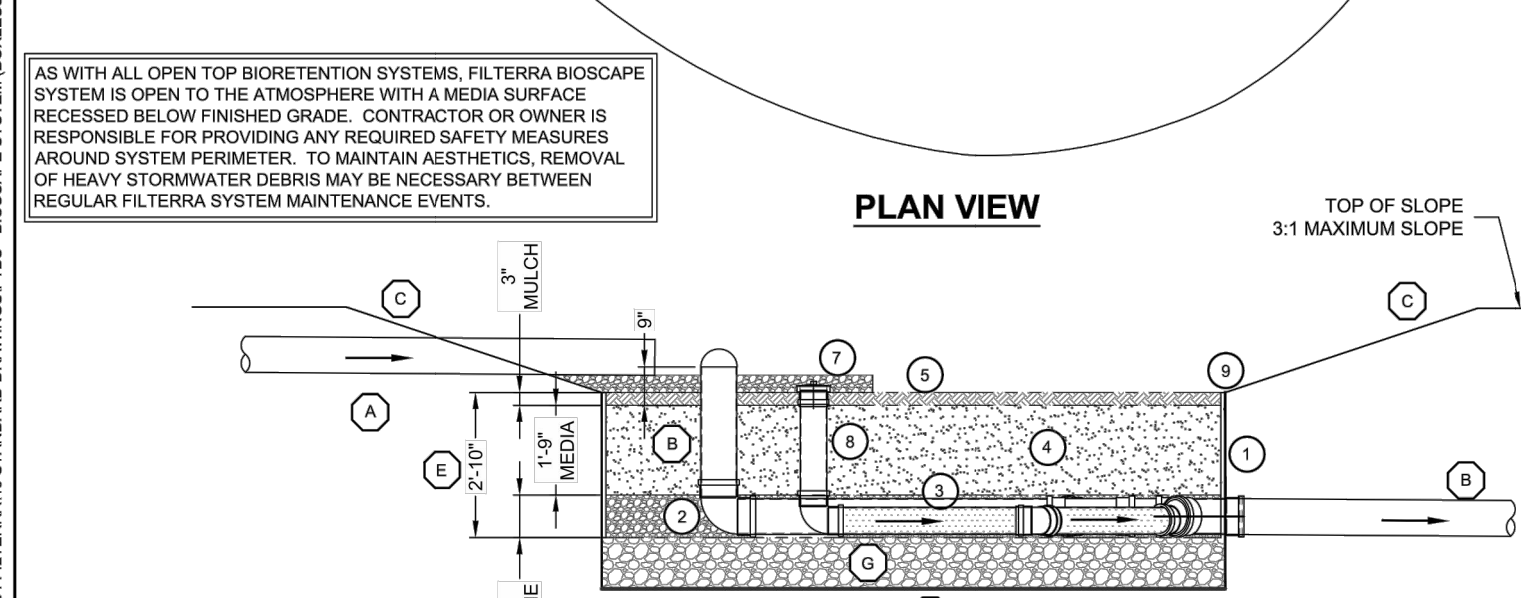


THIS IS A SCHEMATIC LAYOUT ONLY. ACTUAL CONFIGURATION WILL VARY BASED ON THE SITE SPECIFIC CONSIDERATIONS. REFER TO FLOWKIT DRAWINGS FOR ADDITIONAL DETAILS.

AS WITH ALL OPEN TOP BIOTREATMENT SYSTEMS, FILTERRA BIOSCAPE SYSTEM IS OPEN TO THE ATMOSPHERE WITH A MEDIA SURFACE RECESSED BELOW FINISHED GRADE. CONTRACTOR OR OWNER IS RESPONSIBLE FOR PROVIDING ANY REQUIRED SAFETY MEASURES AROUND SYSTEM PERIMETER. TO MAINTAIN AESTHETICS, REMOVAL OF HEAVY STORMWATER DEBRIS MAY BE NECESSARY BETWEEN REGULAR FILTERRA SYSTEM MAINTENANCE EVENTS.



PLAN VIEW



SECTION A-A VIEW

BILL OF MATERIALS		
COUNT	DESCRIPTION	INSTALLED BY
X	FILTERRA SURFACE AREA (SF)	CONTRACTOR
X	MULCH VOLUME (CY)	CONTRACTOR
XX	FILTERRA MEDIA VOLUME (CY)	CONTRACTOR
X	1/2" #4 ROUND AGGREGATE UNDERDRAIN STONE (CY)	CONTRACTOR
X	ENERGY DISSIPATION ROCK (CY)	CONTRACTOR
X	EROSION CONTROL (LF)	CONTRACTOR
X	FILTERRA FLOWKIT	CONTRACTOR

PLANTING SCHEDULE	
NOTE: PLANTS PROVIDED BY OTHERS	
QUANTITY	FILTERRA BIOSCAPE SYSTEM PLANT PALETTE

- GENERAL NOTES**
1. CONTRACTOR SHALL CONTACT CONTECH TO COORDINATE DELIVERY AND SUPERVISION OF PLACEMENT OF FILTERRA BIOSCAPE SYSTEM COMPONENTS (ACTIVATION). CONTRACTOR SHALL COMPLETE ITEMS IN THE LIST OF CONTRACTOR INSTALLATION RESPONSIBILITIES LISTED ON THIS DETAIL BEFORE CONTECH'S REPRESENTATIVE ATTENDS AND SUPERVISES THE ACTIVATION OF THE BIOSCAPE SYSTEM.
 2. PERFORM FILTERRA BIOSCAPE SYSTEM EXCAVATION ONLY AFTER ALL THE CONTRIBUTING DRAINAGE AREAS ARE PERMANENTLY STABILIZED. DO NOT CONSTRUCT FILTERRA BIOSCAPE SYSTEM IN AN AREA USED AS EROSION AND SEDIMENT CONTROL FACILITIES. DO NOT STOCKPILE MATERIALS NOR STORE EQUIPMENT IN THIS AREA.
 3. USE METHODS OF EXCAVATION THAT MINIMIZE COMPACTION OF THE UNDERLYING SOIL UNLESS THE SYSTEM IS TO BE LINED.
 4. CONTRACTOR SHALL COORDINATE WITH CONTECH BEFORE THE FILTERRA BIOSCAPE SYSTEM AREA IS EXCAVATED TO MINIMIZE TIME BETWEEN EXCAVATION AND DELIVERY AND ACTIVATION OF THE FILTERRA BIOSCAPE SYSTEM. ANY STANDING WATER THAT ACCUMULATES IN THE EXCAVATED AREA MUST BE REMOVED BY THE CONTRACTOR BEFORE CONTECH CAN PROVIDE ACTIVATION OF THE FILTERRA BIOSCAPE SYSTEM. ANY ADDITIONAL EXCAVATION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. EXCAVATION DIMENSIONS SHOULD BE PROVIDED TO CONTECH IN THE ACTIVATION REQUEST CHECKLIST.
 5. CONTRACTOR SHALL PROVIDE ACCESS TO THE EXCAVATED AREA(S) FOR USE DURING THE ACTIVATION OF THE FILTERRA BIOSCAPE SYSTEM(S). ACCESS SHALL NOT PROHIBIT LIGHT DUTY EQUIPMENT THAT MAY BE USED TO INSTALL THE COMPONENTS (STONE, MEDIA, ETC). THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY RE-STABILIZATION THAT MAY BE REQUIRED AFTER THE FILTERRA BIOSCAPE SYSTEM ACTIVATION.
 6. CONTECH AND/OR ITS REPRESENTATIVES MUST BE SCHEDULED TO BE ON SITE FOR THE LIST ENTITLED CONTRACTOR ACTIVATION RESPONSIBILITIES.

- CONTRACTOR SITE PREPARATION RESPONSIBILITIES AS DENOTED BY (X) ON THIS DETAIL:**
- (A) CONTRACTOR SHALL INSTALL PIPE OR SWALE THAT CONVEYS INFLUENT FLOWS AS WELL AS ANY REQUIRED INLET AND OUTLET STRUCTURES.
 - (B) CONTRACTOR SHALL PROVIDE BYPASS PIPE AND RISER OR OTHER STRUCTURE AS SHOWN ON PLANS. THE BYPASS PIPE SHALL BE INSTALLED WITH WYE(S) OR OTHER PIPE FITTINGS, AND WITH REDUCER COUPLING(S) FOR CONNECTION OF UNDERDRAIN PIPE, PER PLANS. PIPES SHALL BE INSTALLED TO PROMOTE POSITIVE FLOW FROM THE FILTERRA BIOSCAPE SYSTEM.
 - (C) IF REQUIRED, CONTRACTOR TO PROVIDE SHOULDER ACCORDING TO DIMENSION AND SLOPE SHOWN ON PLANS OR AS DESIGNED BY ENGINEER OF RECORD. SLOPE FROM SHOULDER TO FILTERRA BIOSCAPE SYSTEM SURFACE AREA SHALL NOT EXCEED 3:1. SOD IS REQUIRED TO STABILIZE SIDE SLOPES OR ADJACENT GRADE.
 - (D) CONTRACTOR TO EXCAVATE MEDIA AREA CORRESPONDING TO THE SIZE OF THE FILTERRA BIOSCAPE SYSTEM SURFACE AREA AS SHOWN ON DETAIL AND ON PLAN SHEETS.
 - (E) CONTRACTOR SHALL EXCAVATE VERTICALLY FROM BOTTOM OF UNDERDRAIN STONE, OR DRAINAGE STONE, IF REQUIRED, TO ELEVATION OF MULCH AS SHOWN ON THIS DETAIL.
 - (F) CONTRACTOR TO PROVIDE AND INSTALL ANY GEOTEXTILE OR IMPERMEABLE LINER FOR BOTTOM OF THE FILTERRA BIOSCAPE SYSTEM IF REQUIRED PER THE PLANS.
 - (G) CONTRACTOR TO PROVIDE AND INSTALL ANY ADDITIONAL DRAINAGE STONE BELOW THE FILTERRA BIOSCAPE SYSTEM AS CALLED OUT ON THE PLANS.
- CONTRACTOR ACTIVATION RESPONSIBILITIES AS DENOTED BY (O) ON THIS DETAIL:**
- (O) PLACE GEOTEXTILE FABRIC ALONG THE PERIMETER OF THE FILTERRA BIOSCAPE SYSTEM EXCAVATION.
 - (O) PLACE 1" OF UNDERDRAIN STONE - 2" UNDER THE PIPING, 6" AROUND THE PIPING AND 2" ABOVE THE PIPING USING LIGHT DUTY EQUIPMENT ONLY.
 - (O) PLACE 6" UNDERDRAIN PIPING UNLESS OTHERWISE APPROVED BY CONTECH, ASSOCIATED PIPING AND FITTINGS ELBOWS TO CONNECT TO THE PIPING/FITTING(S) THAT IS PROVIDED BY CONTRACTOR (SEE CONTRACTOR INSTALLATION RESPONSIBILITIES THIS DETAIL).
 - (O) PLACE 2" FILTERRA MEDIA USING LIGHT DUTY EQUIPMENT ONLY. DO NOT COMPACT MEDIA.
 - (O) PLACE 3" DOUBLE SHREDDED HARDWOOD MULCH OVER ENTIRE FILTERRA BIOSCAPE SYSTEM SURFACE AREA USING LIGHT DUTY EQUIPMENT ONLY. DO NOT COMPACT MULCH.
 - (O) PROVIDE AND PLANT VEGETATION AS INDICATED IN TABLE ON THIS DETAIL OR ON SITE PLANS.
 - (O) PLACE ENERGY DISSIPATION ROCK APRON AS DESIGNED AND INDICATED ON THIS DETAIL OR PER ENGINEER OF RECORD PLANS.
 - (O) PLACE CLEANOUT ADAPTER, PLUG AND PIPING.
 - (O) PLACE ADDITIONAL EROSION CONTROL AROUND FILTERRA BIOSCAPE SYSTEM (IF REQUIRED).



FILTERRA BIOSCAPE™ SYSTEM STANDARD DETAIL

BMP-A: BIOSCAPE MODULAR WETLANDS
N.T.S.

CITY OF MENIFEE

POST-CONSTRUCTION SITE PLAN
CAPSTONE MENIFEE

SCALE: 1"=100'	ALBERTA A. ENGINEERING CONSULTANTS	W.O. 21-0035
DATE: 10/20/2022	3788 McCORAY STREET	SHEET 2
DESIGNED: ABE	RIVERSIDE CA 92506	OF 2 SHEETS
CHECKED: SKK	PH. (951) 686-1070	DWG. NO.
PLN CK REF:	FAX (951) 788-1256	
F.B.		

PRELIMINARY

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Appendix 2: Construction Plans

Grading and Drainage Plans

To be Included in FWQMP

Appendix 3: Soils Information

Geotechnical Study and Other Infiltration Testing Data

**GEOTECHNICAL AND INFILTRATION EVALUATION
FOR
PROPOSED WAREHOUSE PROJECT
APN's 330-190-002, -003, -004, -005, -010, -011 AND -012
KUFFEL ROAD AND WHEAT STREET
MENIFEE, RIVERSIDE COUNTY, CALIFORNIA**

PREPARED FOR

**CADO MENIFEE, LLC
C/O CAPSTONE ADVISORS
1545 FARADY AVENUE
CARLSBAD, CALIFORNIA 92008**

PREPARED BY

**GEOTEK, INC.
1548 NORTH MAPLE STREET
CORONA, CALIFORNIA 92880**



GeoTek, Inc.
1548 North Maple Street, Corona, California 92878
(951) 710-1160 Office (951) 710-1167 Fax www.geotekusa.com

June 14, 2021
Project No. 2761-CR

CADO Menifee, LLC
c/o Capstone Advisors
1545 Faraday Avenue
Carlsbad, California 92008

Attention: Mr. Mark Hayden

Subject: Geotechnical and Infiltration Evaluation
Proposed Warehouse Project
APN's 330-190-002, -003, -004, -005, -010, -011 and -012
Kuffel Road and Wheat Street
Menifee, Riverside County, California

Dear Mr. Hayden:

GeoTek, Inc. (GeoTek) is pleased to provide the results of this geotechnical and infiltration evaluation for the proposed project located in Menifee, Riverside County, California. This report presents the results of our evaluation, discussion of our findings, and provides geotechnical recommendations for foundation design and construction.

Based upon review and evaluation, site development appears feasible from a geotechnical viewpoint provided that the recommendations included in this report are incorporated into the design and construction phases of the project.

The opportunity to be of service is sincerely appreciated. If you should have any questions, please do not hesitate to contact our office.

Respectfully
submitted,
GeoTek, Inc.



Bruce A. Hick
GE 2244, Exp. 12/31/22
Geotechnical Engineer



Edward H. LaMont
CEG 1892, Exp. 07/31/22
Principal Geologist

Anna M. Scott
Project Geologist

Distribution: (1) Addressee via email (one PDF file)

G:\Projects\2751 to 2800\2761CR CADO Menifee, LLC co Capstone Advisors Menifee\Supplemental Geotechnical and Infiltration Evaluation\2761CR Geotechnical and Infiltration Evaluation Warehouse Menifee.doc

TABLE OF CONTENTS

1. PURPOSE AND SCOPE OF SERVICES	1
2. SITE DESCRIPTION AND PROPOSED DEVELOPMENT	1
2.1 SITE DESCRIPTION	1
2.2 PROJECT DESCRIPTION	2
3. FIELD EXPLORATION AND LABORATORY TESTING	2
3.1 FIELD EXPLORATION.....	2
3.2 LABORATORY TESTING.....	4
4. GEOLOGIC AND SOILS CONDITIONS	4
4.1 REGIONAL SETTING.....	4
4.2 GENERAL SOIL CONDITIONS	4
4.2.1 Older Alluvium.....	5
4.2.2 Granitic Bedrock (Tonalite).....	5
4.3 SURFACE WATER AND GROUNDWATER	5
4.3.1 Surface Water	5
4.3.2 Groundwater.....	5
4.4 FAULTING AND SEISMICITY	6
4.4.1 Faulting.....	6
4.4.2 Seismic Design Parameters.....	6
4.5 LIQUEFACTION.....	7
4.6 OTHER SEISMIC HAZARDS	7
5. CONCLUSIONS AND RECOMMENDATIONS.....	7
5.1 GENERAL.....	7
5.2 EARTHWORK CONSIDERATIONS.....	8
5.2.1 General.....	8
5.2.2 Site Clearing.....	8
5.2.3 Site Preparation	8
5.2.4 Engineered Fill.....	9
5.2.5 Transition Lot Condition.....	9
5.2.6 Oversized Rock Disposal	9
5.2.7 Excavation Characteristics	9
5.2.8 Trench Excavations and Backfill	10
5.2.9 Shrinkage and Bulking.....	10
5.2.10 Grading Plan Review.....	11
5.3 DESIGN RECOMMENDATIONS.....	11
5.3.1 Foundation Design Criteria	11
5.4 RETAINING AND GARDEN WALL DESIGN AND CONSTRUCTION	15
5.5 PRELIMINARY PAVEMENT DESIGN RECOMMENDATIONS	18
5.6 CONCRETE CONSTRUCTION.....	19
5.6.1 General.....	19
5.6.2 Concrete Mix Design	19
5.6.3 Concrete Flatwork.....	19

TABLE OF CONTENTS

5.6.4 Concrete Performance.....	19
5.7 PLAN REVIEW AND CONSTRUCTION OBSERVATIONS.....	20
6. INTENT	20
7. LIMITATIONS	21
8. SELECTED REFERENCES.....	21

ENCLOSURES

Figure 1 – Site Location Map

Figure 2 – Boring Location Map

Appendix A – Log of Exploratory Excavations

Appendix B – Results of Laboratory Testing

Appendix C – Percolation Data & Porchet Calculations

Appendix D – General Earthwork Grading Guidelines

I. PURPOSE AND SCOPE OF SERVICES

The purpose of this study was to evaluate the geotechnical engineering and geologic conditions at the project site, as outlined in GeoTek's proposal P-0406121-CR dated April 16, 2021. Services provided for this study included the following:

- Research and review of available geologic data and general information pertinent to the site,
- Site exploration consisting of the excavation, logging, and sampling of six (6) exploratory test borings extending to depths ranging from 9.3 to 15.1 feet below grade,
- Excavation of two (2) additional borings to depths of about 5 feet below grade and performing an infiltration test in each boring,
- Laboratory testing of soil samples collected during the field investigation,
- Review and evaluation of site seismicity, and
- Preparation of this geotechnical report which presents GeoTek's findings, conclusions, and recommendations for this site.

2. SITE DESCRIPTION AND PROPOSED DEVELOPMENT

2.1 SITE DESCRIPTION

The approximate 32.4-acre irregular-shaped project site is located adjacent to the southeast corner of Kuffel Road and Wheat Street, in the Sun City area of Menifee, Riverside County, California (See Figure 1). Access to the site is available from Wheat Street, Kuffel Road and Byers Road, all unimproved dirt roads located adjacent to the western, northern and eastern boundaries of the site, respectively. The site is bordered to the northeast and southeast by residential/agricultural developments with vacant land situated to the southwestern edge of the property. Several dirt paths/trails trend throughout the property.

Topographically, the site slopes gently downward to the north at an approximate two (2) percent gradient. Elevation of the southern portion of the the site is approximately 1,460 feet

with approximately 30 feet of elevation differential across the site. The site was vegetated with a sparse covering of grass.

2.2 PROJECT DESCRIPTION

Based upon review of the Conceptual Site Plan (Scheme 1) prepared by HPA Architects, dated February 13, 2020, GeoTek understands plans are to construct an approximate 632,170 square foot warehouse building with approximately 20,000 square feet of attached office space. Additional site improvements include loading docks, truck access lanes, adjacent street improvements, parking lots, hardscaping, landscaping and stormwater management system basins. It is anticipated that the building will be of concrete tilt-up panel construction and will be supported by conventional shallow foundations (continuous and isolated pad) and will incorporate a conventional slab on-grade floor system. For the purposes of this report, it is assumed maximum column and wall loads of about 150 kips and 5 kips per foot, respectively. Specific site development plans were not provided as of the date of this report. Once actual loads are known that information should be provided to GeoTek to determine if modifications to the recommendations presented in this report are warranted.

Based upon past experience, grading of the site will involve cuts and fills generally less than about 5 feet in height, not including any recommended remedial grading. Sewage disposal is anticipated to be provided by a public sewer system. If site development differs from the assumptions made herein, the recommendations included in this report should be subject to further review and evaluation. Site development plans should be reviewed by GeoTek when they become available.

3. FIELD EXPLORATION AND LABORATORY TESTING

3.1 FIELD EXPLORATION

The field exploration for this report was conducted on May 20, 2021 and consisted of excavating six (6) geotechnical exploratory test borings with a hollow-stem drill rig to depths ranging from about 9.3 to 15.1 feet below grade. The approximate locations of the GeoTek excavations are shown on the Boring Location Map (Figure 2). All the test borings were terminated at depths shallower than initially planned due to auger refusal in granitic bedrock. A geologist from GeoTek logged the excavations and collected soil samples for use in

subsequent laboratory testing. The logs of the exploratory borings are included in Appendix A.

Relatively undisturbed soil samples were recovered at various intervals in the geotechnical borings with a California sampler. The California sampler is a 3-inch outside diameter, 2.5-inch inside diameter, split barrel sampler lined with brass rings. The sampler was 18 inches long. The sampler conformed to the requirements of ASTM D 3550. A 140-pound automatic trip hammer was utilized, dropping 30 inches for each blow. The relatively undisturbed samples, together with bulk samples of representative soil types, were returned to the laboratory for testing and evaluation. The California sampler test data are presented on the logs.

Percolation Testing

In addition to the geotechnical exploratory borings, two borings (I-1 and I-2) were excavated in the area of the proposed water quality detention basin to depths of about 4 feet. Infiltration/percolation testing was conducted in these borings in general accordance with the requirements of the County of Riverside.

The percolation tests consisted of drilling an eight-inch diameter test hole to the desired depth and installing approximately two inches of gravel in the bottom of the hole. A three-inch diameter perforated PVC pipe, wrapped in a filter sock, was placed in the excavations and the annular space was filled with gravel to prevent caving within the boring. Water was then placed in the borings to presoak the holes and percolation testing was performed the following the pre-soak period. Following presoaking, the percolation tests were performed which consisted of adding water to each test hole and measuring the water drop over a 30-minute period. The water drop was recorded for twelve test intervals. Water was added to the test holes after each test interval. The field percolation rates were then converted to an infiltration rate using the Porchet Method.

The results of the conversions indicate infiltration rates of 1.08 to 1.14 inch per hour. Copies of the percolation data sheets and the Porchet infiltration rate conversion calculations are presented in Appendix C. No factors of safety were applied to the rates provided. Over the lifetime of the infiltration areas, the infiltration rates may be affected by sediment build up and biological activities, as well as local variations in near surface soil conditions. A suitable factor of safety should be applied to the field rate in designing the infiltration system.

It should be noted that the infiltration rates provided above were performed in relatively undisturbed on-site soils. Infiltration rates will vary and are mostly dependent on the underlying consistency of the site soils and relative density. Infiltration rates may be impacted by weight of equipment travelling over the soils, placement of engineered fill and other various

factors. GeoTek assumes no responsibility or liability for the ultimate design or performance of the storm water facility.

3.2 LABORATORY TESTING

Laboratory testing was performed on selected relatively undisturbed ring and bulk samples collected during the field exploration. The purpose of the laboratory testing was to confirm the field classification of the materials encountered and to evaluate their physical properties for use in the engineering design and analysis. Results of the laboratory testing program along with a brief description and relevant information regarding testing procedures are included on the exploratory borings logs included in Appendix A.

4. GEOLOGIC AND SOILS CONDITIONS

4.1 REGIONAL SETTING

The subject property is situated in the Peninsular Ranges geomorphic province. The Peninsular Ranges province is one of the largest geomorphic units in western North America. It extends approximately 975 miles south of the Transverse Ranges geomorphic province to the tip of Baja California. This province varies in width from about 30 to 100 miles. It is bounded on the west by the Pacific Ocean, on the south by the Gulf of California and on the east by the Colorado Desert Province.

The Peninsular Ranges are essentially a series of northwest-southeast oriented fault blocks. Several major fault zones are found in this province. The Elsinore Fault zone and the San Jacinto Fault zone trend northwest-southeast and are found near the middle of the province. The San Andreas Fault zone borders the northeasterly margin of the province.

More specific to the subject property, the site is in an area geologically mapped to be underlain by tonalite (USGS, 2003). No active faults are shown in the immediate site vicinity on the maps reviewed for the area.

4.2 GENERAL SOIL CONDITIONS

A brief description of the earth materials encountered is presented in the following section. Based on our site reconnaissance, our exploratory excavations and review of published

geologic maps, the area investigated is locally underlain by granitic bedrock that is locally overlain by older alluvium.

4.2.1 Older Alluvium

A thin veneer of older alluvial soil was present at the ground surface within the borings. Where encountered, the older alluvium was noted to consist of a dense to very dense silty sand (SM soil typed based upon the Unified Soil Classification System) or hard sandy silt or sandy clay (ML and CL soil types, respectively). The older alluvium, where encountered, ranged from about 2 to 6 feet thick.

Based on the results of laboratory testing, the older alluvial soils are considered to have a “very low” (0-20) to “low” (21-50) expansion potential (ASTM D 4829).

4.2.2 Granitic Bedrock (Tonalite)

Granitic bedrock was encountered beneath the older alluvium in all the exploratory borings. Where weathered, the granitic bedrock was generally sampled as a very dense silty sand (SM soil type). Auger refusal was encountered within the granitic bedrock at depths ranging from about 9.3 to 15.1 feet below existing grade.

4.3 SURFACE WATER AND GROUNDWATER

4.3.1 Surface Water

If encountered during earthwork operations, surface water on this site is the result of precipitation or possibly some minor surface run-off from the surrounding areas. Overall site area drainage varies due to the site topography. Provisions for surface drainage will need to be accounted for by the project civil engineer.

4.3.2 Groundwater

Groundwater was not encountered within any of the test borings drilled at the site. Based on the presence of shallow granitic bedrock and the lack of groundwater in the borings, it is estimated that the depth to high groundwater at the site is greater than about 50 feet below grade. Based on the results of the field exploration, review of site area geomorphology and geology, groundwater is not anticipated to adversely affect the proposed improvements.

4.4 FAULTING AND SEISMICITY

4.4.1 Faulting

The geologic structure of the entire California area is dominated mainly by northwest-trending faults associated with the San Andreas system. The site is in a seismically active region. However, the site is not situated within a State of California designated “Alquist-Priolo” Earthquake Fault Zone. The nearest known active fault is the Elsinore fault zone located about 10 miles to the southwest.

4.4.2 Seismic Design Parameters

The site is located at approximately 33.7403 degrees West Latitude and -117.2171 degrees North Longitude. Site spectral accelerations (S_s and S_1), for 0.2 and 1.0 second periods for a Class “C” site, were determined from the SEAOC/OSHPD web interface that utilizes the USGS web services and retrieves the seismic design data and presents that information in a report format. A Site Class C is deemed appropriate for this site based on the presence of shallow granitic bedrock. The results are presented in the following table:

SITE SEISMIC PARAMETERS	
Mapped 0.2 sec Period Spectral Acceleration, S_s	1.428g
Mapped 1.0 sec Period Spectral Acceleration, S_1	0.526g
Site Coefficient for Site Class “C”, F_a	1.2
Site Coefficient for Site Class “C”, F_v	1.474
Maximum Considered Earthquake Spectral Response Acceleration for 0.2 Second, S_{MS}	1.713g
Maximum Considered Earthquake Spectral Response Acceleration for 1.0 Second, S_{M1}	0.775g
5% Damped Design Spectral Response Acceleration Parameter at 0.2 Second, S_{DS}	1.142g
5% Damped Design Spectral Response Acceleration Parameter at 1 second, S_{D1}	0.517g
Peak Ground Acceleration (PGA_M)	0.6g
Seismic Design Category	D

Final selection of the appropriate seismic design coefficients should be made by the project structural engineer based upon the local practices and ordinances, expected building response and desired level of conservatism.

4.5 LIQUEFACTION

Liquefaction describes a phenomenon in which cyclic stresses, produced by earthquake-induced ground motion, create excess pore pressures in relatively cohesionless and some low-plastic silt and clay soils. These soils may thereby acquire a high degree of mobility, which can lead to lateral movement, sliding, settlement of loose sediments, sand boils and other damaging deformations. This phenomenon occurs only below the water table, but, after liquefaction occurs, the liquefied soil/water matrix can propagate upward into overlying non-saturated soil as excess pore water dissipates.

The factors known to influence liquefaction potential include soil type and grain size, relative density, plasticity, groundwater level, confining pressures, and both intensity and duration of ground shaking. In general, materials that are susceptible to liquefaction are loose, saturated granular soils having low fines content under low confining pressures and some low plastic silts and clays.

Based on a review of the Riverside County Parcel Report, the site is not located within an area mapped as being susceptible to liquefaction.

Based on the current mapping by Riverside County and the presence of shallow granitic bedrock, it is GeoTek's opinion that the site is not susceptible to liquefaction during a seismic event. Due to the presence of shallow bedrock, seismic induced ("dry sand") settlements are estimated to be minimal.

4.6 OTHER SEISMIC HAZARDS

Due to the general flat terrain, the potential for seismic induced landslides or lateral spreading is considered nil. The potential for secondary seismic hazards such as a seiche and tsunami is considered negligible due to site elevation and distance from an open body of water.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 GENERAL

Development of the site appears feasible from a geotechnical engineering viewpoint. The following recommendations should be incorporated into the design and construction phases of development.

5.2 EARTHWORK CONSIDERATIONS

5.2.1 General

Earthwork and grading should be performed in accordance with the applicable grading ordinances of the County of Riverside, the 2019 California Building Code (CBC), and recommendations contained in this report. The Grading Guidelines included in Appendix D outline general procedures and do not anticipate all site-specific situations. In the event of conflict, the recommendations presented in the text of this report should supersede those contained in Appendix D.

5.2.2 Site Clearing

Initial site preparation should commence with removal of debris, deleterious materials and vegetation within the limits of the planned improvements. These materials should be properly disposed of off-site. Voids resulting from removing any materials should be replaced with engineered fill materials with expansion characteristics similar to the onsite materials.

5.2.3 Site Preparation

Due to the non-uniform nature and thickness of the near-surface older alluvium, it is recommended that the older alluvial soils be removed (where present) beneath the planned building footprint to a depth of at least 3 feet below existing grade or to the granitic bedrock contact, whichever is less. A minimum depth of at least one-foot of engineered fill below proposed foundation depths is recommended. The lateral extent of this recommended over-excavation should extend at least 5 feet beyond the building limits.

Following site clearing operations, over-excavation and lowering of site grades, where necessary, it is recommended that the exposed subgrade soils beneath all surface improvements be proof rolled with a heavy rubber-tired piece of construction equipment approved by and in the presence of the geotechnical engineering representative. The proof rolling equipment should possess a minimum weight of 15 tons and proof rolling should include at least 4 passes, two in each perpendicular direction. All soil that ruts or excessively deflects during proof rolling should be removed as recommended by the GeoTek representative. Following proof rolling and removal of any unsuitable bearing soil, the exposed subgrade should be scarified to a depth of about 12 inches, be moisture conditioned to slightly above the soil's optimum moisture content and then be compacted to at least 90 percent of the soil's maximum dry density as determined by ASTM D-1557 test procedures.

5.2.4 Engineered Fill

The on-site soils are generally considered suitable for reuse as engineered fill provided they are free from vegetation, debris, oversized materials (~6 inches) and other deleterious material. All areas should be brought to final subgrade elevations with fill materials that are placed and compacted in general accordance with minimum project standards. Engineered fill should be placed in 6-to-8-inch loose lifts, moisture conditioned to about two percent above the optimum moisture content and compacted to a minimum relative compaction of 90 percent as determined by ASTM D-1557 test procedures.

If wet soils are encountered during remedial grading, methods for drying soils such as stockpiling or mixing with dry soils may be required to bring the soils to the required moisture content for placement as engineered fill. Placement of engineered fill should be observed and tested on a full-time basis by a GeoTek representative during grading activities.

5.2.5 Transition Lot Condition

Building pads graded with a cut/fill transition should be undercut to reduce the potential for differential settlement. The cut portion of the cut/fill transition should be undercut to a depth of at least 3 feet from proposed finish pad grade and be backfilled with a properly compacted engineered fill. The bottom of the undercut should be sloped at a minimum of 1 percent toward the adjacent street/parking lot area.

5.2.6 Oversized Rock Disposal

Oversized cobbles, boulders and rock fragments should be expected to be encountered during rough grading and utility trench operations. On-site disposal of oversized materials is possible, provided the oversized materials are placed as recommended on Plate 4 within Appendix D. Alternatively, over-sized materials can be exported from the site.

5.2.7 Excavation Characteristics

Excavations in the on-site older alluvium and the upper portion of the granitic bedrock should be readily accomplished with heavy-duty earthmoving or excavating equipment in good operating condition. However, excavation difficulties should be expected where excavations extending several feet into the bedrock materials are planned. “Overbreak” of utility trench excavations should be anticipated in bedrock areas. To further assess the rippability characteristics of the granitic bedrock, consideration should be given to performing a series of seismic traverses in areas where deep excavations are planned.

Consideration should also be given to over-excavation of bedrock “alleyways” within street areas and backfilling these alleyways with a properly compacted engineered fill. If utilized, it is

recommended that the alleyway extend within the limited of the future roadway utilities and extend to a depth below the deepest utility excavation.

5.2.8 Trench Excavations and Backfill

Temporary trench excavations within the on-site materials should be stable at a 1:1 inclination for short durations during construction and where cuts do not exceed 15 feet in height. “Overbreak” of excavations should be anticipated in bedrock areas. Deeper temporary excavations should be reviewed by GeoTek prior to their planned excavation to determine if supplemental recommendations or analysis are warranted. It is anticipated that temporary cuts to a maximum height of 4 feet can be excavated vertically.

Trench excavations should conform to Cal-OSHA regulations. The contractor should have a competent person, per OSHA requirements, on site during construction to observe conditions and to make the appropriate recommendations.

Utility trench backfill should be compacted to at least 90 percent relative compaction (as determined by ASTM D-1557 test procedures). Under-slab trenches should also be compacted to project specifications. Where applicable, based on jurisdictional requirements, the top 12 inches of backfill below subgrade for road pavements should be compacted to at least 95 percent relative compaction. On-site materials may not be suitable for use as bedding material but should be suitable as backfill provided particles larger than 6 inches are removed.

Compaction should be achieved with a mechanical compaction device. Ponding or jetting of trench backfill is not recommended. If backfill soils have dried out, they should be properly moisture conditioned prior to placement in trenches.

5.2.9 Shrinkage and Bulking

For planning purposes, a shrinkage loss of less than about 5 percent is anticipated for excavations within the older alluvium at the site. A bulking factor of about 5 to 15% is estimated for excavations extending into the underlying bedrock materials. Due to the presence of shallow granitic bedrock, a negligible subsidence factor is also anticipated. Several factors will impact earthwork balancing on the site, including shrinkage, trench spoil from utilities and footing excavations, as well as the accuracy of topography. Shrinkage and bulking are primarily dependent upon the degree of compactive effort achieved during construction, depth of fill and underlying site conditions.

Site balance areas should be available in order to adjust project grades, depending on actual field conditions at the conclusion of earthwork construction.

5.2.10 Grading Plan Review

Upon completion of the site grading plans, it is recommended that those plans be provided to GeoTek for review. Based on that review, some modifications to the recommendations provided in this report may be necessary.

5.3 DESIGN RECOMMENDATIONS

5.3.1 Foundation Design Criteria

Foundation design criteria for a conventional foundation system, in general conformance with the 2019 CBC, are presented herein. These are typical design criteria and are not intended to supersede the design by the structural engineer.

Based on the expansion index testing performed for this report and visual examination of the site soils, site soils possess a “low” (21-50) expansion potential (ASTM D4829). Therefore, it is GeoTek’s opinion that conventional foundations supported by engineered fill and/or granitic bedrock may be used for this site.

A summary of GeoTek’s preliminary foundation design recommendations is presented in the table below:

Design Parameter	“Low” Expansion Potential (21≤EI≤50)
Foundation Depth or Minimum Perimeter Beam Depth (inches below lowest adjacent grade)	18-One & Two Story
Minimum Foundation Width (Inches)*	12
Minimum Slab Thickness (actual)	4 inches
Minimum Slab Reinforcing	6” x 6” – W2.9/W2.9 welded wire fabric placed in middle of slab or No. 3 bars at 18-inch centers.
Minimum Footing Reinforcement	Two No. 4 Reinforcing Bars, one top and one bottom
Presaturation of Subgrade Soil (Percent of Optimum)	Minimum 110% to a depth of 12 inches

*Code minimums per Table 1809.7 of the 2019 CBC.

It should be noted that the criteria provided are based on soil support characteristics only. The structural engineer should design the slab and beam reinforcement based on actual loading conditions.

The following criteria for design of foundations are preliminary and should be re-evaluated based on the results additional laboratory testing of samples obtained at/near finish pad grade.

- 5.3.1.1 An allowable bearing capacity of 3,000 pounds per square foot (psf) may be used for design of continuous and perimeter footings 18 inches deep and 12 inches wide, and pad footings 24 inches square and 18 inches deep. This allowable soil bearing capacity may be increased by 300 psf for each additional foot of footing depth and 300 psf for each additional foot of footing width to a maximum value of 5,000 psf. An increase of one-third may be applied when considering short-term live loads (e.g., seismic and wind loads).
- 5.3.1.2 Structural foundations should be designed in accordance with the 2019 CBC, and to withstand a total static settlement of 1 inch and maximum differential static settlement of one-half of the total settlement over a horizontal distance of 40 feet.
- 5.3.1.3 The passive earth pressure may be computed as an equivalent fluid having a density of 310 psf per foot of depth, to a maximum earth pressure of 2,500 psf for footings founded on engineered fill or competent native soil. A coefficient of friction between soil and concrete of 0.35 may be used with dead load forces. When combining passive pressure and frictional resistance, the passive pressure component should be reduced by one-third. The upper one foot of soil should be ignored in the passive pressure calculations unless the surface is covered with pavements.
- 5.3.1.4 A grade beam, a minimum of 12 inches wide and 18 inches deep, should be utilized across large entrances. The base of the grade beam should be at the same elevation as the bottom of the adjoining footings.
- 5.3.1.5 A moisture and vapor retarding system should be placed below slabs-on-grade where moisture migration through the slab is undesirable. Guidelines for these are provided in the 2019 California Green Building Standards Code (CALGreen) Section 4.505.2, the 2019 CBC Section 1907.1 and ACI 360R-10. The vapor retarder design and construction should also meet the requirements of ASTM E 1643. A portion of the vapor retarder design should be the implementation of a moisture vapor retardant membrane.

It should be realized that the effectiveness of the vapor retarding membrane can be adversely impacted as a result of construction related punctures (e.g., stake penetrations, tears, punctures from walking on the vapor retarder placed atop the underlying aggregate layer, etc.). These occurrences should be limited as much as

possible during construction. Thicker membranes are generally more resistant to accidental puncture than thinner ones. Products specifically designed for use as moisture/vapor retarders may also be more puncture resistant. Although the CBC specifies a 6-mil vapor retarder membrane, it is GeoTek's opinion that a minimum 10 mil thick membrane with joints properly overlapped and sealed should be considered, unless otherwise specified by the slab design professional. The membrane should consist of Stego wrap or the equivalent.

Moisture and vapor retarding systems are intended to provide a certain level of resistance to vapor and moisture transmission through the concrete, but do not eliminate it. The acceptable level of moisture transmission through the slab is to a large extent based on the type of flooring used and environmental conditions. Ultimately, the vapor retarding system should be comprised of suitable elements to limited migration of water and reduce transmission of water vapor through the slab to acceptable levels. The selected elements should have suitable properties (i.e., thickness, composition, strength, and permeability) to achieve the desired performance level.

Moisture retarders can reduce, but not eliminate, moisture vapor rise from the underlying soils up through the slab. Moisture retarder systems should be designed and constructed in accordance with applicable American Concrete Institute, Portland Cement Association, Post-Tensioning Concrete Institute, ASTM and California Building Code requirements and guidelines.

GeoTek recommends that a qualified person, such as the flooring contractor, structural engineer, architect, and/or other experts specializing in moisture control within the building be consulted to evaluate the general and specific moisture and vapor transmission paths and associated potential impact on the proposed construction. That person (or persons) should provide recommendations relative to the slab moisture and vapor retarder systems and for migration of potential adverse impact of moisture vapor transmission on various components of the structures, as deemed appropriate.

In addition, the recommendations in this report and GeoTek's services in general are not intended to address mold prevention; since GeoTek, along with geotechnical consultants in general, do not practice in the area of mold prevention. If specific recommendations addressing potential mold issues are desired, then a professional mold prevention consultant should be contacted.

5.3.1.6 It is recommended that control joints be placed in two directions spaced approximately 24 to 36 times the thickness of the slab in inches. These joints are a widely accepted means to control cracks and should be reviewed by the project structural engineer.

5.3.2 Miscellaneous Foundation Recommendations

5.3.2.1 To reduce moisture penetration beneath the slab on grade areas, utility trench excavations should be backfilled with engineered fill, lean concrete or concrete slurry where they intercept the perimeter footing or thickened slab edge.

5.3.2.2 Soils from the footing excavations should not be placed in the slab-on-grade areas unless properly compacted and tested. The excavations should be free of loose/sloughed materials and be neatly trimmed at the time of concrete placement.

5.3.3 Foundation Setbacks

Minimum setbacks for all foundations should comply with the 2019 CBC or County of Riverside requirements, whichever is more stringent. Improvements not conforming to these setbacks are subject to the increased likelihood of excessive lateral movements and/or differential settlements. If large enough, these movements can compromise the integrity of the improvements. The top outside edge of all footings should be set back a minimum of $H/3$ (where H is the slope height) from the face of any descending slope. The setback should be at least five feet and need not exceed 40 feet.

5.3.4 Soil Corrosivity

The soil resistivity at this site was tested in the laboratory on a sample collected during the field investigation. The results of the testing indicate that the on-site soils are considered “corrosive” (4,422 ohm-cm) (Roberge, 2000) to buried ferrous metal in accordance with current standards used by corrosion engineers. It is recommended that a corrosion engineer be consulted to provide recommendations for the protection of buried ferrous metal at this site.

5.3.5 Soil Sulfate Content

The sulfate content was determined in the laboratory on a sample collected during the field investigation. The results indicate that the water-soluble sulfate result is less than 0.1 percent by weight, which is considered “negligible” as per Table 4.2.1 of ACI 318. Based on the test

results and Table 4.3.1 of ACI 318, Based upon the test results, no special recommendations for concrete are required for this project due to soil sulfate exposure.

5.4 RETAINING AND GARDEN WALL DESIGN AND CONSTRUCTION

5.4.1.1 General Design Criteria

Recommendations presented in this report apply to typical masonry or concrete vertical retaining walls to a maximum height of up to six (6) feet. Additional review and recommendations should be requested for higher walls. These are typical design criteria and are not intended to supersede the design by the structural engineer.

Retaining wall foundations should be embedded a minimum of 18 inches into engineered fill and/or competent native soil/bedrock. Retaining wall foundations should be designed in accordance with Section 5.3 of this report. Structural needs may govern and should be evaluated by the project structural engineer.

All earth retention structure plans, as applicable, should be reviewed by this office prior to finalization.

Earthwork considerations, site clearing and remedial earthwork for all earth retention structures should meet the requirements of this report, unless specifically provided otherwise, or more stringent requirements or recommendations are made by the designer. The backfill material placement for all earth retention structures should meet the requirement of Section 5.2.4 in this report.

In general, cantilever earth retention structures, which are designed to yield at least $0.001H$, where H is equal to the height of the earth retention structure, may be designed using the “active” condition. Rigid earth retention structures (including but not limited to rigid walls, and walls braced at top, such as typical basement walls) should be designed using the “at-rest” condition.

In addition to the design lateral forces due to retained earth, surcharges due to improvements, such as an adjacent building or traffic loading, should be considered in the design of the earth retention structures. Loads applied within a 1:1 (horizontal:vertical) projection from the surcharge on the stem of the earth retention structure should be considered in the design.

Final selection of the appropriate design parameters should be made by the designer of the earth retention structures.

5.4.1.2 Cantilevered Walls

The recommendations presented below are for cantilevered retaining walls up to six (6) feet high. Active earth pressure may be used for retaining wall design, provided the top of the wall is not restrained from minor deflections. An equivalent fluid pressure approach may be used to compute the horizontal pressure against the wall. Appropriate fluid unit weights are given below for specific slope gradients of the retained material. These do not include other superimposed loading conditions such as traffic, structures, seismic events, or adverse geologic conditions.

ACTIVE EARTH PRESSURES	
Surface Slope of Retained Materials (horizontal : vertical)	Equivalent Fluid Pressure (pcf) Select Backfill* and Native Soils
Level	42
2:1	65

*The design pressures assume the backfill material has an expansion index less than or equal to 20. Backfill zone includes area between back of the wall to a plane (1:1 horizontal : vertical) up from bottom of the wall foundation (on the backside of the wall) to the ground surface.

For walls with a retained height greater than 6 feet, an incremental seismic pressure should be included into the wall design. Where needed, it is recommended that an equivalent fluid pressure of 25 pcf be included into the wall design to account for seismic loading conditions. This pressure may be applied as an inverted triangular distribution.

5.4.1.3 Retaining Wall Backfill and Drainage

The wall backfill should also include a minimum one (1) foot wide section of ¾- to 1-inch clean crushed rock (or an approved equivalent). The rock should be placed immediately adjacent to the back of the wall and extend up from a back drain to within approximately 24 inches of the finish grade. The upper 24 inches should consist of compacted on-site materials. The rock should be separated from the earth with filter fabric. The presence of other materials might necessitate revision to the parameters provided and modification of the wall designs. The backfill materials should be placed in lifts no greater than eight (8) inches in thickness and

compacted to a minimum of 90% relative compaction as determined by ASTM D 1557 test procedures. Proper surface drainage needs to be provided and maintained.

As an alternative to the drain, rock and fabric, a pre-manufactured wall drainage product (example: Mira Drain 6000 or approved equivalent) may be used behind the retaining wall. The wall drainage product should extend from the base of the wall to within two (2) feet of the ground surface. The subdrain should be placed in direct contact with the wall drainage product.

Retaining walls should be provided with an adequate pipe and gravel back drain system to help prevent buildup of hydrostatic pressures. Backdrains should consist of a four (4)-inch diameter perforated collector pipe (Schedule 40, SDR 35, or approved equivalent) embedded in a minimum of one (1) cubic foot per linear foot of $\frac{3}{4}$ - to 1-inch clean crushed rock or an approved equivalent, wrapped in filter fabric (Mirafi 140N or an approved equivalent). The drain system should be connected to a suitable outlet. Waterproofing of site walls should be performed where moisture migration through the walls is undesirable.

5.4.1.4 Restrained Retaining Walls

Retaining walls that will be restrained at the top that support level backfill or that have reentrant or male corners, should be designed for an equivalent at-rest fluid pressure of 60 pcf, plus any applicable surcharge loading. For areas of male or reentrant corners, the restrained wall design should extend a minimum distance of twice the height of the wall laterally from the corner, or a distance otherwise determined by the project structural engineer.

5.4.1.5 Other Design Considerations

- Wall design should consider the additional surcharge loads from superjacent slopes and/or footings, where appropriate.
- No backfill should be placed against concrete until minimum design strengths are evident by compression tests of cylinders.
- The retaining wall footing excavations, backcuts, and backfill materials should be approved by the project geotechnical engineer or their authorized representative.
- Positive separations should be provided in garden walls at horizontal distances not exceeding 20 feet.

5.5 PRELIMINARY PAVEMENT DESIGN RECOMMENDATIONS

Although planned final grades beneath the proposed parking, access roads and adjacent street improvements within the site are not yet known, the following preliminary pavement design recommendations are based on assumed Traffic Indexes of 5.0 for car parking areas and 6.0 for access drives. Preliminary pavement thickness design is based on the CalTrans Highway Design Manual (2018). An R-value of 40 for the as-graded pavement subgrades has been estimated for the preliminary design recommendations. Once the traffic loading information becomes more defined, revision to the pavement design recommendations may be warranted. It is recommended that the final pavement design be based on R-value testing of the as-graded subgrade soils within the pavement areas.

Based on the assumptions noted above and information contained in the City of Menifee “Street Design Requirements” Standard Plan No. 80, revised 9/20/2018, the following preliminary pavement recommendations are provided for the site:

PRELIMINARY MINIMUM PAVEMENT SECTION		
Traffic Index	Thickness of Asphalt Concrete (inches)	Thickness of Aggregate Base (inches)
5.0 (Car Parking Areas)	3.5	4
6.0 (Automobile Access Lanes)	3.5	6
8.0 (Collector/Enhanced Local, Industrial Collector, Truck Drive/Delivery Lanes)	5	8
10.0 (Secondary (4 Lanes), Major(4 Lanes), Arterial (4 Lanes))	6	12

Traffic Indices (TIs) used in the pavement design were specified in the City of Menifee “Street Design Requirements” Standard Plan No. 80, revised 9/20/2018, and should provide a pavement life of approximately 20 years with a normal amount of flexible pavement maintenance. Irrigation adjacent to pavements, without a deep curb or other cutoff to separate landscaping from the paving may result in premature pavement failure. Traffic parameters used for design were selected based upon engineering judgment and not upon information furnished to us such as an equivalent wheel load analysis or a traffic study.

All base material and the upper 12 inches of subgrade should be compacted to at least 95 percent of the material's maximum dry density as determined by ASTM D 1557 test procedures. All materials and methods of construction should conform to the requirements of the County of Riverside.

5.6 CONCRETE CONSTRUCTION

5.6.1 General

Concrete construction should follow the 2019 CBC and ACI guidelines regarding design, mix placement and curing of the concrete. If desired, GeoTek could provide quality control testing of the concrete during construction.

5.6.2 Concrete Mix Design

As discussed in Section 5.3.5, no special recommendations for concrete are required for this project due to soil sulfate exposure. Additional testing should be performed during grading so that specific recommendations can be formulated based on the as-graded conditions.

5.6.3 Concrete Flatwork

Exterior concrete flatwork is often one of the most visible aspects of site development. They are typically given the least level of quality control, being considered "non-structural" components. Cracking of these features is common due to various factors. While cracking usually does not affect the structural performance of the concrete, it is unsightly. It is recommended that the same standards of care be applied to these features as to the structure itself.

Flatwork should consist of a minimum four-inch (actual) thick concrete and the use of temperature and shrinkage control reinforcement is suggested. The project structural engineer should provide final design recommendations.

5.6.4 Concrete Performance

Concrete cracks should be expected. These cracks can vary from sizes that are hairline to more than 1/8 inch in width. Most cracks in concrete while unsightly do not significantly impact long-term performance. While it is possible to take measures (proper concrete mix, placement, curing, control joints, etc.) to reduce the extent and size of cracks that occur, some cracking will occur despite the best efforts to minimize it. Concrete undergoes chemical processes that are dependent on a wide range of variables, which are difficult, at best, to control. Concrete, while seemingly a stable material, is subject to internal expansion and contraction due to external changes over time.

One of the simplest means to control cracking is to provide weakened control joints for cracking to occur along. These do not prevent cracks from developing; they simply provide a relief point for the stresses that develop. These joints are a widely accepted means to control cracks but are not always effective. Control joints are more effective the more closely spaced they are. GeoTek suggests that control joints be placed in two orthogonal directions and located a distance apart approximately equal to 24 to 36 times the slab thickness.

5.7 PLAN REVIEW AND CONSTRUCTION OBSERVATIONS

It is recommended that site grading, specifications, and foundation plans be reviewed by this office prior to construction to check for conformance with the recommendations of this report. It is also recommended that GeoTek representatives be present during site grading and foundation construction to observe and document for proper implementation of the geotechnical recommendations. The owner/developer should have GeoTek perform at least the following duties:

- Observe site clearing and grubbing operations for proper removal of all unsuitable materials.
- Observe and test bottom of removals prior to fill placement.
- Evaluate the suitability of on-site and import materials for fill placement and collect soil samples for laboratory testing where necessary.
- Observe the fill for uniformity during placement, including utility trench excavation backfill. Also, test the fill for density, relative compaction and moisture content.
- Observe and probe foundation excavations to confirm suitability of bearing materials with respect to density.

If requested, a construction observation and compaction report can be provided by GeoTek which can comply with the requirements of the governmental agencies having jurisdiction over the project. It is recommended that these agencies be notified prior to commencement of construction so that necessary grading permits can be obtained.

6. INTENT

It is the intent of this report to aid in the design and construction of the proposed development. Implementation of the advice presented in this report is intended to reduce risk associated with construction projects. The professional opinions and geotechnical advice

contained in this report are not intended to imply total performance of the project or guarantee that unusual or variable conditions will not be discovered during or after construction.

The scope of our evaluation is limited to the area explored that is shown on the Boring Location Map (Figure 2). This evaluation does not and should in no way be construed to encompass any areas beyond the specific area of the proposed construction as indicated to GeoTek by the client. Further, no evaluation of any existing site improvements is included. The scope is based on our understanding of the project and the client's needs, GeoTek's proposal (Proposal No. P-0406121-CR) dated April 16, 2021 and geotechnical engineering standards normally used on similar projects in this region.

7. LIMITATIONS

GeoTek's findings are based on site conditions observed and the stated sources. Thus, GeoTek's comments are professional opinions that are limited to the extent of the available data.

GeoTek has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the engineering at this time and location and science professions currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this report.

Since GeoTek's recommendations are based on the site conditions observed and encountered at the stated times and laboratory testing. Thus, GeoTek's conclusions and recommendations are professional opinions that are limited to the extent of the available data. Observations during construction are important to allow for any change in recommendations found to be warranted. These opinions have been derived in accordance with current standards of practice and no warranty of any kind is expressed or implied. Standards of care/practice are subject to change with time.

8. SELECTED REFERENCES

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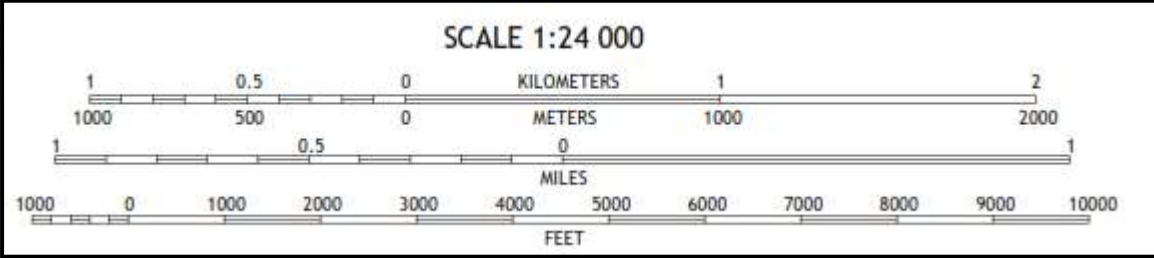
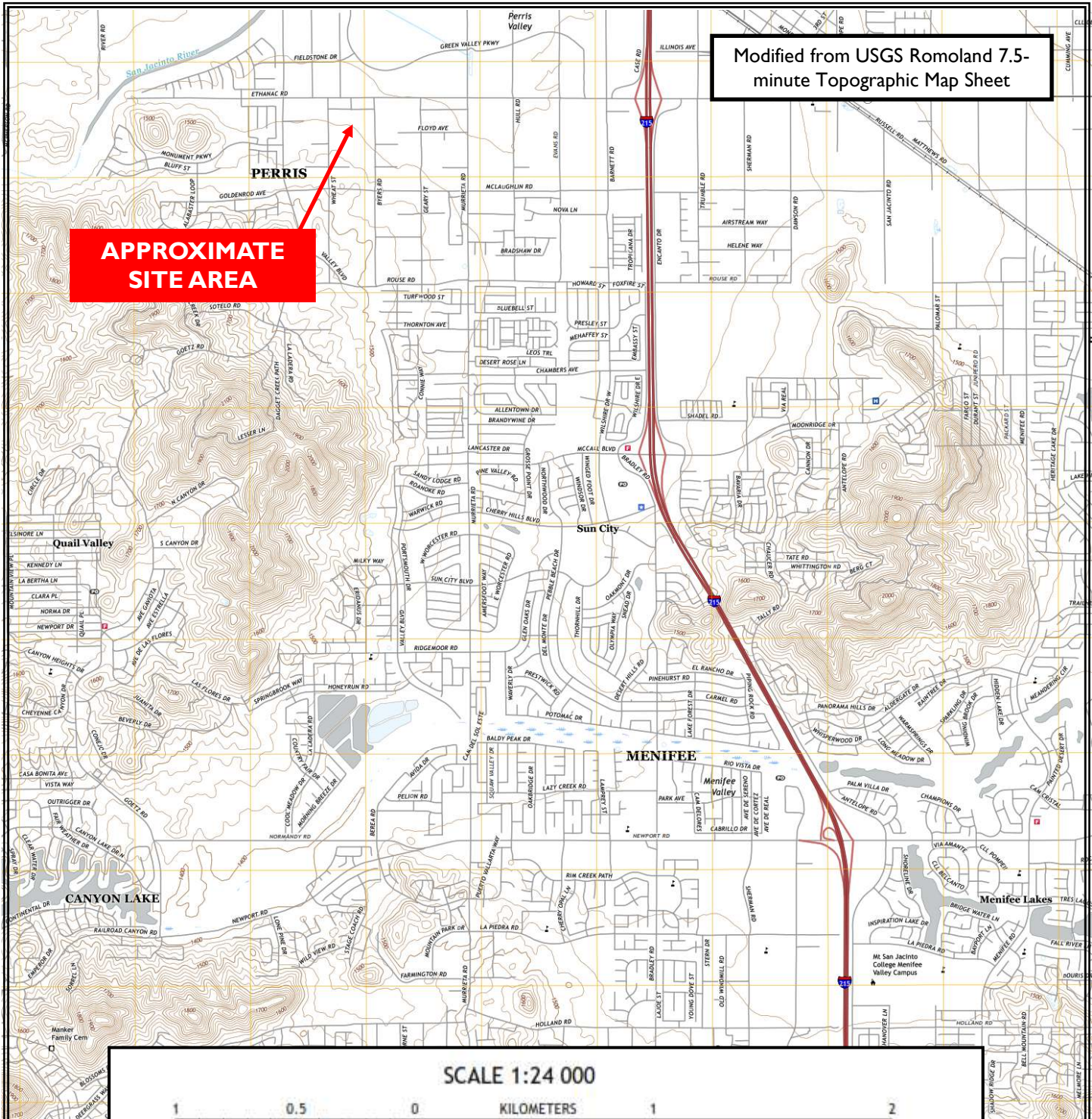
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Modified from USGS Romoland 7.5-minute Topographic Map Sheet

**APPROXIMATE
SITE AREA**



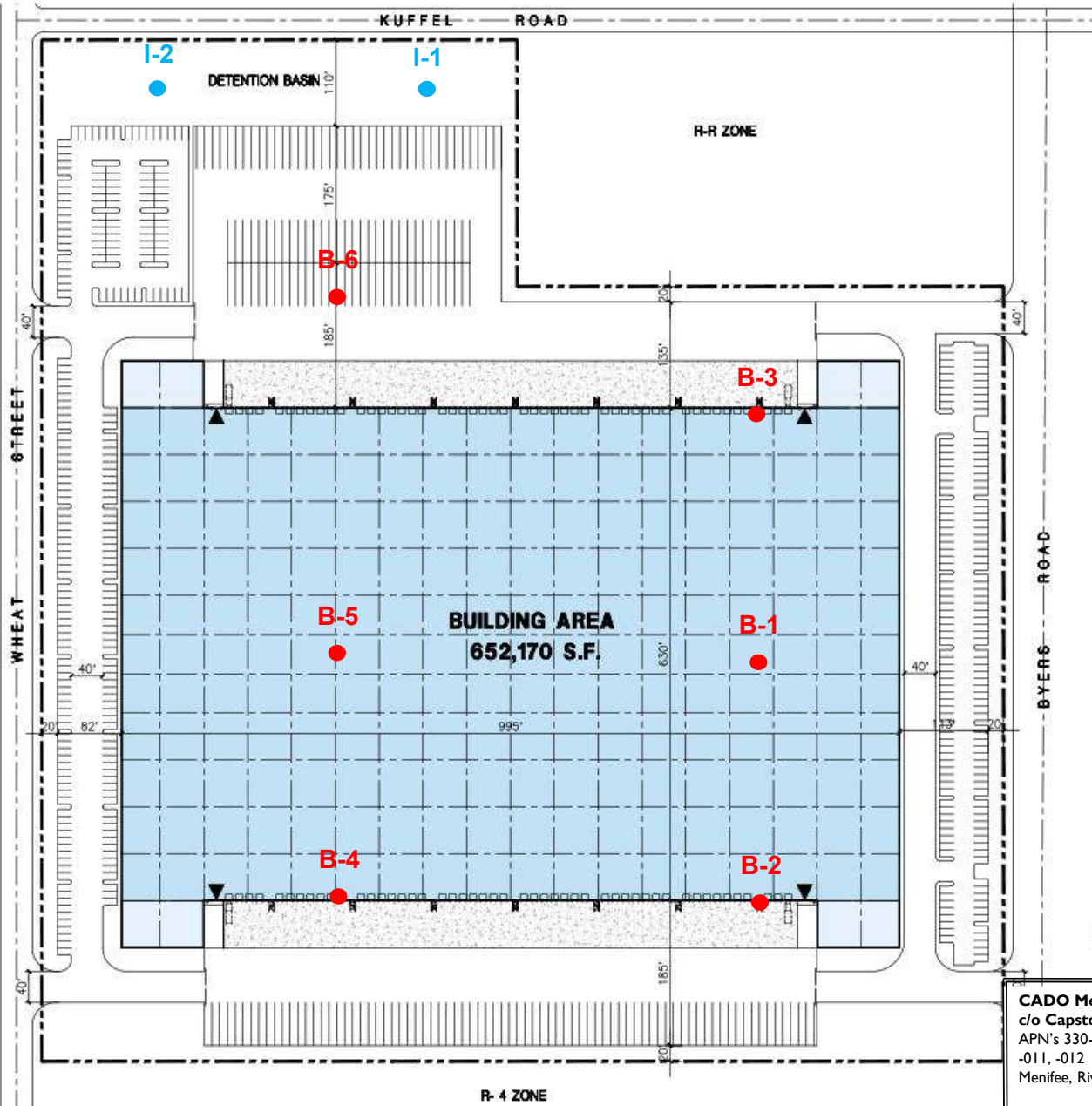
CADO Menifee, LLC
 APNs 330-190-002, -003, -004, -005, -010
 -011 and -012
 Menifee, Riverside County, California

Project No. 2761-CR



Figure I
 Site Location
 and
 Topography
 Map





Legend

- B-2 Approximate Boring Locations
- I-1 Approximate Infiltration Locations

CADO Menifee, LLC
 c/o Capstone Advisors
 APN's 330-190-002, -003, -004, -005, -010, -011, -012
 Menifee, Riverside County, California
 Project No. 2761-CR



Figure 2
 Boring Location Map

APPENDIX A

LOG OF EXPLORATORY BORINGS

**Proposed Warehouse Project
Kuffel Road and Wheat Street
Menifee, Riverside County, California
Project No. 2761-CR**



A - FIELD TESTING AND SAMPLING PROCEDURES

The Modified Split-Barrel Sampler (Ring)

The Ring sampler is driven into the ground at various depths in accordance with ASTM D 3550 test procedures. The sampler, with an external diameter of 3.0 inches, is lined with 1-inch long, thin brass rings with inside diameters of approximately 2.4 inches. The sampler is typically driven into the ground 12 or 18 inches with a 140-pound hammer free falling from a height of 30 inches. Blow counts are recorded for every 6 inches of penetration as indicated on the log of boring. The samples are removed from the sample barrel in the brass rings, sealed, and transported to the laboratory for testing.

Bulk Samples (Large)

These samples are normally large bags of earth materials over 20 pounds in weight collected from the field by means of hand digging or exploratory cuttings.

Bulk Samples (Small)

These are plastic bag samples which are normally airtight and contain less than 5 pounds in weight of earth materials collected from the field by means of hand digging or exploratory cuttings. These samples are primarily used for determining natural moisture content and classification indices.

B - BORING LOG LEGEND

The following abbreviations and symbols often appear in the classification and description of soil and rock on the log of borings:

SOILS

USCS	Unified Soil Classification System
f-c	Fine to coarse
f-m	Fine to medium

GEOLOGIC

B: Attitudes	Bedding: strike/dip
J: Attitudes	Joint: strike/dip
C: Contact line	
.....	Dashed line denotes USCS material change
———	Solid Line denotes unit / formational change
————	Thick solid line denotes end of boring

(Additional denotations and symbols are provided on the boring log)

GeoTek, Inc.
LOG OF EXPLORATORY BORING

CLIENT: Capstone Advisors
PROJECT NAME: Proposed Warehouse Project
PROJECT NO.: 2761-CR
LOCATION: Menifee, CA

DRILLER: 2R
DRILL METHOD: Hollw stem Auger
HAMMER: 140lbs/30in.

LOGGED BY: JD
OPERATOR: Jerry
RIG TYPE: CME 75
DATE: 5/20/2021

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: B-1	Laboratory Testing			
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others	
MATERIAL DESCRIPTION AND COMMENTS									
5	20 43 50-3"	R1	SM	Older Alluvial Fan Deposit: Silty f-c SAND, red-brown, slightly moist, very dense					EI=15, SR
	50-6"	R2		Granitic Rock excavates as: Silty f-c SAND, red-brown, slightly moist, very dense			12.2	112.0	
	42 50-5"	R3				6.9	120.9		
	47 50-3"	R4				6.0	129.0		
	50-3"	R5							
10									
15	50-1"			No Recovery					
BORING TERMINATED AT 15.5 FEET DUE TO GRANITE									
				No groundwater encountered Boring backfilled with soil cuttings					
20									
25									
30									

LEGEND	Sample type:	---Ring	---SPT	---Small Bulk	---Large Bulk	---No Recovery	---Water Table	
	Lab testing:	AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test

GeoTek, Inc.
LOG OF EXPLORATORY BORING

CLIENT: Capstone Advisors
PROJECT NAME: Proposed Warehouse Project
PROJECT NO.: 2761-CR
LOCATION: Menifee, CA

DRILLER: 2R
DRILL METHOD: Hollow stem Auger
HAMMER: 140lbs/30in.

LOGGED BY: JD
OPERATOR: Jerry
RIG TYPE: CME 75
DATE: 5/20/2021

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: B-2	Laboratory Testing		
	Sample Type	Blows / 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
MATERIAL DESCRIPTION AND COMMENTS								
Older Alluvial Fan Deposit:								
17 36 50-6"		R1	CL	Sandy CLAY, grey, slightly moist, hard	19.5	91.4	% Passing #200 = 53.6	
50-4"		R2		Granitic Rock excavates as: Silty f-c SAND, gravelly, olive, slightly moist, very dense	12.1	111.5		
50-2"				No Recovery				
50-2"		R3						
50-1"				No Recovery				
BORING TERMINATED AT 10.5 FEET DUE TO GRANITE								
No groundwater encountered Boring backfilled with soil cuttings								

LEGEND	Sample type:	---Ring	---SPT	---Small Bulk	---Large Bulk	---No Recovery	---Water Table	
	Lab testing:	AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test

GeoTek, Inc.
LOG OF EXPLORATORY BORING

CLIENT: Capstone Advisors
PROJECT NAME: Proposed Warehouse Project
PROJECT NO.: 2761-CR
LOCATION: Menifee, CA

DRILLER: 2R
DRILL METHOD: Hollow stem Auger
HAMMER: 140lbs/30in.

LOGGED BY: JD
OPERATOR: Jerry
RIG TYPE: CME 75
DATE: 5/20/2021

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: B-3	Laboratory Testing			
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others	
MATERIAL DESCRIPTION AND COMMENTS									
9 22 39	9	22	39	R1	SM	Older Alluvial Fan Deposit: Silty f SAND, clayey, red-brown, slightly moist, dense	12.9	97.8	% Passing #200 = 45.4
50-6"				R2		Granitic Rock excavates as: Silty f-c SAND, light brown, slightly moist, very dense	9.0	116.1	
50-4"				R3		No Recovery			
50-4"									
50-3"				R4			5.2		
10						BORING TERMINATED AT 9.5 FEET DUE TO GRANITE No groundwater encountered Boring backfilled with soil cuttings			
15									
20									
25									
30									

LEGEND	Sample type:	---Ring	---SPT	---Small Bulk	---Large Bulk	---No Recovery	---Water Table	
	Lab testing:	AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test

GeoTek, Inc.
LOG OF EXPLORATORY BORING

CLIENT: Capstone Advisors
PROJECT NAME: Proposed Warehouse Project
PROJECT NO.: 2761-CR
LOCATION: Menifee, CA

DRILLER: 2R
DRILL METHOD: Hollow stem Auger
HAMMER: 140lbs/30in.

LOGGED BY: JD
OPERATOR: Jerry
RIG TYPE: CME 75
DATE: 5/20/2021

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: B-4	Laboratory Testing		
	Sample Type	Blows / 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
MATERIAL DESCRIPTION AND COMMENTS								
					Older Alluvial Fan Deposit:			SH, MD, EI EI=36
		45 50-2"	R1	SM	Silty f-c SAND, red-brown, slightly moist, very dense	12.3	105.9	
		50-4"	R2		Granitic Rock excavates as: Silty f-c SAND, red-brown to tan-brown, slightly moist, very dense	9.9	108.3	
5		50-4"	R3			6.4	116	
		50-2"	R4					
10		50-3"	R5			5.6		
					BORING TERMINATED AT 10.5 FEET DUE TO GRANITE No groundwater encountered Boring backfilled with soil cuttings			
15								
20								
25								
30								

LEGEND	Sample type:	---Ring	---SPT	---Small Bulk	---Large Bulk	---No Recovery	---Water Table	
	Lab testing:	AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test

GeoTek, Inc.
LOG OF EXPLORATORY BORING

CLIENT: Capstone Advisors	DRILLER: 2R	LOGGED BY: JD
PROJECT NAME: Proposed Warehouse Project	DRILL METHOD: Hollow stem Auger	OPERATOR: Jerry
PROJECT NO.: 2761-CR	HAMMER: 140lbs/30in.	RIG TYPE: CME 75
LOCATION: Menifee, CA		DATE: 5/20/2021

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: B-5 MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
5	23 50-4"	R1	SM	<p>Older Alluvial Fan Deposit:</p> <p>Silty f SAND, clayey, red-brown, moist, very dense</p> <hr/> <p>Granitic Rock excavates as:</p> <p>Silty f-c SAND, gravelly, dark brown to red-brown, slightly moist, very dense</p>	14.3	121.7		
	50-2"	R2			1.8			
	50-1"	R3			3.4			
	50-2"	R4						
	50-1"	R5						
10				<p>BORING TERMINATED AT 9.5 FEET DUE TO GRANITE</p> <p>No groundwater encountered Boring backfilled with soil cuttings</p>				
15								
20								
25								
30								

LEGEND	Sample type:	■ ---Ring	■ ---SPT	▨ ---Small Bulk	⊠ ---Large Bulk	□ ---No Recovery	▽ ---Water Table	
	Lab testing:	AL = Atterberg Limits	EI = Expansion Index	SA = Sieve Analysis	RV = R-Value Test	SR = Sulfate/Resistivity Test	SH = Shear Test	HC = Consolidation

GeoTek, Inc.
LOG OF EXPLORATORY BORING

CLIENT: Capstone Advisors
PROJECT NAME: Proposed Warehouse Project
PROJECT NO.: 2761-CR
LOCATION: Menifee, CA

DRILLER: 2R
DRILL METHOD: Hollow stem Auger
HAMMER: 140lbs/30in.

LOGGED BY: JD
OPERATOR: Jerry
RIG TYPE: CME 75
DATE: 5/20/2021

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: B-6	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
MATERIAL DESCRIPTION AND COMMENTS								
Older Alluvial Fan Deposit:								
5	6 12 16	R1	ML	Sandy SILT, red-brown, slightly moist, dense	8.8	95.2	Collapse	
	10 14 21	R2			9.8	101.9	Collapse	
	50-6"	R3		Granitic Rock excavates as: Silty f-c SAND, light red-brown, slightly moist, very dense	3.8	109.6		
	50-3"	R4						
10	50-5"	R5			4.0	114.2		
BORING TERMINATED AT 10.5 FEET DUE TO GRANITE								
				No groundwater encountered Boring backfilled with soil cuttings				
15								
20								
25								
30								

LEGEND	Sample type:		---Ring		---SPT		---Small Bulk		---Large Bulk		---No Recovery		---Water Table
	Lab testing:	AL = Atterberg Limits	EI = Expansion Index	SA = Sieve Analysis	RV = R-Value Test	SR = Sulfate/Resistivity Test	SH = Shear Test	HC = Consolidation	MD = Maximum Density				

GeoTek, Inc.
LOG OF EXPLORATORY BORING

CLIENT: Capstone Advisors
PROJECT NAME: Proposed Warehouse Project
PROJECT NO.: 2761-CR
LOCATION: Menifee, CA

DRILLER: 2R
DRILL METHOD: Hollw stem Auger
HAMMER: 140lbs/30in.

LOGGED BY: JD
OPERATOR: Jerry
RIG TYPE: CME 75
DATE: 5/20/2021

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: I-1 MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows / 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
5				SM	Older Alluvial Fan Deposit: Silty f-c SAND, red-brown, slightly moist			
5					Granitic rock excavates as: Silty f-c SAND, grey, slightly moist BORING TERMINATED AT 5 FEET No groundwater encountered			
10								
15								
20								
25								
30								

LEGEND	Sample type:	---Ring	---SPT	---Small Bulk	---Large Bulk	---No Recovery	---Water Table	
	Lab testing:	AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test

GeoTek, Inc.
LOG OF EXPLORATORY BORING

CLIENT: Capstone Advisors
PROJECT NAME: Proposed Warehouse Project
PROJECT NO.: 2761-CR
LOCATION: Menifee, CA

DRILLER: 2R
DRILL METHOD: Hollw stem Auger
HAMMER: 140lbs/30in.

LOGGED BY: JD
OPERATOR: Jerry
RIG TYPE: CME 75
DATE: 5/20/2021

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: I-2 MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows / 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
5				SM	Older Alluvial Fan Deposit: Silty f-c SAND, red-brown, slightly moist			
5					Granitic rock excavates as: Silty f-c SAND, grey, slightly moist BORING TERMINATED AT 5 FEET No groundwater encountered			
10								
15								
20								
25								
30								

LEGEND	Sample type:	---Ring	---SPT	---Small Bulk	---Large Bulk	---No Recovery	---Water Table	
	Lab testing:	AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test

APPENDIX B

RESULTS OF LABORATORY TESTING

**Proposed Warehouse Project
Kuffel Road and Wheat Street
Menifee, Riverside County, California
Project No. 2761-CR**



SUMMARY OF LABORATORY TESTING

Classification

Soils were classified visually in general accordance with the Unified Soil Classification System (ASTM Test Method D 2487). The soil classifications are shown on the logs of borings in Appendix A.

Collapse Test

Collapse tests were performed on selected samples of the site soils in general accordance with ASTM D 5333 test procedures. The results of this test are presented graphically in Appendix B.

Direct Shear

Shear testing was performed in a direct shear machine of the strain-control type in general accordance with ASTM D 3080 test procedures. The rate of deformation was approximately 0.035 inch per minute. The sample was sheared under varying confining loads in order to determine the coulomb shear strength parameters, angle of internal friction and cohesion. The tests were performed on soil samples remolded to approximately 90 percent of maximum dry density as determined by ASTM D 1557 test procedures. The shear test results are presented in Appendix B.

Expansion Index

Expansion Index testing was performed on two soil samples. Testing was performed in general accordance with ASTM Test Method D 4829. The results of the testing are provided below.

Boring No.	Depth (ft.)	Description	Expansion Index	Classification
B-1	0-5	Silty Sand/Granitic Rock	15	Very low
B-4	0-5	Silty Sand/Granitic Rock	36	Low

In-Situ Moisture and Density

The natural water content of sampled soils was determined in general accordance with ASTM D 2216 test procedures on samples of the materials recovered from the subsurface exploration. In addition, in-place dry density of the sampled soils was determined in general accordance with ASTM D 2937 test procedures on relatively undisturbed samples to measure the unit weight of the subsurface soils. Results of these tests are shown on the boring logs at the appropriate sample depths in Appendix A.

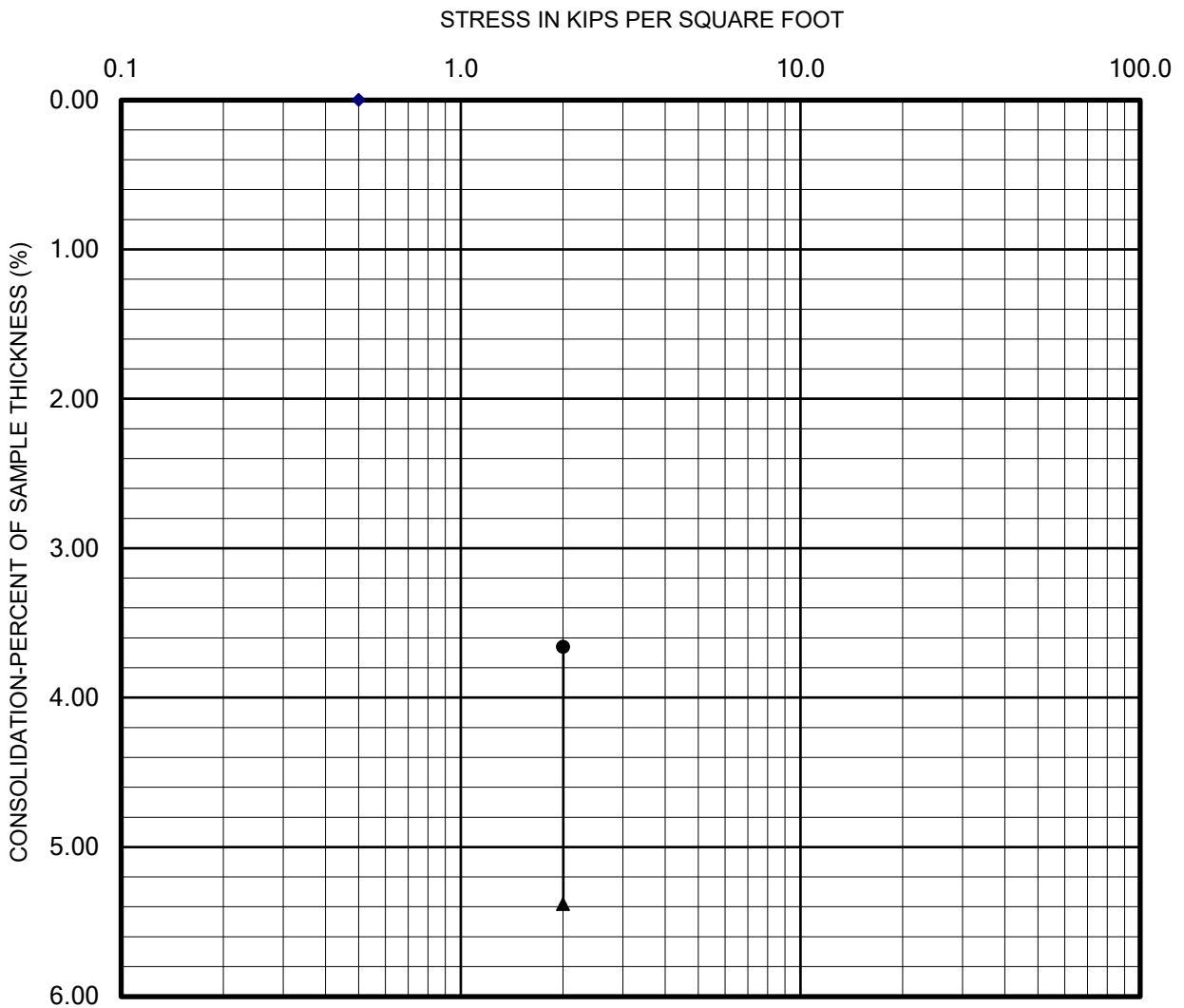
Moisture-Density Relationship

Laboratory testing was performed on two samples collected during the subsurface exploration. The laboratory maximum dry density and optimum moisture content for the soil type was determined in general accordance with test method ASTM Test Procedure D 1557. The results of the testing are provided in Appendix B.

Sulfate Content, Resistivity and Chloride Content

Testing to determine the water-soluble sulfate content was performed by others in general accordance with ASTM D4327 test procedures. Resistivity testing was completed by others in general accordance with ASTM G187 test procedures. Testing to determine the chloride content was performed by others in general accordance with ASTM D4327 test procedures. The results of the testing are provided below and in Appendix B.

Boring No.	Depth (ft.)	pH ASTM D4972	Chloride ASTM D4327 (mg/kg)	Sulfate ASTM D4327 (% by weight)	Resistivity ASTM G187 (ohm-cm)
B-1	0-5	8.9	4.2	0.0012	4,422



- Seating Cycle
- Loading Prior to Inundation
- ▲— Loading After Inundation
- ▲--- Rebound Cycle

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 4546



COLLAPSE REPORT

Sample: B-6 @ 2 feet

Proposed Warehouse Project
Menifee, California

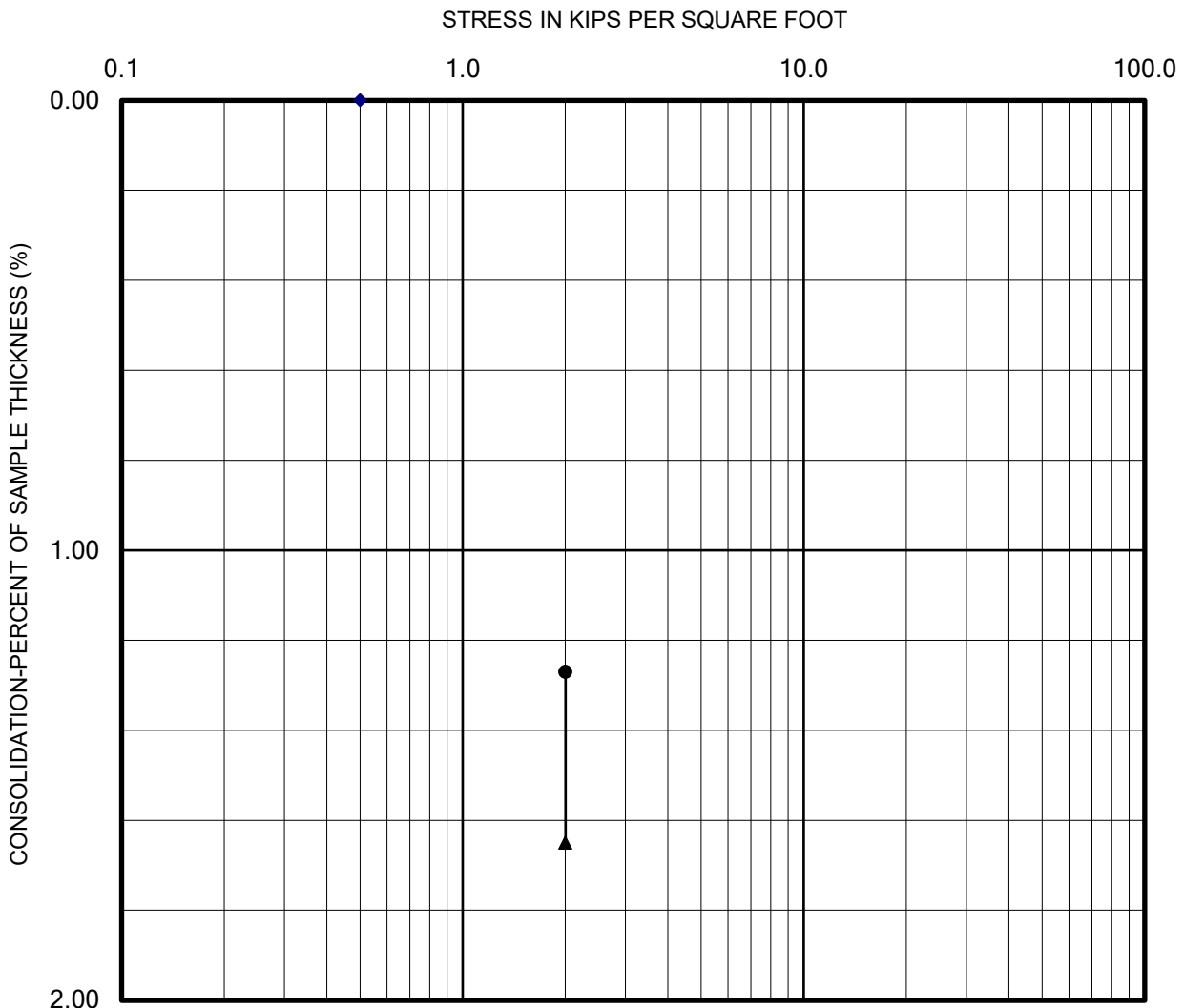
Plate B-1

CHECKED BY: RJ

Lab: Corona

PROJECT NO.: 2761-CR

Date: 6-3-21



- Seating Cycle
- Loading Prior to Inundation
- ▲— Loading After Inundation
- ▲--- Rebound Cycle

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 4546



COLLAPSE REPORT

Sample: B-6 @ 4 feet

**Proposed Warehouse Project
Menifee, California**

Plate B-2

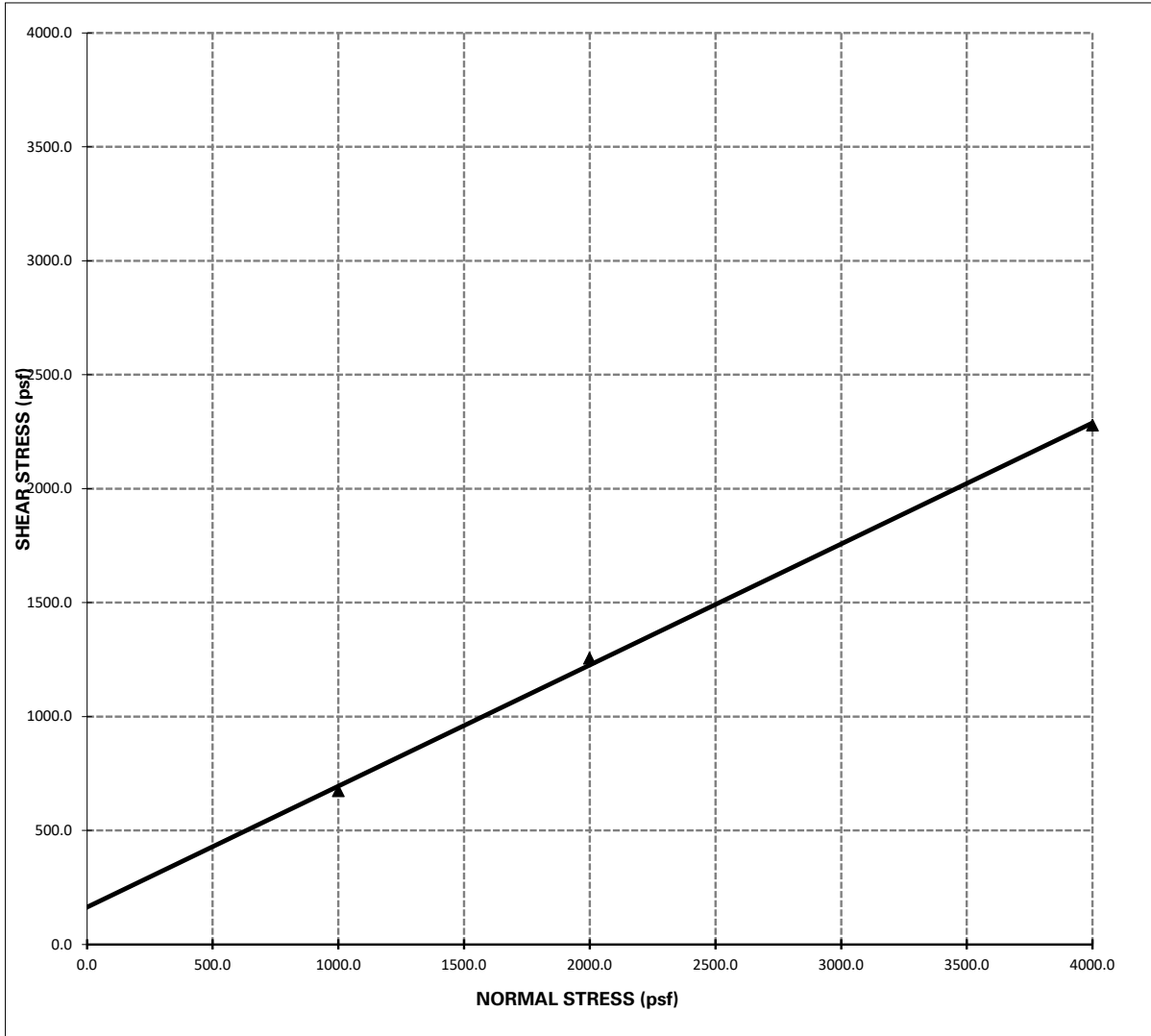
CHECKED BY: RJ	Lab: Corona
PROJECT NO.: 2761-CR	Date: 6-3-21



DIRECT SHEAR TEST

Project Name: Capstone Advisors
Project Number: 2761-CR

Sample Location: B4 @ 0-5'
Date Tested: 6/11/2021



Shear Strength: $\Phi = 28^\circ$, **C = 163 psf**

- Notes:**
- 1 - The soil specimen used in the shear box was a ring sample remolded to approximately 90% relative compaction from a bulk sample collected during the field investigation.
 - 2 - The above reflect direct shear strength at saturated conditions.
 - 3 - The tests were run at a shear rate of 0.035 in/min.



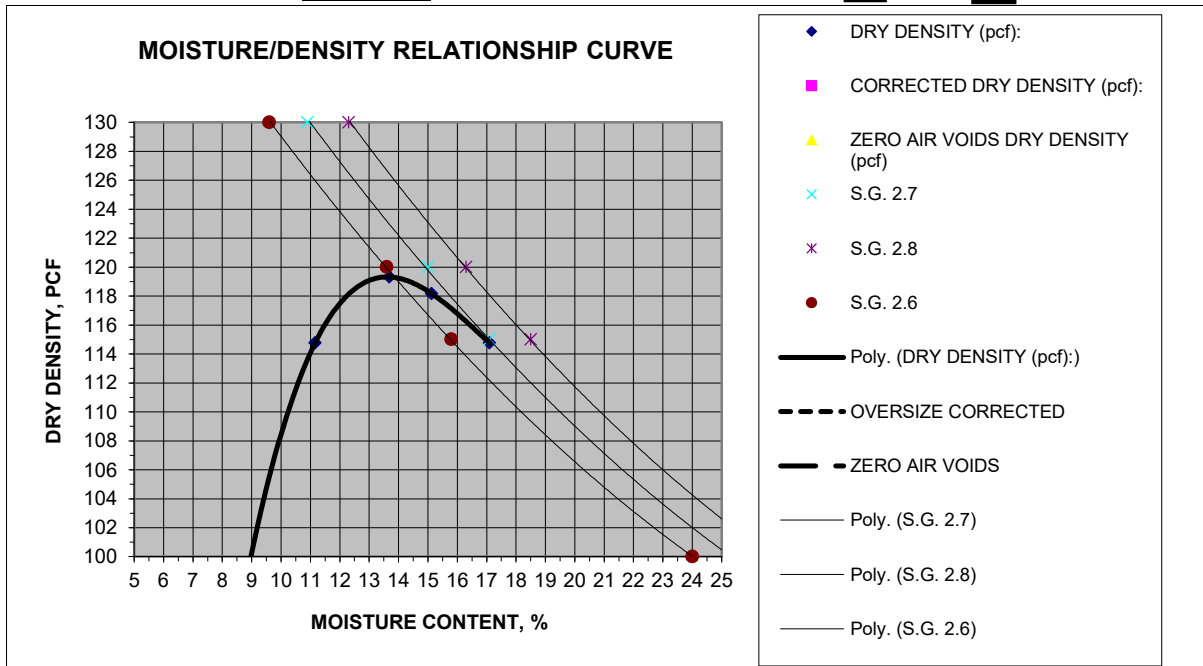
MOISTURE/DENSITY RELATIONSHIP

Client: CADO Menifee LLC
Project: Capstone Advisors
Location: Menifee
Material Type: Light Brown Silty Sand trace Clay
Material Supplier: -
Material Source: -
Sample Location: B4 @ 0-5'
 -
Sampled By: JD
Received By: RJ
Tested By: CD
Reviewed By: RJ

Job No.: 2761-CR
Lab No.: Corona

Date Sampled: 5/21/2021
Date Received: 5/21/2021
Date Tested: 6/9/2021
Date Reviewed: 6/10/2021

Test Procedure: ASTM D1557 **Method:** A
Oversized Material (%): 2.0 **Correction Required:** yes no



MOISTURE DENSITY RELATIONSHIP VALUES

Maximum Dry Density, pcf **@ Optimum Moisture, %**
Corrected Maximum Dry Density, pcf **@ Optimum Moisture, %**

MATERIAL DESCRIPTION

Grain Size Distribution:

	% Gravel (retained on No. 4)
	% Sand (Passing No. 4, Retained on No. 200)
	% Silt and Clay (Passing No. 200)

Classification:

Unified Soils Classification: _____
 AASHTO Soils Classification: _____

Atterberg Limits:

	Liquid Limit, %
	Plastic Limit, %
	Plasticity Index, %



Results Only Soil Testing for Kuftle Rd & Wheat St, Menifee

May 27, 2021

Prepared for:

Anna Scott

GeoTek, Inc.

1548 North Maple Street

Corona, CA 92280

ascott@geotekusa.com

Project X Job#: S210524K

Client Job or PO#: 2761-CR

Respectfully Submitted,

Eduardo Hernandez, M.Sc., P.E.
Sr. Corrosion Consultant
NACE Corrosion Technologist #16592
Professional Engineer
California No. M37102
ehernandez@projectxcorrosion.com





Soil Analysis Lab Results

Client: GeoTek, Inc.
 Job Name: Kuffle Rd & Wheat St, Menifee
 Client Job Number: 2761-CR
 Project X Job Number: S210524K
 May 27, 2021

Bore# / Description	Method Depth	ASTM D4327 Sulfates		ASTM D4327 Chlorides		ASTM G187 Resistivity		ASTM D4972 pH	ASTM G200 Redox	SM 4500-S2-D Sulfide	ASTM D4327 Nitrate	ASTM D6919 Ammonium	ASTM D6919 Lithium	ASTM D6919 Sodium	ASTM D6919 Potassium	ASTM D6919 Magnesium	ASTM D6919 Calcium	ASTM D4327 Fluoride	ASTM D4327 Phosphate
		SO ₄ ²⁻		Cl ⁻		As Rec'd Minimum													
		(mg/kg)	(wt%)	(mg/kg)	(wt%)	(Ohm-cm)	(Ohm-cm)												
B-1	0-5	11.6	0.0012	4.2	0.0004	24,790	4,422	8.9	74	<0.01	0.2	18.1	ND	97.9	1.2	34.4	116.9	2.2	1.0

Cations and Anions, except Sulfide and Bicarbonate, tested with Ion Chromatography
 mg/kg = milligrams per kilogram (parts per million) of dry soil weight
 ND = 0 = Not Detected | NT = Not Tested | Unk = Unknown
 Chemical Analysis performed on 1:3 Soil-To-Water extract
 PPM = mg/kg (soil) = mg/L (Liquid)

APPENDIX C

PERCOLATION DATA SHEETS & PORCHET CALCULATIONS

**Proposed Warehouse Project
Kuffel Road and Wheat Street
Menifee, Riverside County, California
Project No. 2761-CR**



PERCOLATION DATA SHEET

SE CORNER KUFFEL ROAD & WHEAT ROAD MENIFEE

Project: _____

Job No.: 2761-CR.

Test Hole No.: I-1 Tested By: DVG

Date: 5/20, 21/2021

Depth of Hole As Drilled: 48" Before Test: 48"

After Test: 48"

Reading No.	Time	Time Interval (Min)	Total Depth of Hole (Inches)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ In Water Level (Inches)	Rate (minutes per inch)	Comments
								PRESOAK 5 GAL 5/20/2021
	<u>717</u>		<u>48</u>	<u>20</u>				BEGIN 5/21/2021
	<u>742</u>	<u>25</u>			<u>13 1/2</u>	<u>6 1/2</u>		1ST 25 MIN.
	<u>744</u>		<u>48</u>	<u>20</u>				
	<u>809</u>	<u>25</u>			<u>14</u>	<u>6</u>		2ND 25 MIN.
	<u>811</u>		<u>48</u>	<u>20</u>				
	<u>841</u>	<u>30</u>			<u>13</u>	<u>7</u>		1ST 30 MIN.
	<u>843</u>		<u>48</u>	<u>20</u>				
	<u>913</u>	<u>30</u>			<u>13</u>	<u>7</u>		2ND 30 MIN.
	<u>915</u>		<u>48</u>	<u>20</u>				
	<u>945</u>	<u>30</u>			<u>13 1/4</u>	<u>6 3/4</u>		3RD 30 MIN.
	<u>947</u>		<u>48</u>	<u>20</u>				
	<u>1017</u>	<u>30</u>			<u>13 1/2</u>	<u>6 1/2</u>		4TH 30 MIN.
	<u>1019</u>		<u>48</u>	<u>20</u>				
	<u>1049</u>	<u>30</u>			<u>13 3/4</u>	<u>6 1/4</u>		5TH 30 MIN.
	<u>1051</u>		<u>48</u>	<u>20</u>				
	<u>1121</u>	<u>30</u>			<u>14</u>	<u>6</u>		6TH 30 MIN.
	<u>1123</u>		<u>48</u>	<u>20</u>				
	<u>1153</u>	<u>30</u>			<u>14 1/4</u>	<u>5 3/4</u>		7TH 30 MIN.

PERCOLATION DATA SHEET

SE CORNER KUFFEL ROAD & WHEAT ROAD MENIFEE

Project: _____

Job No.: 2761-CR.

Test Hole No.: I-1 Tested By: DVG

Date: 5/20, 21/2021.

Depth of Hole As Drilled: 48" Before Test: 48"

After Test: 48"

Reading No.	Time	Time Interval (Min)	Total Depth of Hole (Inches)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ In Water Level (Inches)	Rate (minutes per inch)	Comments
	<u>1155</u>		<u>48</u>	<u>20</u>				
	<u>1225</u>	<u>30</u>			<u>14 1/4</u>	<u>5 3/4</u>		<u>8TH 30 MIN.</u>
	<u>1227</u>		<u>48</u>	<u>20</u>				
	<u>1257</u>	<u>30</u>			<u>14 1/2</u>	<u>5 1/2</u>		<u>9TH 30 MIN.</u>
	<u>1259</u>		<u>48</u>	<u>20</u>				
	<u>129</u>	<u>30</u>			<u>14 1/2</u>	<u>5 1/2</u>		<u>10TH 30 MIN.</u>
	<u>131</u>		<u>48</u>	<u>20</u>				
	<u>201</u>	<u>30</u>			<u>14 3/4</u>	<u>5 1/4</u>		<u>11TH 30 MIN.</u>
	<u>203</u>		<u>48</u>	<u>20</u>				
	<u>233</u>	<u>30</u>			<u>14 3/4</u>	<u>5 1/4</u>		<u>12TH 30 MIN.</u>

PERCOLATION DATA SHEET

SE CORNER KUFFEL ROAD & WHEAT ROAD MENIFEE

Project: _____

Job No.: 2761-CR

Test Hole No.: I-2 Tested By: DVG

Date: 5/20, 21/2021

Depth of Hole As Drilled: 48" Before Test: 48" After Test: 48"

Reading No.	Time	Time Interval (Min)	Total Depth of Hole (Inches)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ In Water Level (Inches)	Rate (minutes per inch)	Comments
								PRESOAK 5 GAL 5/20/2021
	<u>731</u>		<u>48</u>	<u>20</u>				BEGIN 5/21/2021
	<u>756</u>	<u>25</u>			<u>12 3/4</u>	<u>7 1/4</u>		1st 25 MIN.
	<u>758</u>		<u>48</u>	<u>20</u>				
	<u>823</u>	<u>25</u>			<u>13 1/4</u>	<u>6 3/4</u>		2ND 25 MIN.
	<u>825</u>		<u>48</u>	<u>20</u>				
	<u>855</u>	<u>30</u>			<u>12 1/4</u>	<u>7 3/4</u>		1st 30 MIN.
	<u>857</u>		<u>48</u>	<u>20</u>				
	<u>927</u>	<u>30</u>			<u>12 1/4</u>	<u>7 3/4</u>		2ND 30 MIN.
	<u>929</u>		<u>48</u>	<u>20</u>				
	<u>959</u>	<u>30</u>			<u>12 1/2</u>	<u>7 1/2</u>		3RD 30 MIN.
	<u>1001</u>		<u>48</u>	<u>20</u>				
	<u>1031</u>	<u>30</u>			<u>13</u>	<u>7</u>		4TH 30 MIN.
	<u>1033</u>		<u>48</u>	<u>20</u>				
	<u>1103</u>	<u>30</u>			<u>13 1/4</u>	<u>6 3/4</u>		5TH 30 MIN.
	<u>1105</u>		<u>48</u>	<u>20</u>				
	<u>1135</u>	<u>30</u>			<u>13 1/2</u>	<u>6 1/2</u>		6TH 30 MIN.
	<u>1137</u>		<u>48</u>	<u>20</u>				
	<u>1207</u>	<u>30</u>			<u>13 1/2</u>	<u>6 1/2</u>		7TH 30 MIN.

PERCOLATION DATA SHEET

SE CORNER KUFFEL ROAD & WHEAT ROAD MENIFEE

Project: _____

Job No.: 2761-CR.

Test Hole No.: I-2 Tested By: DVG

Date: 5/20, 21/2021.

Depth of Hole As Drilled: 48'' Before Test: 48'' After Test: 48''

Reading No.	Time	Time Interval (Min)	Total Depth of Hole (Inches)	Initial Water Level (Inches)	Final Water Level (Inches)	Δ In Water Level (Inches)	Rate (minutes per inch)	Comments
	<u>1209</u>		<u>48</u>	<u>20</u>				
	<u>1239</u>	<u>30</u>			<u>13 3/4</u>	<u>6 1/4</u>		<u>8TH 30 MIN.</u>
	<u>1241</u>		<u>48</u>	<u>20</u>				
	<u>111</u>	<u>30</u>			<u>14</u>	<u>6</u>		<u>9TH 30 MIN.</u>
	<u>113</u>		<u>48</u>	<u>20</u>				
	<u>143</u>	<u>30</u>			<u>14 1/4</u>	<u>5 3/4</u>		<u>10TH 30 MIN.</u>
	<u>145</u>		<u>48</u>	<u>20</u>				
	<u>215</u>	<u>30</u>			<u>14 1/4</u>	<u>5 3/4</u>		<u>11TH 30 MIN.</u>
	<u>217</u>		<u>48</u>	<u>20</u>				
	<u>247</u>	<u>30</u>			<u>14 1/2</u>	<u>5 1/2</u>		<u>12TH 30 MIN.</u>
	—							
	—							
	—							
	—							
	—							

Client: Capstone Advisors
Project: Menifee
Project No: 2761-CR
Date: 5/21/2021

Boring No. I-1

Percolation Rate (Porchet Method)

Time Interval, $\Delta t =$ 30
 Final Depth to Water, $D_F =$ 33.25
 Test Hole Radius, $r =$ 4
 Initial Depth to Water, $D_O =$ 28
 Total Test Hole Depth, $D_T =$ 48

Equation -
$$I_t = \frac{\Delta H (60r)}{\Delta t (r+2H_{avg})}$$

$H_O = D_T - D_O =$ 20
 $H_F = D_T - D_F =$ 14.75
 $\Delta H = \Delta D = H_O - H_F =$ 5.25
 $H_{avg} = (H_O + H_F) / 2 =$ 17.375

$I_t =$ 1.08 Inches per Hour



Client: Capstone Advisors
Project: Menifee
Project No: 2761-CR
Date: 5/21/2021

Boring No. I-2

Percolation Rate (Porchet Method)

Time Interval, $\Delta t =$ 30
 Final Depth to Water, $D_F =$ 33.5
 Test Hole Radius, $r =$ 4
 Initial Depth to Water, $D_O =$ 28
 Total Test Hole Depth, $D_T =$ 48

Equation -
$$I_t = \frac{\Delta H (60r)}{\Delta t (r+2H_{avg})}$$

$H_O = D_T - D_O =$ 20
 $H_F = D_T - D_F =$ 14.5
 $\Delta H = \Delta D = H_O - H_F =$ 5.5
 $H_{avg} = (H_O + H_F) / 2 =$ 17.25

$I_t =$ 1.14 Inches per Hour



APPENDIX D

GENERAL GRADING GUIDELINES

**Proposed Warehouse Project
Kuffel Road and Wheat Street
Menifee, Riverside County, California
Project No. 2761-CR**



GENERAL GRADING GUIDELINES

Guidelines presented herein are intended to address general construction procedures for earthwork construction. Specific situations and conditions often arise which cannot reasonably be discussed in general guidelines, when anticipated these are discussed in the text of the report. Often unanticipated conditions are encountered which may necessitate modification or changes to these guidelines. It is our hope that these will assist the contractor to more efficiently complete the project by providing a reasonable understanding of the procedures that would be expected during earthwork and the testing and observation used to evaluate those procedures.

General

Grading should be performed to at least the minimum requirements of governing agencies, Chapters 18 and 33 of the Uniform Building Code, CBC (2019) and the guidelines presented below.

Preconstruction Meeting

A preconstruction meeting should be held prior to site earthwork. Any questions the contractor has regarding our recommendations, general site conditions, apparent discrepancies between reported and actual conditions and/or differences in procedures the contractor intends to use should be brought up at that meeting. The contractor (including the main onsite representative) should review our report and these guidelines in advance of the meeting. Any comments the contractor may have regarding these guidelines should be brought up at that meeting.

Grading Observation and Testing

1. Observation of the fill placement should be provided by our representative during grading. Verbal communication during the course of each day will be used to inform the contractor of test results. The contractor should receive a copy of the "Daily Field Report" indicating results of field density tests that day. If our representative does not provide the contractor with these reports, our office should be notified.
2. Testing and observation procedures are, by their nature, specific to the work or area observed and location of the tests taken, variability may occur in other locations. The contractor is responsible for the uniformity of the grading operations; our observations and test results are intended to evaluate the contractor's overall level of efforts during grading. The contractor's personnel are the only individuals participating in all aspect of site work. Compaction testing and observation should not be considered as relieving the contractor's responsibility to properly compact the fill.
3. Cleanouts, processed ground to receive fill, key excavations, and subdrains should be observed by our representative prior to placing any fill. It will be the contractor's responsibility to notify our representative or office when such areas are ready for observation.

4. Density tests may be made on the surface material to receive fill, as considered warranted by this firm.
5. In general, density tests would be made at maximum intervals of two feet of fill height or every 1,000 cubic yards of fill placed. Criteria will vary depending on soil conditions and size of the fill. More frequent testing may be performed. In any case, an adequate number of field density tests should be made to evaluate the required compaction and moisture content is generally being obtained.
6. Laboratory testing to support field test procedures will be performed, as considered warranted, based on conditions encountered (e.g. change of material sources, types, etc.) Every effort will be made to process samples in the laboratory as quickly as possible and in progress construction projects are our first priority. However, laboratory workloads may cause in delays and some soils may require a **minimum of 48 to 72 hours to complete test procedures**. Whenever possible, our representative(s) should be informed in advance of operational changes that might result in different source areas for materials.
7. Procedures for testing of fill slopes are as follows:
 - a) Density tests should be taken periodically during grading on the flat surface of the fill, three to five feet horizontally from the face of the slope.
 - b) If a method other than over building and cutting back to the compacted core is to be employed, slope compaction testing during construction should include testing the outer six inches to three feet in the slope face to determine if the required compaction is being achieved.
8. Finish grade testing of slopes and pad surfaces should be performed after construction is complete.

Site Clearing

1. All vegetation, and other deleterious materials, should be removed from the site. If material is not immediately removed from the site it should be stockpiled in a designated area(s) well outside of all current work areas and delineated with flagging or other means. Site clearing should be performed in advance of any grading in a specific area.
2. Efforts should be made by the contractor to remove all organic or other deleterious material from the fill, as even the most diligent efforts may result in the incorporation of some materials. This is especially important when grading is occurring near the natural grade. All equipment operators should be aware of these efforts. Laborers may be required as root pickers.
3. Nonorganic debris or concrete may be placed in deeper fill areas provided the procedures used are observed and found acceptable by our representative.

Treatment of Existing Ground

1. Following site clearing, all surficial deposits of alluvium and colluvium as well as weathered or creep affected bedrock, should be removed unless otherwise specifically indicated in the text of this report.
2. In some cases, removal may be recommended to a specified depth (e.g. flat sites where partial alluvial removals may be sufficient). The contractor should not exceed these depths unless directed otherwise by our representative.
3. Groundwater existing in alluvial areas may make excavation difficult. Deeper removals than indicated in the text of the report may be necessary due to saturation during winter months.
4. Subsequent to removals, the natural ground should be processed to a depth of six inches, moistened to near optimum moisture conditions and compacted to fill standards.
5. Exploratory back hoe or dozer trenches still remaining after site removal should be excavated and filled with compacted fill if they can be located.

Fill Placement

1. Unless otherwise indicated, all site soil and bedrock may be reused for compacted fill; however, some special processing or handling may be required (see text of report).
2. Material used in the compacting process should be evenly spread, moisture conditioned, processed, and compacted in thin lifts six (6) to eight (8) inches in compacted thickness to obtain a uniformly dense layer. The fill should be placed and compacted on a nearly horizontal plane, unless otherwise found acceptable by our representative.
3. If the moisture content or relative density varies from that recommended by this firm, the contractor should rework the fill until it is in accordance with the following:
 - a) Moisture content of the fill should be at or above optimum moisture. Moisture should be evenly distributed without wet and dry pockets. Pre-watering of cut or removal areas should be considered in addition to watering during fill placement, particularly in clay or dry surficial soils. The ability of the contractor to obtain the proper moisture content will control production rates.
 - b) Each six-inch layer should be compacted to at least 90 percent of the maximum dry density in compliance with the testing method specified by the controlling governmental agency. In most cases, the testing method is ASTM Test Designation D 1557.
4. Rock fragments less than eight inches in diameter may be utilized in the fill, provided:
 - a) They are not placed in concentrated pockets;
 - b) There is a sufficient percentage of fine-grained material to surround the rocks;
 - c) The distribution of the rocks is observed by, and acceptable to, our representative.

5. Rocks exceeding eight (8) inches in diameter should be taken off site, broken into smaller fragments, or placed in accordance with recommendations of this firm in areas designated suitable for rock disposal. On projects where significant large quantities of oversized materials are anticipated, alternate guidelines for placement may be included. If significant oversize materials are encountered during construction, these guidelines should be requested.
6. In clay soil, dry or large chunks or blocks are common. If in excess of eight (8) inches minimum dimension, then they are considered as oversized. Sheepsfoot compactors or other suitable methods should be used to break up blocks. When dry, they should be moisture conditioned to provide a uniform condition with the surrounding fill.

Slope Construction

1. The contractor should obtain a minimum relative compaction of 90 percent out to the finished slope face of fill slopes. This may be achieved by either overbuilding the slope and cutting back to the compacted core, or by direct compaction of the slope face with suitable equipment.
2. Slopes trimmed to the compacted core should be overbuilt by at least three (3) feet with compaction efforts out to the edge of the false slope. Failure to properly compact the outer edge results in trimming not exposing the compacted core and additional compaction after trimming may be necessary.
3. If fill slopes are built "at grade" using direct compaction methods, then the slope construction should be performed so that a constant gradient is maintained throughout construction. Soil should not be "spilled" over the slope face nor should slopes be "pushed out" to obtain grades. Compaction equipment should compact each lift along the immediate top of slope. Slopes should be back rolled or otherwise compacted at approximately every 4 feet vertically as the slope is built.
4. Corners and bends in slopes should have special attention during construction as these are the most difficult areas to obtain proper compaction.
5. Cut slopes should be cut to the finished surface. Excessive undercutting and smoothing of the face with fill may necessitate stabilization.

UTILITY TRENCH CONSTRUCTION AND BACKFILL

Utility trench excavation and backfill is the contractor's responsibility. The geotechnical consultant typically provides periodic observation and testing of these operations. While efforts are made to make sufficient observations and tests to verify that the contractor's methods and procedures are adequate to achieve proper compaction, it is typically impractical to observe all backfill procedures. As such, it is critical that the contractor use consistent backfill procedures.

Compaction methods vary for trench compaction and experience indicates many methods can be successful. However, procedures that “worked” on previous projects may or may not prove effective on a given site. The contractor(s) should outline the procedures proposed, so that we may discuss them **prior** to construction. We will offer comments based on our knowledge of site conditions and experience.

1. Utility trench backfill in slopes, structural areas, in streets and beneath flat work or hardscape should be brought to at least optimum moisture and compacted to at least 90 percent of the laboratory standard. Soil should be moisture conditioned prior to placing in the trench.
2. Flooding and jetting are not typically recommended or acceptable for native soils. Flooding or jetting may be used with select sand having a Sand Equivalent (SE) of 30 or higher. This is typically limited to the following uses:
 - a) shallow (12 + inches) under slab interior trenches and,
 - b) as bedding in pipe zone.

The water should be allowed to dissipate prior to pouring slabs or completing trench compaction.

3. Care should be taken not to place soils at high moisture content within the upper three feet of the trench backfill in street areas, as overly wet soils may impact subgrade preparation. Moisture may be reduced to 2% below optimum moisture in areas to be paved within the upper three feet below sub grade.
4. Sand backfill should not be allowed in exterior trenches adjacent to and within an area extending below a 1:1 projection from the outside bottom edge of a footing, unless it is similar to the surrounding soil.
5. Trench compaction testing is generally at the discretion of the geotechnical consultant. Testing frequency will be based on trench depth and the contractors procedures. A probing rod would be used to assess the consistency of compaction between tested areas and untested areas. If zones are found that are considered less compact than other areas, this would be brought to the contractors attention.

JOB SAFETY

General

Personnel safety is a primary concern on all job sites. The following summaries are safety considerations for use by all our employees on multi-employer construction sites. On ground personnel are at highest risk of injury and possible fatality on grading construction projects. The company recognizes that construction activities will vary on each site and that job site safety is the contractor's responsibility. However, it is, imperative that all personnel be safety conscious to avoid accidents and potential injury.

In an effort to minimize risks associated with geotechnical testing and observation, the following precautions are to be implemented for the safety of our field personnel on grading and construction projects.

1. **Safety Meetings:** Our field personnel are directed to attend the contractor's regularly scheduled safety meetings.
2. **Safety Vests:** Safety vests are provided for and are to be worn by our personnel while on the job site.
3. **Safety Flags:** Safety flags are provided to our field technicians; one is to be affixed to the vehicle when on site, the other is to be placed atop the spoil pile on all test pits.

In the event that the contractor's representative observes any of our personnel not following the above, we request that it be brought to the attention of our office.

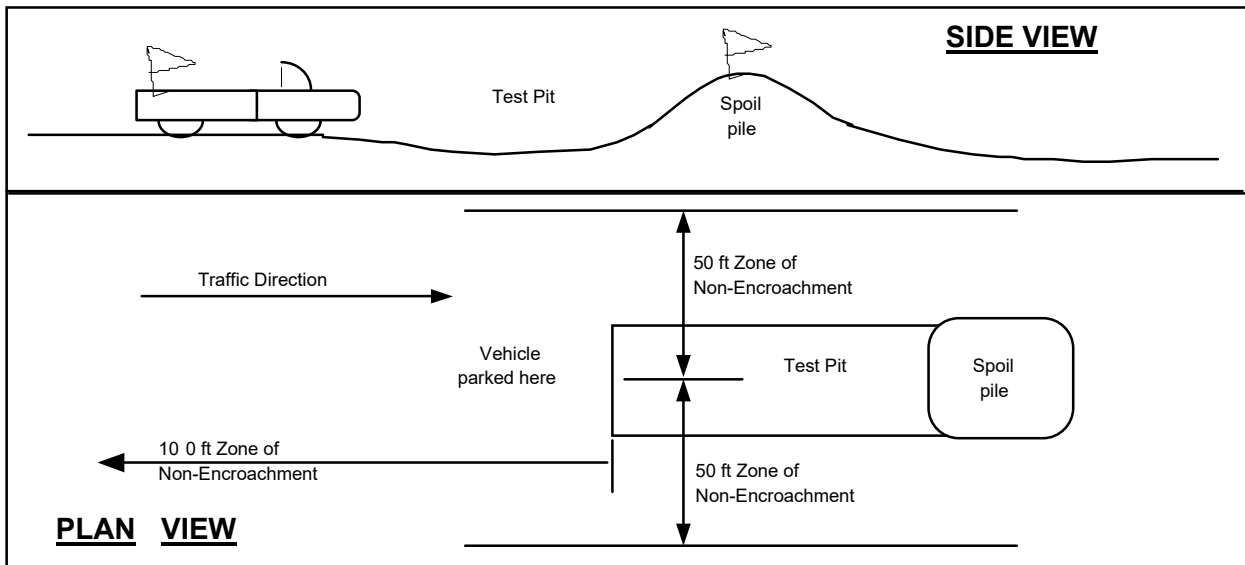
Test Pits Location, Orientation and Clearance

The technician is responsible for selecting test pit locations. The primary concern is the technician's safety. However, it is necessary to take sufficient tests at various locations to obtain a representative sampling of the fill. As such, efforts will be made to coordinate locations with the grading contractors authorized representatives (e.g. dump man, operator, supervisor, grade checker, etc.), and to select locations following or behind the established traffic pattern, preferably outside of current traffic. The contractors authorized representative should direct excavation of the pit and safety during the test period. Again, safety is the paramount concern.

Test pits should be excavated so that the spoil pile is placed away from oncoming traffic. The technician's vehicle is to be placed next to the test pit, opposite the spoil pile. This necessitates that the fill be maintained in a drivable condition. Alternatively, the contractor may opt to park a piece of equipment in front of test pits, particularly in small fill areas or those with limited access.

A zone of non-encroachment should be established for all test pits (see diagram below). No grading equipment should enter this zone during the test procedure. The zone should extend outward to the sides approximately 50 feet from the center of the test pit and 100 feet in the direction of traffic flow. This zone is established both for safety and to avoid excessive ground vibration, which typically decreases test results.

TEST PIT SAFETY PLAN



Slope Tests

When taking slope tests, the technician should park their vehicle directly above or below the test location on the slope. The contractor's representative should effectively keep all equipment at a safe operation distance (e.g. 50 feet) away from the slope during testing.

The technician is directed to withdraw from the active portion of the fill as soon as possible following testing. The technician's vehicle should be parked at the perimeter of the fill in a highly visible location.

Trench Safety

It is the contractor's responsibility to provide safe access into trenches where compaction testing is needed. Trenches for all utilities should be excavated in accordance with CAL-OSHA and any other applicable safety standards. Safe conditions will be required to enable compaction testing of the trench backfill.

All utility trench excavations in excess of 5 feet deep, which a person enters, are to be shored or laid back. Trench access should be provided in accordance with OSHA standards. Our personnel are directed not to enter any trench by being lowered or "riding down" on the equipment.

Our personnel are directed not to enter any excavation which;

1. is 5 feet or deeper unless shored or laid back,
2. exit points or ladders are not provided,
3. displays any evidence of instability, has any loose rock or other debris which could fall into the trench, or

4. displays any other evidence of any unsafe conditions regardless of depth.

If the contractor fails to provide safe access to trenches for compaction testing, our company policy requires that the soil technician withdraws and notifies their supervisor. The contractor's representative will then be contacted in an effort to effect a solution. All backfill not tested due to safety concerns or other reasons is subject to reprocessing and/or removal.

Procedures

In the event that the technician's safety is jeopardized or compromised as a result of the contractor's failure to comply with any of the above, the technician is directed to inform both the developer's and contractor's representatives. If the condition is not rectified, the technician is required, by company policy, to immediately withdraw and notify their supervisor. The contractor's representative will then be contacted in an effort to effect a solution. No further testing will be performed until the situation is rectified. Any fill placed in the interim can be considered unacceptable and subject to reprocessing, recompaction or removal.

In the event that the soil technician does not comply with the above or other established safety guidelines, we request that the contractor bring this to technicians attention and notify our project manager or office. Effective communication and coordination between the contractor's representative and the field technician(s) is strongly encouraged in order to implement the above safety program and safety in general.

The safety procedures outlined above should be discussed at the contractor's safety meetings. This will serve to inform and remind equipment operators of these safety procedures particularly the zone of non-encroachment.

The safety procedures outlined above should be discussed at the contractor's safety meetings. This will serve to inform and remind equipment operators of these safety procedures particularly the zone of non-encroachment.

Appendix 4: Historical Site Conditions

Phase I Environmental Site Assessment or Other Information on Past Site Use



GEO-ENVIRONMENTAL, INC.

Caltrans Certified
DBE Firm

PHASE I ENVIRONMENTAL SITE ASSESSMENT
Property Located Between Wheat Street and Byers Street
Approximately 1,500 Feet North of McLaughlin Road and
1,200 Feet South of Ethanac Road in Sun City
Unincorporated Rivers de County, California

GEI Project No: 236-03a

Prepared for

Mr. John Wolter
Van Dell & Associates
255 East Rincon Street, Suite 323
Corona, California 92879

November 18, 2005

GEO-ENVIRONMENTAL, INC.

1720 Garry Avenue, Suite 215, Santa Ana, CA 92705

Tel (949) 263-8334. Fax (949) 263-8338

www.geo-environmental.com



GEO-ENVIRONMENTAL, INC.

Caltrans Certified
DBE Firm

Phase I Environmental Site Assessment
Vacant Lots Located Between Wheat Street and Byers Street
Approximately 1,500 Feet North of McLaughlin Road and
1,200 Feet South of Ethanac Road in Sun City
Unincorporated Area of Riverside County, California

Prepared for

Mr. John Wolter
Van Dell & Associates
255 East Rincon Street, Suite 323
Corona, CA 92879

GEI Project No. 236-03a

Prepared by

Geo-Environmental, Inc.
1720 E. Garry Avenue, Suite 215
Santa Ana, California 92705



Roberto C. Flores
Roberto C. Flores
Staff Engineer

Sree Akkenapally
Sree Akkenapally, R.E.A. I
Project Engineer
Environmental Assessor Class I - 06727

Farhat H. Siddiqi
Farhat H. Siddiqi, Ph.D., P.E.
Principal Engineer
Civil Engineer - 25287



November 18, 2005

TABLE OF CONTENTS

	PAGE
1.0 INTRODUCTION	1
2.0 PURPOSE	1
3.0 SCOPE OF WORK	1
4.0 SITE AND VICINITY GENERAL CHARACTERISTICS	2
5.0 RECORDS REVIEW	2
5.1 FINDINGS	2
5.2 STATE GOVERNMENT DATABASES	4
5.3 PHYSICAL SETTING SOURCE SUMMARY	5
5.4 HISTORICAL USE INFORMATION ON THE PROPERTY	6
6.0 SITE RECONNAISSANCE	7
7.0 CONCLUSIONS	7
8.0 LIMITATIONS	8
9.0 REFERENCES	8

ILLUSTRATION

Figure 1 - Vicinity and Topographic Map

APPENDICES

- Appendix A – EDR Database Report
- Appendix B – Historical Aerial Photographs
- Appendix C – Historical Topographic Maps
- Appendix D – Site Photographs

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Vacant Lots Located Between Wheat Street and Byers Street
Sun City, Unincorporated Area of Riverside County, California
Project No. 236-03a

1.0 INTRODUCTION

This report presents the results of a Phase I Environmental Site Assessment (ESA) performed by Geo-Environmental, Inc. (GEI) at the subject site located between Wheat Street and Byers Street approximately 1,500 feet north of McLaughlin Road and 1,200 feet south of Ethanac Road in Sun City, Unincorporated area of Riverside County, California (Figure 1). GEI's work has been performed in general accordance with our conversations with Mr. John Wolter of Van Dell & Associates on November 7, 2005.

As part of this investigation, GEI reviewed federal, state and local records, historical aerial photographs, topographic maps and other data, and conducted a site inspection. Such assessment activities revealed the following pertinent information and supporting conclusions regarding the subject property and the surroundings properties.

2.0 PURPOSE

GEI performed an ESA for the property located between Wheat Street and Byers Street approximately 1,500 feet north of McLaughlin Road and 1,200 feet south of Ethanac Road in Sun City, Unincorporated area of Riverside County, California. The purpose of the ESA is to identify, to the extent feasible, recognized environmental conditions in connection with the subject property. The term "Recognized Environmental Conditions (RECs)", as defined by American Society for Testing and Materials (ASTM), means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the groundwater, ground, or surface water of the subject property.

3.0 SCOPE OF WORK

The scope of work was the performance of an ESA in accordance with ASTM 1527E-00 and included the following tasks:

- ↓ Review of historical data, including historical aerial photographs, historical topographic maps, previous environmental assessments, and zoning information.
- ↓ Review of environmental databases and files obtained from federal, state and local regulatory agencies.
- ↓ Interviews of owner, site contacts, and manager of the subject property.
- ↓ Visual inspection of the subject property, including taking photographs of the site and noting adjacent property uses and conditions.
- ↓ Preparation of the report.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Vacant Lots Located Between Wheat Street and Byers Street
Sun City, Unincorporated Area of Riverside County, California
Project No. 236-03a

4.0 SITE AND VICINITY GENERAL CHARACTERISTICS

The subject property is located in Sun City, an Unincorporated Area of Riverside County, between the Interstate 15 Freeway (I-15) and the Interstate 215 Freeway (I-215), south of Highway 74. Specifically, the lot is located between Wheat Street and Byers Street, approximately 1,500 feet north of McLaughlin Road and 1,200 feet south of Ethanac Road. The lot consists of primarily undeveloped vacant land located in a rural area. The site is surrounded by few private properties. The existing ground surface of the site descends gently to the northeast. The site elevation is around 1,440 and 1,445 feet above mean sea level (msl). At the time of our site investigation, the site was mostly vacant and contained volunteer grasses and seasonal vegetation.

5.0 RECORDS REVIEW

Federal and state records were accessed through Environmental Data Resources, Inc. (EDR) of Milford, Connecticut to identify sites in the vicinity of the subject property that may impact environmental conditions at the subject property (See Appendix A).

5.1 FINDINGS

The subject property was not identified in any of the several government database searches. There was only one property identified within the search radius of the site that appeared on the public database accessed by EDR. Native Plant (located at 202 Ethanac Road) was listed as CORTESE and LUST site. This property is further discussed in Section 5.2.4.

5.1.1 National Priorities List (NPL)

The NPL is the Environmental Protection Agency's (EPA's) list of the most serious, uncontrolled or abandoned, hazardous waste sites identified for possible long-term remedial action under the Superfund program. No NPL sites were identified within a 1.0-mile radius of the subject property.

5.1.2 Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)

CERCLIS is a compilation by the EPA of known or suspected, uncontrolled or abandoned, hazardous wastes sites that the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA-Superfund Act). No CERCLIS sites were identified within a 0.5-mile radius of the subject property.

5.1.3 RCRA Corrective Action (CORRACTS)

CORRACTS is a list of handlers with Resource Conservation and Recovery Act (RCRA) Corrective Action activity. No CORRACTS sites were identified within a 1.0-mile radius of the subject property.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Vacant Lots Located Between Wheat Street and Byers Street
Sun City, Unincorporated Area of Riverside County, California
Project No. 236-03a

5.1.4 Resource Conservation and Recovery Act (RCRA) Treatment, Storage, and Disposal (TSD) Facilities

The RCRA program identifies and tracks hazardous waste from the point of generation to the point of disposal. RCRA notifiers are sites that have filed notification forms with the EPA, in accordance with RCRA requirements, regarding their generation, storage, transportation, treatment, or disposal of hazardous waste. A hazardous waste generator should ship its waste to a Treatment, Storage and Disposal (TSD) facility for proper disposal. No RCRA TSD facilities were identified within a 0.5-mile radius of the subject property.

5.1.5 RCRA Generators

The RCRA program identifies and tracks hazardous waste from the point of generation to the point of disposal. RCRA notifiers are sites that have filed notification forms with the EPA, in accordance with RCRA requirements, regarding their generation, storage, transportation, treatment, or disposal of hazardous waste.

RCRA hazardous-waste regulations separate generators of hazardous waste into three categories based on the quantity generated, as follows:

- Conditionally exempt small-quantity generators (CESQGs) generate no more than 100 kilograms of hazardous waste in a calendar month.
- Small-quantity generators (SQGs) generate 100 kilograms to 1,000 kilograms of hazardous waste in a calendar month.
- Large-quantity generators (LQGs) generate more than 1,000 kilograms of hazardous waste in a calendar month.

No properties were identified within 0.25-mile of the site as RCRA-LQGs and there were no properties identified within 0.25 mile of the site that were listed as RCRA-SQGs.

5.1.6 Emergency Response Notification System (ERNS)

ERNS is a national database used to collect information of reported releases of oil and hazardous substances. The database search for ERNS sites was limited to the subject property in accordance with ASTM guidance. The property is not listed as an ERNS site in the database.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Vacant Lots Located Between Wheat Street and Byers Street
Sun City, Unincorporated Area of Riverside County, California
Project No. 236-03a

5.2 STATE GOVERNMENT DATABASES

5.2.1 Solid Waste Facilities/Landfill Sites (SWF/LS)

SWF/LS records typically contain an inventory of solid waste disposal facilities or landfills in the state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Section 2004 criteria for solid waste landfills or disposal sites. The state database maintains an inventory of the solid waste facilities in the state. No facilities were identified within a 0.5-mile radius of the subject property.

5.2.2 State Hazardous Waste Sites (Cal-Sites)

State hazardous waste site records (Cal-Sites) are the states equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds are identified along with sites where potentially responsible parties will pay for cleanup. No Cal-Sites facilities were identified within a 1.0-mile radius of the subject property.

5.2.3 Underground Storage Tanks (USTs)

UST records contain an inventory of registered USTs. No UST site facilities were identified within a 0.25-mile radius of the subject property.

5.2.4 Leaking Underground Storage Tanks (LUSTs)

LUST records contain an inventory of reported incidents involving leaking underground storage tanks. There is one (1) LUST site (Native Plant) located within approximately 0.5-mile radius of the subject property. The Native Plant is located at 202 Ethanac Road. This LUST site is listed as "soil only" case and has received a Case Closed/No Further Action status from the local agency. Therefore, based on the above information, this LUST site is not expected have adversely impacted the environmental condition of the subject property.

5.2.5 Voluntary Cleanup Program (VCPs)

The California Voluntary Cleanup Program was established to provide administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in California. No VCP facilities were identified within a 0.5-mile radius of the subject property.

5.2.6 Waste Management Unit Database System/Solid Waste Assessment Test (WMUDS/SWAT)

The 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. There are no WMUDS/SWAT facilities located within 0.5-mile radius of the subject property.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Vacant Lots Located Between Wheat Street and Byers Street
Sun City, Unincorporated Area of Riverside County, California
Project No. 236-03a

5.3 PHYSICAL SETTING SOURCE SUMMARY

The following physical setting sources were accessed:

- *EDR GeoCheck Physical Setting Source Addendum*
- *U.S. Geological Survey (USGS) Topographic Maps*

5.3.1 Geology, Lithology, and Topography

The subject site is located at an elevation of approximately 1,445 feet above mean sea level. The subject site is located in an area underlain by residual soil, which in turn is underlain by Cretaceous granitic rock, in a stratified sequence. According to the EDR GeoCheck report the soil component name is Monserate and it is identified as a sandy loam considered to be a well draining material.

It is a Class C soil hydrologically, with slow infiltration rates generally. Deeper soil types may have moderately fine to fine textures. The soil does not meet the requirements for a hydric soil. Depth to groundwater near the subject property is expected to be more than 100 feet below the ground surface.

The subject property and surroundings area is generally flat with some gradual sloping to the northeast. According to the EDR overview Map and Detail Map there are no retention ponds located in each cardinal direction near the vicinity of the site that are likely used to collect rainwater runoff.

No fault traces are depicted on the EDR's Physical Setting Source Map (See Appendix C) at 1- mile from the site. The closest fault is the Elsinore Fault, which is located approximately 10.3 miles away from the site

5.3.2 Hydrology

There is no surface water other surface bodies shown on the available maps and note. Although no site-specific hydrogeological data was referenced in completion of this investigation, regional data presented in the EDR report suggest groundwater flow direction is consistent with topographical conditions in the absence of pumping of wells. Since the review of topographic map of the subject property indicates that contour lines decrease to the northeast, groundwater flow is believed to be in that direction. Six (6) monitoring wells were identified in the EDR database search within a radius of ½ to 1-mile.

5.3.3 Radon Gas Emissions

Evaluation of radon emissions is beyond the scope of an ASTM Phase I Environmental Investigation. However, according to the EDR Report, the EPA-designated Radon Zone for Riverside County, California is "2", with an indoor average radon level that is between 0 and 2 picoCuries per liter (pCi/L). The EPA recommended action level for radon is 4.0 pCi/L. Therefore; the subject property does not appear to be in an area of elevated radon levels.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Vacant Lots Located Between Wheat Street and Byers Street
Sun City, Unincorporated Area of Riverside County, California
Project No. 236-03a

5.3.4 Wetlands

No wetland areas were identified on the subject site or in the near vicinity.

5.4 HISTORICAL USE INFORMATION ON THE PROPERTY

Based upon all available information reviewed in the completion of this investigation it appears the subject site was agricultural until a few years ago (refer to historical aerial photos for further details).

5.4.1 Historical Aerial Photographs

GEI obtained aerial photographs of the subject property and surrounding area for the years 1938, 1953, 1967, 1980, 1989, 1994, and 2002 from Environmental Data Resources, Inc. (EDR) of Milford, Connecticut. The aerial photographs were reviewed for evidence of environmental concerns on or near the subject property and for indications of previous uses of the site and surroundings area. Copies of all photographs are included in Appendix B.

Review of the aerial photographs revealed that the subject property was used for agriculture since at least 1938 until a few years ago.

No evidence of environmental concern on or adjacent to the subject property was revealed during a review of the aerial photographs.

5.4.2 Historical Topographic Maps

Historical topographic maps of the site and surrounding area were obtained from EDR. The topographic map covering the site is the "Corona South", 7.5-inch quadrangle. Topographic maps from the years 1947, 1953, 1973, and 1979 were obtained and reviewed. The topographic maps were reviewed for indications of previous uses of the site and surrounding area. Copies of the topographic maps are included in Appendix C.

No evidence of environmental concern on or adjacent to the subject property was revealed during a review of the topographic maps.

5.4.3 Historical Fire Insurance Maps

Historical Sanborn maps of the site and surrounding area were not available for the subject property or surrounding areas.

5.4.4 Historical City Directories

No historical city directories were available for the subject property.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Vacant Lots Located Between Wheat Street and Byers Street
Sun City, Unincorporated Area of Riverside County, California
Project No. 236-03a

6.0 SITE RECONNAISSANCE

GEI visited the subject property on November 11, 2005. GEI staff walked the site noting the general condition of the property, and looking for any evidence of RECs as defined in Section 2.0. Photographs taken during the property visit are included in Appendix D.

The subject property is primarily a vacant land. This vacant land is located in a rural portion of Sun City. Around the site are scattered existing residential structures.

There were no indications of unusual staining or a surface release observed on the subject property during the site visit. There were no underground storage tanks (USTs) or aboveground storage tanks (ASTs) observed on or near the site. There were no apparent indications of improper storage of chemicals or observable indications of previous use of the site for manufacturing or other industrial purposes.

No evidence of waste dumping or abandoned drums was observed at the subject property, nor was any evidence of waste dumping noted at the adjacent properties during site reconnaissance.

No electrical transformers were observed at the subject property during the site reconnaissance. No active or inactive oil and gas wells were identified at the subject property and/or within 1,000-foot radius of the subject property.

7.0 CONCLUSIONS

GEI has performed a Phase I Environmental Investigation of the subject property located between Wheat Street and Byers Street approximately 1,500 feet north of McLaughlin Road and 1,200 feet south of Ethanac Road in Sun City, Unincorporated area of Riverside County, California, in conformance with the scope and limitations of ASTM 1527E-00.

Based on the findings provided in this report, GEI review of the general property information, observation of neighboring properties, and research of available historical property information, the following is concluded:

- The historical land use of subject property has been agriculture since at least 1938 until a few years ago. The subject property is currently a vacant land. This vacant land is located in a rural portion of Sun City. Around the site are scattered existing residential structures.
- No evidence of waste dumping or abandoned drums was observed at the subject property, nor was any evidence of waste dumping noted at the adjacent properties during site reconnaissance.
- No industrial manufacturing activities were observed at the subject property. A review of agency files did not reveal any manufacturing activities at the subject property.
- No electrical transformers were observed at the subject property during the site reconnaissance.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Vacant Lots Located Between Wheat Street and Byers Street
Sun City, Unincorporated Area of Riverside County, California
Project No. 236-03a

- No active or inactive oil and gas wells were identified at the subject property and/or within 1,000-foot radius of the subject property.
- There are no wetlands at the subject property, or within the vicinity of the subject property. The review of aerial photographs, topographic maps and personal interviews with local agencies staff did not indicate the presence of wetlands sites at the subject property, nor in the vicinity of the subject property.
- There are no landfills at the subject property or within the vicinity of the subject property. A review of historical aerial photographs, topographic maps, personal interviews with local agencies staff and government database report did not indicate the presence of landfills site at the subject property nor in the vicinity of the subject property.
- The site was not listed on the environmental data base search conducted by EDR for any of its searches; this investigation concludes that the property, from an environmental impact standpoint was well maintained.
- Based on the information obtained and the site inspection conducted on November 11, 2005, GEI concludes that no Recognized Environmental Condition (REC) is present on the subject property.

8.0 LIMITATIONS

The findings and professional opinions presented in this report are based on information made available to Geo-Environmental, Inc. (in most cases from previous reports supplied by our client, and from public records) and could change if additional information becomes available. In performing our professional services, Geo-Environmental, Inc. applied present engineering and scientific judgment and used a level of effort consistent with the standard of practice measured on the date of this report and in the vicinity of the project site for projects of similar scope. Geo-Environmental, Inc., make no warranties, either express or implied, concerning the completeness of the data made available to us for this study. Geo-Environmental, Inc. specifically withholds certification of any type concerning the absence of contamination at the subject site.

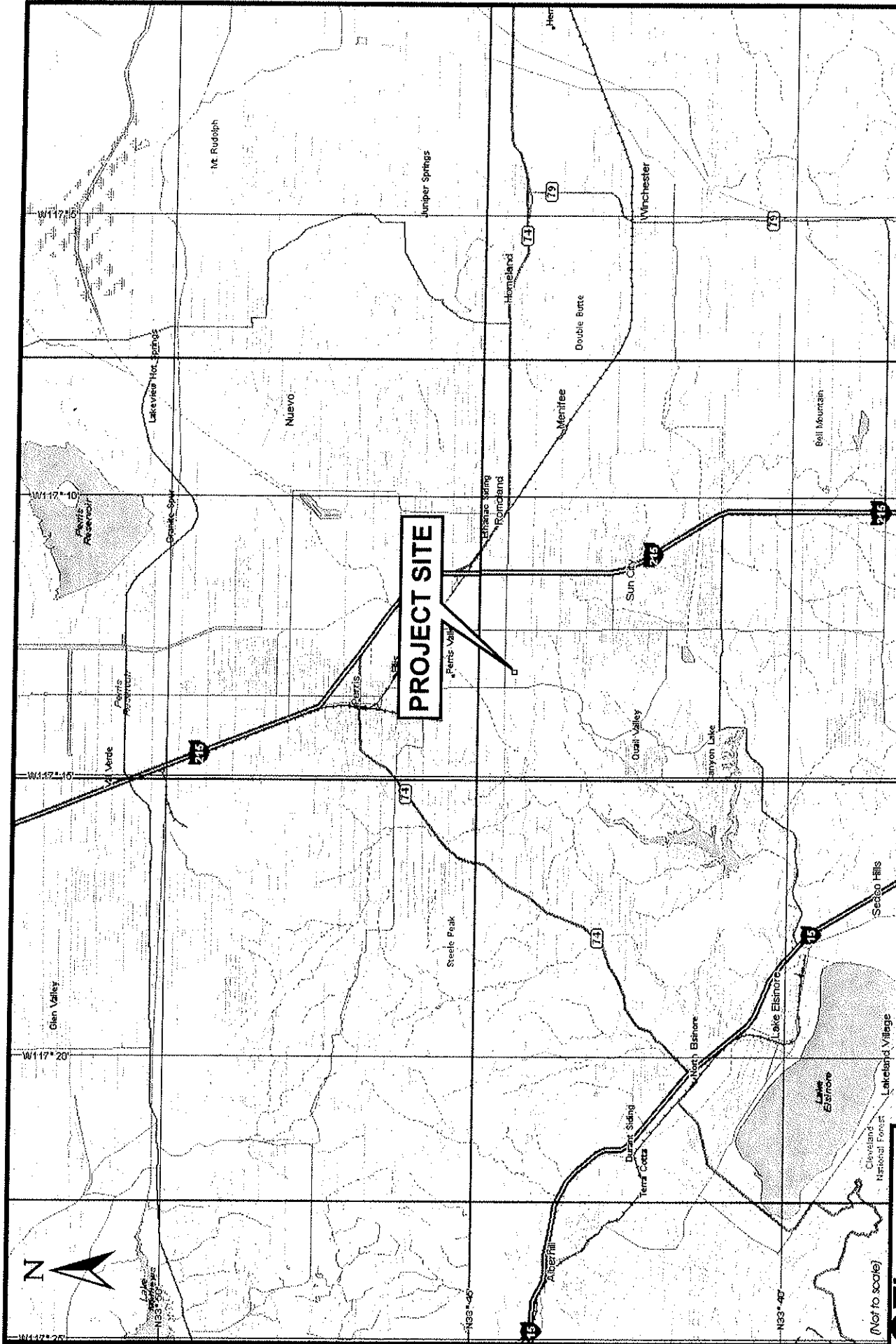
9.0 REFERENCES

1. ASTM Practice E 1527-00, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process; issued 2000.
2. EDR Database Report, dated November 7, 2005.
3. United States Geological Survey (USGS), 1953, Romoland, California 7.5 Minute Quadrangle, dated 1979.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Vacant Lots Located Between Wheat Street and Byers Street
Sun City, Unincorporated Area of Riverside County, California
Project No. 236-03a

ILLUSTRATION



(Not to scale)



GEO-ENVIRONMENTAL, INC.
 1720 E. Cary Avenue, Suite 215
 Santa Ana, CA 92705
 Tel: (949) 263-8334 . Fax: (949) 263-8338
<http://www.geo-environmental.com>

VICINITY MAP

Property Located Approximately 1,200 Feet South of Eihanac Road
 Between Wheat Street and Byers Street
 Sun City, Unincorporated Riverside County, California

FIGURE 1

DRAWN BY:	RCF
APPROVED BY:	FHS
PROJECT NO.:	236-03a
DATE:	11/09/05

APPENDIX A
EDR DATABASE REPORT



EDR® Environmental
Data Resources Inc

"Linking Technology with Tradition"®

Sanborn® Map Report

Ship To: Emily Williams
Geo Environmental Inc.
1720 E. Jarry Avenue
Santa Ana, CA 92705

Order Date: 11/7/2005 **Completion Date:** 11/7/2005

Inquiry #: 1549286.3

P.O. #: NA

Site Name: Vacant Lots

Address: Between Wheat St & Byers St

City/State: Sun City, CA 92585

Customer Project: 236-03(a)

5014700TIM 949-263-8334

Cross Streets:

This document reports that the largest and most complete collection of Sanborn fire insurance maps has been reviewed based on client supplied information, and fire insurance maps depicting the target property at the specified address were not identified.

NO COVERAGE

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report AS IS. Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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EDR® Environmental
Data Resources Inc

The EDR Radius Map with GeoCheck®

**Vacant Lots
Between Wheat St & Byers Rd
Sun City, CA 92585**

Inquiry Number: 1549286.2s

November 07, 2005

The Standard in Environmental Risk Management Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary.....	ES1
Overview Map.....	2
Detail Map.....	3
Map Findings Summary.....	4
Map Findings.....	6
EDR Proprietary Historical Map Findings.....	9
Orphan Summary.....	10
Government Records Searched/Data Currency Tracking.....	GR-1
 <u>GEOCHECK ADDENDUM</u>	
Physical Setting Source Addendum.....	A-1
Physical Setting Source Summary.....	A-2
Physical Setting Source Map.....	A-7
Physical Setting Source Map Findings.....	A-8
Physical Setting Source Records Searched.....	A-13

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 meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

BETWEEN WHEAT ST & BYERS RD
SUN CITY, CA 92585

COORDINATES

Latitude (North): 33.739400 - 33° 44' 21.8"
Longitude (West): 117.217200 - 117° 13' 1.9"
Universal Transverse Mercator: Zone 11
UTM X (Meters): 479880.5
UTM Y (Meters): 3733089.2
Elevation: 1445 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: 33117-F2 ROMOLAND, CA
Source: USGS 7.5 min quad index

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 ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP..... CERCLIS No Further Remedial Action Planned
CORRACTS..... Corrective Action Report
RCRA-TSDF..... Resource Conservation and Recovery Act Information
RCRA-LQG..... Resource Conservation and Recovery Act Information
RCRA-SQG..... Resource Conservation and Recovery Act Information
ERNS..... Emergency Response Notification System

STATE ASTM STANDARD

AWP..... Annual Workplan Sites

EXECUTIVE SUMMARY

Cal-Sites.....	Calsites Database
CHMIRS.....	California Hazardous Material Incident Report System
Notify 65.....	Proposition 65 Records
Toxic Pits.....	Toxic Pits Cleanup Act Sites
SWF/LF.....	Solid Waste Information System
WMUDS/SWAT.....	Waste Management Unit Database
CA BOND EXP. PLAN.....	Bond Expenditure Plan
UST.....	Active UST Facilities
VCP.....	Voluntary Cleanup Program Properties
SWRCY.....	Recycler Database
INDIAN LUST.....	Leaking Underground Storage Tanks on Indian Land
INDIAN UST.....	Underground Storage Tanks on Indian Land
CA FID UST.....	Facility Inventory Database
HIST UST.....	Hazardous Substance Storage Container Database
SWEEPS UST.....	SWEEPS UST Listing

FEDERAL ASTM SUPPLEMENTAL

CONSENT.....	Superfund (CERCLA) Consent Decrees
ROD.....	Records Of Decision
Delisted NPL.....	National Priority List Deletions
FINDS.....	Facility Index System/Facility Registry System
HMIRS.....	Hazardous Materials Information Reporting System
MLTS.....	Material Licensing Tracking System
MINES.....	Mines Master Index File
NPL Liens.....	Federal Superfund Liens
PADS.....	PCB Activity Database System
US ENG CONTROLS.....	Engineering Controls Sites List
ODI.....	Open Dump Inventory
DOD.....	Department of Defense Sites
INDIAN RESERV.....	Indian Reservations
UMTRA.....	Uranium Mill Tailings Sites
FUDS.....	Formerly Used Defense Sites
RAATS.....	RCRA Administrative Action Tracking System
TRIS.....	Toxic Chemical Release Inventory System
TSCA.....	Toxic Substances Control Act
SSTS.....	Section 7 Tracking Systems
FTTS INSP.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

AST.....	Aboveground Petroleum Storage Tank Facilities
CLEANERS.....	Cleaner Facilities
CA WDS.....	Waste Discharge System
DEED.....	Deed Restriction Listing
REF.....	Unconfirmed Properties Referred to Another Agency
WIP.....	Well Investigation Program Case List
EMI.....	Emissions Inventory Data
NFA.....	No Further Action Determination
NFE.....	Properties Needing Further Evaluation
SCH.....	School Property Evaluation Program
SLIC.....	Statewide SLIC Cases
HAZNET.....	Facility and Manifest Data

EXECUTIVE SUMMARY

BROWNFIELDS DATABASES

US BROWNFIELDS..... A Listing of Brownfields Sites
US INST CONTROL..... Sites with Institutional Controls
VCP..... Voluntary Cleanup Program Properties

EDR PROPRIETARY HISTORICAL DATABASES

See the EDR Proprietary Historical Database Section for details

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

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.

STATE ASTM STANDARD

CORTESE: This database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release and all solid waste disposal facilities from which there is known migration. The source is the California Environmental Protection Agency/Office of Emergency Information.

A review of the Cortese list, as provided by EDR, has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>NATIVE PLANT</i>	<i>202 ETHANAC</i>	<i>1/4 - 1/2NNW 1</i>		<i>6</i>

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 10/10/2005 has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>NATIVE PLANT</i>	<i>202 ETHANAC</i>	<i>1/4 - 1/2NNW 1</i>		<i>6</i>
<i>NATIVE PLANT</i>	<i>202 E ETHANAC RD</i>	<i>1/4 - 1/2NW 2</i>		<i>8</i>

EXECUTIVE SUMMARY

EDR PROPRIETARY HISTORICAL DATABASES

See the EDR Proprietary Historical Database Section for details

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

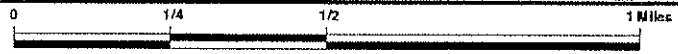
<u>Site Name</u>	<u>Database(s)</u>
RIO VISTA SERVICE CENTER	Notify 65, SWEEPS UST
ROMOLAND MARKET	LUST, Cortese, SWEEPS UST
ROMO GAS MART	SWEEPS UST
CALTRANS	LUST, Cortese
CAL TRANS	LUST
RIVERSIDE COUNTY TRANSPOR COMMISION	RCRA-SQG

OVERVIEW MAP - 1549286.2s - Geo Environmental Inc.



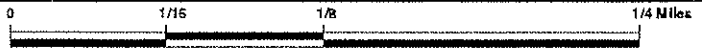
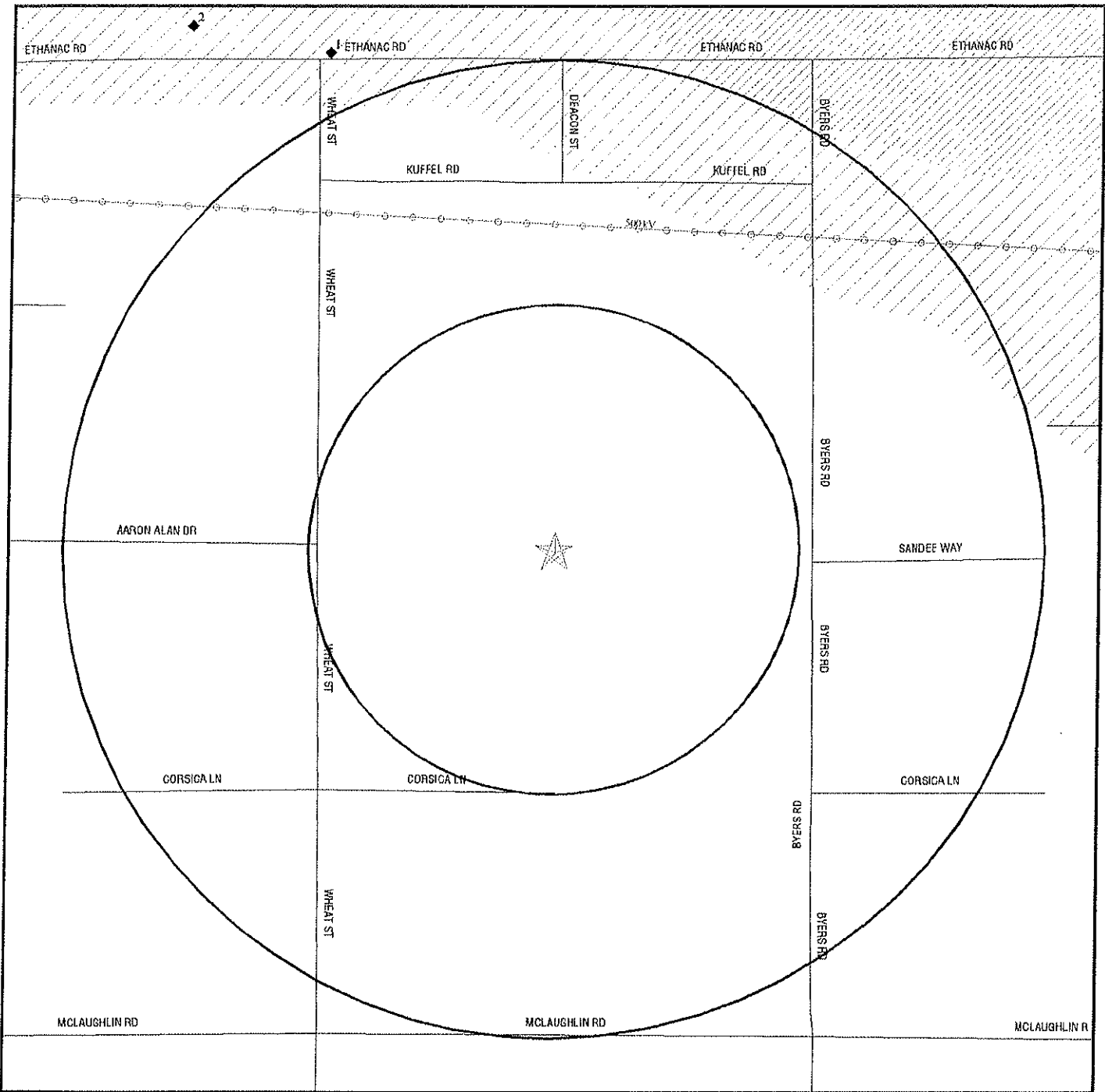
- ☆ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites
- ▨ National Priority List Sites
- ▧ Landfill Sites
- ▩ Dept. Defense Sites

- ▨ Indian Reservations BIA
- ⚡ Power transmission lines
- ⚡ Oil & Gas pipelines
- ▨ 100-year flood zone
- ▩ 500-year flood zone
- ▧ Areas of Concern



<p>TARGET PROPERTY: Vacant Lots ADDRESS: Between Wheat St & Byers Rd CITY/STATE/ZIP: Sun City CA 92585 LAT/LONG: 33.7394 / 117.2172</p>	<p>CUSTOMER: Geo Environmental Inc. CONTACT: Emily Williams INQUIRY #: 1549286.2s DATE: November 07, 2005 2:08 pm</p>
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DETAIL MAP - 1549286.2s - Geo Environmental Inc.



- ☆ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites
- Historical Gas Stations / Historical Dry Cleaners
See the EDR Proprietary Historical Map Findings
- ◆ Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites

- Indian Reservations BIA
- ~ Power transmission lines
- ~ Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone

- Areas of Concern



TARGET PROPERTY: Vacant Lots
ADDRESS: Between Wheat St & Byers Rd
CITY/STATE/ZIP: Sun City CA 92585
LAT/LONG: 33.7394 / 117.2172

CUSTOMER: Geo Environmental Inc.
CONTACT: Emily Williams
INQUIRY #: 1549286.2s
DATE: November 07, 2005 2:08 pm

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
<u>FEDERAL ASTM STANDARD</u>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.250	0	0	NR	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRA TSD		0.500	0	0	0	NR	NR	0
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS	TP		NR	NR	NR	NR	NR	0
<u>STATE ASTM STANDARD</u>								
AWP		1.000	0	0	0	0	NR	0
Cal-Sites		1.000	0	0	0	0	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
Cortese		0.500	0	0	1	NR	NR	1
Notify 65		1.000	0	0	0	0	NR	0
Toxic Pits		1.000	0	0	0	0	NR	0
State Landfill		0.500	0	0	0	NR	NR	0
WMUDS/SWAT		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	2	NR	NR	2
CA Bond Exp. Plan		1.000	0	0	0	0	NR	0
UST		0.250	0	0	NR	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
SWRCY		0.500	0	0	0	NR	NR	0
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
CA FID UST		0.250	0	0	NR	NR	NR	0
HIST UST		0.250	0	0	NR	NR	NR	0
SWEEPS UST		0.250	0	0	NR	NR	NR	0
<u>FEDERAL ASTM SUPPLEMENTAL</u>								
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
HMIRS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
FUDS		1.000	0	0	0	0	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0

STATE OR LOCAL ASTM SUPPLEMENTAL

AST	TP		NR	NR	NR	NR	NR	0
CLEANERS		0.250	0	0	NR	NR	NR	0
CA WDS	TP		NR	NR	NR	NR	NR	0
DEED		0.500	0	0	0	NR	NR	0
REF		0.250	0	0	NR	NR	NR	0
WIP		0.250	0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
NFA		0.250	0	0	NR	NR	NR	0
NFE		0.250	0	0	NR	NR	NR	0
SCH		0.250	0	0	NR	NR	NR	0
SLIC		0.500	0	0	0	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0

EDR PROPRIETARY HISTORICAL DATABASES

Gas Stations/Dry Cleaners		0.250	0	0	NR	NR	NR	0
Coal Gas		1.000	0	0	0	0	NR	0

BROWNFIELDS DATABASES

US BROWNFIELDS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0

NOTES:

See the EDR Proprietary Historical Database Section for details

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID
 Direction
 Distance
 Distance (ft.)
 Elevation

Site

Database(s) EDR ID Number
 EPA ID Number

1
 NNW
 1/4-1/2
 1473 ft.

NATIVE PLANT
 202 ETHANAC
 PERRIS, CA

LUST S101307986
 Cortese N/A

Relative:
 Lower

Actual:
 1430 ft.

State LUST:

Cross Street: Not reported
 Qty Leaked: Not reported
 Case Number: 083301975T
 Reg Board: 8
 Chemical: Gasoline
 Lead Agency: Local Agency
 Local Agency : 33000L
 Case Type: Soil only
 Status: Case Closed
 Abate Method: Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)

Review Date: Not reported
 Workplan: Not reported
 Pollution Char: 4/2/1992
 Remed Action: Not reported
 Monitoring: 9/30/1993
 Close Date: 11/8/1993
 Release Date: 6/26/1991
 Cleanup Fund Id : Not reported
 Discover Date : 5/29/1990
 Enforcement Dt : Not reported
 Enf Type: Not reported
 Enter Date : 12/19/1991
 Funding: Not reported
 Staff Initials: UNK
 How Discovered: Tank Closure
 How Stopped: Not reported
 Interim : Not reported
 Leak Cause: UNK
 Leak Source: UNK
 MTBE Date : Not reported
 Max MTBE GW : Not reported
 MTBE Tested: Site NOT Tested for MTBE. Includes Unknown and Not Analyzed.
 Priority: Not reported
 Local Case # : 91562
 Beneficial: Not reported
 Staff : CAB
 GW Qualifier : Not reported
 Max MTBE Soil : Not reported
 Soil Qualifier : Not reported
 Hydr Basin #: UNNAMED BASIN
 Operator : Not reported
 Oversight Prgm: LUST
 Review Date : 6/17/1997
 Stop Date : 5/29/1990
 Work Suspended : Not reported
 Responsible Party: PERRIS GREEN VALLEY ASSOCIATES
 RP Address: 110 NEWPORT CENTER SUITE 250 NEWPORT CA 92660
 Global Id: T0606500254
 Org Name: Not reported
 Contact Person: Not reported
 MTBE Conc: 0
 Mtbe Fuel: 1

Confirm Leak: Not reported
 Prelim Assess: Not reported
 Remed Plan: 4/2/1992

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NATIVE PLANT (Continued)

Database(s)
EDR ID Number
EPA ID Number

S101307986

Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported
Summary : Not reported

LUST Region 8:
Region: 8 Cross Street: Not reported
Regional Board: 08
Local Case Num: 91562
Facility Status: Case Closed
Staff: CAB
Facility Contact: Not reported
Lead Agency: Local Agency
Local Agency: 33000L
Abate Method: Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)
Qty Leaked: Not reported
County: Riverside
Cleanup Fund Id : Not reported
Review Date: Not reported Confirm Leak: Not reported
Workplan: Not reported Prelim Assess: Not reported
Pollution Char: 4/2/1992 Remed Plan: 4/2/1992
Remed Action: 9/30/1993 Monitoring: 9/30/1993
Close Date: 11/8/1993
Discover Date : 5/29/1990
Enforcement Dt : Not reported
Enf Type: Not reported
Enter Date : 12/19/1991
Funding: Not reported
Staff Initials: UNK
How Discovered: Tank Closure
How Stopped: Not reported
Interim : Not reported
Lat/Lon : 33.793243 / -117.2829513
Leak Cause: UNK
Leak Source: UNK
Beneficial: Not reported
MTBE Date : Not reported
MTBE Tested : NT
Max MTBE GW : Not reported
GW Qualifies : Not reported
Max MTBE Soil : Not reported
Soil Qualifies : Not reported
Hydr Basin #: UNNAMED BASIN
Oversight Prgm : LUST
Global ID: T0606500254
Organization Name: Not reported
Priority : Not reported
Work Suspended : Not reported
MTBE Class: *
Case Type: S
How Stopped Date: 5/29/1990
MTBE Concentration: 0
MTBE Fuel: 1
Case Number: 083301975T
Substance: 8006619

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

NATIVE PLANT (Continued)

Database(s) EDR ID Number
EPA ID Number

S101307986

Staff: CAB
Summary : Not reported

CORTESE:
Region: CORTESE
Fac Address 2: 202 ETHANAC

2
NW
1/4-1/2
1724 ft.

NATIVE PLANT
202 E ETHANAC RD
PERRIS, CA

LUST S103820874
N/A

Relative:
Lower

LUST Region RV:
Facility ID: 91562
Region: RIVERSIDE
Status: Case Closed
Site Closed: Yes
Employee ID: 12
Case Type: Soil only

Actual:
1429 ft.

MAP FINDINGS - EDR PROPRIETARY HISTORICAL DATABASES

YEAR	NAME	ADDRESS	CITY	ST	DIR.	DIST.	ELEV.	TYPE
------	------	---------	------	----	------	-------	-------	------

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.
EDR Historical Gas Station & Dry Cleaner Search: No mapped sites were found in EDR's search of the EDR Historical Gas Station & Dry Cleaner Database within 0.250 mile of the Target Property.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
PERRIS	1007091436	RIVERSIDE COUNTY TRANSPOR COMMISSION	24521 HWY 74	92570	RCRA-SQG
RIO VISTA	S100225708	RIO VISTA SERVICE CENTER	410 HIGHWAY 12	92570	Notify 65, SWEEPS UST
ROMOLAND	S105025906	CALTRANS	2764 HIGHWAY 74	92585	LUST, Cortese
ROMOLAND	S105025907	ROMOLAND MARKET	27856 HIGHWAY 74	92585	LUST, Cortese, SWEEPS UST
ROMOLAND	S105557667	CAL TRANS	27644 HWY 74	92585	LUST
ROMOLAND	S106931558	ROMO GAS MART	27682 HIGHWAY 74	92585	SWEEPS UST

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 this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM STANDARD RECORDS

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: 07/01/05	Source: EPA
Date Data Arrived at EDR: 08/03/05	Telephone: N/A
Date Made Active in Reports: 08/22/05	Last EDR Contact: 08/03/05
Number of Days to Update: 19	Next Scheduled EDR Contact: 10/31/05
	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 8
Telephone: 303-312-6774

EPA Region 4
Telephone 404-562-8033

Proposed NPL: Proposed National Priority List Sites

Date of Government Version: 04/27/05	Source: EPA
Date Data Arrived at EDR: 05/04/05	Telephone: N/A
Date Made Active in Reports: 05/16/05	Last EDR Contact: 08/05/05
Number of Days to Update: 12	Next Scheduled EDR Contact: 10/31/05
	Data Release Frequency: Quarterly

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 09/19/05	Source: EPA
Date Data Arrived at EDR: 10/21/05	Telephone: 703-413-0223
Date Made Active in Reports: 10/27/05	Last EDR Contact: 09/20/05
Number of Days to Update: 6	Next Scheduled EDR Contact: 12/19/05
	Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. 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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/22/05
Date Data Arrived at EDR: 09/20/05
Date Made Active in Reports: 10/27/05
Number of Days to Update: 37

Source: EPA
Telephone: 703-413-0223
Last EDR Contact: 09/20/05
Next Scheduled EDR Contact: 12/19/05
Data Release Frequency: Quarterly

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/28/05
Date Data Arrived at EDR: 07/05/05
Date Made Active in Reports: 08/08/05
Number of Days to Update: 34

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/06/05
Next Scheduled EDR Contact: 12/05/05
Data Release Frequency: Quarterly

RCRA: Resource Conservation and Recovery Act Information

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. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site 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: 08/11/05
Date Data Arrived at EDR: 08/23/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 44

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/23/05
Next Scheduled EDR Contact: 10/24/05
Data Release Frequency: Quarterly

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/04
Date Data Arrived at EDR: 01/27/05
Date Made Active in Reports: 03/24/05
Number of Days to Update: 56

Source: National Response Center, United States Coast Guard
Telephone: 202-260-2342
Last EDR Contact: 07/25/05
Next Scheduled EDR Contact: 10/24/05
Data Release Frequency: Annually

FEDERAL ASTM SUPPLEMENTAL RECORDS

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: 12/31/03
Date Data Arrived at EDR: 06/17/05
Date Made Active in Reports: 08/04/05
Number of Days to Update: 48

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/12/05
Next Scheduled EDR Contact: 12/12/05
Data Release Frequency: Biennially

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/14/04	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 02/15/05	Telephone: Varies
Date Made Active in Reports: 04/25/05	Last EDR Contact: 07/25/05
Number of Days to Update: 69	Next Scheduled EDR Contact: 10/24/05
	Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 06/08/05	Source: EPA
Date Data Arrived at EDR: 07/11/05	Telephone: 703-416-0223
Date Made Active in Reports: 08/08/05	Last EDR Contact: 07/06/05
Number of Days to Update: 28	Next Scheduled EDR Contact: 10/03/05
	Data Release Frequency: Annually

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: 07/01/05	Source: EPA
Date Data Arrived at EDR: 08/03/05	Telephone: N/A
Date Made Active in Reports: 08/22/05	Last EDR Contact: 08/03/05
Number of Days to Update: 19	Next Scheduled EDR Contact: 10/31/05
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/11/05	Source: EPA
Date Data Arrived at EDR: 07/19/05	Telephone: (415) 947-8000
Date Made Active in Reports: 08/08/05	Last EDR Contact: 07/05/05
Number of Days to Update: 20	Next Scheduled EDR Contact: 10/03/05
	Data Release Frequency: Quarterly

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/27/05	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 07/22/05	Telephone: 202-366-4555
Date Made Active in Reports: 09/01/05	Last EDR Contact: 07/22/05
Number of Days to Update: 41	Next Scheduled EDR Contact: 10/17/05
	Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/14/05
Date Data Arrived at EDR: 07/22/05
Date Made Active in Reports: 08/22/05
Number of Days to Update: 31

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/05/05
Next Scheduled EDR Contact: 10/03/05
Data Release Frequency: Quarterly

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: 05/13/05
Date Data Arrived at EDR: 06/27/05
Date Made Active in Reports: 08/08/05
Number of Days to Update: 42

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/27/05
Next Scheduled EDR Contact: 12/26/05
Data Release Frequency: Semi-Annually

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (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 receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/91
Date Data Arrived at EDR: 02/02/94
Date Made Active in Reports: 03/30/94
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/22/05
Next Scheduled EDR Contact: 11/21/05
Data Release Frequency: No Update Planned

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: 08/30/05
Date Data Arrived at EDR: 09/13/05
Date Made Active in Reports: 10/27/05
Number of Days to Update: 44

Source: EPA
Telephone: 202-564-3887
Last EDR Contact: 08/25/05
Next Scheduled EDR Contact: 11/07/05
Data Release Frequency: Annually

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: 10/01/03
Date Data Arrived at EDR: 11/12/03
Date Made Active in Reports: 11/21/03
Number of Days to Update: 9

Source: USGS
Telephone: 703-692-8801
Last EDR Contact: 08/09/05
Next Scheduled EDR Contact: 11/07/05
Data Release Frequency: Semi-Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized. In 1978, 24 inactive uranium mill tailings sites in Oregon, Idaho, Wyoming, Utah, Colorado, New Mexico, Texas, North Dakota, South Dakota, Pennsylvania, and on Navajo and Hopi tribal lands, were targeted for cleanup by the Department of Energy.

Date of Government Version: 12/29/04
Date Data Arrived at EDR: 01/07/05
Date Made Active in Reports: 03/14/05
Number of Days to Update: 66

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 09/19/05
Next Scheduled EDR Contact: 12/19/05
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/30/85	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/04	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/04	Last EDR Contact: 05/23/95
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/04	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 06/29/05	Telephone: 202-528-4285
Date Made Active in Reports: 08/08/05	Last EDR Contact: 06/29/05
Number of Days to Update: 40	Next Scheduled EDR Contact: 10/03/05
	Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 10/01/03	Source: USGS
Date Data Arrived at EDR: 11/12/03	Telephone: 202-208-3710
Date Made Active in Reports: 11/21/03	Last EDR Contact: 08/09/05
Number of Days to Update: 9	Next Scheduled EDR Contact: 11/07/05
	Data Release Frequency: Semi-Annually

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/02/05	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/12/05	Telephone: 703-603-8867
Date Made Active in Reports: 10/06/05	Last EDR Contact: 10/03/05
Number of Days to Update: 55	Next Scheduled EDR Contact: 01/02/06
	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: 04/17/95	Source: EPA
Date Data Arrived at EDR: 07/03/95	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/95	Last EDR Contact: 09/06/05
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/05/05
	Data Release Frequency: No Update Planned

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: 12/31/03	Source: EPA
Date Data Arrived at EDR: 07/13/05	Telephone: 202-566-0250
Date Made Active in Reports: 08/17/05	Last EDR Contact: 09/19/05
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/19/05
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 12/31/02
Date Data Arrived at EDR: 04/27/04
Date Made Active in Reports: 05/21/04
Number of Days to Update: 24

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 07/18/05
Next Scheduled EDR Contact: 10/17/05
Data Release Frequency: Every 4 Years

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Date of Government Version: 07/15/05
Date Data Arrived at EDR: 07/25/05
Date Made Active in Reports: 08/22/05
Number of Days to Update: 28

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 09/19/05
Next Scheduled EDR Contact: 12/19/05
Data Release Frequency: Quarterly

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/03
Date Data Arrived at EDR: 01/03/05
Date Made Active in Reports: 01/25/05
Number of Days to Update: 22

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/18/05
Next Scheduled EDR Contact: 10/17/05
Data Release Frequency: Annually

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: 07/15/05
Date Data Arrived at EDR: 07/25/05
Date Made Active in Reports: 08/22/05
Number of Days to Update: 28

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 09/19/05
Next Scheduled EDR Contact: 12/19/05
Data Release Frequency: Quarterly

STATE OF CALIFORNIA ASTM STANDARD RECORDS

AWP: Annual Workplan Sites

Known Hazardous Waste Sites. California DTSC's Annual Workplan (AWP), formerly BEP, identifies known hazardous substance sites targeted for cleanup.

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 09/21/05
Number of Days to Update: 23

Source: California Environmental Protection Agency
Telephone: 916-323-3400
Last EDR Contact: 08/29/05
Next Scheduled EDR Contact: 11/28/05
Data Release Frequency: Annually

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 09/21/05
Number of Days to Update: 23

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 08/29/05
Next Scheduled EDR Contact: 11/28/05
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/03
Date Data Arrived at EDR: 05/18/04
Date Made Active in Reports: 06/25/04
Number of Days to Update: 38

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 08/22/05
Next Scheduled EDR Contact: 11/21/05
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). This listing is no longer updated by the state agency.

Date of Government Version: 04/01/01
Date Data Arrived at EDR: 05/29/01
Date Made Active in Reports: 07/26/01
Number of Days to Update: 58

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-9100
Last EDR Contact: 07/26/05
Next Scheduled EDR Contact: 10/24/05
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/93
Date Data Arrived at EDR: 11/01/93
Date Made Active in Reports: 11/19/93
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 07/19/05
Next Scheduled EDR Contact: 10/17/05
Data Release Frequency: No Update Planned

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: 07/01/95
Date Data Arrived at EDR: 08/30/95
Date Made Active in Reports: 09/26/95
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 08/01/05
Next Scheduled EDR Contact: 10/31/05
Data Release Frequency: No Update Planned

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/12/05
Date Data Arrived at EDR: 09/13/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 23

Source: Integrated Waste Management Board
Telephone: 916-341-6320
Last EDR Contact: 09/13/05
Next Scheduled EDR Contact: 12/12/05
Data Release Frequency: Quarterly

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/00
Date Data Arrived at EDR: 04/10/00
Date Made Active in Reports: 05/10/00
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 09/06/05
Next Scheduled EDR Contact: 12/05/05
Data Release Frequency: Quarterly

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 10/10/05
Date Data Arrived at EDR: 10/10/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 21

Source: State Water Resources Control Board
Contact: Riverside County Environmental Health, (951) 358-5055
Last EDR Contact: 10/10/05
Next Scheduled EDR Contact: 01/09/06
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/01
Date Data Arrived at EDR: 02/28/01
Date Made Active in Reports: 03/29/01
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-576-2220
Last EDR Contact: 08/22/05
Next Scheduled EDR Contact: 11/21/05
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Date of Government Version: 09/30/04
Date Data Arrived at EDR: 10/20/04
Date Made Active in Reports: 11/19/04
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 07/11/05
Next Scheduled EDR Contact: 10/10/05
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Date of Government Version: 05/19/03
Date Data Arrived at EDR: 05/19/03
Date Made Active in Reports: 06/02/03
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 08/15/05
Next Scheduled EDR Contact: 11/14/05
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: 09/07/04
Date Data Arrived at EDR: 09/07/04
Date Made Active in Reports: 10/12/04
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 09/27/05
Next Scheduled EDR Contact: 12/26/05
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Date of Government Version: 10/01/05
Date Data Arrived at EDR: 10/20/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 11

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 10/20/05
Next Scheduled EDR Contact: 01/02/06
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 09/09/03
Date Data Arrived at EDR: 09/10/03
Date Made Active in Reports: 10/07/03
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 916-542-5424
Last EDR Contact: 09/06/05
Next Scheduled EDR Contact: 12/05/05
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Date of Government Version: 06/07/05
Date Data Arrived at EDR: 06/07/05
Date Made Active in Reports: 06/29/05
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-346-7491
Last EDR Contact: 07/08/05
Next Scheduled EDR Contact: 10/03/05
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Date of Government Version: 02/26/04
Date Data Arrived at EDR: 02/26/04
Date Made Active in Reports: 03/24/04
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-346-7491
Last EDR Contact: 09/27/05
Next Scheduled EDR Contact: 12/26/05
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: 02/14/05
Date Data Arrived at EDR: 02/15/05
Date Made Active in Reports: 03/28/05
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-4130
Last EDR Contact: 08/08/05
Next Scheduled EDR Contact: 11/07/05
Data Release Frequency: Varies

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: 03/01/01
Date Data Arrived at EDR: 04/23/01
Date Made Active in Reports: 05/21/01
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 07/18/05
Next Scheduled EDR Contact: 10/17/05
Data Release Frequency: No Update Planned

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: 01/01/89
Date Data Arrived at EDR: 07/27/94
Date Made Active in Reports: 08/02/94
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/94
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA UST:

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/11/05
Date Data Arrived at EDR: 07/12/05
Date Made Active in Reports: 08/11/05
Number of Days to Update: 30

Source: SWRCB
Contact: Riverside County Environmental Health, (951) 358-5055
Last EDR Contact: 07/12/05
Next Scheduled EDR Contact: 10/10/05
Data Release Frequency: Semi-Annually

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: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 09/21/05
Number of Days to Update: 23

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/29/05
Next Scheduled EDR Contact: 11/28/05
Data Release Frequency: Quarterly

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 10/03/05
Date Data Arrived at EDR: 10/10/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 21

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 10/10/05
Next Scheduled EDR Contact: 01/09/06
Data Release Frequency: Quarterly

INDIAN UST: Underground Storage Tanks on Indian Land

Date of Government Version: 04/18/05
Date Data Arrived at EDR: 05/16/05
Date Made Active in Reports: 05/31/05
Number of Days to Update: 15

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 08/25/05
Next Scheduled EDR Contact: 11/21/05
Data Release Frequency: Varies

INDIAN LUST: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 06/02/05
Date Data Arrived at EDR: 06/03/05
Date Made Active in Reports: 07/01/05
Number of Days to Update: 28

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 08/25/05
Next Scheduled EDR Contact: 11/21/05
Data Release Frequency: Varies

INDIAN LUST: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 09/07/05
Date Data Arrived at EDR: 09/08/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 53

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 08/25/05
Next Scheduled EDR Contact: 11/21/05
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/94
Date Data Arrived at EDR: 09/05/95
Date Made Active in Reports: 09/29/95
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/98
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 10/15/90	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/25/91	Telephone: 916-341-5851
Date Made Active in Reports: 02/12/91	Last EDR Contact: 07/26/01
Number of Days to Update: 18	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1980'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: 06/01/94	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/05	Telephone: N/A
Date Made Active in Reports: 08/11/05	Last EDR Contact: 06/03/05
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

STATE OF CALIFORNIA ASTM SUPPLEMENTAL RECORDS

AST: Aboveground Petroleum Storage Tank Facilities

Registered Aboveground Storage Tanks.

Date of Government Version: 08/01/05	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/25/05	Telephone: 916-341-5712
Date Made Active in Reports: 09/30/05	Last EDR Contact: 08/16/05
Number of Days to Update: 36	Next Scheduled EDR Contact: 10/31/05
	Data Release Frequency: Quarterly

CLEANERS: 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: 04/18/05	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 04/18/05	Telephone: 916-327-4498
Date Made Active in Reports: 05/06/05	Last EDR Contact: 07/05/05
Number of Days to Update: 18	Next Scheduled EDR Contact: 10/03/05
	Data Release Frequency: Annually

CA WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 09/19/05	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/20/05	Telephone: 916-341-5227
Date Made Active in Reports: 10/06/05	Last EDR Contact: 09/20/05
Number of Days to Update: 16	Next Scheduled EDR Contact: 12/19/05
	Data Release Frequency: Quarterly

DEED: Deed Restriction Listing

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 10/03/05
Date Data Arrived at EDR: 10/03/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 28

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 10/03/05
Next Scheduled EDR Contact: 01/02/06
Data Release Frequency: Semi-Annually

NFA: No Further Action Determination

This category contains properties at which DTSC has made a clear determination that the property does not pose a problem to the environment or to public health.

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 38

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/29/05
Next Scheduled EDR Contact: 11/28/05
Data Release Frequency: Quarterly

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/03
Date Data Arrived at EDR: 07/19/05
Date Made Active in Reports: 08/11/05
Number of Days to Update: 23

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 07/19/05
Next Scheduled EDR Contact: 10/17/05
Data Release Frequency: Varies

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/27/05
Date Data Arrived at EDR: 07/28/05
Date Made Active in Reports: 08/11/05
Number of Days to Update: 14

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 07/25/05
Next Scheduled EDR Contact: 10/24/05
Data Release Frequency: Varies

REF: Unconfirmed Properties Referred to Another Agency

This category contains properties where contamination has not been confirmed and which were determined as not requiring direct DTSC Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another state or local regulatory agency.

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 38

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/29/05
Next Scheduled EDR Contact: 11/28/05
Data Release Frequency: Quarterly

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 38

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/29/05
Next Scheduled EDR Contact: 11/28/05
Data Release Frequency: Quarterly

NFE: Properties Needing Further Evaluation

This category contains properties that are suspected of being contaminated. These are unconfirmed contaminated properties that need to be assessed using the PEA process. PEA in Progress indicates properties where DTSC is currently conducting a PEA. PEA Required indicates properties where DTSC has determined a PEA is required, but not currently underway.

Date of Government Version: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 09/21/05
Number of Days to Update: 23

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/29/05
Next Scheduled EDR Contact: 11/28/05
Data Release Frequency: Quarterly

SLIC: Statewide SLIC Cases

The Spills, Leaks, Investigations, and Cleanups (SLIC) listings includes unauthorized discharges from spills and leaks, other than from underground storage tanks or other regulated sites.

Date of Government Version: 10/10/05
Date Data Arrived at EDR: 10/10/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 21

Source: State Water Resources Control Board
Contact: Riverside County Environmental Health, (951) 358-5055
Last EDR Contact: 10/10/05
Next Scheduled EDR Contact: 01/09/06
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

Date of Government Version: 04/03/03
Date Data Arrived at EDR: 04/07/03
Date Made Active in Reports: 04/25/03
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/22/05
Next Scheduled EDR Contact: 11/21/05
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 09/30/04
Date Data Arrived at EDR: 10/20/04
Date Made Active in Reports: 11/19/04
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 07/11/05
Next Scheduled EDR Contact: 10/10/05
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 08/19/05
Date Data Arrived at EDR: 08/22/05
Date Made Active in Reports: 09/21/05
Number of Days to Update: 30

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 08/15/05
Next Scheduled EDR Contact: 11/14/05
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Any contaminated site that impacts groundwater or has the potential to impact groundwater.

Date of Government Version: 11/17/04
Date Data Arrived at EDR: 11/18/04
Date Made Active in Reports: 01/04/05
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/25/05
Next Scheduled EDR Contact: 10/24/05
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Unregulated sites that impact groundwater or have the potential to impact groundwater.

Date of Government Version: 04/01/05
Date Data Arrived at EDR: 04/05/05
Date Made Active in Reports: 04/21/05
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 07/08/05
Next Scheduled EDR Contact: 10/03/05
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 05/24/05
Date Data Arrived at EDR: 05/25/05
Date Made Active in Reports: 06/16/05
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 07/05/05
Next Scheduled EDR Contact: 10/03/05
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

Date of Government Version: 09/07/04
Date Data Arrived at EDR: 09/07/04
Date Made Active in Reports: 10/12/04
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 09/06/05
Next Scheduled EDR Contact: 12/05/05
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

Date of Government Version: 11/24/04
Date Data Arrived at EDR: 11/29/04
Date Made Active in Reports: 01/04/05
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/22/05
Next Scheduled EDR Contact: 11/21/05
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 07/01/04
Date Data Arrived at EDR: 08/10/04
Date Made Active in Reports: 09/08/04
Number of Days to Update: 29

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 07/05/05
Next Scheduled EDR Contact: 10/03/05
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Date of Government Version: 09/28/05
Date Data Arrived at EDR: 09/29/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 32

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 09/26/05
Next Scheduled EDR Contact: 11/28/05
Data Release Frequency: Annually

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/03
Date Data Arrived at EDR: 10/11/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 20

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 08/23/05
Next Scheduled EDR Contact: 11/07/05
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LOCAL RECORDS

ALAMEDA COUNTY:

Underground Tanks

Date of Government Version: 06/28/05
Date Data Arrived at EDR: 06/28/05
Date Made Active in Reports: 07/26/05
Number of Days to Update: 28

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/28/05
Next Scheduled EDR Contact: 10/24/05
Data Release Frequency: Semi-Annually

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: 08/16/05
Date Data Arrived at EDR: 08/16/05
Date Made Active in Reports: 09/01/05
Number of Days to Update: 16

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/25/05
Next Scheduled EDR Contact: 10/24/05
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/29/05
Date Data Arrived at EDR: 08/30/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 37

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 08/29/05
Next Scheduled EDR Contact: 11/28/05
Data Release Frequency: Semi-Annually

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/22/05
Date Data Arrived at EDR: 07/25/05
Date Made Active in Reports: 08/25/05
Number of Days to Update: 31

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 07/25/05
Next Scheduled EDR Contact: 11/07/05
Data Release Frequency: Semi-Annually

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 05/10/05
Date Data Arrived at EDR: 05/10/05
Date Made Active in Reports: 06/06/05
Number of Days to Update: 27

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 09/26/05
Next Scheduled EDR Contact: 12/05/05
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LOS ANGELES COUNTY:

List of Solid Waste Facilities

Date of Government Version: 02/01/05
Date Data Arrived at EDR: 02/18/05
Date Made Active in Reports: 03/28/05
Number of Days to Update: 38

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 08/18/05
Next Scheduled EDR Contact: 11/14/05
Data Release Frequency: Varies

City of El Segundo Underground Storage Tank

Date of Government Version: 08/29/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 09/28/05
Number of Days to Update: 30

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 08/29/05
Next Scheduled EDR Contact: 11/14/05
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Date of Government Version: 03/28/03
Date Data Arrived at EDR: 10/23/03
Date Made Active in Reports: 11/26/03
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 08/22/05
Next Scheduled EDR Contact: 11/21/05
Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Date of Government Version: 08/16/05
Date Data Arrived at EDR: 09/14/05
Date Made Active in Reports: 09/28/05
Number of Days to Update: 14

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 08/15/05
Next Scheduled EDR Contact: 11/14/05
Data Release Frequency: Semi-Annually

City of Los Angeles Landfills

Date of Government Version: 03/01/05
Date Data Arrived at EDR: 03/18/05
Date Made Active in Reports: 04/08/05
Number of Days to Update: 21

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 09/13/05
Next Scheduled EDR Contact: 12/12/05
Data Release Frequency: Varies

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/28/05
Date Data Arrived at EDR: 07/08/05
Date Made Active in Reports: 08/03/05
Number of Days to Update: 26

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 08/15/05
Next Scheduled EDR Contact: 11/14/05
Data Release Frequency: Semi-Annually

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/25/05
Date Data Arrived at EDR: 05/27/05
Date Made Active in Reports: 07/01/05
Number of Days to Update: 35

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 08/15/05
Next Scheduled EDR Contact: 11/14/05
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/98	Source: EPA Region 9
Date Data Arrived at EDR: 07/07/99	Telephone: 415-972-3178
Date Made Active in Reports: N/A	Last EDR Contact: 07/06/99
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 08/08/05	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 08/26/05	Telephone: 415-499-6647
Date Made Active in Reports: 09/28/05	Last EDR Contact: 08/01/05
Number of Days to Update: 33	Next Scheduled EDR Contact: 10/31/05
	Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination

Date of Government Version: 09/28/05	Source: Napa County Department of Environmental Management
Date Data Arrived at EDR: 09/29/05	Telephone: 707-253-4269
Date Made Active in Reports: 10/31/05	Last EDR Contact: 09/26/05
Number of Days to Update: 32	Next Scheduled EDR Contact: 12/26/05
	Data Release Frequency: Semi-Annually

Closed and Operating Underground Storage Tank Sites

Date of Government Version: 09/28/05	Source: Napa County Department of Environmental Management
Date Data Arrived at EDR: 09/29/05	Telephone: 707-253-4269
Date Made Active in Reports: 10/31/05	Last EDR Contact: 09/26/05
Number of Days to Update: 32	Next Scheduled EDR Contact: 12/26/05
	Data Release Frequency: Annually

ORANGE COUNTY:

List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 09/01/05	Source: Health Care Agency
Date Data Arrived at EDR: 09/19/05	Telephone: 714-834-3446
Date Made Active in Reports: 10/06/05	Last EDR Contact: 09/09/05
Number of Days to Update: 17	Next Scheduled EDR Contact: 12/05/05
	Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 09/01/05	Source: Health Care Agency
Date Data Arrived at EDR: 09/19/05	Telephone: 714-834-3446
Date Made Active in Reports: 10/31/05	Last EDR Contact: 09/09/05
Number of Days to Update: 42	Next Scheduled EDR Contact: 12/05/05
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 09/01/05
Date Data Arrived at EDR: 09/19/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 17

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 09/09/05
Next Scheduled EDR Contact: 12/05/05
Data Release Frequency: Annually

PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 10/12/05
Date Data Arrived at EDR: 10/12/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 19

Source: Placer County Health and Human Services
Telephone: 530-889-7312
Last EDR Contact: 09/19/05
Next Scheduled EDR Contact: 12/19/05
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 09/15/05
Date Data Arrived at EDR: 09/16/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 20

Source: Department of Public Health
Telephone: 951-358-5055
Last EDR Contact: 07/18/05
Next Scheduled EDR Contact: 10/17/05
Data Release Frequency: Quarterly

Underground Storage Tank Tank List

Date of Government Version: 05/24/05
Date Data Arrived at EDR: 05/25/05
Date Made Active in Reports: 06/16/05
Number of Days to Update: 22

Source: Health Services Agency
Telephone: 951-358-5055
Last EDR Contact: 07/18/05
Next Scheduled EDR Contact: 10/17/05
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS - Contaminated Sites

Date of Government Version: 08/19/05
Date Data Arrived at EDR: 09/02/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 34

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 08/26/05
Next Scheduled EDR Contact: 10/31/05
Data Release Frequency: Quarterly

ML - Regulatory Compliance Master List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 07/25/05
Date Data Arrived at EDR: 08/19/05
Date Made Active in Reports: 09/13/05
Number of Days to Update: 25

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 08/05/05
Next Scheduled EDR Contact: 10/31/05
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 09/20/05
Date Data Arrived at EDR: 09/20/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 16

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 09/06/05
Next Scheduled EDR Contact: 12/05/05
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 08/01/00
Date Data Arrived at EDR: 12/13/01
Date Made Active in Reports: 01/15/02
Number of Days to Update: 33

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 08/22/05
Next Scheduled EDR Contact: 11/21/05
Data Release Frequency: Varies

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: 05/16/05
Date Data Arrived at EDR: 05/18/05
Date Made Active in Reports: 06/16/05
Number of Days to Update: 29

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 07/08/05
Next Scheduled EDR Contact: 10/03/05
Data Release Frequency: Quarterly

SAN FRANCISCO COUNTY:

Local Oversight Facilities

Date of Government Version: 09/07/05
Date Data Arrived at EDR: 09/08/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 28

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 09/06/05
Next Scheduled EDR Contact: 12/05/05
Data Release Frequency: Quarterly

Underground Storage Tank Information

Date of Government Version: 09/07/05
Date Data Arrived at EDR: 09/08/05
Date Made Active in Reports: 10/20/05
Number of Days to Update: 42

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 09/06/05
Next Scheduled EDR Contact: 12/05/05
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SAN MATEO COUNTY:

Fuel Leak List

Date of Government Version: 08/11/05
Date Data Arrived at EDR: 08/12/05
Date Made Active in Reports: 09/13/05
Number of Days to Update: 32

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 07/11/05
Next Scheduled EDR Contact: 10/10/05
Data Release Frequency: Semi-Annually

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 08/17/05
Date Data Arrived at EDR: 08/17/05
Date Made Active in Reports: 09/21/05
Number of Days to Update: 35

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 07/11/05
Next Scheduled EDR Contact: 10/10/05
Data Release Frequency: Annually

SANTA CLARA COUNTY:

Fuel Leak Site Activity Report

Date of Government Version: 03/29/05
Date Data Arrived at EDR: 03/30/05
Date Made Active in Reports: 04/21/05
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 09/27/05
Next Scheduled EDR Contact: 12/26/05
Data Release Frequency: Semi-Annually

Hazardous Material Facilities

Date of Government Version: 09/13/05
Date Data Arrived at EDR: 09/13/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 23

Source: City of San Jose Fire Department
Telephone: 408-277-4659
Last EDR Contact: 09/06/05
Next Scheduled EDR Contact: 12/05/05
Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks

Date of Government Version: 06/28/05
Date Data Arrived at EDR: 06/28/05
Date Made Active in Reports: 07/26/05
Number of Days to Update: 28

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/12/05
Next Scheduled EDR Contact: 12/12/05
Data Release Frequency: Quarterly

Underground Storage Tanks

Date of Government Version: 06/28/05
Date Data Arrived at EDR: 06/28/05
Date Made Active in Reports: 07/26/05
Number of Days to Update: 28

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/12/05
Next Scheduled EDR Contact: 12/12/05
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SONOMA COUNTY:

Leaking Underground Storage Tank Sites

Date of Government Version: 10/01/05
Date Data Arrived at EDR: 10/24/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 7

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 10/24/05
Next Scheduled EDR Contact: 01/23/06
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Date of Government Version: 01/29/04
Date Data Arrived at EDR: 01/29/04
Date Made Active in Reports: 02/23/04
Number of Days to Update: 25

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 07/18/05
Next Scheduled EDR Contact: 10/03/05
Data Release Frequency: Semi-Annually

VENTURA COUNTY:

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/05
Date Data Arrived at EDR: 09/20/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 16

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/09/05
Next Scheduled EDR Contact: 11/21/05
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 08/30/05
Date Data Arrived at EDR: 09/26/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 35

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/13/05
Next Scheduled EDR Contact: 12/12/05
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 07/05/05
Date Data Arrived at EDR: 07/22/05
Date Made Active in Reports: 08/04/05
Number of Days to Update: 13

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/15/05
Next Scheduled EDR Contact: 10/10/05
Data Release Frequency: Quarterly

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: 08/30/05
Date Data Arrived at EDR: 09/29/05
Date Made Active in Reports: 10/31/05
Number of Days to Update: 32

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/13/05
Next Scheduled EDR Contact: 12/12/05
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Date of Government Version: 07/19/05
Date Data Arrived at EDR: 08/08/05
Date Made Active in Reports: 08/30/05
Number of Days to Update: 22

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 07/18/05
Next Scheduled EDR Contact: 10/17/05
Data Release Frequency: Annually

EDR PROPRIETARY HISTORICAL DATABASES

EDR Historical Gas Station and Dry Cleaners: EDR has searched select national collections of business directories and has collected listings of potential dry cleaner and 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 dry cleaning and 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, dry cleaner, cleaners, laundry, laundromat, cleaning/laundry, wash & dry, etc.*

This information is meant to assist and complement environmental professionals in their conduct of environmental site assessments, and is not meant to be a substitute for a full historical investigation as defined in ASTM E1527. The information provided in this proprietary database may or may not be complete; i.e., the absence of a dry cleaner or gas station/filling station/service station site does not necessarily mean that such a site did not exist in the area covered by this report.

(A note on "dry cleaning" sites: it is not possible for EDR to differentiate between establishments that use PERC on-site as a cleaning solvent and sites that function simply as drop-off and pick-up locations or that are traditional wet cleaning/laundry facilities. Therefore, it is essential for environmental professionals to incorporate professional judgment in the evaluation of each site.)

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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BROWNFIELDS DATABASES

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: 08/08/05
Date Data Arrived at EDR: 08/29/05
Date Made Active in Reports: 09/21/05
Number of Days to Update: 23

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/29/05
Next Scheduled EDR Contact: 11/28/05
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 08/18/05
Date Data Arrived at EDR: 08/18/05
Date Made Active in Reports: 10/06/05
Number of Days to Update: 49

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 08/11/05
Next Scheduled EDR Contact: 12/12/05
Data Release Frequency: Semi-Annually

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/10/05
Date Data Arrived at EDR: 02/11/05
Date Made Active in Reports: 04/06/05
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 703-603-8867
Last EDR Contact: 07/05/05
Next Scheduled EDR Contact: 10/03/05
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.

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: PennWell Corporation
Telephone: (800) 823-6277

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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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

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

STREET AND ADDRESS INFORMATION

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GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

VACANT LOTS
BETWEEN WHEAT ST & BYERS RD
SUN CITY, CA 92585

TARGET PROPERTY COORDINATES

Latitude (North):	33.739399 - 33° 44' 21.8"
Longitude (West):	117.217201 - 117° 13' 1.9"
Universal Transverse Mercator:	Zone 11
UTM X (Meters):	479880.5
UTM Y (Meters):	3733089.2
Elevation:	1445 ft. above sea level

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

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. 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.

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).

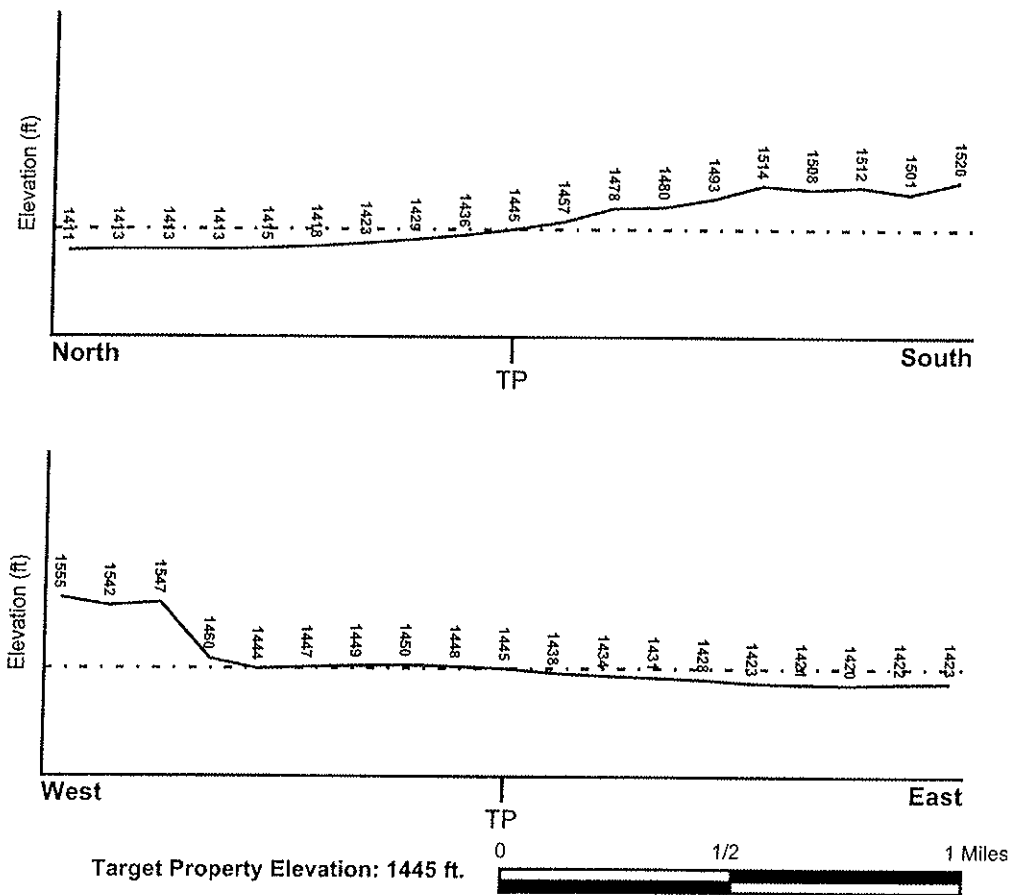
TOPOGRAPHIC INFORMATION

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

USGS Topographic Map: 33117-F2 ROMOLAND, CA
 General Topographic Gradient: General NNE
 Source: USGS 7.5 min quad index

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County
RIVERSIDE, CA

FEMA Flood
Electronic Data
YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 0602452080B

Additional Panels in search area: 0602580015D

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property
ROMOLAND

NWI Electronic
Data Coverage
Not Available

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data:*

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era:	Mesozoic	Category:	Plutonic and Intrusive Rocks
System:	Cretaceous		
Series:	Cretaceous granitic rocks		
Code:	Kg (decoded above as Era, System & Series)		

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).

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. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	MONSERATE
Soil Surface Texture:	sandy loam
Hydrologic Group:	Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.
Soil Drainage Class:	Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	10 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2.00 Min: 0.60	Max: 7.30 Min: 6.10
2	10 inches	28 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.60 Min: 0.20	Max: 7.30 Min: 6.10
3	28 inches	45 inches	indurated	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00
4	45 inches	57 inches	cemented	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00
5	57 inches	70 inches	loamy coarse sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2.00 Min: 0.60	Max: 8.40 Min: 6.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: loam
fine sandy loam
coarse sandy loam

Surficial Soil Types: loam
fine sandy loam
coarse sandy loam

Shallow Soil Types: indurated
sandy loam
fine sandy loam

Deeper Soil Types: stratified
coarse sandy loam
gravelly - fine sandy loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	USGS3124865	1/2 - 1 Mile East
2	USGS3124844	1/2 - 1 Mile SE
3	USGS3124841	1/2 - 1 Mile SSE
4	USGS3124867	1/2 - 1 Mile ENE
5	USGS3124834	1/2 - 1 Mile SE
6	USGS3124859	1/2 - 1 Mile East

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

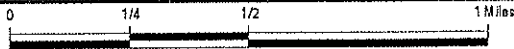
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

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

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 1549286.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



<p>TARGET PROPERTY: Vacant Lots ADDRESS: Between Wheat St & Byers Rd CITY/STATE/ZIP: Sun City CA 92585 LAT/LONG: 33.7394 / 117.2172</p>	<p>CUSTOMER: Geo Environmental Inc. CONTACT: Emily Williams INQUIRY #: 1549286.2s DATE: November 07, 2005 2:09 pm</p>
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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

1
 East
 1/2 - 1 Mile
 Lower

FED USGS USGS3124865

Agency cd:	USGS	Site no:	334422117122301
Site name:	005S003W17A001S		
Latitude:	334422		
Longitude:	1171223	Dec lat:	33.7394647
Dec lon:	-117.20725727	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	ROMOLAND	Map scale:	24000
Altitude:	1422	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	San Jacinto, California. Area = 757 sq.mi.		
Topographic:	Valley flat		
Site type:	Ground-water other than Spring	Date construction:	19950206
Date inventoried:	19950606	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	160	Hole depth:	160
Source of depth data:	driller	Project number:	470600323
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1995-02-07	Ground water data end date:	1995-02-07
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1995-02-07	22	

2
 SE
 1/2 - 1 Mile
 Higher

FED USGS USGS3124844

Agency cd:	USGS	Site no:	334355117123601
Site name:	005S003W17Q001S		
Latitude:	334355		
Longitude:	1171236	Dec lat:	33.7319649
Dec lon:	-117.21086852	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	ROMOLAND	Map scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Altitude:	1450	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	San Jacinto. California. Area = 757 sq.mi.		
Topographic:	Valley flat		
Site type:	Ground-water other than Spring	Date construction:	198809
Date inventoried:	19950424	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	210	Hole depth:	210
Source of depth data:	owner	Project number:	5470600323
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

3
SSE
1/2 - 1 Mile
Higher

FED USGS USGS3124841

Agency cd:	USGS	Site no:	334350117123401
Site name:	005S003W17R002S		
Latitude:	334350		
Longitude:	1171234	Dec lat:	33.73057605
Dec lon:	-117.21031293	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec lalong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	ROMOLAND	Map scale:	24000
Altitude:	1460	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	San Jacinto. California. Area = 757 sq.mi.		
Topographic:	Valley flat		
Site type:	Ground-water other than Spring	Date construction:	19920211
Date inventoried:	19950420	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	220	Hole depth:	220
Source of depth data:	driller	Project number:	5470600323
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

4
ENE
 1/2 - 1 Mile
 Lower

FED USGS USGS3124867

Agency cd:	USGS	Site no:	334431117120601
Site name:	005S003W16D001S		
Latitude:	334431		
Longitude:	1171206	Dec lat:	33.74196464
Dec lon:	-117.20253482	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	ROMOLAND	Map scale:	24000
Altitude:	1417	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	San Jacinto. California. Area = 757 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19931118	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	160	Hole depth:	Not Reported
Source of depth data:	owner	Project number:	470648023
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1993-11-18
Water quality data end date:	1993-11-18	Water quality data count:	1
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

5
SE
 1/2 - 1 Mile
 Higher

FED USGS USGS3124834

Agency cd:	USGS	Site no:	334346117122101
Site name:	005S003W17R001S		
Latitude:	334346		
Longitude:	1171221	Dec lat:	33.72946498
Dec lon:	-117.20670163	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	ROMOLAND	Map scale:	24000
Altitude:	1445	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	San Jacinto. California. Area = 757 sq.mi.		
Topographic:	Valley flat		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19950606	Mean greenwich time offset:	PST

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	Y	Hole depth:	370
Type of ground water site:	Single well, other than collector or Ranney type	Project number:	470600323
Aquifer Type:	Not Reported	Daily flow data begin date:	0000-00-00
Aquifer:	Not Reported	Daily flow data count:	0
Well depth:	370	Peak flow data end date:	0000-00-00
Source of depth data:	driller	Water quality data begin date:	1995-07-24
Real time data flag:	0	Water quality data count:	1
Daily flow data end date:	0000-00-00	Ground water data end date:	0000-00-00
Peak flow data begin date:	0000-00-00		
Peak flow data count:	0		
Water quality data end date:	1995-07-24		
Ground water data begin date:	0000-00-00		
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

6
East
1/2 - 1 Mile
Lower

FED USGS USGS3124859

Agency cd:	USGS	Site no:	334415117120201
Site name:	005S003W16F001S		
Latitude:	334415	Dec lat:	33.73752032
Longitude:	1171202	Coor meth:	M
Dec lon:	-117.20142363	Latlong datum:	NAD27
Coor accr:	S	District:	06
Dec latlong datum:	NAD83	County:	065
State:	06	Land net:	Not Reported
Country:	US	Map scale:	24000
Location map:	ROMOLAND	Altitude method:	M
Altitude:	1419	Altitude datum:	NGVD29
Altitude accuracy:	10		
Hydrologic:	San Jacinto, California. Area = 757 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19931118	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported	Hole depth:	Not Reported
Well depth:	Not Reported	Project number:	470648023
Source of depth data:	Not Reported	Daily flow data begin date:	0000-00-00
Real time data flag:	0	Daily flow data count:	0
Daily flow data end date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data begin date:	0000-00-00	Water quality data begin date:	1993-11-18
Peak flow data count:	0	Water quality data count:	2
Water quality data end date:	1995-08-09	Ground water data end date:	0000-00-00
Ground water data begin date:	0000-00-00		
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zip	Total Sites	> 4 Pci/L	Pct. > 4 Pci/L
92585	1	0	0.00

Federal EPA Radon Zone for RIVERSIDE 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 RIVERSIDE COUNTY, CA

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.117 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.450 pCi/L	100%	0%	0%
Basement	1.700 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002. 7.5-Minute DEMs correspond to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

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

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

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

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

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.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

California Drinking Water Quality Database

Source: Department of Health Services
Telephone: 916-324-2319

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

California Oil and Gas Well Locations for District 2, 3, 5 and 6

Source: Department of Conservation
Telephone: 916-323-1779

RADON

State Database: CA Radon

Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information

Source: USGS
Telephone: 703-356-4020

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

EPA Radon Zones

Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

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.

APPENDIX B
HISTORICAL AERIAL PHOTOGRAPHS



EDR® Environmental
Data Resources Inc

The EDR Aerial Photo Decade Package

**Vacant Lots
Between Wheat St & Byers St
Sun City, CA 92585**

Inquiry Number: 1549286.6

November 08, 2005

The Standard in Environmental Risk Management Information

**440 Wheelers Farms Road
Milford, Connecticut 06460**

Nationwide Customer Service

**Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com**

Environmental Data Resources, Inc.

Aerial Photography Print Service

Environmental Data Resources, Inc.'s (EDR) Aerial Photography Print Service is a screening tool designed to assist professionals in evaluating potential liability on a target property resulting from past activities. ASTM E 1527-00, Section 7.3 on Historical Use Information, identifies the prior use requirements for a Phase I environmental site assessment. The ASTM standard requires a review of *reasonably ascertainable standard historical sources*. *Reasonably ascertainable means information that is publicly available, obtainable from a source with reasonable time and cost constraints, and practically reviewable.*

To meet the prior use requirements of ASTM E 1527-00, Section 7.3.4, the following *standard historical sources* may be used: aerial photographs, fire insurance maps, property tax files, land title records (although these cannot be the sole historical source consulted), topographic maps, city directories, building department records, or zoning/land use records. ASTM E 1527-00 requires *"All obvious uses of the property shall be identified from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historical sources as are necessary, and that are reasonably ascertainable and likely to be useful."* (ASTM E 1527-00, Section 7.3.2, page 12.)

Aerial Photographs

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Aerial photographs are a valuable historical resource for documenting past land use and can be particularly helpful when other historical sources (such as city directories or fire insurance maps) are not reasonably ascertainable. The EDR Aerial Photograph Print Service includes a search of local aerial photograph collections flown by public and private agencies. EDR's professional field-based researchers provide digitally reproduced historical aerial photographs at ten year intervals.

Please call Environmental Data Resources, Inc. Nationwide Customer Service at
1-800-352-0050 (8am-8pm ET)

with questions or comments about your report.

Thank you for your business!

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iry: 1549286.6 Year: 1938

Flyer: Laval

Scale: 1"=555'



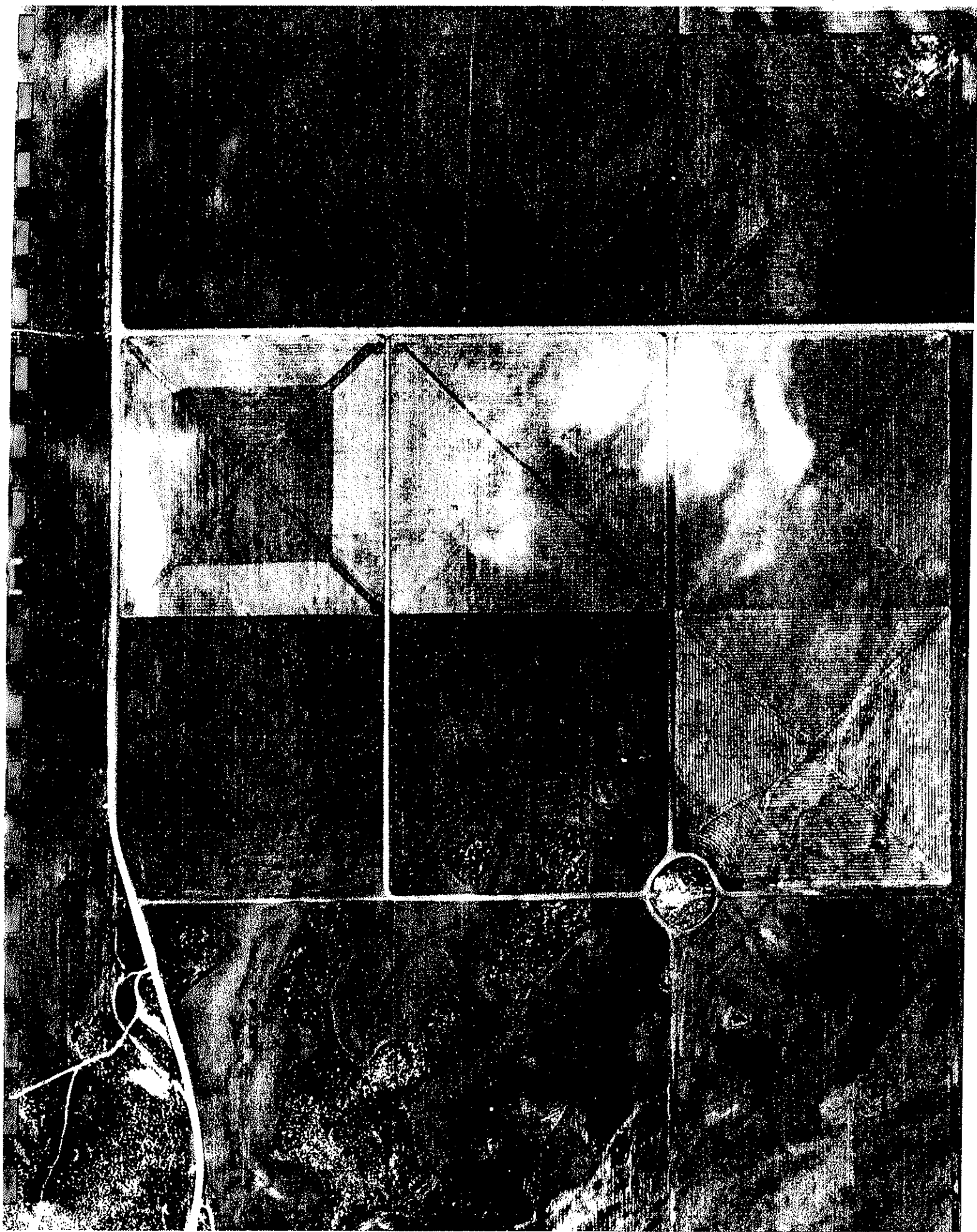


Inquiry: 1549286.6 Year: 1953

Flyer: Pacific Air

Scale: 1"=555'





Inquiry: 1549286.6 Year: 1967

Flyer: Western

Scale: 1"=555'





Inquiry: 1549286.6 Year: 1980

Flyer: AMI

Scale: 1"=600'





inquiry: 1549286.6 Year: 1989

Flyer: USGS

Scale: 1"=666'





Inquiry: 1549286.6 Year: 1994

Flyer: USGS

Scale: 1"=666'





Inquiry: 1549286.6 Year: 2002

Flyer: USGS

Scale: 1"=666'



APPENDIX C
HISTORICAL TOPOGRAPHIC MAPS



EDR® Environmental
Data Resources Inc

**EDR Historical
Topographic Map
Report**

**Vacant Lots
Between Wheat St & Byers St
Sun City, CA 92585**

Inquiry Number: 1549286.4

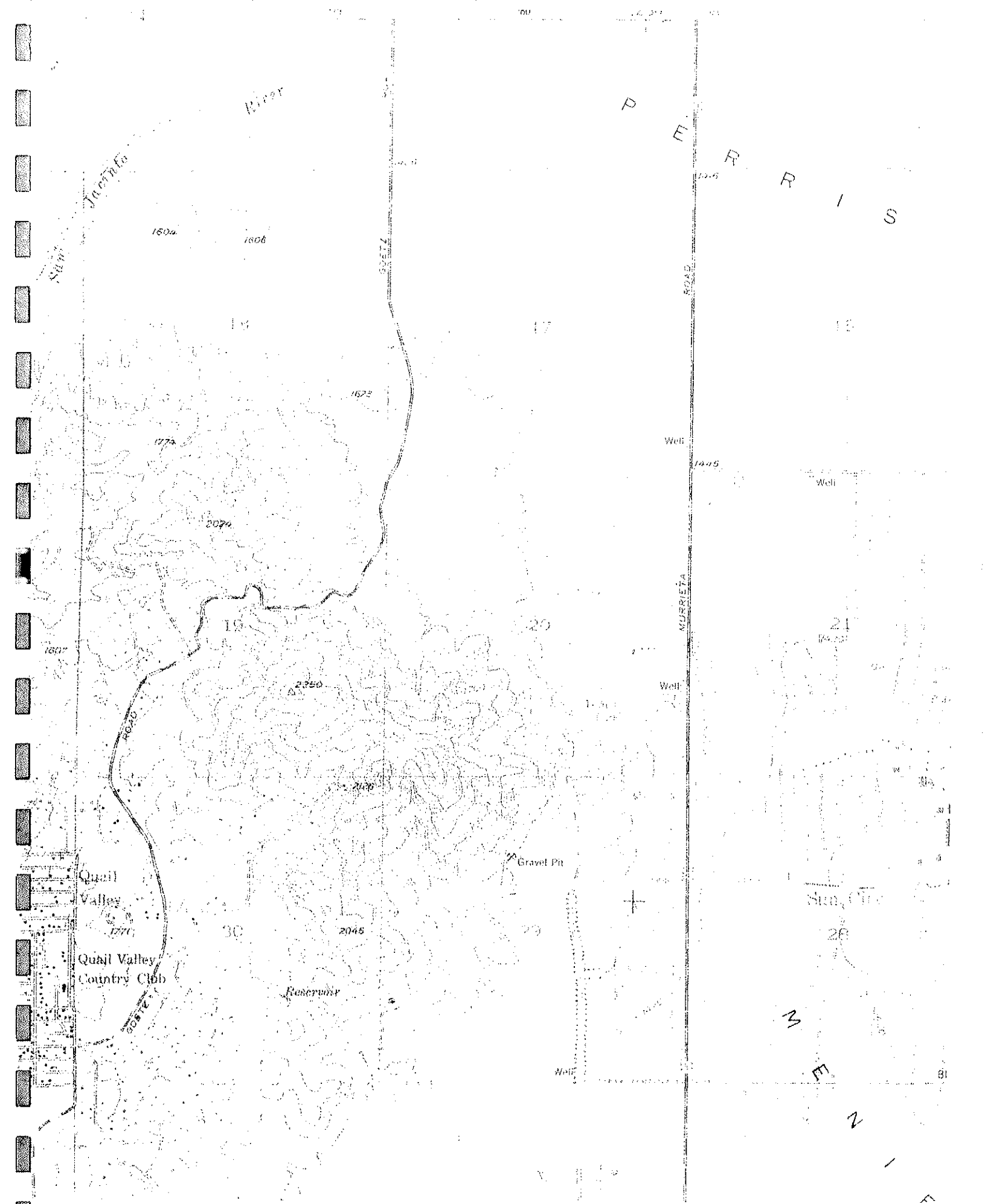
November 07, 2005

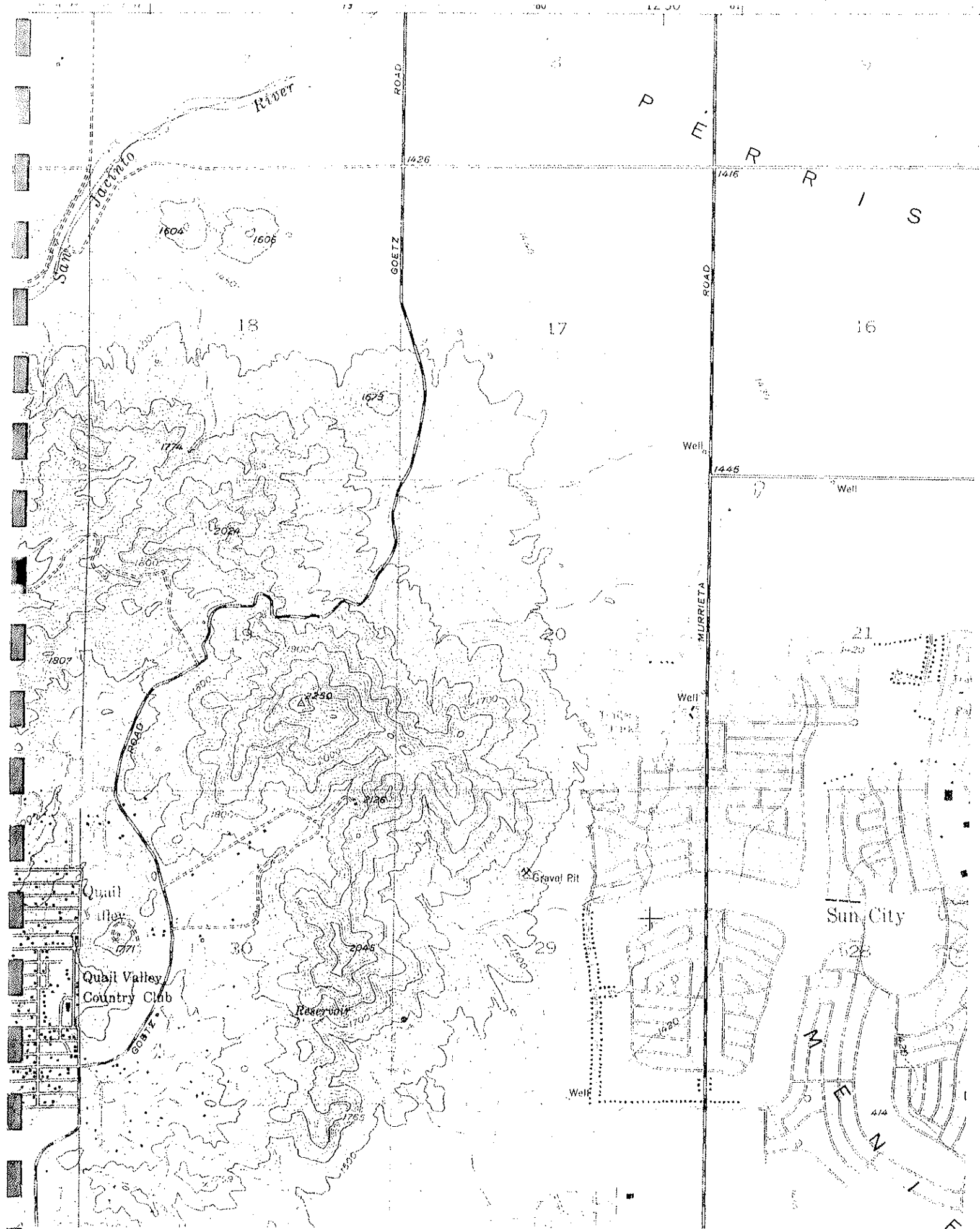
**The Standard in
Environmental Risk
Management Information**

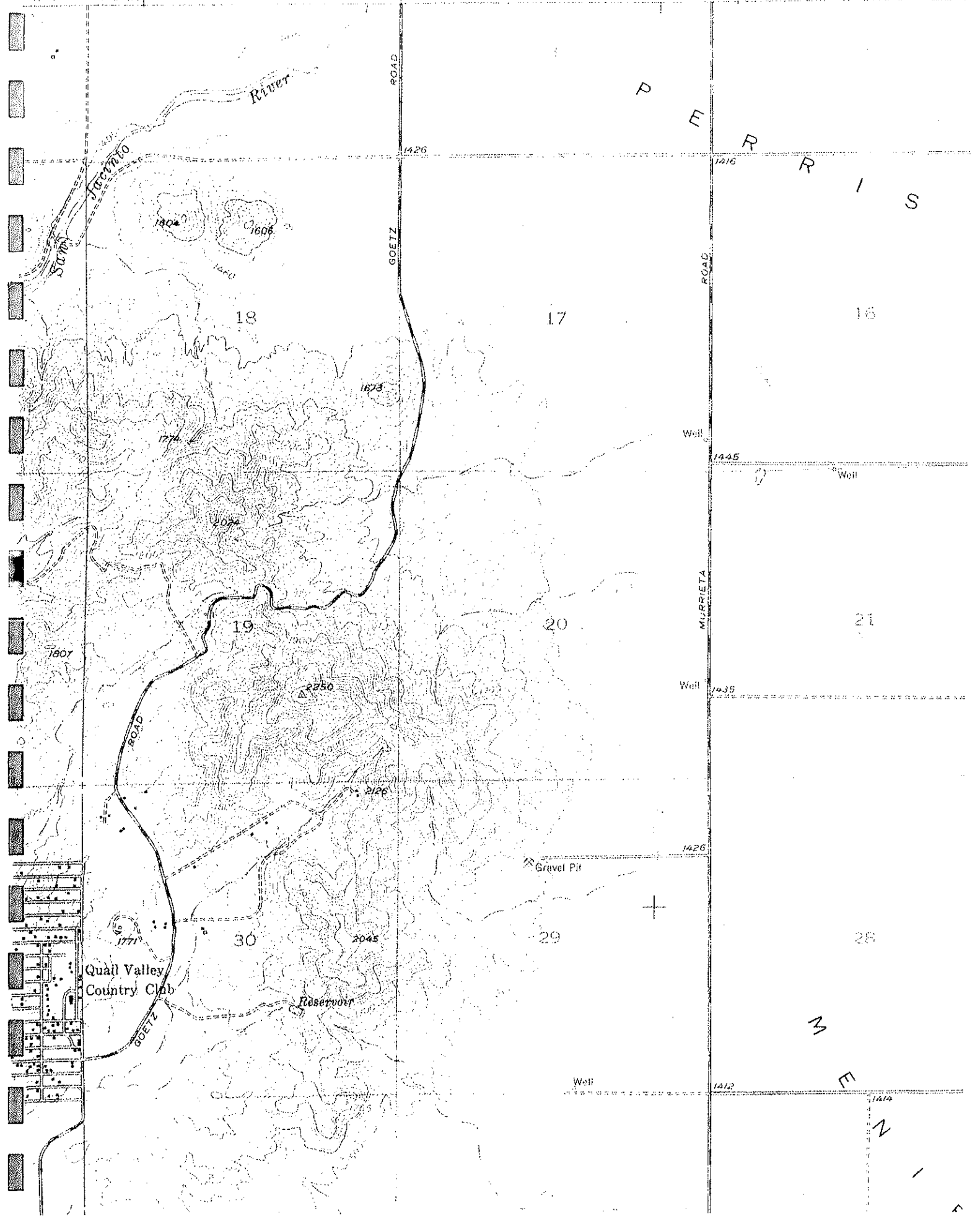
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Milford, Connecticut 06461

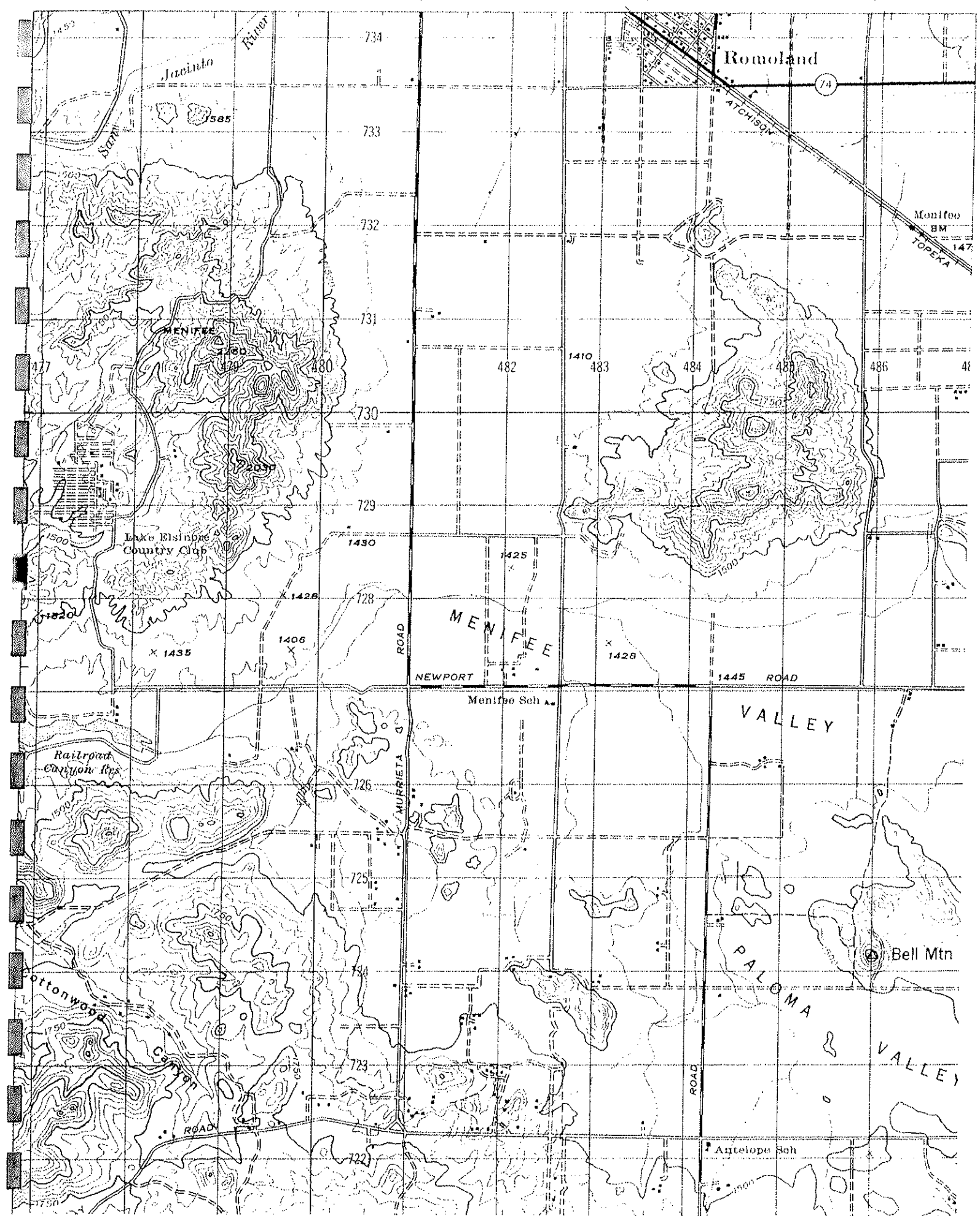
Nationwide Customer Service

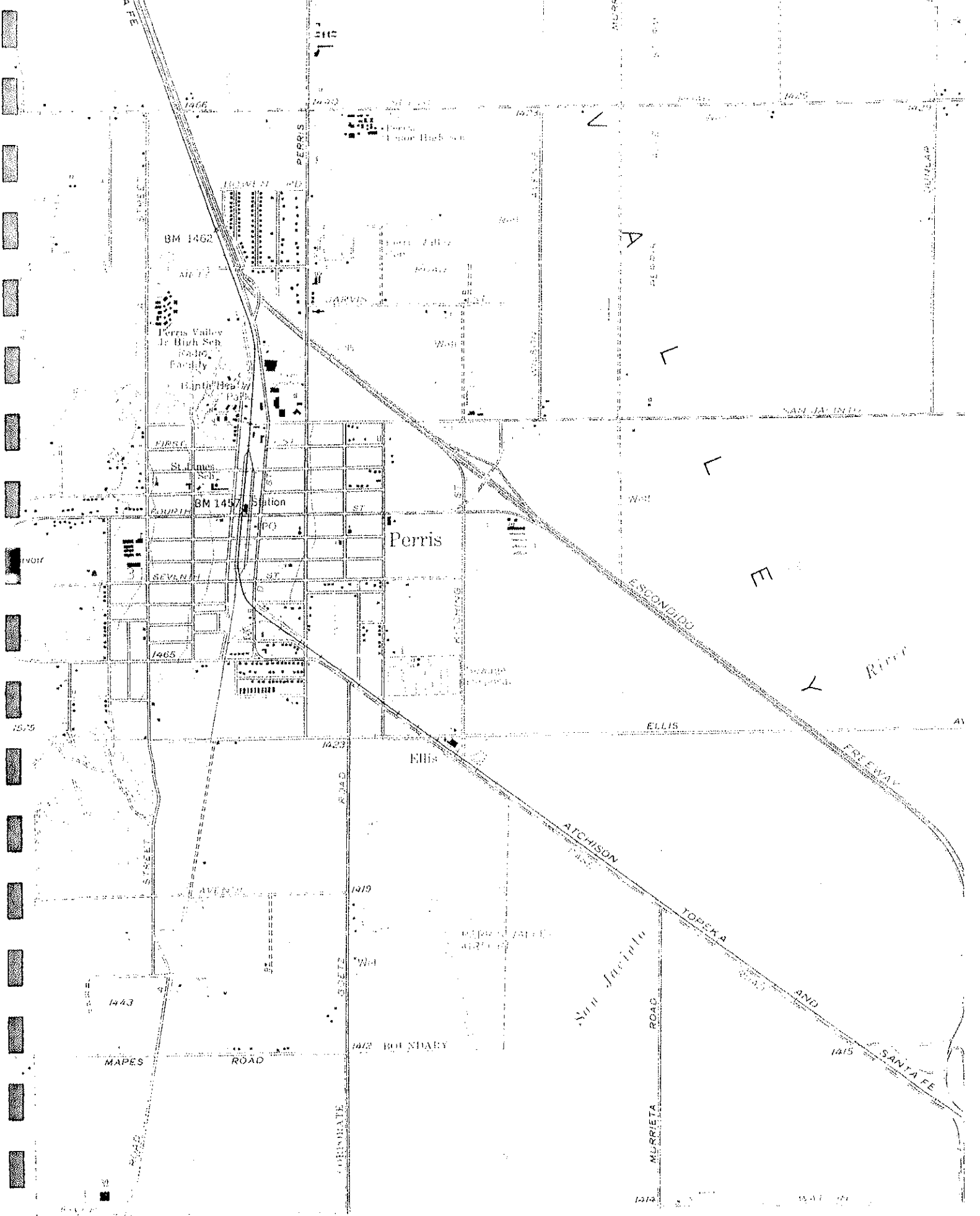
Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

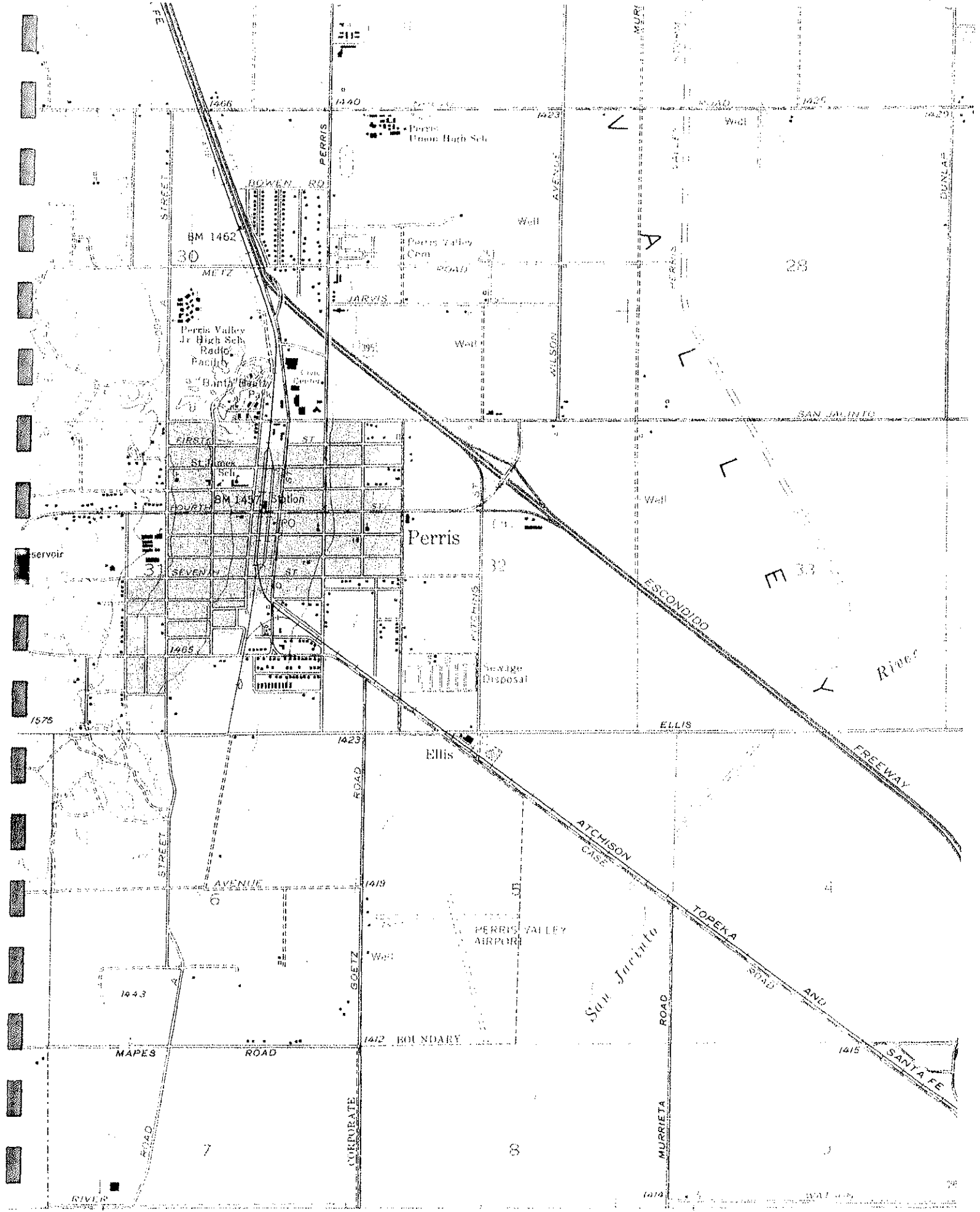


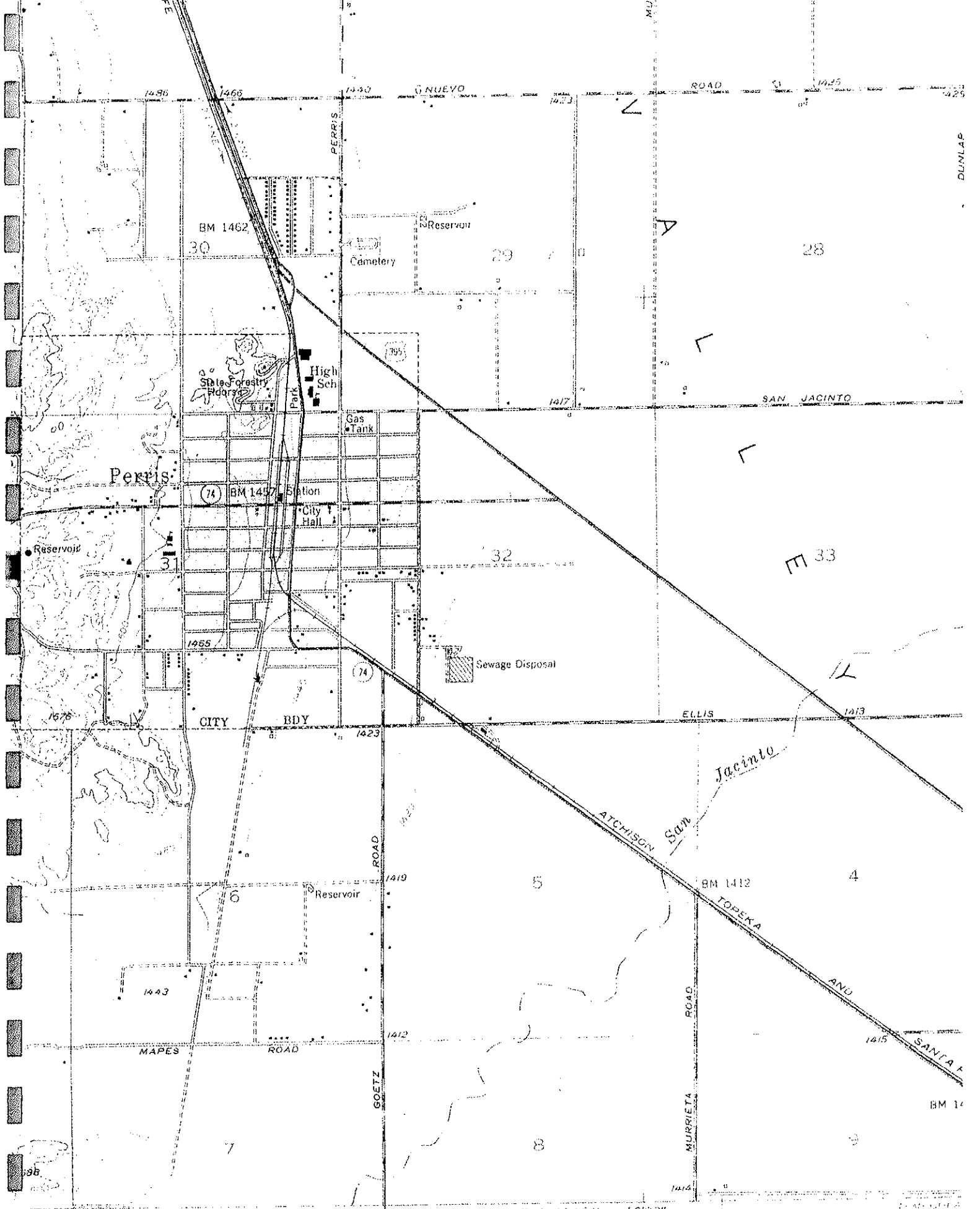


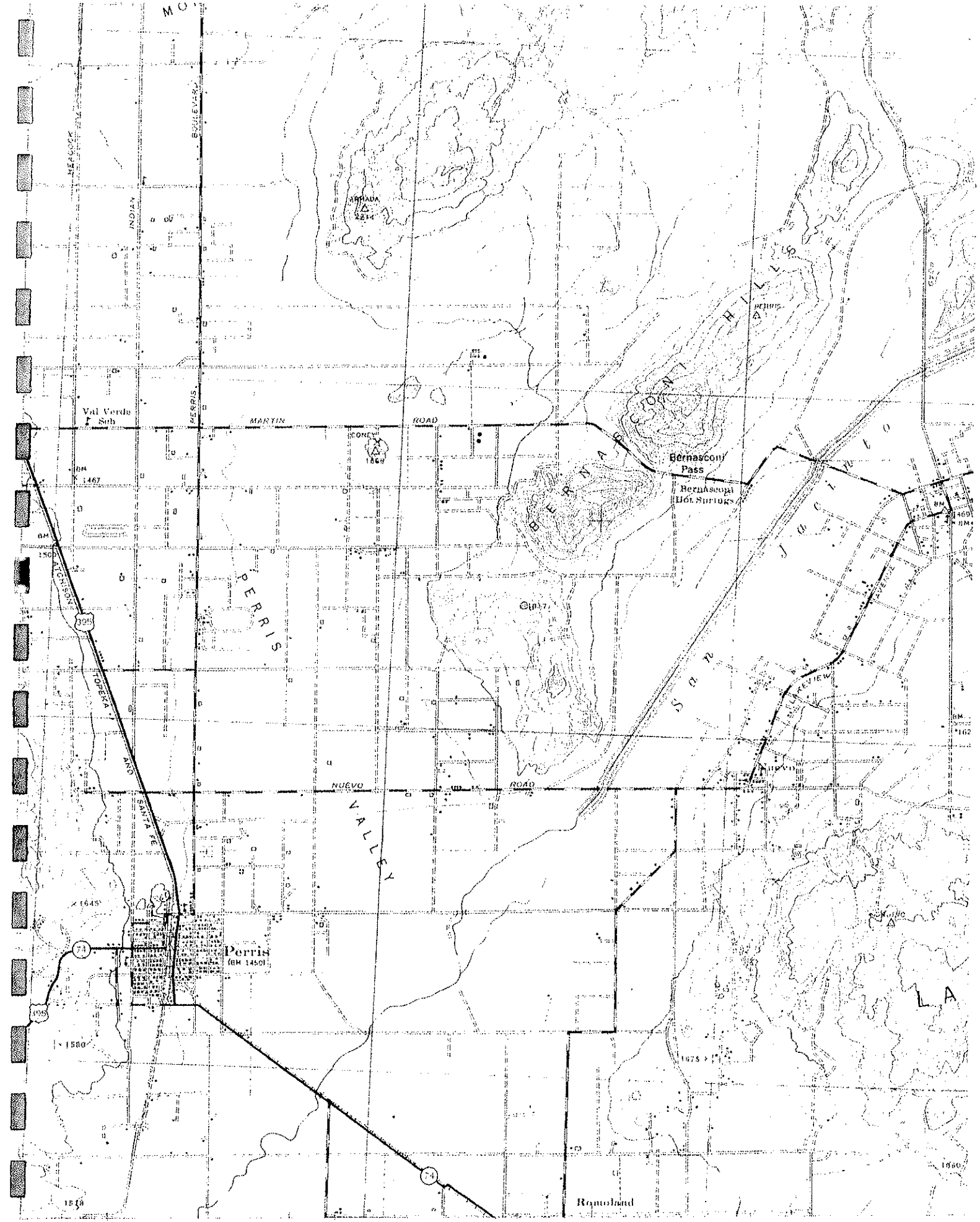


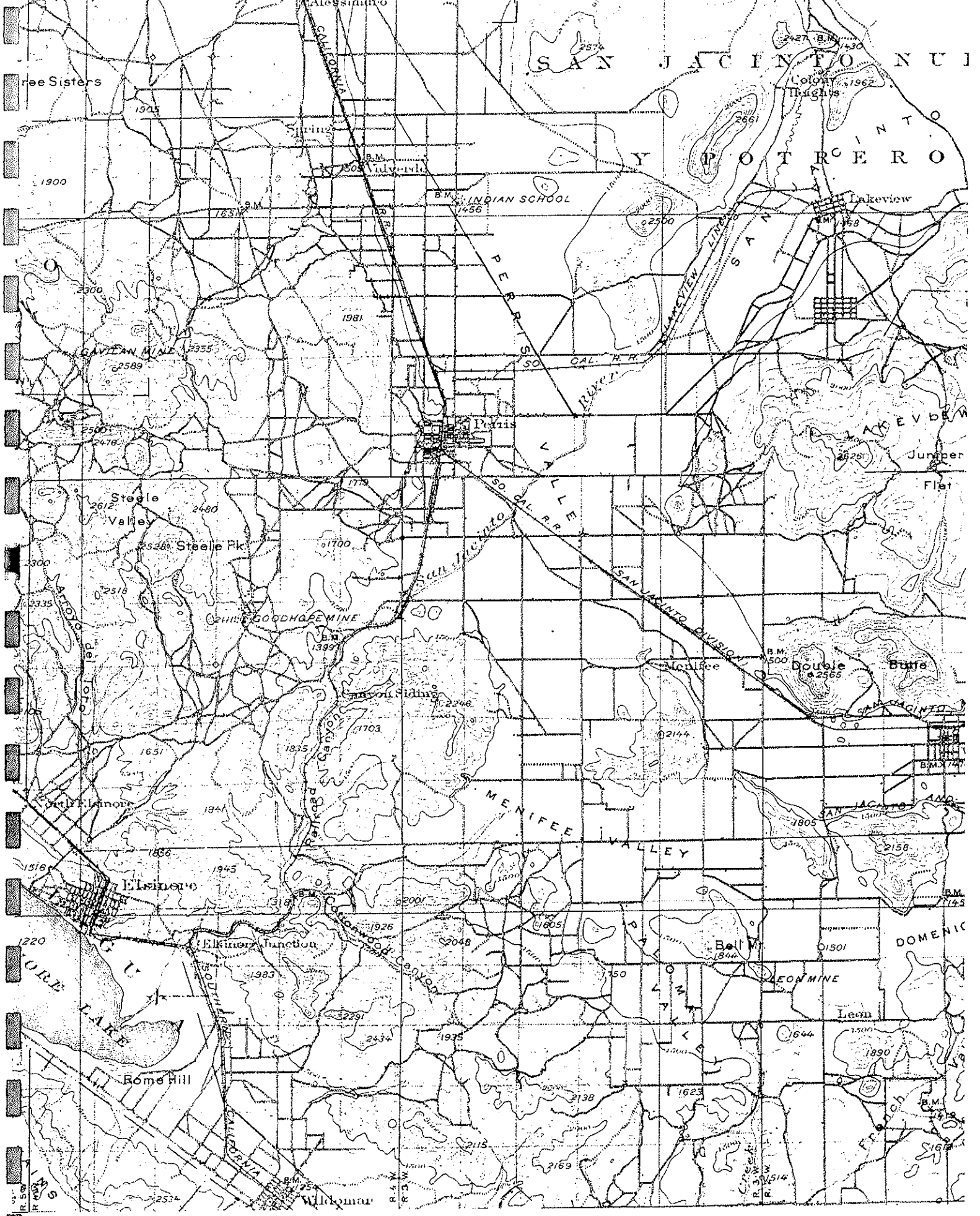












EDR Historical Topographic Map Report

Environmental Data Resources, Inc.'s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property, and its surrounding area, resulting from past activities. ASTM E 1527-00, Section 7.3 on Historical Use Information, identifies the prior use requirements for a Phase I environmental site assessment. The ASTM standard requires a review of *reasonably ascertainable standard historical sources*. *Reasonably ascertainable is defined as information that is publicly available, obtainable from a source with reasonable time and cost constraints, and practically reviewable.* To meet the prior use requirements of ASTM E 1527-00, Section 7.3.4, the following *standard historical sources* may be used: aerial photographs, city directories, fire insurance maps, topographic maps, property tax files, land title records (although these cannot be the sole historical source consulted), building department records, or zoning/and use records. ASTM E 1527-00 requires *"All obvious uses of the property shall be identified from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historical sources as are necessary, and that are reasonably ascertainable and likely to be useful."* (ASTM E 1527-00, Section 7.3.2 page 12.)

EDR's Historical Topographic Map Report includes a search of available public and private color historical topographic map collections.

Topographic Maps

A topographic map (topo) is a color coded line-and-symbol representation of natural and selected artificial features plotted to a scale. Topos show the shape, elevation, and development of the terrain in precise detail by using contour lines and color coded symbols. Many features are shown by lines that may be straight, curved, solid, dashed, dotted, or in any combination. The colors of the lines usually indicate similar classes of information. For example, topographic contours (brown); lakes, streams, irrigation ditches, etc. (blue); land grids and important roads (red); secondary roads and trails, railroads, boundaries, etc. (black); and features that have been updated using aerial photography, but not field verified, such as disturbed land areas (e.g., gravel pits) and newly developed water bodies (purple).

For more than a century, the USGS has been creating and revising topographic maps for the entire country at a variety of scales. There are about 60,000 U.S. Geological Survey (USGS) produced topo maps covering the United States. Each map covers a specific quadrangle (quad) defined as a four-sided area bounded by latitude and longitude. Historical topographic maps are a valuable historical resource for documenting the prior use of a property and its surrounding area, and due to their frequent availability can be particularly helpful when other standard historical sources (such as city directories, fire insurance maps, or aerial photographs) are not reasonably ascertainable.

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APPENDIX D
SITE PHOTOGRAPHS

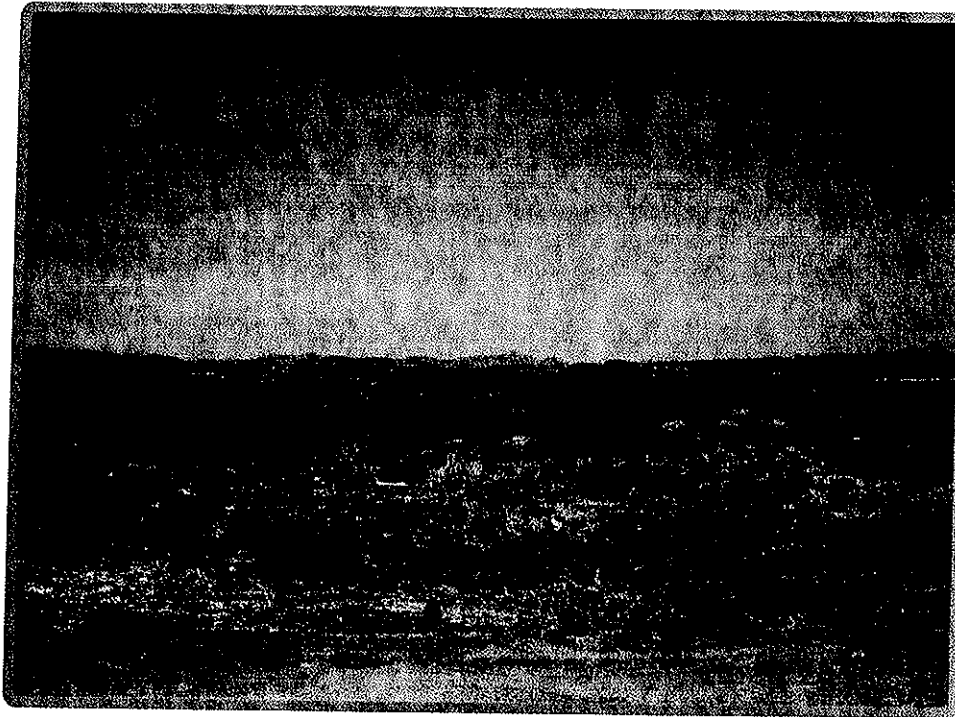


Photo 1: View looking towards the northwest of the project site.



Photo 2: View looking towards the north of the project site.



GEO-ENVIRONMENTAL, INC.

GEI-Project No: 236-03a

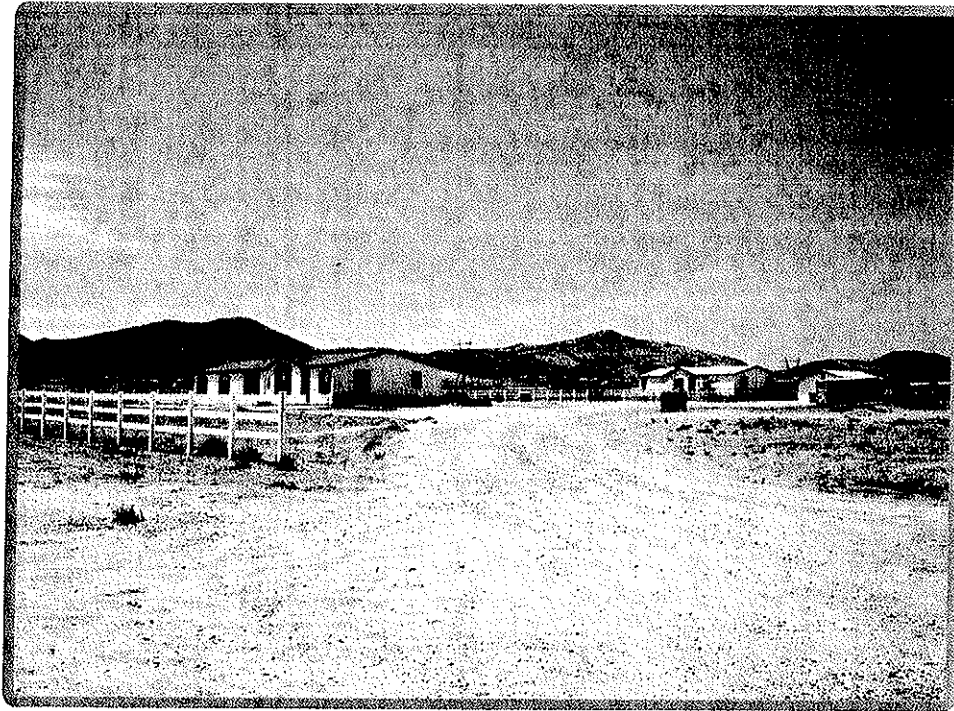


Photo 3: Residential properties located adjacent to the northeast side of the project site.

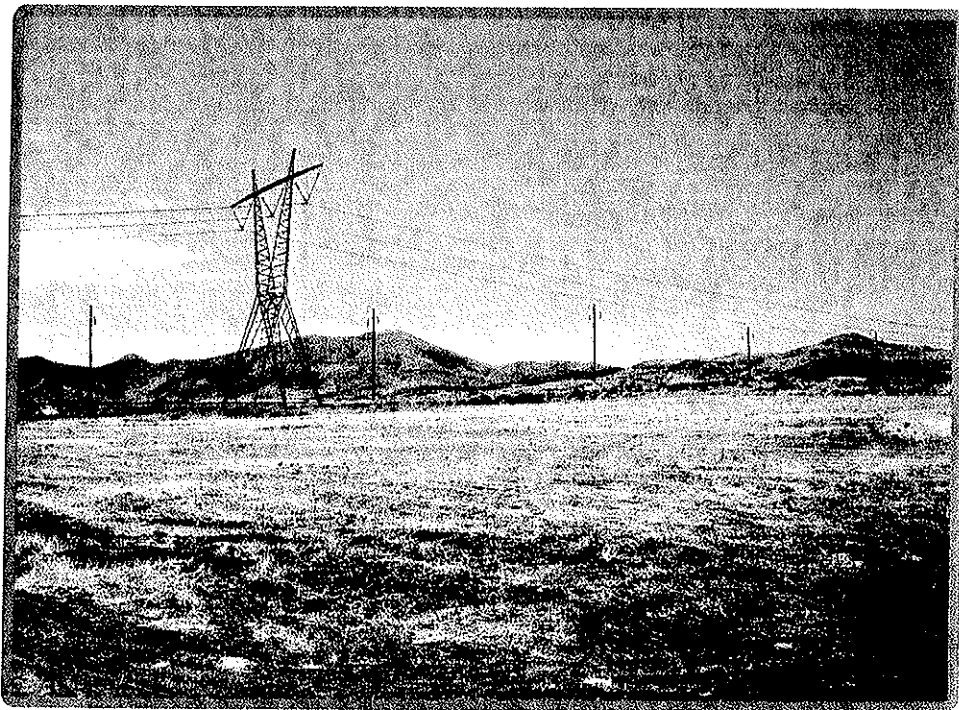


Photo 4: View looking towards the southeast of the project site.



GEO-ENVIRONMENTAL, INC.

GEI-Project No: 236-03a

PARTNER

Engineering and Science, Inc.



PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT

Rutledge Parcel

26065 Byers Road
Menifee, California 92585

Report Date: August 30, 2021
Partner Project No. 21-333053.1



Prepared for:

Capstone Advisors
1545 Faraday Avenue
Carlsbad, California 92008

August 30, 2021

Mark Hayden
Capstone Advisors
1545 Faraday Avenue
Carlsbad, California 92008

Subject: Phase I Environmental Site Assessment
Rutledge Parcel
26065 Byers Road
Menifee, California 92585
Partner Project No. 21-333053.1

Dear Mark Hayden:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the *Phase I Environmental Site Assessment* (Phase I ESA) report of the abovementioned address (the "subject property"). This assessment was performed in conformance with the scope and limitations as detailed in the ASTM Practice E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

This assessment included a site reconnaissance as well as research and interviews with representatives of the public, property ownership, site manager, and regulatory agencies. An assessment was made, conclusions stated, and recommendations outlined.

We appreciate the opportunity to provide environmental services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at (310) 662-8852.

Sincerely,



Leo Bertolino
Relationship Manager

EXECUTIVE SUMMARY

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in accordance with the scope of work and limitations of ASTM Standard Practice E1527-13, the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) and set forth by Capstone Advisors for the property located at 26065 Byers Road in Menifee, Riverside County, California (the "subject property"). The Phase I Environmental Site Assessment is designed to provide Capstone Advisors with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the subject property.

Property Description

The subject property is located on the southwest corner of the intersection of Byers Road and Kuffel Road within a rural residential area of Riverside County. Please refer to the table below for further description of the subject property:

Subject Property Data

Address:	26065 Byers Road, Menifee, California
Property Use:	Rural Residential
Land Acreage (Ac):	4.77 Ac
Number of Buildings:	Three manufactured homes, one garage, several small manufactured shed buildings and a small solar energy farm
Number of Floors:	One
Gross Building Area (SF):	Not defined
Date of Construction:	2002 (per County Assessor)
Assessor's Parcel Number (APN):	330190013
Type of Construction:	Wood-Framed (garage only)
Current Tenants:	Residential tenants
Site Assessment Performed By:	Tatjana McCondichie of Partner
Site Assessment Conducted On:	August 25, 2021

The subject property is currently occupied by residential tenants for rural residential use. The subject property is occupied by three manufactured homes, one garage, several small manufactured shed buildings, a small solar energy farm and occupied by residential tenants. In addition to the current structures, the subject property is also improved with livestock pens for chickens, ducks and horses.

According to available historical sources, the subject property was formerly undeveloped as early as 1901; developed agriculturally developed from at least 1938 to 1978; vacant land between 1985 and 2002; and developed with the current structures in 2002. Tenants on the subject property include residential listings from 2005 to present.

The immediately surrounding properties consist of rural residences to the north across Kuffel Road; vacant land to the south; rural residences to the east across Byers Road; and vacant land to the west.

According to information obtained from the Regional Water Quality Control Board and topographic map interpretation, the depth to groundwater in the vicinity of the subject property is inferred to be approximately 60 to 90 feet below ground surface (bgs) and groundwater flow is inferred to be toward the north-northeast.

Findings

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- Partner did not identify any recognized environmental conditions during the course of this assessment.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- Partner did not identify any controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- Partner did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- Partner did not identify any environmental issues during the course of this assessment.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of 26065 Byers Road in the City of Menifee, Riverside County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of recognized environmental conditions or environmental issues in connection with the subject property. Based on the conclusions of this assessment, Partner recommends no further investigation of the subject property at this time.

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Purpose	1
1.2	Scope of Work.....	1
1.3	Limitations	2
1.4	User Reliance	2
1.5	Limiting Conditions	3
2.0	SITE DESCRIPTION	4
2.1	Site Location and Legal Description	4
2.2	Current Property Use.....	4
2.3	Current Use of Adjacent Properties	4
2.4	Physical Setting Sources.....	4
2.4.1	Topography.....	4
2.4.2	Hydrology	5
2.4.3	Geology/Soils	5
2.4.4	Flood Zone Information	5
3.0	HISTORICAL INFORMATION.....	7
3.1	Aerial Photograph Review	7
3.2	Fire Insurance Maps	8
3.3	City Directories.....	8
3.4	Historical Topographic Maps	9
4.0	REGULATORY RECORDS REVIEW	10
4.1	Regulatory Agencies.....	10
4.1.1	State Department	10
4.1.2	Health Department	10
4.1.3	Air Pollution Control Agency.....	10
4.1.4	Regional Water Quality Agency.....	10
4.1.5	Department of Toxic Substances Control	11
4.1.6	Building Department	11
4.1.7	Planning Department.....	11
4.1.8	Oil & Gas Exploration.....	11
4.1.9	Assessor's Office.....	12
4.2	Mapped Database Records Search.....	12
4.2.1	Regulatory Database Summary.....	12
4.2.2	Subject Property Listings	13
4.2.3	Adjacent Property Listings	13
4.2.4	Sites of Concern Listings.....	13
4.2.5	Orphan Listings.....	13
5.0	USER PROVIDED INFORMATION AND INTERVIEWS.....	14
5.1	Interviews	14
5.1.1	Interview with Owner	14
5.1.2	Interview with Report User.....	15
5.1.3	Interview with Key Site Manager	15
5.1.4	Interviews with Past Owners, Operators and Occupants	15
5.1.5	Interview with Others	15

5.2	User Provided Information	15
5.2.1	Title Records, Environmental Liens, and AULs.....	15
5.2.2	Specialized Knowledge.....	15
5.2.3	Actual Knowledge of the User	15
5.2.4	Valuation Reduction for Environmental Issues	15
5.2.5	Commonly Known or Reasonably Ascertainable Information	16
5.2.6	Previous Reports and Other Provided Documentation	16
6.0	SITE RECONNAISSANCE.....	17
6.1	General Site Characteristics.....	17
6.2	Potential Environmental Hazards.....	18
6.3	Non-ASTM Services.....	19
6.3.1	Asbestos-Containing Materials (ACMs)	19
6.3.2	Lead-Based Paint (LBP).....	19
6.3.3	Radon	20
6.3.4	Lead in Drinking Water.....	20
6.3.5	Mold.....	20
6.4	Adjacent Property Reconnaissance.....	21
7.0	FINDINGS AND CONCLUSIONS.....	22
8.0	SIGNATURES OF ENVIRONMENTAL PROFESSIONALS	23
9.0	REFERENCES.....	24

Figures

- Figure 1** Site Location Map
- Figure 2** Site Plan
- Figure 3** Topographic Map

Appendices

- Appendix A** Site Photographs
- Appendix B** Historical/Regulatory Documentation
- Appendix C** Regulatory Database Report
- Appendix D** Qualifications

1.0 INTRODUCTION

Partner Engineering and Science, Inc. (Partner) has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Standard Practice E1527-13 and the Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312) for the property located at 26065 Byers Road in Menifee, Riverside County, California (the "subject property"). Any exceptions to, or deletions from, this scope of work are described in the report.

1.1 Purpose

The purpose of this ESA is to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E1527-13) affecting the subject property that: 1) constitute or result in a material violation or a potential material violation of any applicable environmental law; 2) impose any material constraints on the operation of the subject property or require a material change in the use thereof; 3) require clean-up, remedial action or other response with respect to Hazardous Substances or Petroleum Products on or affecting the subject property under any applicable environmental law; 4) may affect the value of the subject property; and 5) may require specific actions to be performed with regard to such conditions and circumstances. The information contained in the ESA Report will be used by Client to: 1) evaluate its legal and financial liabilities for transactions related to foreclosure, purchase, sale, loan origination, loan workout or seller financing; 2) evaluate the subject property's overall development potential, the associated market value and the impact of applicable laws that restrict financial and other types of assistance for the future development of the subject property; and/or 3) determine whether specific actions are required to be performed prior to the foreclosure, purchase, sale, loan origination, loan workout or seller financing of the subject property.

This ESA was performed to permit the *User* to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) liability (hereinafter, the "*landowner liability protections*," or "*LLPs*"). ASTM Standard E1527-13 constitutes "*all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35)(B).

1.2 Scope of Work

The scope of work for this ESA is in accordance with the requirements of ASTM Standard E1527-13. This assessment included: 1) a property and adjacent site reconnaissance; 2) interviews with key personnel; 3) a review of historical sources; 4) a review of regulatory agency records; and 5) a review of a regulatory database report provided by a third-party vendor. Partner contacted local agencies, such as environmental health departments, fire departments and building departments in order to determine any current and/or former hazardous substances usage, storage and/or releases of hazardous substances on the subject property. Additionally, Partner researched information on the presence of activity and use limitations (AULs) at these agencies. As defined by ASTM E1527-13, AULs are the legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the subject property; or 2) to prevent activities that could interfere with the effectiveness of a response action, in

order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls (IC/ECs), are intended to prevent adverse impacts to individuals or populations that may be exposed to hazardous substances and petroleum products in the soil or groundwater on the property.

If requested by Client, this report may also include the identification, discussion of, and/or limited sampling of asbestos-containing materials (ACMs), lead-based paint (LBP), mold, and/or radon.

1.3 Limitations

Partner warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an ESA of a property for the purpose of identifying recognized environmental conditions. There is a possibility that even with the proper application of these methodologies there may exist on the subject property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Partner believes that the information obtained from the record review and the interviews concerning the subject property is reliable. However, Partner cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the Client. No other warranties are implied or expressed.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This report is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

This practice does not address requirements of any state or local laws or of any federal laws other than the all appropriate inquiry provisions of the LLPs. Further, this report does not intend to address all of the safety concerns, if any, associated with the subject property.

Environmental concerns, which are beyond the scope of a Phase I ESA as defined by ASTM include the following: ACMs, LBP, radon, and lead in drinking water. These issues may affect environmental risk at the subject property and may warrant discussion and/or assessment; however, are considered non-scope issues. If specifically requested by the Client, these non-scope issues are discussed in Section 6.3.

1.4 User Reliance

Capstone Advisors engaged Partner to perform this assessment in accordance with an agreement governing the nature, scope and purpose of the work as well as other matters critical to the engagement. All reports, both verbal and written, are for the sole use and benefit of Capstone Advisors. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with Partner granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall

be responsible to protect, indemnify and hold Partner, Client and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such Use. Unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted. Additional legal penalties may apply.

1.5 Limiting Conditions

The findings and conclusions contain all of the limitations inherent in these methodologies that are referred to in ASTM E1527-13.

Specific limitations and exceptions to this ESA are more specifically set forth below:

- Interviews with past owners, operators and occupants were not reasonably ascertainable and thus constitute a data gap. Based on information obtained from other historical sources (as discussed in Section 3.0), this data gap is not expected to alter the findings of this assessment.
- Partner requested information relative to deed restrictions and environmental liens, a title search, and completion of a pre-survey questionnaire from the Report User. This information was not provided at the time of the assessment.
- Partner submitted Freedom of Information Act (FOIA) requests to Riverside County Department of Environmental Health (RCDEH) for information pertaining to hazardous substances, underground storage tanks, releases, inspection records, etc. for the subject property. As of this writing, this agency has not responded to Partner's request. Based on information obtained from other historical sources, this limitation is not expected to alter the overall findings of this assessment.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The subject property at 26065 Byers Road in Menifee, California is located on the southwest corner of the intersection of Byers Road and Kuffel Road. According to the Riverside County Assessor records, the subject property is legally described as "4.77 ACRES IN LOT 804 MB 014/091 ROMOLA FARMS 9 Lot 804 Subdivision Name ROMOLA FARMS 9 Acres 004.77 Lot Type Lot Rec Map Type Map Book Map Plat B 014 Map Plat P 091 Serial Number A2FL22109041A HCD 249779 Serial Number A2FL22109041B HCD 249780 Serial Number AZFL421A11171LP12 Decal Number LBG8098 HCD 282999 Serial Number AZFL421B11171LP12 HCD 282300 Serial Number ACSC7V710465JA Decal Number 8819047 HCD 185959".

Please refer to Figure 1: Site Location Map, Figure 2: Site Plan, Figure 3: Topographic Map, and Appendix A: Site Photographs for the location and site characteristics of the subject property.

2.2 Current Property Use

The subject property is currently occupied by residential tenants for rural residential use. The subject property is occupied by three manufactured homes, one garage, several small manufactured shed buildings, a small solar energy farm and occupied by residential tenants. In addition to the current structures, the subject property is also improved with livestock pens for chickens, ducks and horses.

The subject property is designated for Economic Development Corridor -Northern Gateway development by the City of Menifee.

The subject property was not identified in the regulatory database report of Section 4.2.

2.3 Current Use of Adjacent Properties

The subject property is located within a mixed rural residential area of Riverside County. During the vicinity reconnaissance, Partner observed the following land use on properties in the immediate vicinity of the subject property:

Immediately Surrounding Properties

North: Kuffel Road beyond which are rural residences

South: Vacant land

East: Byers Road beyond which are rural residences

West: Vacant land

No adjacent properties were identified in the regulatory database report of Section 4.2.

2.4 Physical Setting Sources

2.4.1 Topography

The United States Geological Survey (USGS) *Romoland, California* Quadrangle 7.5-minute series topographic map was reviewed for this ESA. According to the contour lines on the topographic map, the subject property is located at approximately 1,430 feet above mean sea level (MSL). The contour lines in the area of the subject property indicate the area is sloping toward the north-northeast. Specific subject property features are not depicted on the 2012 map edition reviewed for this assessment.

A copy of the most recent topographic map is included as Figure 3 of this report.

2.4.2 Hydrology

According to topographic map interpretation, groundwater in the vicinity of the subject property is inferred to flow toward the north-northeast. The nearest surface water in the vicinity of the subject property is the San Jacinto River located approximately 0.7 miles northwest of the subject property. No settling ponds, lagoons, surface impoundments, wetlands or natural catch basins were observed at the subject property during this assessment.

According to available information, the subject property is served by an onsite well, as well as a public water system, operated by the Elsinore Valley Municipal Water District (EVMWD). The sources of public water for the EVMWD are from a mix of local groundwater, surface water and imported water.

Information specific to the subject property regarding the depth to groundwater and direction of groundwater flow was not available for the subject area. However, according to information obtained from online research through the State Water Resources Control Board, According to a previous subsurface investigation conducted on nearby properties, the depth to groundwater in the vicinity of the subject property is anticipated to be approximately 60 to 90 feet below ground surface (bgs).

2.4.3 Geology/Soils

The subject property is situated within the Santa Ana River Valley of the Peninsular Ranges geomorphic province of the State of California. The uppermost geologic formation underlying the soils at the subject property is the Quaternary Alluvium. The Quaternary Alluvium comprises the underlying stratigraphy and consists mostly of sand, silt and clay deposited in fluvial environments. The thickness of the Quaternary Alluvium is estimated to be over 200 feet. The Quaternary Alluvium is underlain by the Pleistocene and older formations.

Based on information obtained from the USDA Natural Resources Conservation Service Web Soil Survey online database, the subject property is mapped as the Buchenau, Las Posas and Porterville series. The Buchenau series have very dark gray, moderately alkaline, calcareous medium textured A horizons and grayish brown, moderately alkaline and calcareous, medium to moderately fine B2 horizons that overlie a strongly lime cemented hardpan at moderate depth. The Las Posas series consists of moderately deep, well drained soils that formed in material weathered from basic igneous rocks. Las Posas soils are on mountainous uplands and have slopes of 5 to 50 percent. The mean annual precipitation is about 16 inches and the mean annual air temperature is about 62 degrees F. The Porterville series consists of deep, well drained soils that formed in fine textured alluvial material from basic and metabasic igneous rock. Porterville soils are on fans and foothills and have slopes of 0 to 15 percent. The mean annual precipitation is about 13 inches and the mean annual air temperature is about 62 degrees F.

2.4.4 Flood Zone Information

Partner performed a review of the Flood Insurance Rate Map, published by the Federal Emergency Management Agency. According to Community Panel Numbers 06065C2055H dated August 18, 2014, the

subject property appears to be located in an unshaded Zone X, defined as an area located outside of the 100-year and 500-year flood plains.

3.0 HISTORICAL INFORMATION

Partner obtained historical use information about the subject property from a variety of sources. A chronological listing of the historical data found is summarized in the table below:

Historical Use Information

Period/Date	Source	Description/Use
1901	Topographic Map	Undeveloped/Natural land
1938-1978	Aerial Photographs, Interviews	Agricultural land
1985-2002	Aerial Photographs	Vacant land
2002-Present	Aerial Photographs, Assessor Records, City Directories, Interviews, Onsite Observations	Rural residential

Tenants on the subject property include residential listings from 2005 to present.

The subject property parcel was historically used for agricultural purposes. There is a potential that agricultural related chemicals such as pesticides, herbicides, and fertilizers, may have been used and stored onsite. The subject property is either paved over or covered by building structures that minimize direct contact to any potential remaining concentrations in the soil. Additionally, during previous site development activities, near surface soils (where residual agricultural chemical concentrations would have most likely been present, if at all) were generally mixed with fill material or disturbed during grading. Also, it is common that engineered fill material is placed over underlying soils as part of the development activities. Furthermore, it is likely that residual agricultural chemicals (if any) would have likely degraded since the site was last utilized for agricultural purposes. These additional variables serve to further reduce the potential for exposure to residual agricultural chemicals (if any). Based on these reasons, Partner concludes that the possible former use of agricultural chemicals is not expected to represent a significant environmental concern at this time.

No additional potential environmental concerns were identified in association with the current or former use of the subject property.

3.1 Aerial Photograph Review

Partner obtained available aerial photographs of the subject property and surrounding area from Environmental Data Resources (EDR) on August 16, 2021. The following was observed on the subject property and adjacent properties during the aerial photograph review:

Date:	1938, 1949, 1953, 1961, 1967, 1974, 1978	Scale:	1"=500'
Subject Property:	Agricultural land		
North:	Agricultural land		
South:	Agricultural land		
East:	Agricultural land		
West:	Agricultural land		

Date:	1985, 1989, 1994, 1997	Scale:	1"=500'
Subject Property:	Appears as vacant land		
North:	Appears to be occupied by rural residences across a roadway		
South:	Appears as vacant land		
East:	Appears as vacant land		

Date:	1985, 1989, 1994, 1997	Scale:	1"=500'
West:	Appears as vacant land		

Date:	2002	Scale:	1"=500'
Subject Property:	No significant changes visible		
North:	No significant changes visible		
South:	No significant changes visible		
East:	Appears to be occupied by a rural residence across a roadway		
West:	No significant changes visible		

Date:	2006, 2009, 2012, 2016	Scale:	1"=500'
Subject Property:	Appears to be occupied by the current modular home structures		
North:	Appears to be occupied by rural residences across a roadway		
South:	No significant changes visible		
East:	Appears to be occupied by a rural residence across a roadway		
West:	No significant changes visible		

Copies of select aerial photographs are included in Appendix B of this report.

3.2 Fire Insurance Maps

Partner reviewed the collection of Sanborn Fire insurance maps from EDR on August 16, 2021. Sanborn map coverage was not available for the subject property.

A copy of the Sanborn Map No Coverage Letter is included in Appendix B of this report.

3.3 City Directories

Partner reviewed historical city directories obtained from EDR on August 16, 2021 for past names and businesses that were listed for the subject property and adjacent properties. The findings are presented in the following table:

City Directory Search for 26065 Byers Road (Subject Property)	
Year(s)	Occupant Listed
1973-	No Listings
2005	
2010	Residential Listing
2014	Residential Listing
2017	Residential Listing

Based on the city directory review, no environmentally sensitive listings were identified for the subject property address.

City Directory Search for Adjacent Properties	
Year(s)	Occupant Listed
1973-	No Listings
1992	
1995	Residential Listing
2000	Residential Listing
2005	Residential Listing
2010	Residential Listing

City Directory Search for Adjacent Properties

Year(s)	Occupant Listed
2014	Residential Listing
2017	Residential Listing

Based on the city directory review, no environmentally sensitive listings were identified for the adjacent property addresses.

Copies of reviewed city directories are included in Appendix B of this report.

3.4 Historical Topographic Maps

Partner reviewed historical topographic maps obtained from EDR on August 16, 2021. The following was observed on the subject property and adjacent properties during the topographic map review:

Date: 1901, 1942, 1943, 1947, 1953, 1973, 1979

Subject Property:	Undeveloped
North:	Undeveloped
South:	Undeveloped
East:	Undeveloped
West:	Undeveloped

Copies of reviewed topographic maps are included in Appendix B of this report.

4.0 REGULATORY RECORDS REVIEW

4.1 Regulatory Agencies

4.1.1 State Department

Regulatory Agency Data

Name of Agency:	California Environmental Protection Agency (Cal/EPA)
Point of Contact:	Online: https://siteportal.calepa.ca.gov/nsite/map/help
Agency Address:	1001 I Street, Sacramento, California 95814
Agency Phone Number:	(916) 323-2514
Date of Contact:	August 17, 2021
Method of Communication:	Online
Summary of Communication:	No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the CalEPA.

4.1.2 Health Department

Regulatory Agency Data

Name of Agency:	Riverside County Department of Environmental Health (RCDEH)
Point of Contact:	NA
Agency Address:	4065 County Circle Drive-Room 104, Perris, California
Agency Phone Number:	(951) 358-5055
Date of Contact:	August 17, 2021
Method of Communication:	Online Request
Summary of Communication:	As of the date of this report, Partner has not received a response from the RCDEH for inclusion in this report.

4.1.3 Air Pollution Control Agency

Regulatory Agency Data

Name of Agency:	Air Quality Management District (AQMD)
Point of Contact:	N/A
Agency Address:	21865 Copley Dr, Diamond Bar, California
Agency Phone Number:	(909) 396-2000
Date of Contact:	August 17, 2021
Method of Communication:	Online
Summary of Communication:	No Permits to Operate (PTO), Notices of Violation (NOV), or Notices to Comply (NTC) or the presence of AULs, dry cleaning machines, or USTs were on file for the subject property with the AQMD.

4.1.4 Regional Water Quality Agency

Regulatory Agency Data

Name of Agency:	Regional Water Quality Control Board (RWQCB)
Point of Contact:	Laura Gallardo
Agency Address:	320 W. 4 th St, Los Angeles, California
Agency Phone Number:	(213) 576-6600
Date of Contact:	August 17, 2021
Method of Communication:	Online

Regulatory Agency Data

Summary of Communication: No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the RWQCB.

4.1.5 Department of Toxic Substances Control

Regulatory Agency Data

Name of Agency: California Department of Toxic Substances Control (DTSC)
Point of Contact: N/A
Agency Address: 5796 Corporate Avenue, Cypress, California
Agency Phone Number: (714) 484-5300
Date of Contact: August 17, 2021
Method of Communication: Online
Summary of Communication: No records regarding hazardous substance use, storage or releases, or the presence of USTs and AULs on the subject property were on file with the DTSC.

4.1.6 Building Department

Regulatory Agency Data

Name of Agency: City of Menifee Building and Safety Department
Point of Contact: Records Clerk
Agency Address: 29844 Haun Rd, Menifee, CA 92586
Agency Phone Number: (951) 672-6777
Date of Contact: August 17, 2021
Method of Communication: Faxed Request
Summary of Communication: As of the date of this report, Partner has not received a response from the MBD for inclusion in this report.

4.1.7 Planning Department

Regulatory Agency Data

Name of Agency: Menifee Planning Department (RPD)
Point of Contact: Records Clerk
Agency Address: 29844 Haun Rd, Menifee, CA 92586
Agency Phone Number: (951) 672-6777
Date of Contact: August 17, 2021
Method of Communication: Online
Summary of Communication: According to records reviewed, the subject property is zoned Economic Development Corridor -Northern Gateway development by the City of Menifee.

4.1.8 Oil & Gas Exploration

Regulatory Agency Data

Name of Agency: California Division of Oil, Gas and Geothermal Resources (DOGGR)
Point of Contact: N/A
Agency Address: 801 K Street, Sacramento, California
Agency Phone Number: (916) 322-1080
Date of Contact: August 17, 2021

Regulatory Agency Data

Method of Communication: Online
Summary of Communication: According to CalGEM, no oil and/or gas wells are located on or adjacent to the subject property.

4.1.9 Assessor's Office

Regulatory Agency Data

Name of Agency: Riverside County Assessor (RCA)
Point of Contact: N/A
Agency Address: 2720 Gateway Drive, Perris, California
Agency Phone Number: (951) 955-6200
Date of Contact: August 17, 2021
Method of Communication: Online
Summary of Communication: According to records reviewed, the subject property is identified by Assessor Parcel Number (APN) 330190013, which contains a total of 4.77-acres. Three structures, noted to be a 2002 Fleetwood, a 2004 Fleetwood, and a 2017 Skyline mobile home were brought onto the property as residential structures in 2002.

4.2 Mapped Database Records Search

Information from standard federal, state, county, and city environmental record sources was provided by Environmental Data Resources, Inc. (EDR). Data from governmental agency lists are updated and integrated into one database, which is updated as these data are released. The information contained in this report was compiled from publicly available sources and the locations of the sites are plotted utilizing a geographic information system, which geocodes the site addresses. The accuracy of the geocoded locations is approximately +/-300 feet.

Using the ASTM definition of migration, Partner considers the migration of hazardous substances or petroleum products in any form onto the subject property during the evaluation of each site listed on the radius report, which includes solid, liquid, and vapor.

4.2.1 Regulatory Database Summary

Radius Report Data

Database	Search Radius (mile)	Subject Property	Adjacent Properties	Sites of Concern
Federal NPL or Delisted NPL Site	1.00	N	N	N
Federal CERCLIS Site	0.50	N	N	N
Federal CERCLIS-NFRAP Site	0.50	N	N	N
Federal RCRA CORRACTS Facility	1.00	N	N	N
Federal RCRA TSDF Facility	0.50	N	N	N
Federal RCRA Generators Site (LQG, SQG, CESQG)	0.25	N	N	N
Federal IC/EC Registries	0.50	N	N	N
Federal ERNS Site	Subject Property	N	N/A	N/A
State/Tribal Equivalent NPL	1.00	N	N	N
State/Tribal Equivalent CERCLIS	1.00	N	N	N

Radius Report Data

Database	Search Radius (mile)	Subject Property	Adjacent Properties	Sites of Concern
State/Tribal Landfill/Solid Waste Disposal Site	0.50	N	N	N
State/Tribal Leaking Storage Tank Site	0.50	N	N	N
State/Tribal Registered Storage Tank Sites (UST/AST)	0.25	N	N	N
State/Tribal Voluntary Cleanup Sites (VCP)	0.50	N	N	N
State/Tribal Spills	0.50	N	N	N
Federal Brownfield Sites	0.50	N	N	N
State Brownfield Sites	0.50	N	N	N
EDR MGP	1.00	N	N	N
EDR US Hist Auto Station	0.125	N	N	N
EDR US Hist Cleaners	0.125	N	N	N

4.2.2 Subject Property Listings

The subject property is not identified in the regulatory database report.

4.2.3 Adjacent Property Listings

The adjacent properties are not identified in the regulatory database report.

Based on the findings, vapor migration is not expected to represent a significant environmental concern at this time.

4.2.4 Sites of Concern Listings

No sites of concern are identified in the regulatory database report.

Based on the findings, vapor migration is not expected to represent a significant environmental concern at this time.

4.2.5 Orphan Listings

No orphan listings are identified in the regulatory database report.

A copy of the regulatory database report is included in Appendix C of this report.

5.0 USER PROVIDED INFORMATION AND INTERVIEWS

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the *Brownfields Amendments*), the *User* must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. The *User* should provide the following information to the *environmental professional*. Failure to provide this information could result in a determination that *all appropriate inquiries* is not complete. The *User* is asked to provide information or knowledge of the following:

- Review Title and Judicial Records for Environmental Liens and AULs
- Specialized Knowledge or Experience of the User
- Actual Knowledge of the User
- Reason for Significantly Lower Purchase Price
- Commonly Known or *Reasonably Ascertainable* information
- Degree of Obviousness
- Reason for Preparation of this Phase I ESA

Fulfillment of these user responsibilities is key to qualification for the identified defenses to CERCLA liability. Partner requested our Client to provide information to satisfy User Responsibilities as identified in Section 6 of the ASTM guidance.

Pursuant to ASTM E1527-13, Partner requested the following site information from Capstone Advisors (User of this report).

User Responsibilities

Item	Provided By User	Not Provided By User	Discussed Below	Does Not Apply
AAI User Questionnaire			X	
Title Records, Environmental Liens, and AULs			X	
Specialized Knowledge			X	
Actual Knowledge			X	
Valuation Reduction for Environmental Issues			X	
Identification of Key Site Manager	Section 5.1.3			
Reason for Performing Phase I ESA	Section 1.1			
Prior Environmental Reports			X	
Other				X

5.1 Interviews

5.1.1 Interview with Owner

Mr. Michael Rutledge, subject property owner, was not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property; any pending, threatened, or past administrative proceedings relevant to hazardous substances or

petroleum products in, on, or from the subject property; or any notices from a governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

According to Mr. Rutledge, the subject property was developed in 2006 for rural residential use. Prior to that, the subject property was developed agriculturally. Mr. Rutledge further stated that there are no USTs, ASTs, clarifiers, oil/water separators, groundwater monitoring wells, or hazardous substance use/storage/generation on the subject property to the best of his knowledge. According to Mr. Rutledge, the subject property is equipped with three septic tanks (one for each modular home) as well as a fresh water well. Additionally, the subject property is connected to the municipal water system.

5.1.2 Interview with Report User

Please refer to Section 5.2 below for information requested from the Report User.

5.1.3 Interview with Key Site Manager

Mr. Michael Rutledge was also identified as the key site manager. Refer to Section 5.1.1 for additional information.

5.1.4 Interviews with Past Owners, Operators and Occupants

Interviews with past owners, operators and occupants were not reasonably ascertainable and thus constitute a data gap.

5.1.5 Interview with Others

As the subject property is not an abandoned property as defined in ASTM 1527-13, interview with others were not performed.

5.2 User Provided Information

5.2.1 Title Records, Environmental Liens, and AULs

Partner was not provided with title records or environmental lien and AUL information for review as part of this assessment.

5.2.2 Specialized Knowledge

No specialized knowledge of environmental conditions associated with the subject property was provided by the User at the time of the assessment.

5.2.3 Actual Knowledge of the User

No actual knowledge of any environmental lien or AULs encumbering the subject property or in connection with the subject property was provided by the User at the time of the assessment.

5.2.4 Valuation Reduction for Environmental Issues

No knowledge of valuation reductions associated with the subject property was provided by the User at the time of the assessment.

5.2.5 Commonly Known or Reasonably Ascertainable Information

The User did not provide information that is commonly known or *reasonably ascertainable* within the local community about the subject property at the time of the assessment.

5.2.6 Previous Reports and Other Provided Documentation

No previous reports or other pertinent documentation was provided to Partner for review during the course of this assessment.

6.0 SITE RECONNAISSANCE

The weather at the time of the site visit was sunny and clear. Refer to Section 1.5 for limitations encountered during the field reconnaissance and Sections 2.1 and 2.2 for subject property operations. The table below provides the site assessment details:

Site Assessment Data

Site Assessment Performed By: Tatjana McCondichie
Site Assessment Conducted On: August 25, 2021

The table below provides the subject property personnel interviewed during the field reconnaissance:

Site Visit Personnel for 26065 Byers Road (Subject Property)

Name	Title/Role	Contact Number	Site Walk* Yes/No
Michael Rutledge	Key Site Manager	(858) 232-5694	Yes

* Accompanied Partner during the field reconnaissance activities and provided information pertaining to the current operations and maintenance of the subject property

No potential environmental concerns were identified during the onsite reconnaissance.

6.1 General Site Characteristics

6.1.1 Solid Waste Disposal

Solid waste generated at the subject property is disposed of in residential trash cans. An independent solid waste disposal contractor removes solid waste from the subject property. No evidence of illegal dumping of solid waste was observed during the Partner site reconnaissance.

6.1.2 Sewage Discharge and Disposal

Sanitary discharges from the subject property are directed to an onsite septic system, as further discussed in Section 6.1.7.

6.1.3 Surface Water Drainage

Storm water is removed from the subject property primarily by direct percolation into the soils at the property.

The subject property does not appear to be a designated wetland area, based on information obtained from the United States Department of Fish and Wildlife; however, a comprehensive wetlands survey would be required in order to formally determine actual wetlands on the subject property. No surface impoundments, wetlands, natural catch basins, settling ponds, or lagoons are located on the subject property. No drywells were identified on the subject property.

6.1.4 Source of Heating and Cooling

Heating and cooling systems as well as domestic hot water equipment are fueled by electricity and natural gas provided by onsite solar panels and an onsite propane AST, respectively.

6.1.5 Wells and Cisterns

No aboveground evidence of wells or cisterns was observed during the site reconnaissance.

6.1.6 Wastewater

Domestic wastewater generated at the subject property is disposed by means of the onsite septic system. No industrial process is currently performed at the subject property.

6.1.7 Septic Systems

The subject property is equipped with three septic tanks for sanitary waste generated in the onsite residences. As these septic systems service the residences only, and there are no industrial processes currently or historically, the presence of the septic system is not expected to represent a significant environmental concern.

6.1.8 Additional Site Observations

No additional general site characteristics were observed during the site reconnaissance.

6.2 Potential Environmental Hazards

6.2.1 Hazardous Substances and Petroleum Products Used or Stored at the Site

No evidence of the use of reportable quantities of hazardous substances was observed on the subject property. Small quantities of general maintenance supplies were found to be properly labeled and stored at the time of the assessment with no signs of leaks, stains, or spills. The storage and use of maintenance supplies does not appear to pose a significant threat to the environmental integrity of the subject property at this time.

6.2.2 Aboveground & Underground Hazardous Substance or Petroleum Product Storage Tanks (ASTs/USTs)

No evidence of current or former ASTs or USTs was observed during the site reconnaissance.

6.2.3 Evidence of Releases

No spills, stains or other indications that a surficial release has occurred at the subject property were observed.

6.2.4 Polychlorinated Biphenyls (PCBs)

No potential PCB-containing equipment (transformers, oil-filled switches, hoists, lifts, dock levelers, hydraulic elevators, etc.) was observed on the subject property during Partner's reconnaissance.

6.2.5 Strong, Pungent or Noxious Odors

No strong, pungent or noxious odors were evident during the site reconnaissance.

6.2.6 Pools of Liquid

No pools of liquid were observed on the subject property during the site reconnaissance.

6.2.7 Drains, Sumps and Clarifiers

No drains, sumps, or clarifiers, other than those associated with storm water removal, were observed on the subject property during the site reconnaissance.

6.2.8 Pits, Ponds and Lagoons

No pits, ponds or lagoons were observed on the subject property.

6.2.9 Stressed Vegetation

No stressed vegetation was observed on the subject property.

6.2.10 Additional Potential Environmental Hazards

No additional environmental hazards, including landfill activities or radiological hazards, were observed.

6.3 Non-ASTM Services

6.3.1 Asbestos-Containing Materials (ACMs)

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials to be presumed to contain asbestos, for purposes of this regulation. All thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building that have not been appropriately tested are "presumed asbestos-containing material" (PACM).

The subject property buildings were constructed in 2006 and are modular structures. As such, an asbestos evaluation was not required by the Client's scope of services.

6.3.2 Lead-Based Paint (LBP)

Lead is a highly toxic metal that affects virtually every system of the body. LBP is defined as any paint, varnish, stain, or other applied coating that has 1 mg/cm² (or 5,000 ug/g or 0.5% by weight) or more of lead. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as "Title X", to protect families from exposure to lead from paint, dust, and soil. Under Section 1017 of Title X, intact LBP on most walls and ceilings is not considered a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. Further, Section 1018 of this law directed the Housing and Urban Development (HUD) and the US EPA to require the disclosure of known information on LBP and LBP hazards before the sale or lease of most housing built before 1978.

It is unlikely that LBP is present in buildings constructed after 1977. Therefore, due to the age of the subject property buildings, it is unlikely that LBP is present.

As such, an lead-based paint evaluation was not required by the Client's scope of services.

6.3.3 Radon

Radon is a colorless, odorless, naturally occurring, radioactive, inert, gaseous element formed by radioactive decay of radium (Ra) atoms. The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones, according to the table below:

EPA Radon Zones		
EPA Zones	Average Predicted Radon Levels	Potential
Zone 1	Exceed 4.0 pCi/L	Highest
Zone 2	Between 2.0 and 4.0 pCi/L	Moderate
Zone 3	Less than 2.0 pCi/L	Low

It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the US EPA recommends site-specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures.

Radon sampling was not conducted as part of this assessment. Review of the US EPA Map of Radon Zones places the subject property in Zone 2. Based upon the radon zone classification, radon is not considered to be a significant environmental concern.

6.3.4 Lead in Drinking Water

According to available information, the subject property is served by an onsite well, as well as a public water system, operated by the Elsinore Valley Municipal Water District (EVMWD). The sources of public water for the EVMWD are from a mix of local groundwater, surface water and imported water. Partner was not provided water quality testing reports for the onsite water well. In addition, according to the Elsinore Valley Municipal Water District (EVMWD) 2020 Annual Water Quality Report, water supplied to the subject property is in compliance with all State and Federal regulations pertaining to drinking water standards, including lead and copper. Water sampling was not conducted to verify water quality.

6.3.5 Mold

Molds are microscopic organisms found virtually everywhere, indoors and outdoors. Mold will grow and multiply under the right conditions, needing only sufficient moisture (e.g. in the form of very high humidity, condensation, or water from a leaking pipe, etc.) and organic material (e.g., ceiling tile, drywall, paper, or natural fiber carpet padding).

Partner observed accessible, interior areas for the subject property building for significant evidence of mold growth with the exceptions detailed in Section 1.5 of this report; however, this ESA should not be used as a mold survey or inspection. Additionally, this limited assessment was not designed to assess all areas of potential mold growth that may be affected by mold growth on the subject property. Rather, it is intended to give the client an indication as to whether or not conspicuous (based on observed areas) mold growth is present at the subject property. This evaluation did not include a review of pipe chases, mechanical systems, or areas behind enclosed walls and ceilings.

No obvious indications of water damage or mold growth were observed during Partner's visual assessment.

6.4 Adjacent Property Reconnaissance

The adjacent property reconnaissance consisted of observing the adjacent properties from the subject property premises. No items of environmental concern were identified on the adjacent properties during the site assessment, including hazardous substances, petroleum products, ASTs, USTs, evidence of releases, PCBs, strong or noxious odors, pools of liquids, sumps or clarifiers, pits or lagoons, stressed vegetation, or any other potential environmental hazards.

7.0 FINDINGS AND CONCLUSIONS

A *recognized environmental condition (REC)* refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- Partner did not identify any recognized environmental conditions during the course of this assessment.

A *controlled recognized environmental condition (CREC)* refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. The following was identified during the course of this assessment:

- Partner did not identify any controlled recognized environmental conditions during the course of this assessment.

A *historical recognized environmental condition (HREC)* refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. The following was identified during the course of this assessment:

- Partner did not identify any historical recognized environmental conditions during the course of this assessment.

An *environmental issue* refers to environmental concerns identified by Partner, which do not qualify as RECs; however, warrant further discussion. The following was identified during the course of this assessment:

- Partner did not identify any environmental issues during the course of this assessment.

Conclusions, Opinions and Recommendations

Partner has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 of 26065 Byers Road in the City of Menifee, Riverside County, California (the "subject property"). Any exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

This assessment has revealed no evidence of recognized environmental conditions or environmental issues in connection with the subject property. Based on the conclusions of this assessment, Partner recommends no further investigation of the subject property at this time.

8.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Partner has performed a Phase I Environmental Site Assessment of the property located at 26065 Byers Road in Menifee, Riverside County, California in conformance with the scope and limitations of the protocol and the limitations stated earlier in this report. Exceptions to or deletions from this protocol are discussed earlier in this report.

By signing below, Partner declares that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR §312. Partner has the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. Partner has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared By:



Tatjana McCondichie
Environmental Professional

Reviewed By:



Ashley Pizzello
Senior Author/Environmental Professional

9.0 REFERENCES

Reference Documents

American Society for Testing and Materials, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation: E1527-13.

Environmental Data Resources (EDR), Radius Report, August 2021

Federal Emergency Management Agency, Federal Insurance Administration, National Flood Insurance Program, Flood Insurance Map, accessed via internet, August 2021

United States Department of Agriculture, Natural Resources Conservation Service, accessed via internet, August 2021

United States Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey, accessed via the internet, August 2021

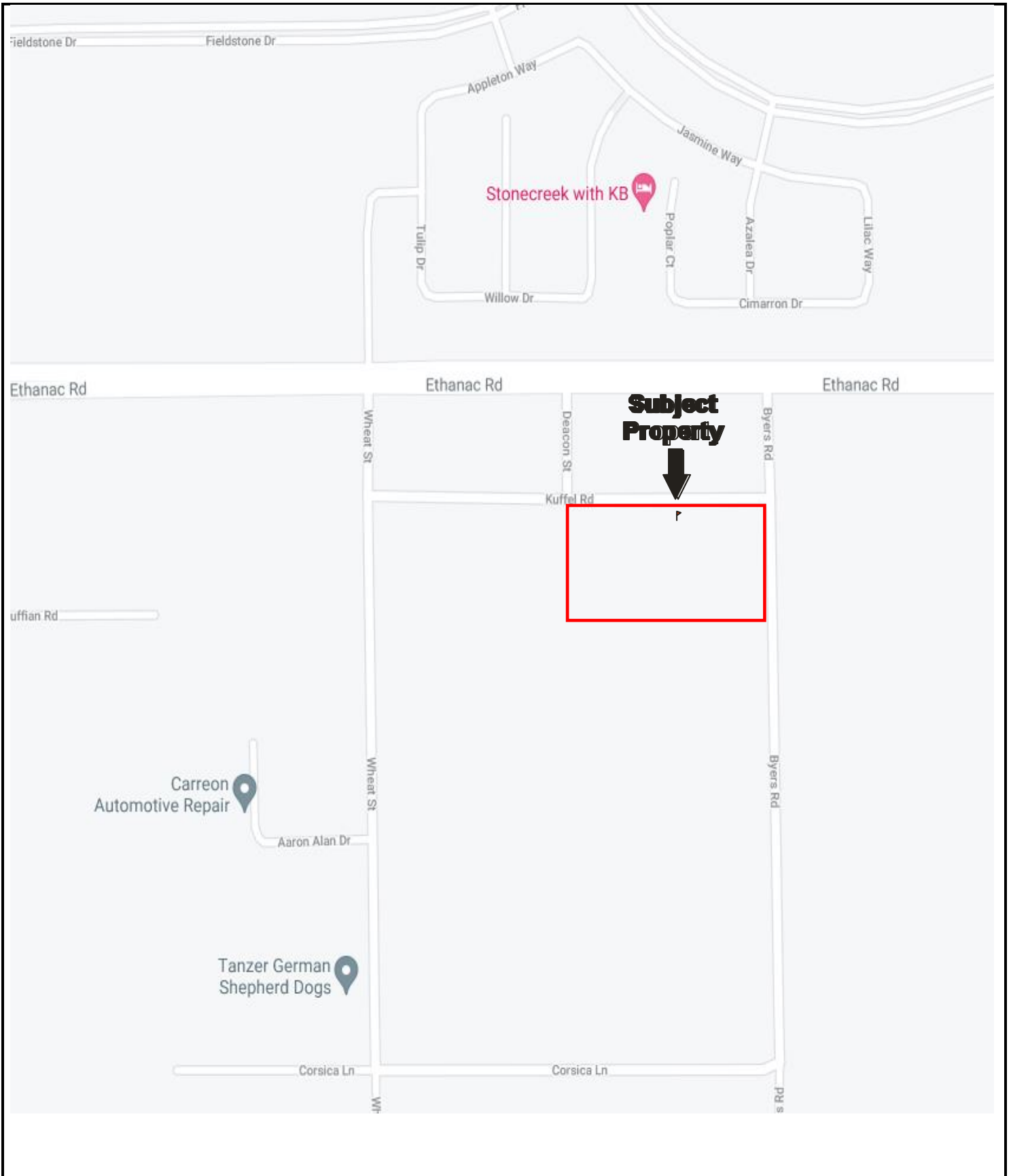
United States Environmental Protection Agency, EPA Map of Radon Zones (Document EPA-402-R-93-071), accessed via the internet, August 2021

United States Geological Survey, accessed via the Internet, August 2021

United States Geological Survey Topographic Map 1995, 7.5-minute series, accessed via internet, August 2021

FIGURES

- 1 SITE LOCATION MAP**
- 2 SITE PLAN**
- 3 TOPOGRAPHIC MAP**



Drawing Not To Scale

KEY:
Subject Property 

FIGURE 1: SITE LOCATION MAP
Project No. 21-333053.1



**GROUNDWATER
FLOW**



KEY:

Subject Property



FIGURE 2: SITE PLAN
Project No. 21-333053.1



USGS 7.5 Minute Romoland, California Quadrangle
 Revised: 2012

KEY:
 Subject Property 

FIGURE 3: TOPOGRAPHIC MAP
 Project No. 21-333053.1



APPENDIX A: SITE PHOTOGRAPHS



1. View of a typical onsite structure



2. View of a typical onsite structure



3. View of a typical onsite structure



4. View of the garage structure



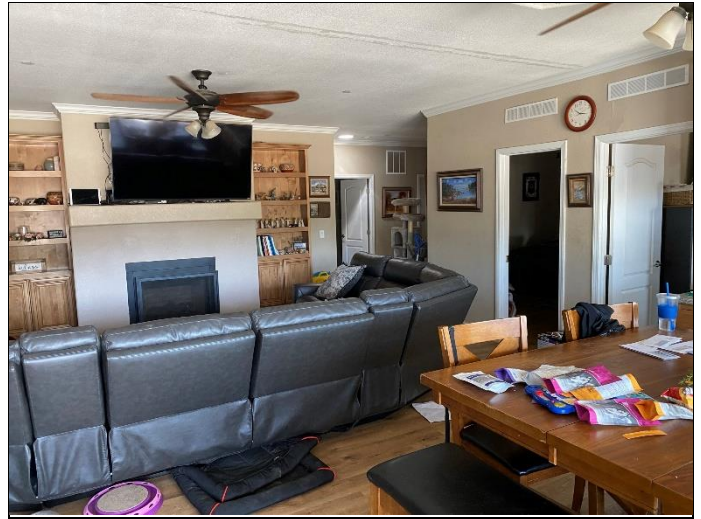
5. View of a typical onsite shed structure



6. Interior view of a residential structure



7. Interior view of a residential structure



8. Interior view of a residential structure



9. View of the subject property



10. View of storage area



11. View of parking area



12. View of the subject property



13. View of horse turnout



14. Interior view of garage



15. View of onsite water well



16. View of onsite solar panels



17. View of typical septic tank



18. View of trash cans



19. View along the eastern boundary



20. View along the southern boundary



21. View of the north adjoining properties



22. View of the south adjoining properties

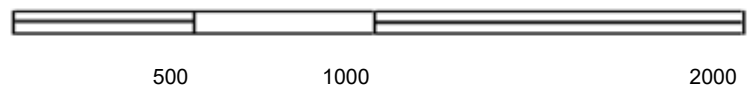
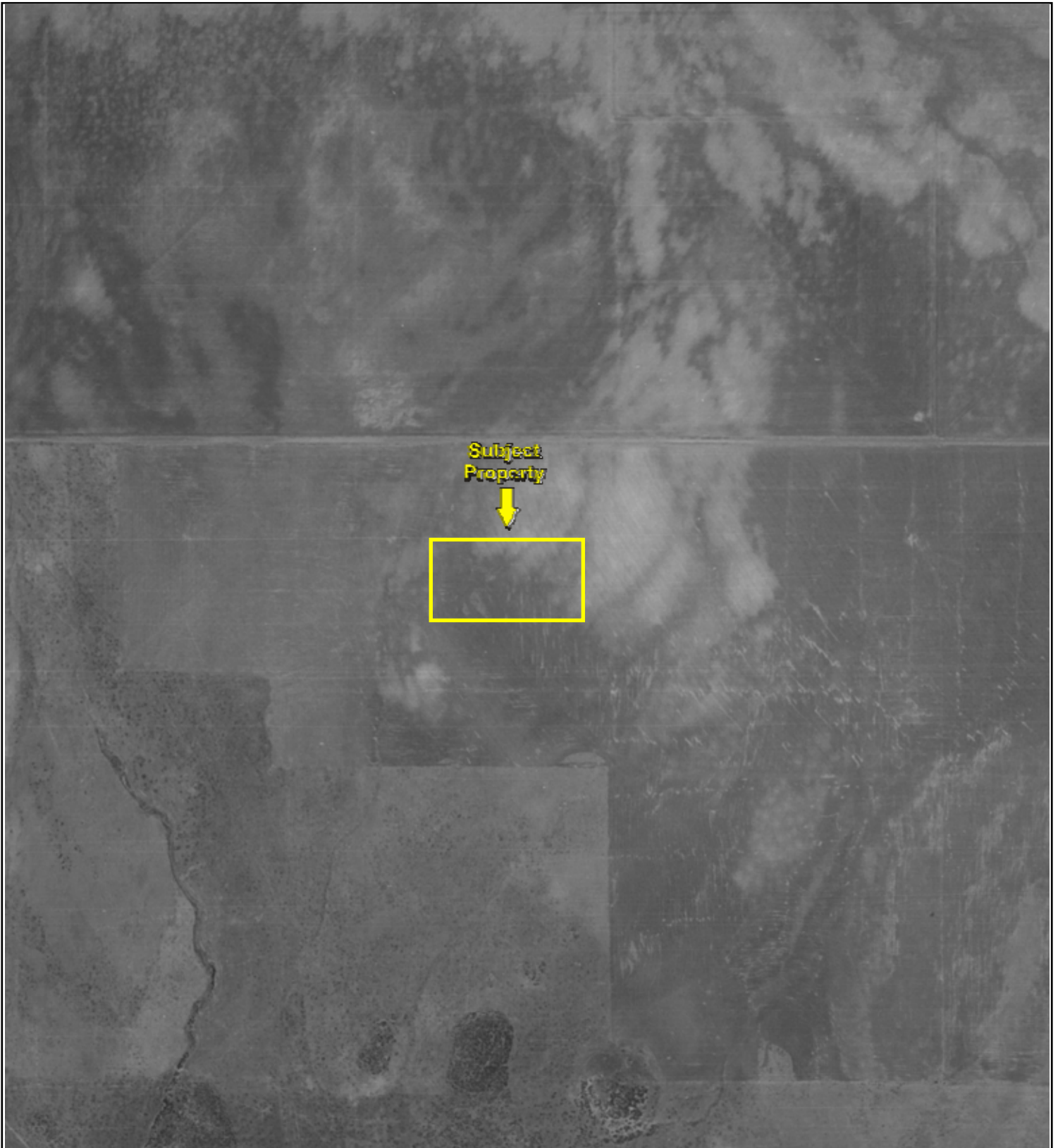


23. View of the east adjoining properties

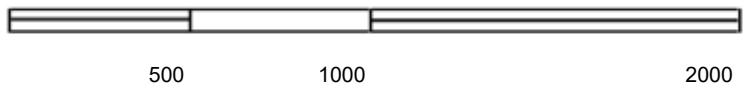
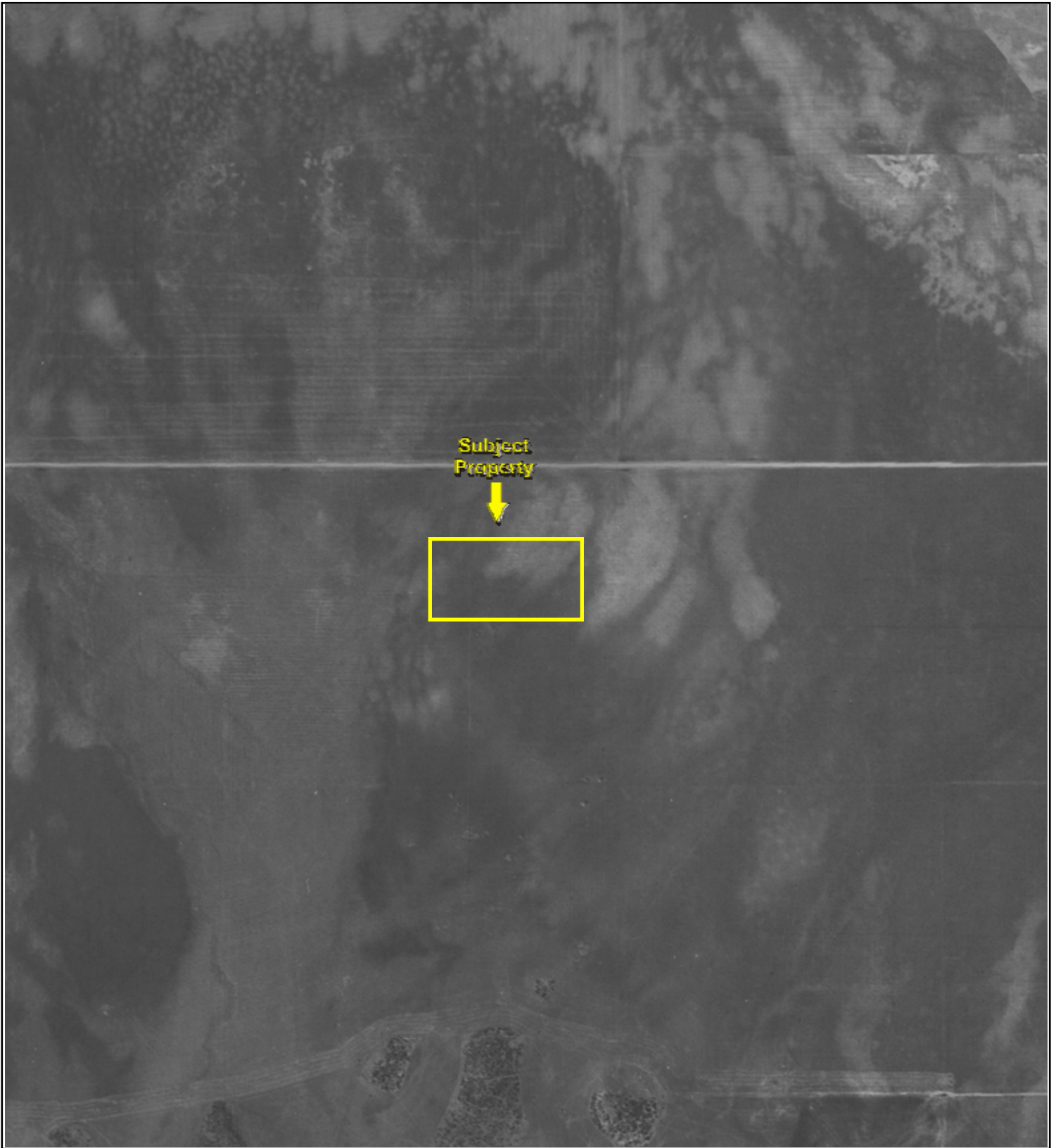


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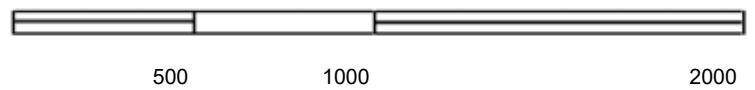
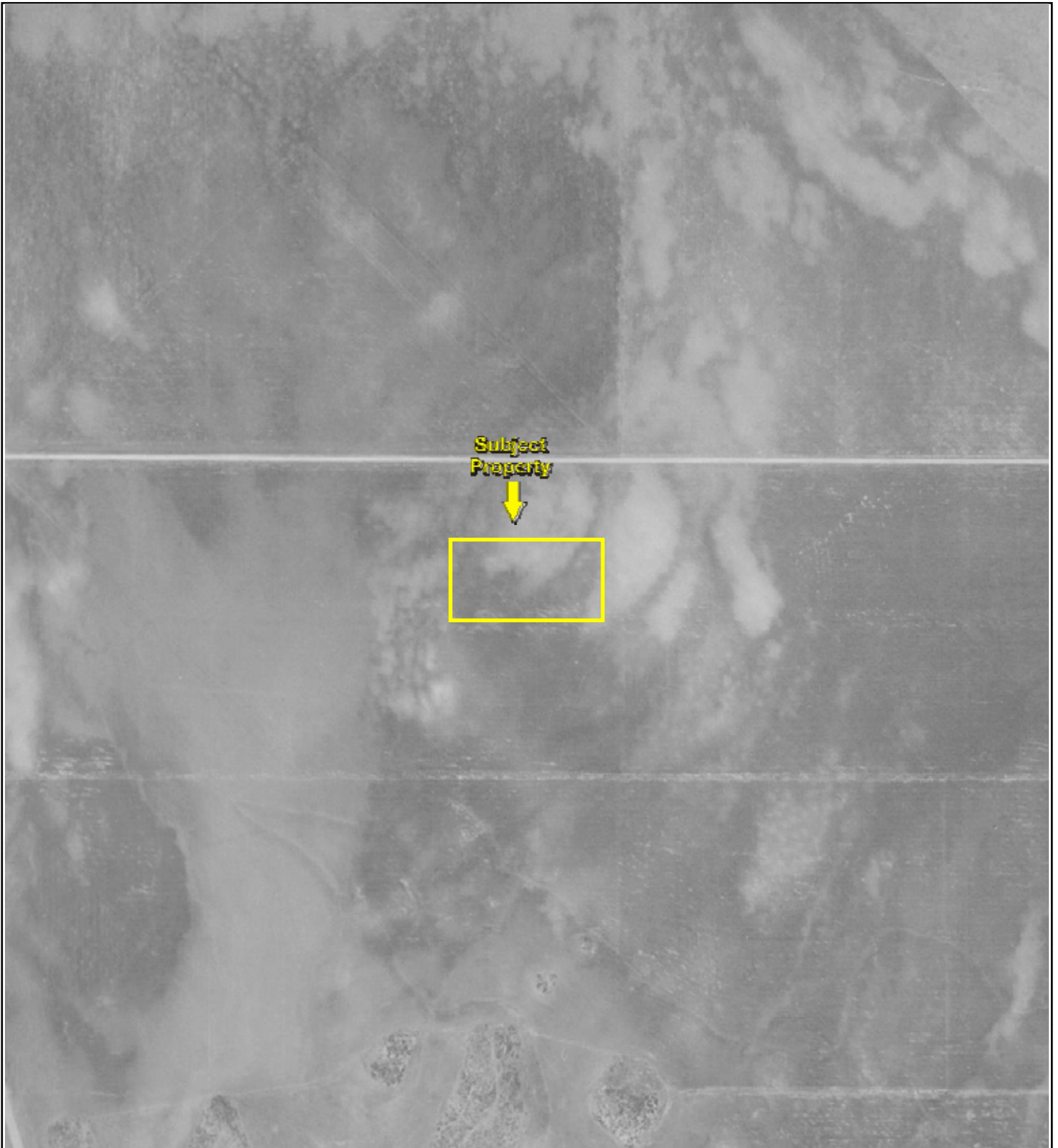
APPENDIX B: HISTORICAL/REGULATORY DOCUMENTATION



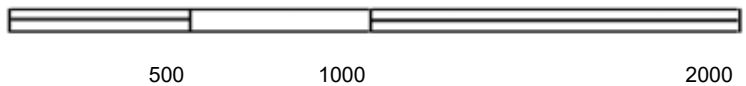
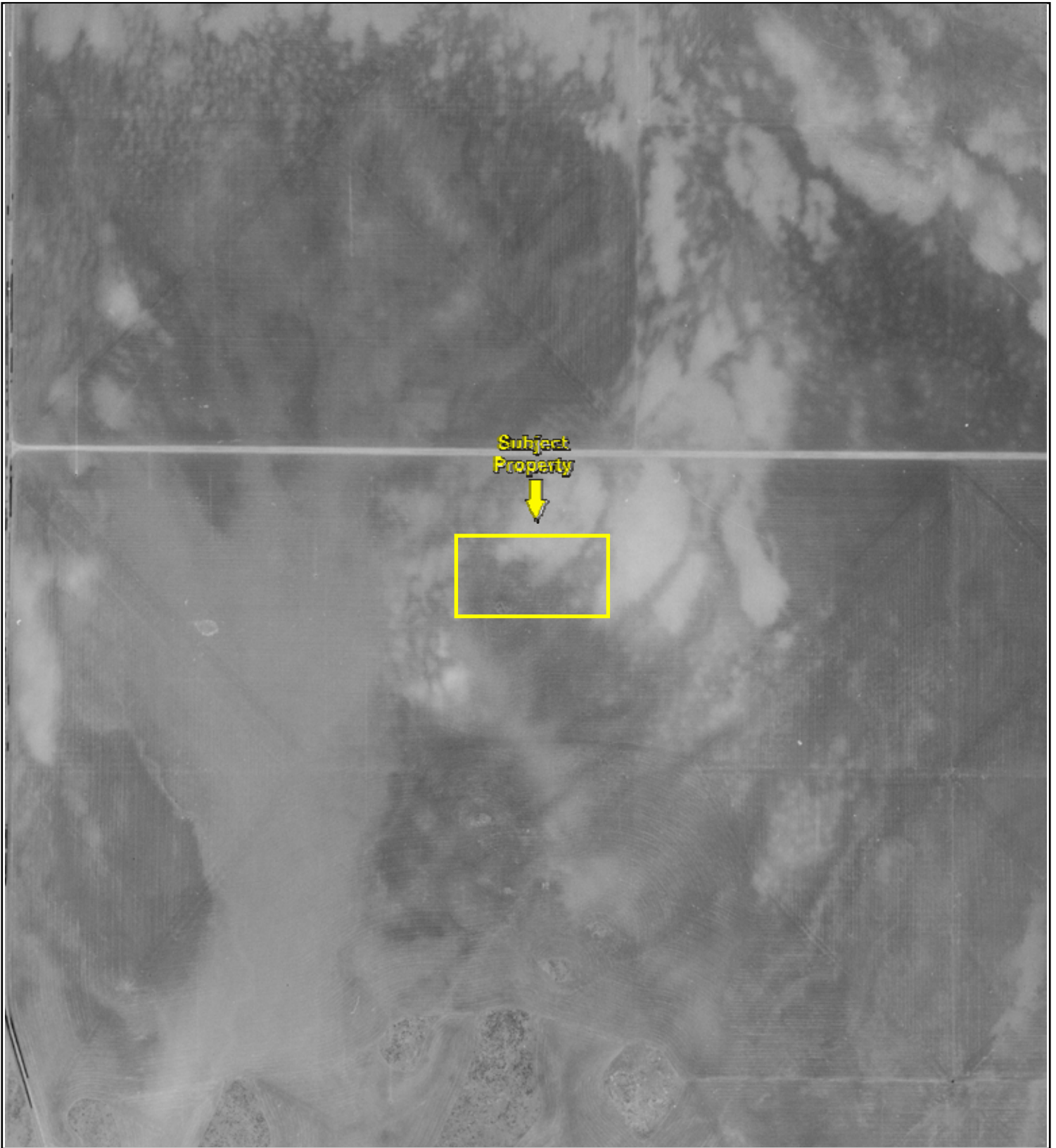
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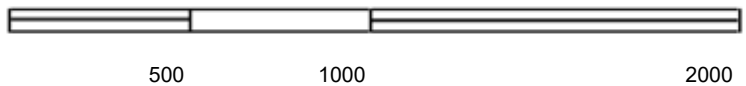
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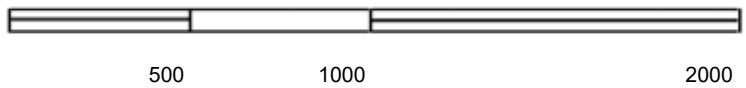
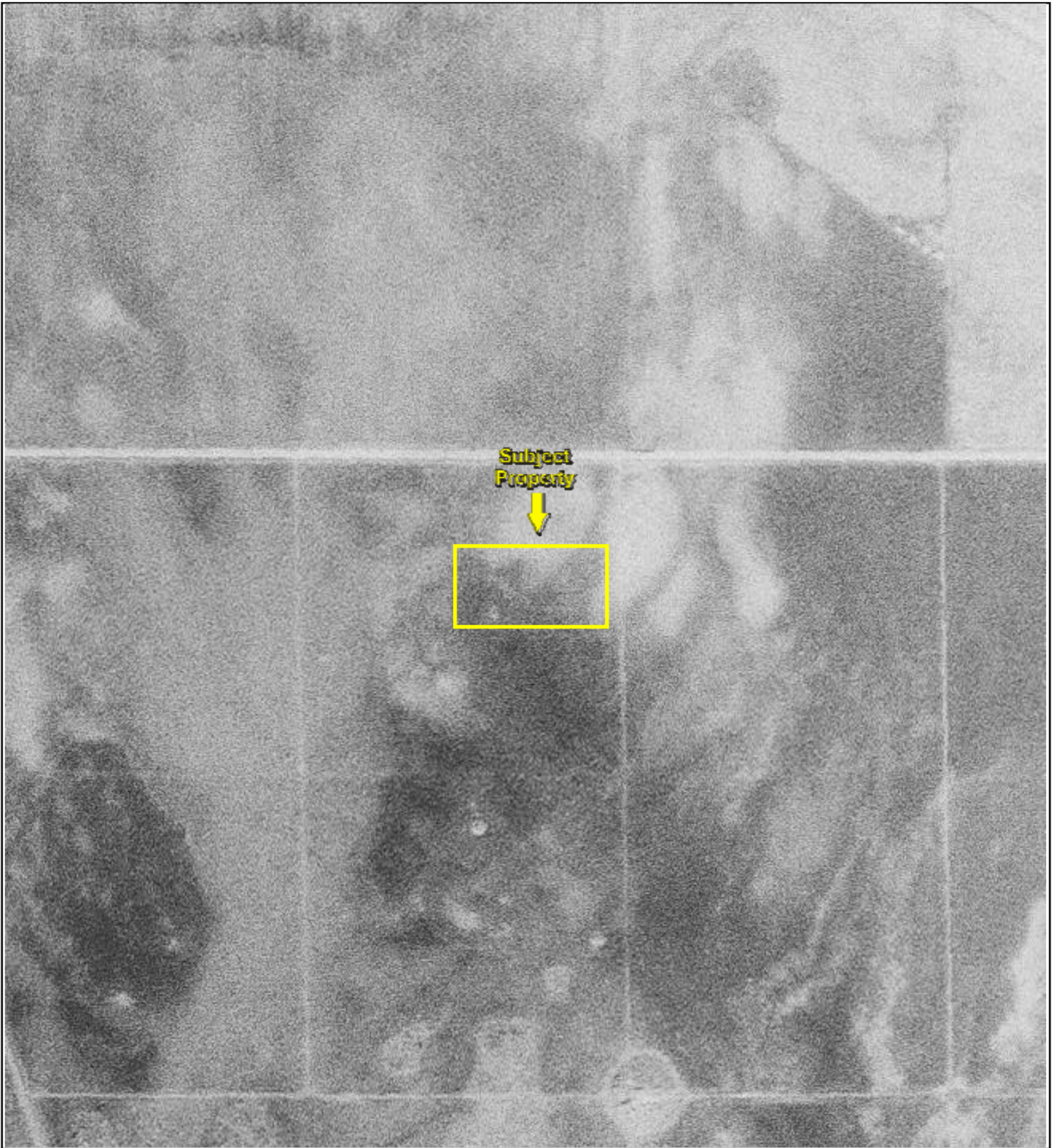
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Key: Subject Property 



Key: Subject Property 



Key: Subject Property 



Subject
Property



500

1000

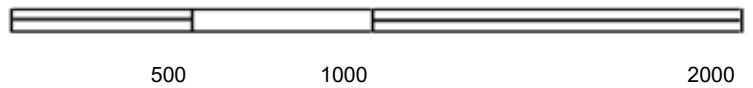
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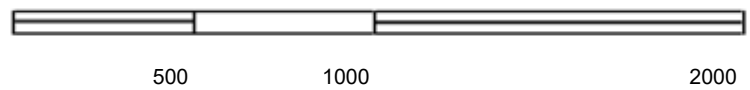
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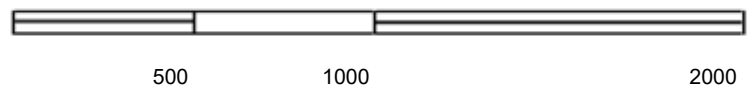
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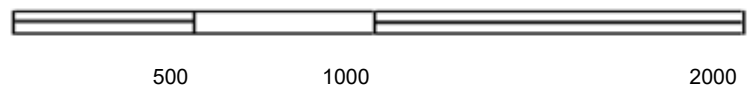
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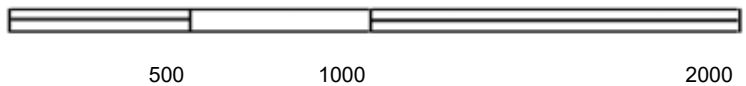
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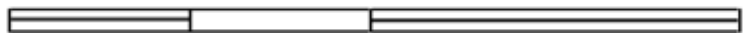
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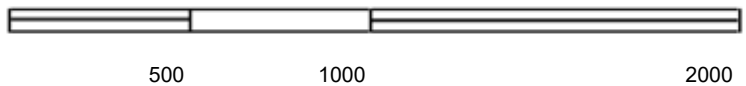
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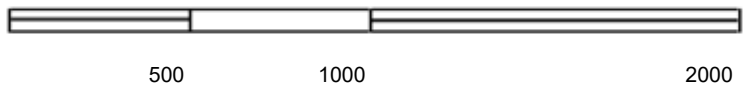
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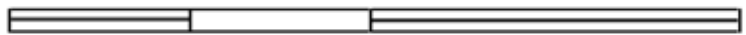
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Key: Subject Property 



Key: Subject Property 



Key: Subject Property 



Rutledge Parcel
26065 Byers Road
Sun City, CA 92585

Inquiry Number: 6620490.3

August 16, 2021

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

08/16/21

Site Name:

Rutledge Parcel
26065 Byers Road
Sun City, CA 92585
EDR Inquiry # 6620490.3

Client Name:

Partner Engineering and Science, Inc.
2154 Torrance Blvd, Suite 200
Torrance, CA 90501-0000
Contact: Marisol Garcia



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Certification # 1308-4453-BAFE
PO # 21-333053.1
Project 21-333053.1

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Sanborn® Library search results

Certification #: 1308-4453-BAFE

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Rutledge Parcel

26065 Byers Road
Sun City, CA 92585

Inquiry Number: 6620490.5
August 23, 2021

The EDR-City Directory Image Report

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2017	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1995	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1992	<input type="checkbox"/>	<input type="checkbox"/>	EDR Digital Archive
1990	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1985	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1980	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1976	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1973	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

26065 Byers Road
Sun City, CA 92585

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

BYERS RD

2017	pg A1	EDR Digital Archive	
2014	pg A3	EDR Digital Archive	
2010	pg A5	EDR Digital Archive	
2005	pg A7	EDR Digital Archive	
2000	-	EDR Digital Archive	Target and Adjoining not listed in Source
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source
1990	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1985	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1980	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1976	-	Haines Criss-Cross Directory	Target and Adjoining not listed in Source
1973	-	Haines Criss-Cross Directory	Street not listed in Source

FINDINGS

CROSS STREETS

Year

CD Image

Source

KUFFEL RD

2017	pg. A2	EDR Digital Archive	
2014	pg. A4	EDR Digital Archive	
2010	pg. A6	EDR Digital Archive	
2005	pg. A8	EDR Digital Archive	
2000	pg. A9	EDR Digital Archive	
1995	pg. A10	EDR Digital Archive	
1992	-	EDR Digital Archive	Target and Adjoining not listed in Source
1990	-	Haines Criss-Cross Directory	Street not listed in Source
1985	-	Haines Criss-Cross Directory	Street not listed in Source
1980	-	Haines Criss-Cross Directory	Street not listed in Source
1976	-	Haines Criss-Cross Directory	Street not listed in Source
1973	-	Haines Criss-Cross Directory	Street not listed in Source

City Directory Images



-

BYERS RD 2017

26065 DOOLEY, RONALD J
26110 MCDONALD, J
26355 ALCARAZ, MAXIMIANO Z

KUFFEL RD 2017

25310 ARMENTA, JAYSON S
25360 LOPP, RICHARD A
25450 MCKENNA, MIKE S
25484 ARAGON, REGINA



-

BYERS RD 2014

26065 CASTRO, MARIO
26110 MCDONALD, J
26150 OCCUPANT UNKNOWN,
26260 OCCUPANT UNKNOWN,

KUFFEL RD 2014

25310 OCCUPANT UNKNOWN,
25360 LOPP, RICHARD A
25432 OCCUPANT UNKNOWN,
25450 OCCUPANT UNKNOWN,
25484 CABRERA, MILAGRO
25486 GARCIA, MANUEL



-

BYERS RD 2010

26065 ARCHIBEK, LARRY S
26150 ALVARADO, J

KUFFEL RD 2010

25310 OCCUPANT UNKNOWN,
25360 LOPP, RICHARD A
25432 HERNANDEZ, EDER
25450 MCKENNA, MIKE S
25458 SIPES, ROBERT
25484 CABRERA, MILAGRO



-

BYERS RD 2005

26065 ARCHIBEK, LARRY
26150 ALVARADO, J

KUFFEL RD 2005

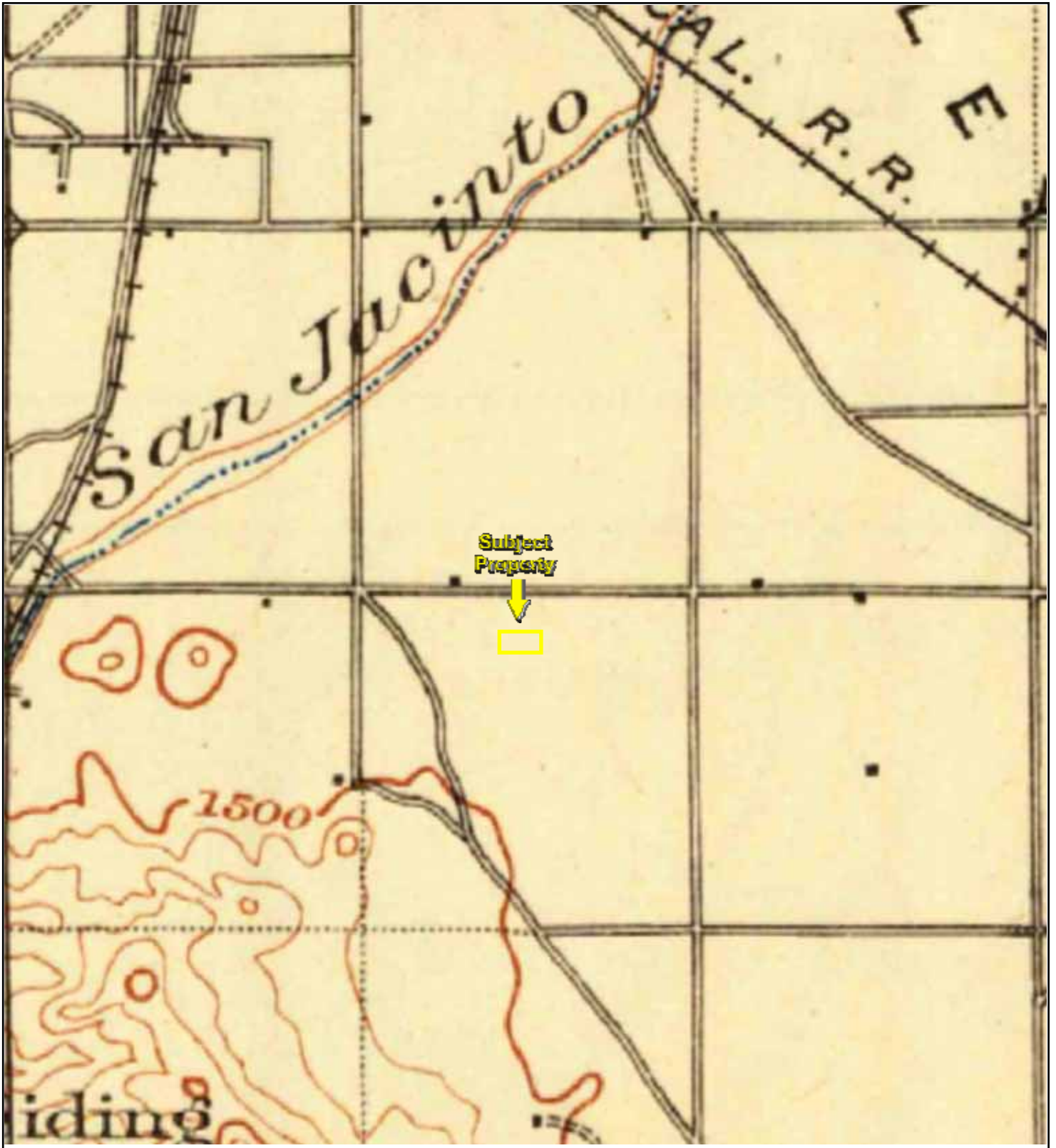
25310 GARCIA, RAFAEL
25360 LOPP, RICHARD A
25432 HERNANDEZ, JUAN
25450 MCKENNA, MIKE
25468 SIPES, ROBERT
25484 THORPE, KARL D

KUFFEL RD 2000

25310 GARCIA, R
25360 DUNN, ROBERT G
25432 DELATORE, MYRA
25450 POTTER, AMBER L
25468 CAY, CHERYL
25484 OCCUPANT UNKNOWN,

KUFFEL RD 1995

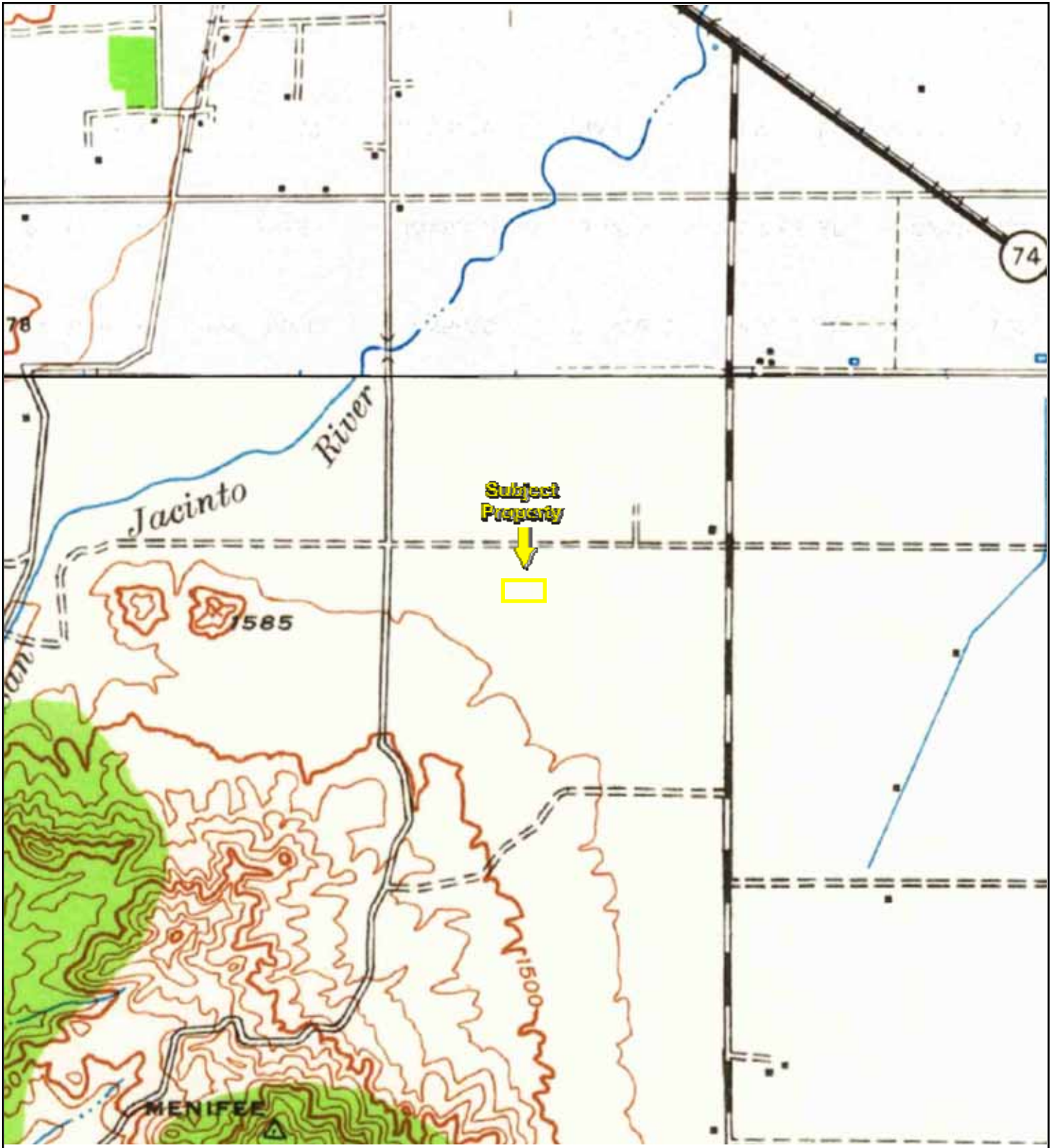
25360 DUNN, ROBERT G



TP, Elsinore, 1901, 30-minute



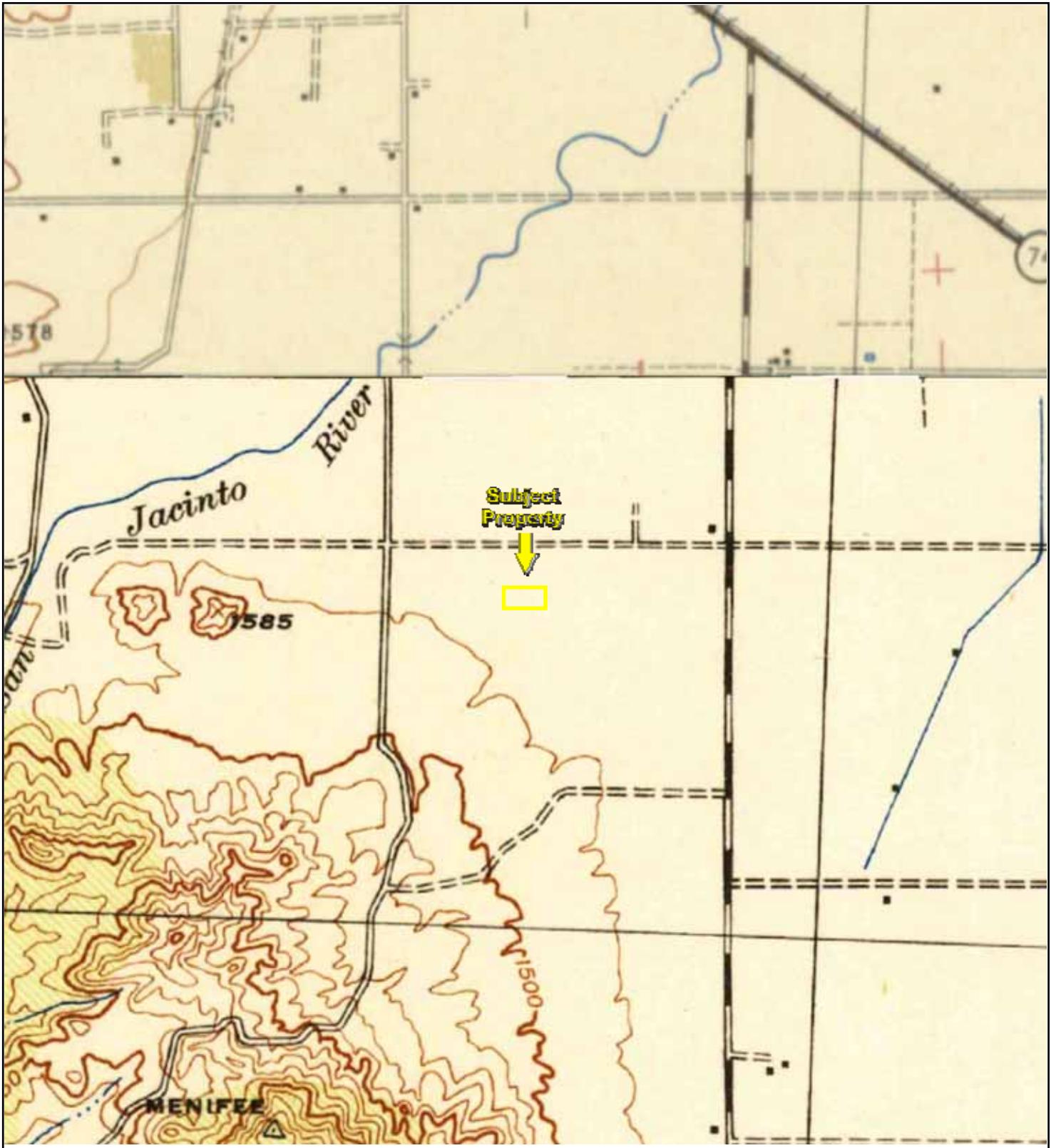
Key: Subject Property 



TP, Murrieta, 1942, 15-minute
NE, Perris, 1942, 15-minute



Key: Subject Property 

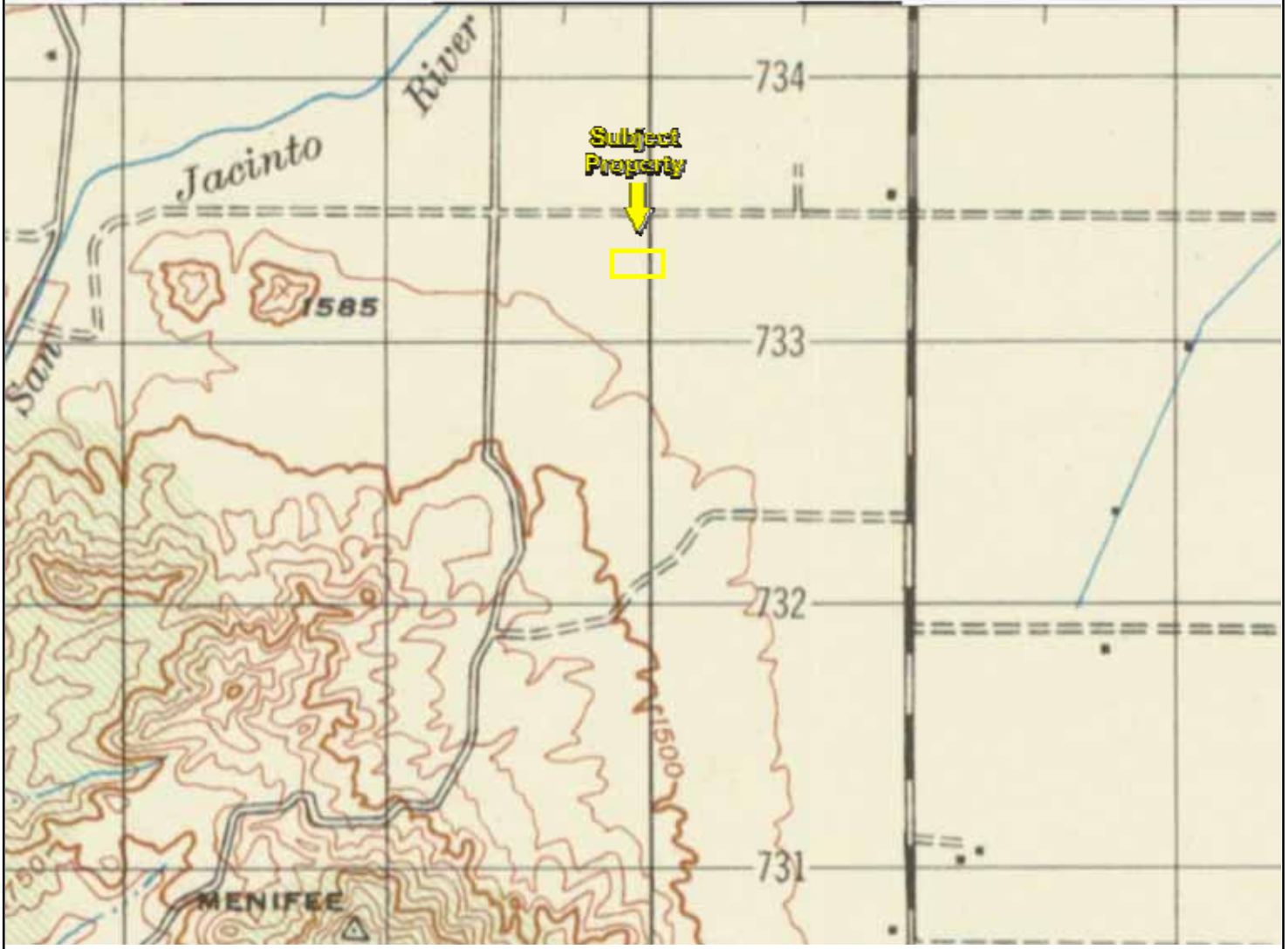


TP, Murrieta, 1943, 15-minute
NE, PERRIS, 1943, 15-minute



Key: Subject Property 

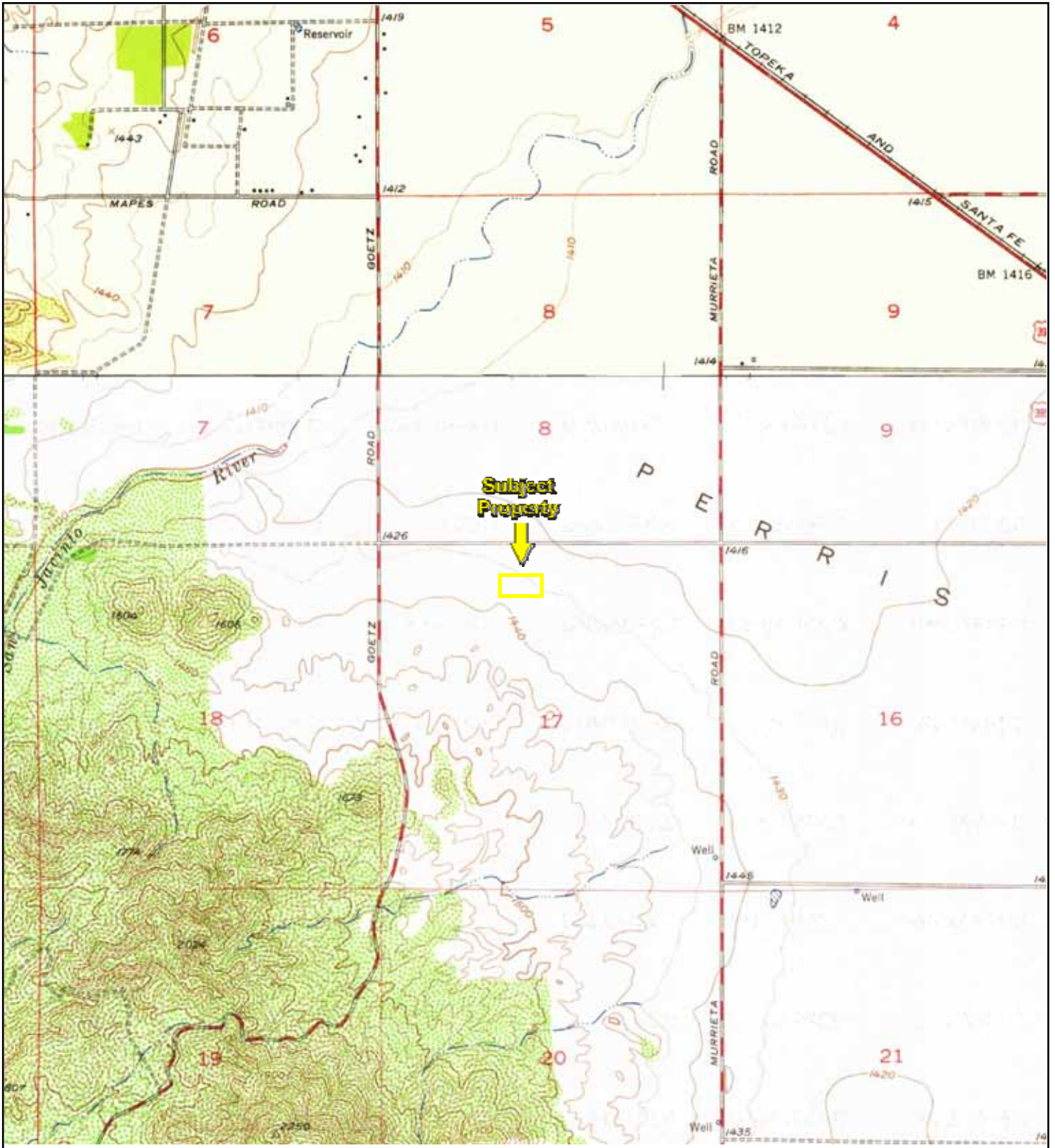
UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED
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UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED
UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED



TP, MURRIETA, 1947, 15-minute



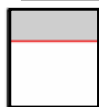
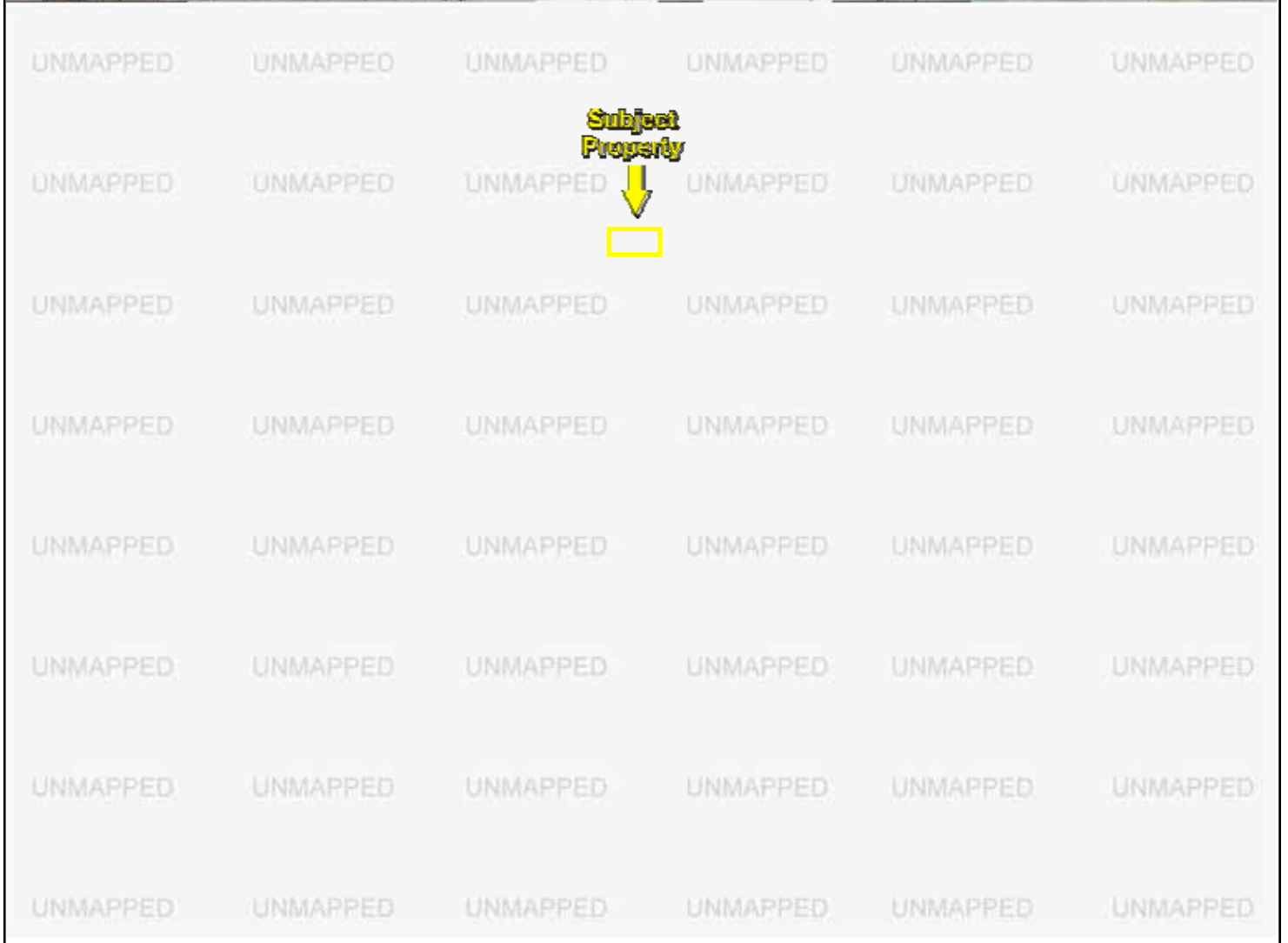
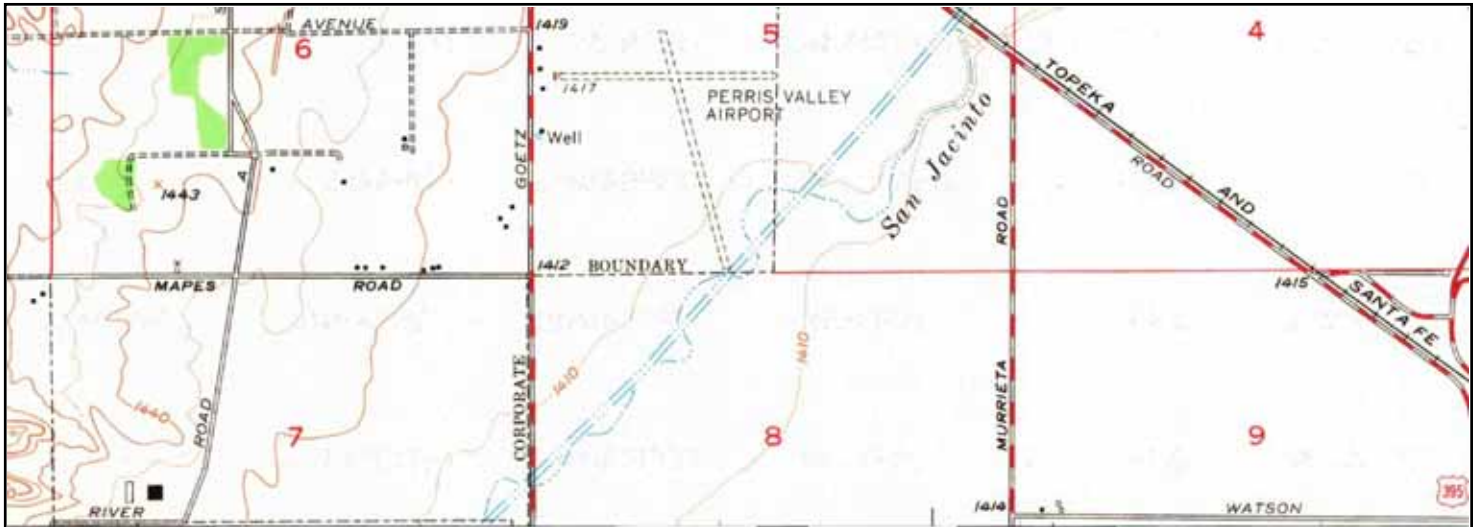
Key: Subject Property 



TP, Romoland, 1953, 7.5-minute
N, Perris, 1953, 7.5-minute



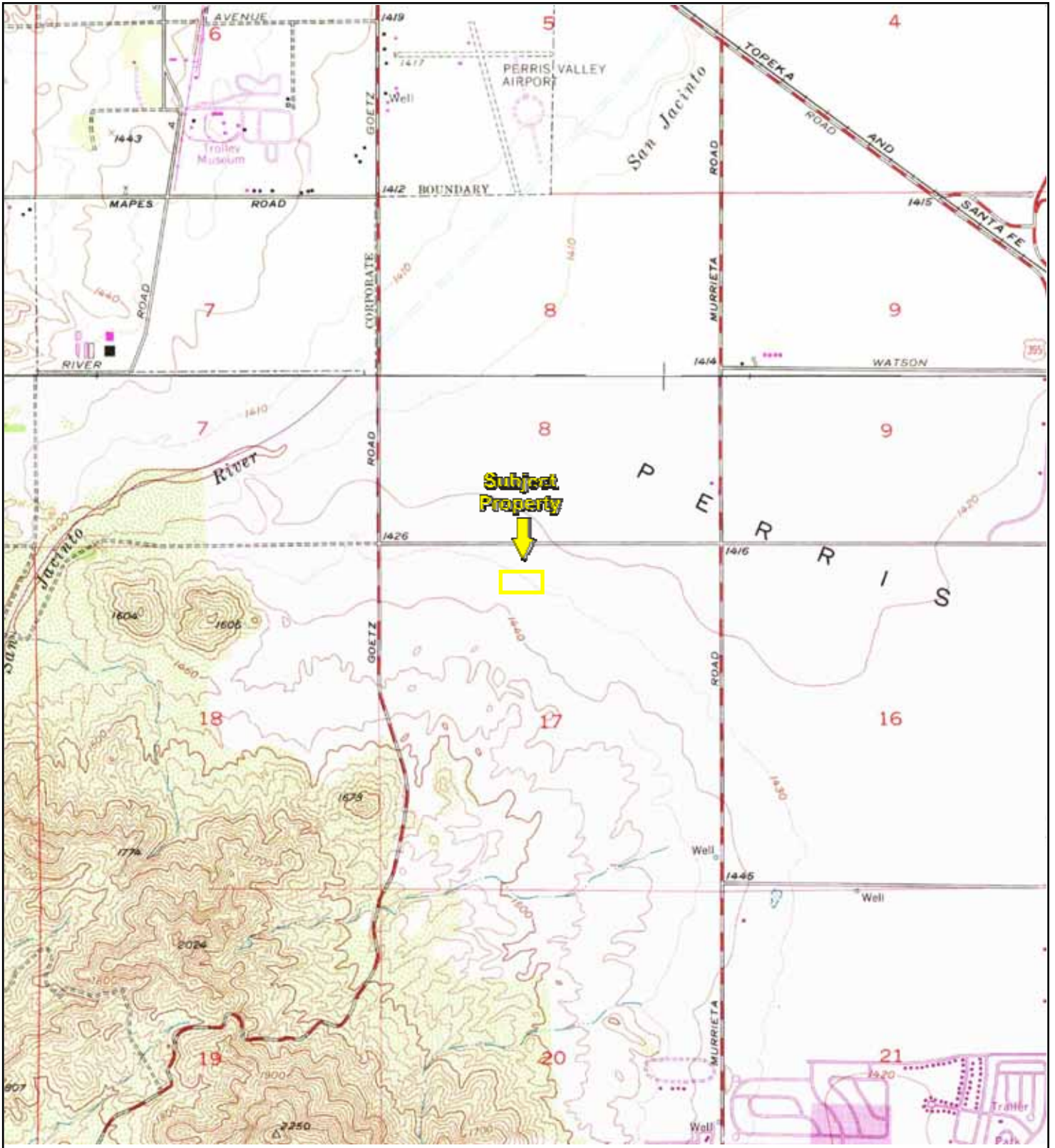
Key: Subject Property



N, Perris, 1967, 7.5-minute



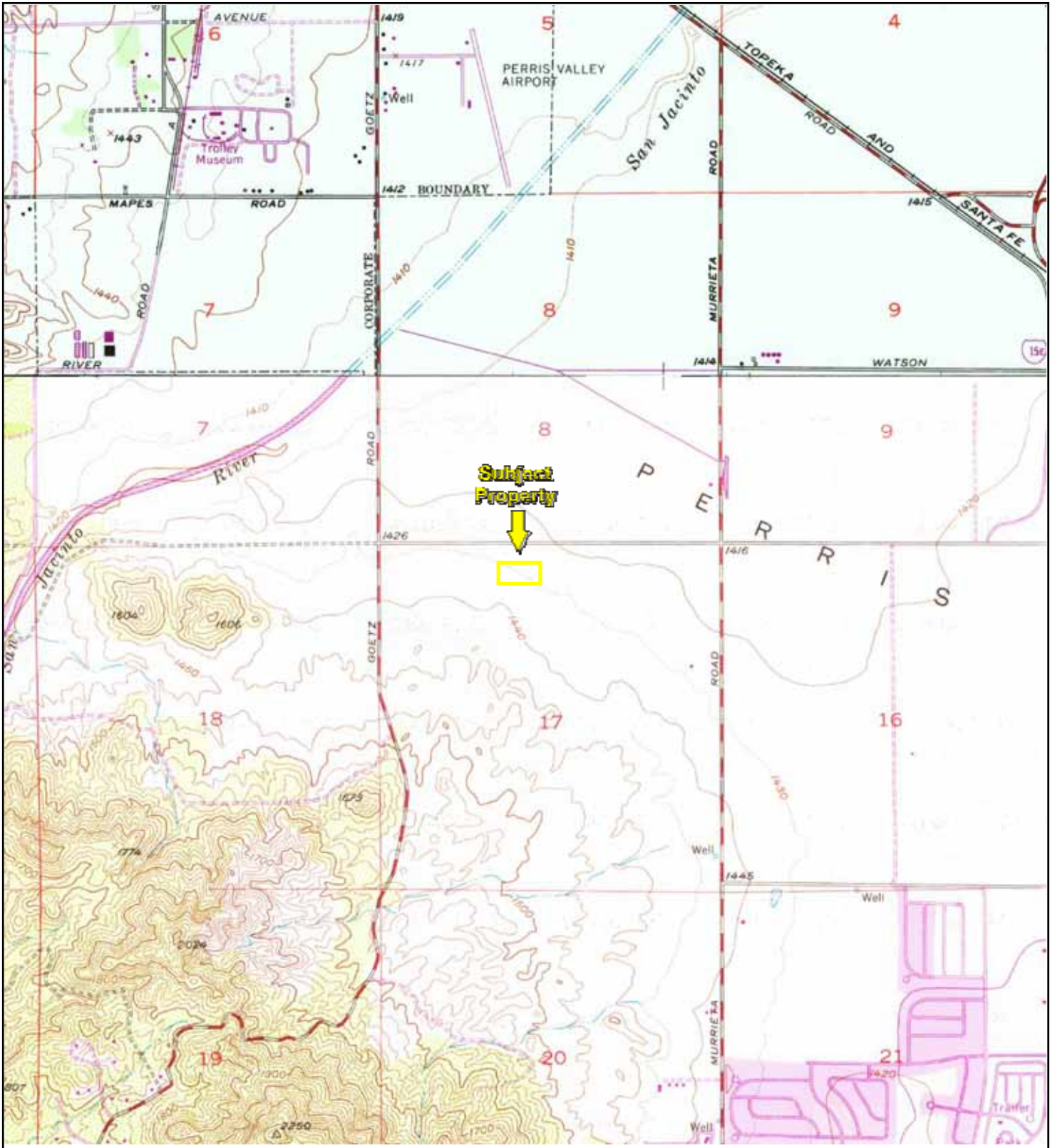
Key: Subject Property



TP, Romoland, 1973, 7.5-minute
N, Perris, 1973, 7.5-minute



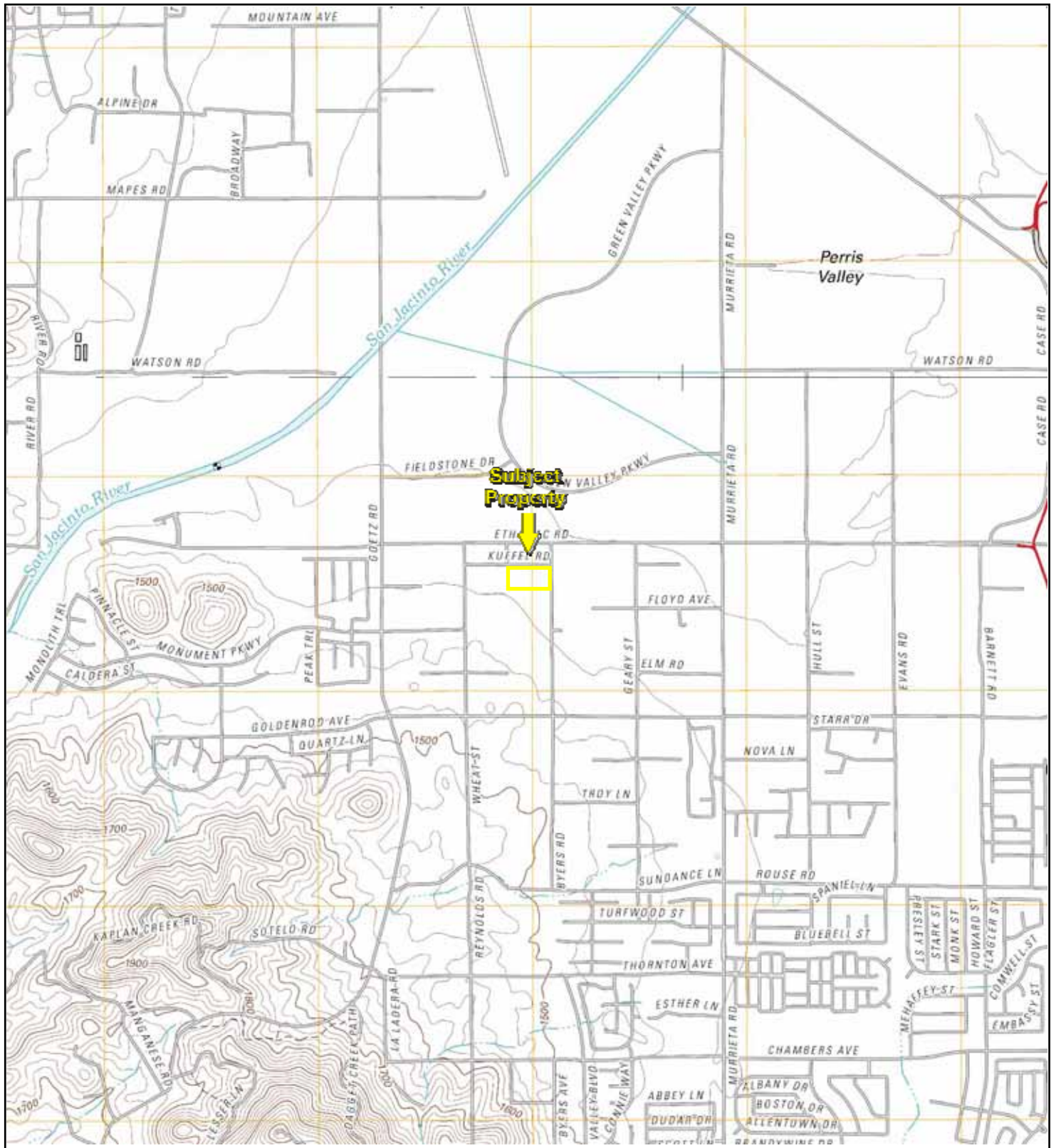
Key: Subject Property



TP, Romoland, 1979, 7.5-minute
 N, Perris, 1979, 7.5-minute



Key: Subject Property 



TP, Romoland, 2012, 7.5-minute
N, Perris, 2012, 7.5-minute



Key: Subject Property



Assessor - County Clerk - Recorder

Riverside County, CA

- [HOME](#)
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- [E-FORMS](#)
- [CONTACT US](#)
- [ACR HOME](#)

- [BACK](#)
- [VIEW TAX INFO](#)
- [VIEW SIMILAR SALES](#)
- [VALUE HISTORY](#)
- [PROPERTY REPORT](#)

General Information

Property Address	26065 BYERS ST MENIFEE, CA 92585
Assessment No. (PIN)	330190013
APN (GeoCode)	330190013
Property Type	Multiple Living Units (MH)
TAG	026-199 MENIFEE
Acreage	4.77
Doing Business As	
Business Use	



Legal Description

4.77 ACRES IN LOT 804 MB 014/091 ROMOLA FARMS 9 Lot 804 SubdivisionName ROMOLA FARMS 9 Acres 004.77 LotType Lot RecMapType Map Book MapPlatB 014 MapPlatP 091 SerialNumber A2FL22109041A HCD 249779 SerialNumber A2FL22109041B HCD 249780 SerialNumber AZFL421A11171LP12 DecalNumber LBG8098 HCD 282999 SerialNumber AZFL421B11171LP12 HCD 282300 SerialNumber ACSC7V710465JA DecalNumber 8819047 HCD 185959

Valuation data as of: **Tuesday, August 17, 2021**

Valuation data updated weekly.

Transfer History

Date	Document #	Sale Price
3/1/2017	2017-0086235	\$0
6/16/2016	2016-0247964	\$439,000
7/21/2014	2014-0269921	\$0
7/7/2010	2010-0317203	\$0
7/7/2010	2010-5317203	\$0
3/16/2006	2006-0186580	\$0
1/19/2005	2005-0050808	\$0
7/1/2004	2004-0513078	\$0
8/28/2002	2002-0477951	\$70,000
10/26/1995	1995-0357897	\$0
10/26/1995	1995-0357896	\$0
4/18/1995	1995-0120223	\$0
9/2/1992	1992-0330922	\$85,000
3/30/1988	1988-0083771	\$25,000
1/16/1987	1987-0012229	\$0
1/16/1987	1987-0012230	\$22,500
11/17/1983	1983-0240507	\$0
12/1/1971	1971-0147229	\$0

Buildings

- [2002 Fleetwood \(1st UNIT\)](#)
- [2004 Fleetwood \(2nd Unit\)](#)
- [2017 Skyline \(3rd UNIT\)](#)

Floor Areas		Structural Elements		Units/Costs
DESCRIPTION	TYPE	GROSS	FINISHED	CONSTRUCTION
Main Dwelling - MH	Ground	1456.00	1456.00	Wood or Light Steel (D)

Total Area **1456.00**

Address 26065 BYERS ST
Grade Multiple Living Units (MH)
Year Built 2002

Features

Code	Code Description	Year	Size	Quality	Cond. Details	Percent
MHHookUP	MH Hook Ups (RCN)	2002	Replacement Cost New - 5000.00	N/A	Average	100.00 %
Solar	Active Solar Energy System (RCN)	2017	Replacement Cost New - 1.00	Average	Average	100.00 %
MHHookUP	MH Hook Ups (RCN)	2017	Replacement Cost New - 5000.00	N/A	Average	100.00 %
MHFoundPerm	MH Foundation - Permanent	2017	Living Area - 2788.00	N/A	Average	100.00 %
MHHookUP	MH Hook Ups (RCN)	2002	Replacement Cost New - 5000.00	N/A	Average	100.00 %
CARPORT	Carport, Residential	2018	Actual Area - 700.00	Average	Average	100.00 %
CARPORT	Carport, Residential	2018	Actual Area - 400.00	Average	Average	100.00 %

Land

Primary Use	Land Type	Acres	Eff. Frontage	Eff. Depth
Manufactured Home	LandLine 01 / 330190013 / Manufactured Home	4.77	0.00	0.00

Land Use Detail does not exist for this account.



Assessor - County Clerk - Recorder
Riverside County, CA

Property Detail

26065 BYERS ST MENIFEE CA 92585

Assessment No. 330190013
APN 330190013
Property Type Multiple Living Units (MH)
Neighborhood RM2500
Acreage 4.77

Legal Description

4.77 ACRES IN LOT 804 MB 014/091 ROMOLA FARMS 9 Lot 804 SubdivisionName ROMOLA FARMS 9 Acres 004.77 LotType Lot RecMapType Map Book MapPlatB 014 MapPlatP 091 SerialNumber A2FL22109041A HCD 249779 SerialNumber A2FL22109041B HCD 249780 SerialNumber AZFL421A11171LP12 DecalNumber LBG8098 HCD 282999 SerialNumber AZFL421B11171LP12 HCD 282300 SerialNumber ACSC7V710465JA DecalNumber 8819047 HCD 185959

Value History (Part 1)

Year	Reason Date	Market Value				Factored Base Year Value			
		Land	Improvement	Living Improvement	Total	Land	Improvement	Living Improvement	Total
2017	Other 01/01/2017					\$178,500	\$269,280		\$447,780
2017	Other 01/03/2017	\$175,000	\$264,000		\$439,000				
2017	Other 16/09/2017		\$0						
2018	Completed New Construction 14/12/2018					\$182,069	\$474,366		\$656,435
2018	Other 01/01/2018					\$182,070	\$458,165		\$640,235
2019	01/01/2019					\$185,710	\$483,529		\$669,239
2020	01/01/2020					\$189,424	\$493,199		\$682,623
2021	01/01/2021					\$191,386	\$498,308		\$689,694

Value History (Part 2)

Year	Restricted Value				Assessed Value				Penalty	Exemption	Net Taxable Value
	Land	Improvement	Living Improvement	Total	Land	Improvement	Living Improvement	Total			
2017					\$178,500	\$269,280		\$447,780		\$7,000	\$440,780
2017					\$0						\$0
2017						\$183,500		\$183,500			\$183,500
2018					\$0	\$16,200		\$16,200			\$16,200
2018					\$182,070	\$458,165		\$640,235		\$7,000	\$633,235
2019					\$185,710	\$483,529		\$669,239		\$7,000	\$662,239
2020					\$189,424	\$493,199		\$682,623		\$7,000	\$675,623
2021					\$191,386	\$498,308		\$689,694		\$7,000	\$682,694

Transfer History

Doc #	Sales Price	Date	Vacant Land
2017-0086235	\$0	3/1/2017	False
2016-0247964	\$439,000	6/16/2016	False
2014-0269921	\$256,000	7/21/2014	False
2010-0317203	\$0	7/7/2010	False
2010-5317203	\$0	7/7/2010	False
2006-0186580	\$0	3/16/2006	False
2005-0050808	\$0	1/19/2005	False
2004-0513078	\$0	7/1/2004	False
2002-0477951	\$70,000	8/28/2002	False
1995-0357897	\$0	10/26/1995	False
1995-0357896	\$0	10/26/1995	False
1995-0120223	\$0	4/18/1995	False
1992-0330922	\$85,000	9/2/1992	False
1988-0083771	\$25,000	3/30/1988	False
1987-0012229	\$0	1/16/1987	False
1987-0012230	\$22,500	1/16/1987	False
1983-0240507	\$0	11/17/1983	False
1971-0147229	\$0	12/1/1971	False

Features

Code	Code Descr.	Year	Building	Size	Size Descr.	Units	Cond. Details	Percent
MHHookUP	MH Hook Ups (RCN)	2002	2004 Fleetwood (2nd Unit)	5000.00	Replacement Cost New	N/A	5000.00 Average	100.00
Solar	Active Solar Energy System (RCN)	2017	330190013	1.00	Replacement Cost New	Average	1.00 Average	100.00
MHHookUP	MH Hook Ups (RCN)	2017	2017 Skyline (3rd UNIT)	5000.00	Replacement Cost New	N/A	5000.00 Average	100.00
MHFoundPerm	MH Foundation - Permanent	2017	2017 Skyline (3rd UNIT)	2788.00	Living Area	N/A	5437.00 Average	100.00
MHHookUP	MH Hook Ups (RCN)	2002	2002 Fleetwood (1st UNIT)	5000.00	Replacement Cost New	N/A	5000.00 Average	100.00
CARPORT	Carport, Residential	2018	2017 Skyline (3rd UNIT)	700.00	Actual Area	Average	10374.00 Average	100.00
CARPORT	Carport, Residential	2018	2017 Skyline (3rd UNIT)	400.00	Actual Area	Average	5928.00 Average	100.00

Land Details

Primary Use	Land Type	Acres	Eff. Frontage	Eff. Depth
Manufactured Home	LandLine 01 / 330190013 / Manufactured Home	4.77	0.00	0.00

2002 Fleetwood (1st UNIT) - Building Details

Address 26065 BYERS ST
Type Multiple Living Units (MH)
Year Built 2002

Image: Sketch Image

Structural Elements

Use	Detail
Basement	No Basement
Bathroom Condition	Average
Central Cooling	Yes
Central Heating	Yes
Kitchen Condition	Average
Roof Cover	Rock/Composite

Floor Areas

Description	Level	Gross Area	Finished Area	Construction Type
Main Dwelling - MH	Ground	1456.00	1456.00	Wood or Light Steel (D)

Unit Counts

Units/Costs	Category	Description
8	Bath Fixtures	Bathroom Fixtures
4368	Building Additive	Heat and Cooling (Cost)
2	MH Number of Units	Total MH Units
3	Room Count	Bedroom
1	Room Count	Dining Room
1	Room Count	Family Room / Den
2	Room Count	Bath - Full
1	Room Count	Kitchen
1	Room Count	Living Room
1	Room Count	Utility Room

2004 Fleetwood (2nd Unit) - Building Details

Address 26065 BYERS ST
Type Multiple Living Units (MH)
Year Built 2004

Image: Sketch Image

Structural Elements

Use	Detail
Basement	No Basement
Bathroom Condition	Average
Central Cooling	Yes
Central Heating	Yes
Kitchen Condition	Average
Roof Cover	Rock/Composite

Floor Areas

Description	Level	Gross Area	Finished Area	Construction Type
Main Dwelling - MH	Ground	2280.00	2280.00	Wood or Light Steel (D)

Unit Counts

Units/Costs	Category	Description
8	Bath Fixtures	Bathroom Fixtures
6840	Building Additive	Heat and Cooling (Cost)
2	MH Number of Units	Total MH Units
3	Room Count	Bedroom
1	Room Count	Dining Room
1	Room Count	Family Room / Den
2	Room Count	Bath - Full
1	Room Count	Kitchen
1	Room Count	Living Room
1	Room Count	Utility Room

2017 Skyline (3rd UNIT) - Building Details

Address 26065 BYERS ST
Type Multiple Living Units (MH)
Year Built 2017

Image: Sketch Image

Structural Elements

Use	Detail
Basement	No Basement
Bathroom Condition	Average
Central Cooling	Yes
Central Heating	Yes
Kitchen Condition	Average
Roof Cover	Rock/Composite

Floor Areas

Description	Level	Gross Area	Finished Area	Construction Type
Main Dwelling - MH	Ground	2788.00	2788.00	Wood or Light Steel (D)

Unit Counts

Units/Costs	Category	Description
8	Bath Fixtures	Bathroom Fixtures
4200	Building Additive	Heat and Cooling (Cost)
3	MH Number of Units	Total MH Units
4	Room Count	Bedroom
1	Room Count	Dining Room
1	Room Count	Family Room / Den
2	Room Count	Bath - Full
1	Room Count	Kitchen
1	Room Count	Living Room
1	Room Count	Utility Room

Riverside County is not liable for erroneous or incomplete data.
 California Revenue and Taxation Code Sec. 408.3 (d)

Date Printed: 8/21/2021

APPENDIX C: REGULATORY DATABASE REPORT

Rutledge Parcel

26065 Byers Road
Sun City, CA 92585

Inquiry Number: 6620490.2s
August 16, 2021

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

<u>SECTION</u>	<u>PAGE</u>
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	9
Orphan Summary	20
Government Records Searched/Data Currency Tracking	GR-1
 <u>GEOCHECK ADDENDUM</u>	
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 (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

26065 BYERS ROAD
SUN CITY, CA 92585

COORDINATES

Latitude (North): 33.7416830 - 33° 44' 30.05"
Longitude (West): 117.2161640 - 117° 12' 58.19"
Universal Transverse Mercator: Zone 11
UTM X (Meters): 479977.0
UTM Y (Meters): 3733342.2
Elevation: 1432 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5641314 ROMOLAND, CA
Version Date: 2012

North Map: 5641330 PERRIS, CA
Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140603
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
 26065 BYERS ROAD
 SUN CITY, CA 92585

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	NATIVE PLANT	202 ETHANAC	LUST, HIST CORTESE	Lower	702, 0.133, WNW
A2	RODEFFER INVESTMENTS	25160 ETHANAC RD., S	HIST UST	Higher	1189, 0.225, WNW
A3	NATIVE PLANTS INC	25160 ETHANAC RD	SWEEPS UST, CA FID UST	Higher	1189, 0.225, WNW
4	MONUMENT RANCH SITE	GOETZ ROAD / ETHANAC	ENVIROSTOR, SCH, CERS	Lower	1933, 0.366, WNW
5	NATIVE PLANT	202 E ETHANAC	LUST, Cortese, CERS	Lower	2285, 0.433, NW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

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

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-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

EXECUTIVE SUMMARY

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROLS..... Institutional Controls Sites List

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC..... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
UST..... Active UST Facilities
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties
INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

EXECUTIVE SUMMARY

HIST Cal-Sites.....	Historical Calsites Database
SCH.....	School Property Evaluation Program
CDL.....	Clandestine Drug Labs
Toxic Pits.....	Toxic Pits Cleanup Act Sites
CERS HAZ WASTE.....	CERS HAZ WASTE
US CDL.....	National Clandestine Laboratory Register
PFAS.....	PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

CERS TANKS.....	California Environmental Reporting System (CERS) Tanks
-----------------	--

Local Land Records

LIENS.....	Environmental Liens Listing
LIENS 2.....	CERCLA Lien Information
DEED.....	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS.....	Hazardous Materials Information Reporting System
CHMIRS.....	California Hazardous Material Incident Report System
LDS.....	Land Disposal Sites Listing
MCS.....	Military Cleanup Sites Listing
SPILLS 90.....	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR.....	RCRA - Non Generators / No Longer Regulated
FUDS.....	Formerly Used Defense Sites
DOD.....	Department of Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations

EXECUTIVE SUMMARY

FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
UXO.....	Unexploded Ordnance Sites
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
ECHO.....	Enforcement & Compliance History Information
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
EMI.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
HAZNET.....	Facility and Manifest Data
ICE.....	ICE
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
Notify 65.....	Proposition 65 Records
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CIWQS.....	California Integrated Water Quality System
CERS.....	CERS
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
MINES MRDS.....	Mineral Resources Data System
HWTS.....	Hazardous Waste Tracking System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
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
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EXECUTIVE SUMMARY

RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 04/23/2021 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>MONUMENT RANCH SITE</i> Facility Id: 70000024 Status: No Further Action	<i>GOETZ ROAD / ETHANAC</i>	<i>WNW 1/4 - 1/2 (0.366 mi.)</i>	<i>4</i>	<i>12</i>

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>NATIVE PLANT</i> Database: LUST REG 8, Date of Government Version: 02/14/2005	<i>202 ETHANAC</i>	<i>WNW 1/8 - 1/4 (0.133 mi.)</i>	<i>1</i>	<i>9</i>

EXECUTIVE SUMMARY

Facility Status: Case Closed
 Global ID: T0606500254

NATIVE PLANT	202 E ETHANAC	NW 1/4 - 1/2 (0.433 mi.)	5	16
Database: LUST, Date of Government Version: 03/08/2021				
Database: RIVERSIDE CO. LUST, Date of Government Version: 06/29/2021				
Status: Completed - Case Closed				
Facility Id: 91562				
Global Id: T0606500254				
Facility Status: 9				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NATIVE PLANTS INC Status: A Tank Status: A Comp Number: 58515	25160 ETHANAC RD	WNW 1/8 - 1/4 (0.225 mi.)	A3	11

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
RODEFFER INVESTMENTS Facility Id: 00000042545	25160 ETHANAC RD., S	WNW 1/8 - 1/4 (0.225 mi.)	A2	10

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NATIVE PLANTS INC Facility Id: 33007127	25160 ETHANAC RD	WNW 1/8 - 1/4 (0.225 mi.)	A3	11

EXECUTIVE SUMMARY

Status: A

Other Ascertainable Records

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 03/22/2021 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NATIVE PLANT Cleanup Status: COMPLETED - CASE CLOSED	202 E ETHANAC	NW 1/4 - 1/2 (0.433 mi.)	5	16

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CAL SITES]. This listing is no longer updated by the state agency.

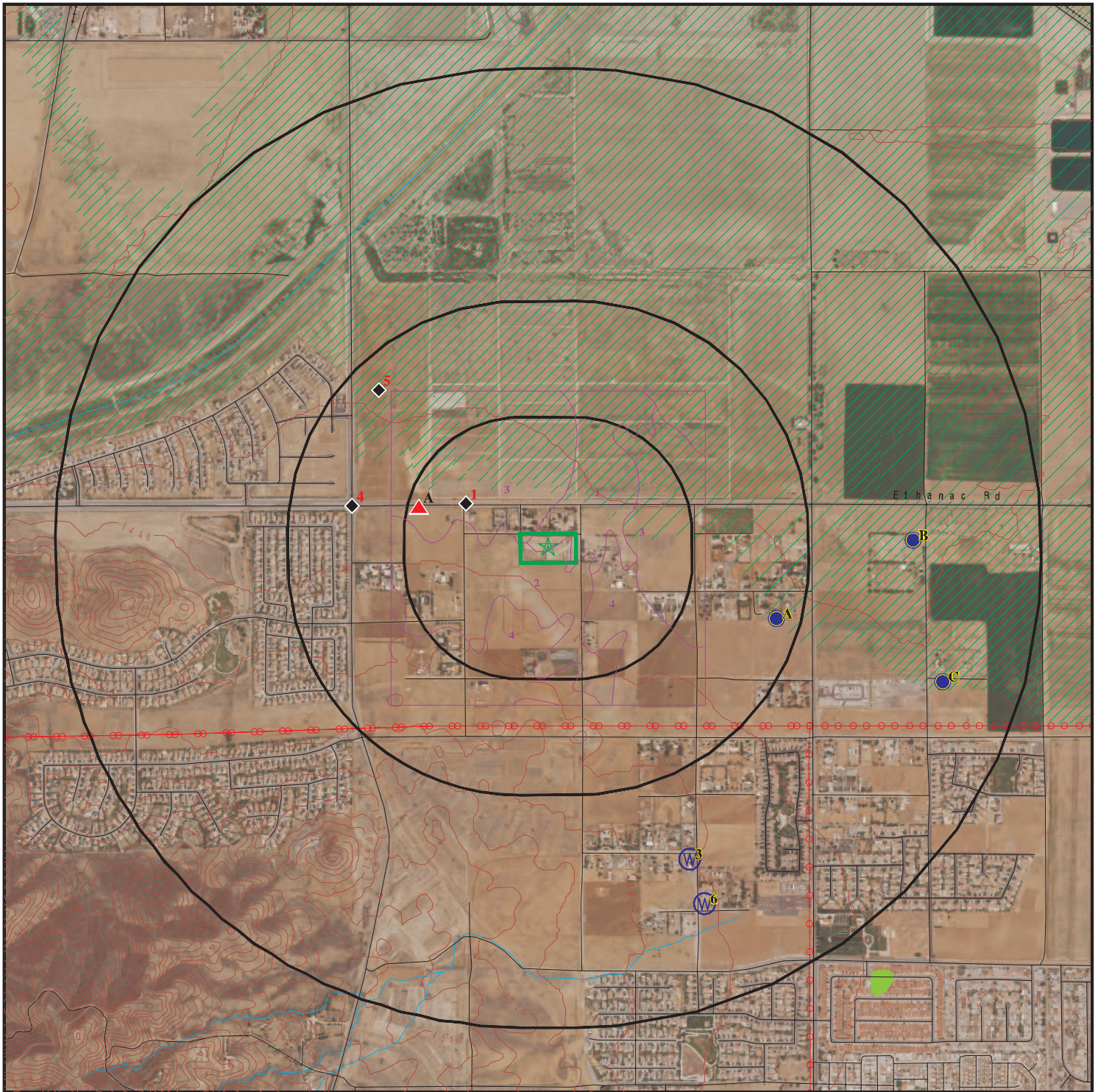
A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.


<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
NATIVE PLANT Reg Id: 083301975T	202 ETHANAC	WNW 1/8 - 1/4 (0.133 mi.)	1	9


EXECUTIVE SUMMARY


There were no unmapped sites in this report.

OVERVIEW MAP - 6620490.2S



 Target Property

 Sites at elevations higher than or equal to the target property

 Sites at elevations lower than the target property


 Manufactured Gas Plants

 National Priority List Sites

 Dept. Defense Sites

 Indian Reservations BIA


 Power transmission lines

 Special Flood Hazard Area (1%)

 0.2% Annual Chance Flood Hazard

 National Wetland Inventory

 State Wetlands

 Areas of Concern

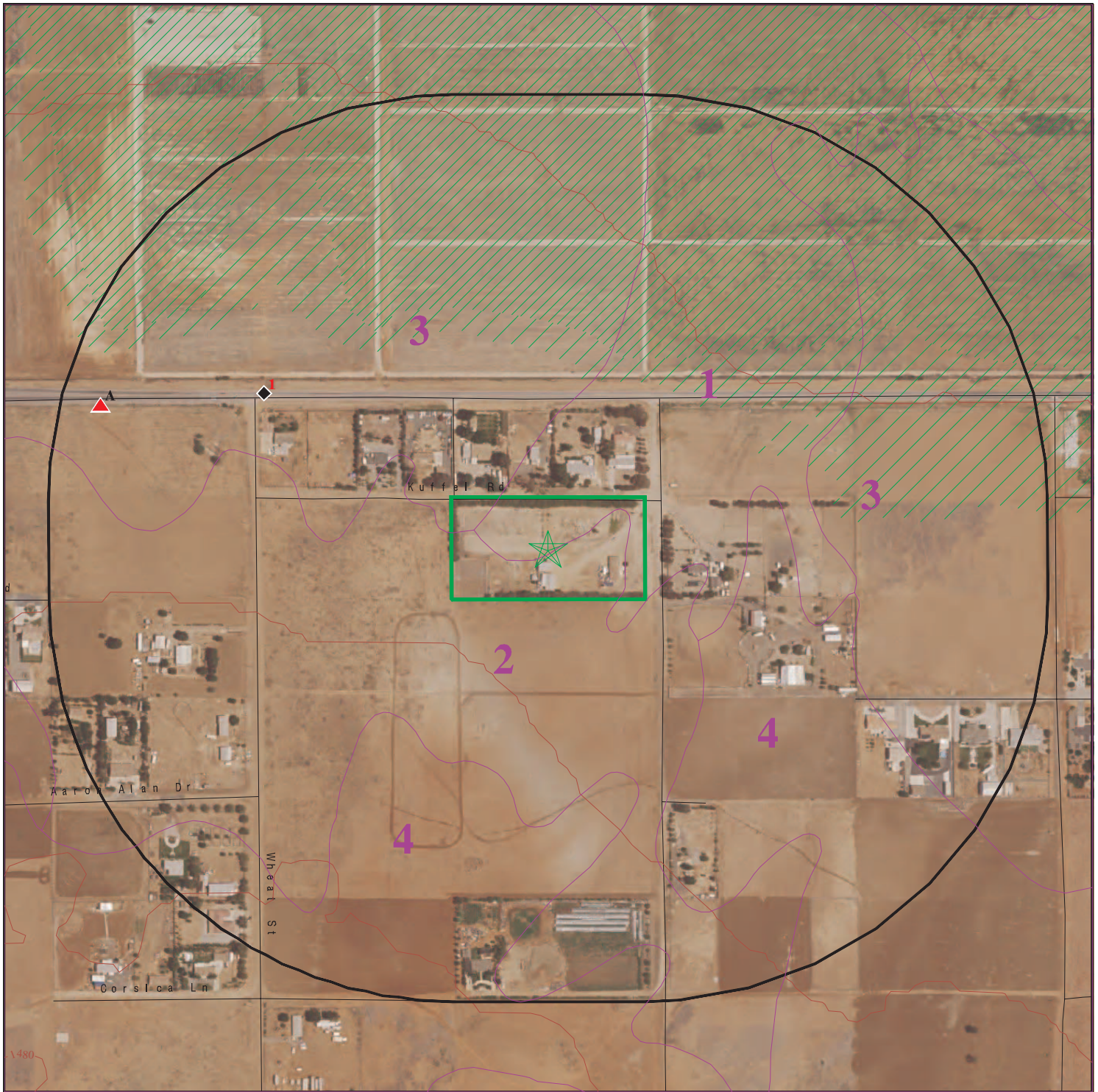









This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Rutledge Parcel
 ADDRESS: 26065 Byers Road
 Sun City CA 92585
 LAT/LONG: 33.741683 / 117.216164





CLIENT: Partner Engineering and Science, Inc.
 CONTACT: Marisol Garcia
 INQUIRY #: 6620490.2s
 DATE: August 16, 2021 10:28 am

DETAIL MAP - 6620490.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites



-  Indian Reservations BIA
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard
-  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: Rutledge Parcel
 ADDRESS: 26065 Byers Road
 Sun City CA 92585
 LAT/LONG: 33.741683 / 117.216164

CLIENT: Partner Engineering and Science, Inc.
 CONTACT: Marisol Garcia
 INQUIRY #: 6620490.2s
 DATE: August 16, 2021 10:30 am

MAP FINDINGS SUMMARY

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

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
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
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
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields 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	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	1	NR	NR	NR	1
HIST UST	0.250		0	1	NR	NR	NR	1
CERS TANKS	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	1	NR	NR	NR	1
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	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	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	1	NR	NR	1
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	1	0	NR	NR	1
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		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	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0

- Totals -- 0 0 5 3 0 0 8

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
-----------------	--	----------------------------	-----------------	------------------	------------------	----------------	---------------	--------------------------

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

1
WNW
1/8-1/4
0.133 mi.
702 ft.

NATIVE PLANT
202 ETHANAC
PERRIS, CA 92570

LUST **S101307986**
HIST CORTESE **N/A**

Relative:
Lower
Actual:
1431 ft.

LUST REG 8:

Name:	NATIVE PLANT
Address:	202 ETHANAC
City:	PERRIS
Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083301975T
Local Case Num:	91562
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0606500254
How Stopped Date:	5/29/1990
Enter Date:	12/19/1991
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	5/29/1990
Enforcement Date:	Not reported
Close Date:	11/8/1993
Date Prelim Assessment Workplan Submitted:	6/21/1991
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	4/2/1992
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	9/30/1993
Enter Date:	12/19/1991
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	33.793243
Longitude:	-117.2829513
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	CAB
Staff Initials:	UNK

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NATIVE PLANT (Continued)

S101307986

Lead Agency: Local Agency
Local Agency: 33000L
Hydr Basin #: UNNAMED BASIN
Beneficial: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: Not reported

HIST CORTESE:
edr_fname: NATIVE PLANT
edr_fadd1: 202 ETHANAC
City,State,Zip: PERRIS, CA
Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 083301975T

A2
WNW
1/8-1/4
0.225 mi.
1189 ft.

RODEFFER INVESTMENTS---WHOLESA
25160 ETHANAC RD., SUN CITY, C
SUN CITY, CA 92380
Site 1 of 2 in cluster A

HIST UST **U001575597**
N/A

Relative:
Higher
Actual:
1432 ft.

HIST UST:
Name: RODEFFER INVESTMENTS---WHOLESA
Address: 25160 ETHANAC RD., SUN CITY, C
City,State,Zip: SUN CITY, CA 92380
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000042545
Facility Type: Other
Other Type: WHOLESALE NURSERY
Contact Name: JOE MARTINEZ
Telephone: 7146571755
Owner Name: MR. E.O. RODEFFER--RODEFFER I
Owner Address: 11770 E. WARNER SUITE 129
Owner City,St,Zip: FOUNTAIN VALLEY, CA 92708
Total Tanks: 0003

Tank Num: 001
Container Num: 1
Year Installed: 1980
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: 1/8
Leak Detection: Visual

Tank Num: 002
Container Num: 2
Year Installed: 1980
Tank Capacity: 00005000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: 1/8

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

RODEFFER INVESTMENTS---WHOLESA (Continued)

U001575597

Leak Detection: Visual

Tank Num: 003
Container Num: 3
Year Installed: 1980
Tank Capacity: 00000500
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: 1/8
Leak Detection: None

**A3
WNW
1/8-1/4
0.225 mi.
1189 ft.**

**NATIVE PLANTS INC
25160 ETHANAC RD
SUN CITY, CA 92380

Site 2 of 2 in cluster A**

**SWEEPS UST S101590350
CA FID UST N/A**

**Relative:
Higher

Actual:
1432 ft.**

SWEEPS UST:
Name: NATIVE PLANTS INC
Address: 25160 ETHANAC RD
City: SUN CITY
Status: Active
Comp Number: 58515
Number: 1
Board Of Equalization: 44-018404
Referral Date: 03-23-90
Action Date: 03-23-90
Created Date: 03-28-89
Owner Tank Id: 000914
SWRCB Tank Id: 33-000-058515-000001
Tank Status: A
Capacity: 5000
Active Date: 03-23-90
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 2

Name: NATIVE PLANTS INC
Address: 25160 ETHANAC RD
City: SUN CITY
Status: Active
Comp Number: 58515
Number: 1
Board Of Equalization: 44-018404
Referral Date: 03-23-90
Action Date: 03-23-90
Created Date: 03-28-89
Owner Tank Id: 000914
SWRCB Tank Id: 33-000-058515-000002
Tank Status: A
Capacity: 10000
Active Date: 03-23-90
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

NATIVE PLANTS INC (Continued)

S101590350

CA FID UST:
 Facility ID: 33007127
 Regulated By: UTNKA
 Regulated ID: Not reported
 Cortese Code: Not reported
 SIC Code: Not reported
 Facility Phone: 7146571755
 Mail To: Not reported
 Mailing Address: 417 WAKERA WAY
 Mailing Address 2: Not reported
 Mailing City,St,Zip: SUN CITY 92380
 Contact: Not reported
 Contact Phone: Not reported
 DUNs Number: Not reported
 NPDES Number: Not reported
 EPA ID: Not reported
 Comments: Not reported
 Status: Active

4
WNW
1/4-1/2
0.366 mi.
1933 ft.

MONUMENT RANCH SITE
GOETZ ROAD / ETHANAC ROAD
PERRIS, CA 92570

ENVIROSTOR **S109548225**
SCH **N/A**
CERS

Relative:
Lower
Actual:
1431 ft.

ENVIROSTOR:
 Name: MONUMENT RANCH SITE
 Address: GOETZ ROAD / ETHANAC ROAD
 City,State,Zip: PERRIS, CA 92570
 Facility ID: 70000024
 Status: No Further Action
 Status Date: 06/22/2006
 Site Code: 404643
 Site Type: School Investigation
 Site Type Detailed: School
 Acres: 23
 NPL: NO
 Regulatory Agencies: SMBRP
 Lead Agency: SMBRP
 Program Manager: Not reported
 Supervisor: Shahir Haddad
 Division Branch: Southern California Schools & Brownfields Outreach
 Assembly: 61
 Senate: 31
 Special Program: Not reported
 Restricted Use: NO
 Site Mgmt Req: NONE SPECIFIED
 Funding: School District
 Latitude: 33.74253
 Longitude: -117.2405
 APN: 330-160-007, 330-160-008, 330-160-009, 330-160-010, 330-160-011,
 330-160-012, 330-160-013, 330-160-014, 330-160-015, 330160007,
 330160008
 Past Use: AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS
 Potential COC: Arsenic DDD DDE DDT
 Confirmed COC: 30001-NO 30006-NO 30007-NO 30008-NO
 Potential Description: SOIL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MONUMENT RANCH SITE (Continued)

S109548225

Alias Name: Romoland School District
Alias Type: Alternate Name
Alias Name: 330-160-007
Alias Type: APN
Alias Name: 330-160-008
Alias Type: APN
Alias Name: 330-160-009
Alias Type: APN
Alias Name: 330-160-010
Alias Type: APN
Alias Name: 330-160-011
Alias Type: APN
Alias Name: 330-160-012
Alias Type: APN
Alias Name: 330-160-013
Alias Type: APN
Alias Name: 330-160-014
Alias Type: APN
Alias Name: 330-160-015
Alias Type: APN
Alias Name: 330160007
Alias Type: APN
Alias Name: 330160008
Alias Type: APN
Alias Name: 404643
Alias Type: Project Code (Site Code)
Alias Name: 20050024
Alias Type: Envirostor ID Number
Alias Name: 70000024
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 06/26/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 08/09/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 01/03/2006
Comments: PEA workplan approval

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/20/2006
Comments: DTSC issued a No Further Action determination based on a Preliminary Environmental Assessment Report

Future Area Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MONUMENT RANCH SITE (Continued)

S109548225

Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: MONUMENT RANCH SITE
Address: GOETZ ROAD / ETHANAC ROAD
City,State,Zip: PERRIS, CA 92570
Facility ID: 70000024
Site Type: School Investigation
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 23
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Not reported
Supervisor: Shahir Haddad
Division Branch: Southern California Schools & Brownfields Outreach
Site Code: 404643
Assembly: 61
Senate: 31
Special Program Status: Not reported
Status: No Further Action
Status Date: 06/22/2006
Restricted Use: NO
Funding: School District
Latitude: 33.74253
Longitude: -117.2405
APN: 330-160-007, 330-160-008, 330-160-009, 330-160-010, 330-160-011,
330-160-012, 330-160-013, 330-160-014, 330-160-015, 330160007,
330160008
Past Use: AGRICULTURAL - ORCHARD, AGRICULTURAL - ROW CROPS
Potential COC: Arsenic, DDD, DDE, DDT
Confirmed COC: 30001-NO, 30006-NO, 30007-NO, 30008-NO
Potential Description: SOIL
Alias Name: Romoland School District
Alias Type: Alternate Name
Alias Name: 330-160-007
Alias Type: APN
Alias Name: 330-160-008
Alias Type: APN
Alias Name: 330-160-009
Alias Type: APN
Alias Name: 330-160-010
Alias Type: APN
Alias Name: 330-160-011
Alias Type: APN
Alias Name: 330-160-012
Alias Type: APN

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MONUMENT RANCH SITE (Continued)

S109548225

Alias Name: 330-160-013
Alias Type: APN
Alias Name: 330-160-014
Alias Type: APN
Alias Name: 330-160-015
Alias Type: APN
Alias Name: 330160007
Alias Type: APN
Alias Name: 330160008
Alias Type: APN
Alias Name: 404643
Alias Type: Project Code (Site Code)
Alias Name: 20050024
Alias Type: Envirostor ID Number
Alias Name: 70000024
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 06/26/2006
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 08/09/2005
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 01/03/2006
Comments: PEA workplan approval

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/20/2006
Comments: DTSC issued a No Further Action determination based on a Preliminary Environmental Assessment Report

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CERS:

Name: MONUMENT RANCH SITE
Address: GOETZ ROAD / ETHANAC ROAD
City,State,Zip: PERRIS, CA 92570

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MONUMENT RANCH SITE (Continued)

S109548225

Site ID: 340232
 CERS ID: 70000024
 CERS Description: School Investigation

Affiliation:

Affiliation Type Desc: Lead Project Manager
 Entity Name: IVY OSORNIO
 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: Not reported

Affiliation Type Desc: Supervisor
 Entity Name: SHAHIR HADDAD
 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: Not reported

5
NW
1/4-1/2
0.433 mi.
2285 ft.

NATIVE PLANT
202 E ETHANAC
PERRIS, CA 92570

LUST **S109284869**
Cortese **N/A**
CERS

Relative:
Lower
Actual:
1419 ft.

LUST:

Name: NATIVE PLANT
 Address: 202 E ETHANAC
 City,State,Zip: PERRIS, CA 92570
 Lead Agency: RIVERSIDE COUNTY LOP
 Case Type: LUST Cleanup Site
 Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500254
 Global Id: T0606500254
 Latitude: 33.7466142384993
 Longitude: -117.222491446869
 Status: Completed - Case Closed
 Status Date: 11/08/1993
 Case Worker: RIV
 RB Case Number: 083301975T
 Local Agency: RIVERSIDE COUNTY LOP
 File Location: Local Agency Warehouse
 Local Case Number: 91562
 Potential Media Affect: Soil
 Potential Contaminants of Concern: Gasoline
 Site History: Not reported

LUST:

Global Id: T0606500254
 Contact Type: Regional Board Caseworker
 Contact Name: CARL BERNHARDT
 Organization Name: SANTA ANA RWQCB (REGION 8)
 Address: 3737 MAIN STREET, SUITE 500

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NATIVE PLANT (Continued)

S109284869

City: RIVERSIDE
Email: carl.bernhardt@waterboards.ca.gov
Phone Number: 9517824495

Global Id: T0606500254
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP
Organization Name: RIVERSIDE COUNTY LOP
Address: 3880 LEMON ST SUITE 200
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558980

LUST:

Global Id: T0606500254
Action Type: ENFORCEMENT
Date: 03/24/2009
Action: File review - #RCDEH Upload Site File 9/9/2015

Global Id: T0606500254
Action Type: Other
Date: 05/29/1990
Action: Leak Discovery

Global Id: T0606500254
Action Type: Other
Date: 05/29/1990
Action: Leak Stopped

Global Id: T0606500254
Action Type: Other
Date: 06/26/1991
Action: Leak Reported

Global Id: T0606500254
Action Type: ENFORCEMENT
Date: 03/25/2009
Action: Closure/No Further Action Letter - #Site Closure

LUST:

Global Id: T0606500254
Status: Open - Case Begin Date
Status Date: 05/29/1990

Global Id: T0606500254
Status: Open - Site Assessment
Status Date: 06/21/1991

Global Id: T0606500254
Status: Open - Remediation
Status Date: 04/02/1992

Global Id: T0606500254
Status: Open - Verification Monitoring
Status Date: 09/30/1993

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NATIVE PLANT (Continued)

S109284869

Global Id: T0606500254
Status: Completed - Case Closed
Status Date: 11/08/1993

RIVERSIDE CO. LUST:

Name: NATIVE PLANT
Address: 202 E ETHANAC RD
City,State,Zip: PERRIS, CA
Region: RIVERSIDE
Facility ID: 91562
Employee: Brown
Site Closed: Yes
Case Type: Soil only
Facility Status: closed/action completed
Casetype Decode: Soil only is impacted
Fstatus Decode: Closed/Action completed

CORTESE:

Name: NATIVE PLANT
Address: 202 E ETHANAC
City,State,Zip: PERRIS, CA 92570
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0606500254
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

CERS:

Name: NATIVE PLANT
Address: 202 E ETHANAC
City,State,Zip: PERRIS, CA 92570
Site ID: 202512
CERS ID: T0606500254
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Regional Board Caseworker
Entity Name: CARL BERNHARDT - SANTA ANA RWQCB (REGION 8)
Entity Title: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NATIVE PLANT (Continued)

S109284869

Affiliation Address: 3737 MAIN STREET, SUITE 500
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9517824495

Affiliation Type Desc: Local Agency Caseworker
Entity Name: Riverside County LOP - RIVERSIDE COUNTY LOP
Entity Title: Not reported
Affiliation Address: 3880 LEMON ST SUITE 200
Affiliation City: RIVERSIDE
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 9519558980

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NO SITES FOUND					

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2021	Source: EPA
Date Data Arrived at EDR: 05/03/2021	Telephone: N/A
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 08/04/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/27/2021	Source: EPA
Date Data Arrived at EDR: 05/03/2021	Telephone: N/A
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 08/04/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: N/A
Last EDR Contact: 08/04/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/30/2021
Date Made Active in Reports: 06/17/2021
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 06/23/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/04/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/27/2021	Source: EPA
Date Data Arrived at EDR: 05/03/2021	Telephone: 800-424-9346
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 08/04/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 10/25/2021
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/22/2021	Source: EPA
Date Data Arrived at EDR: 03/23/2021	Telephone: 800-424-9346
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (415) 495-8895
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (415) 495-8895
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (415) 495-8895
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	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: 03/22/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/23/2021	Telephone: (415) 495-8895
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 06/21/2021
Number of Days to Update: 57	Next Scheduled EDR Contact: 10/04/2021
	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: 05/10/2021	Source: Department of the Navy
Date Data Arrived at EDR: 05/13/2021	Telephone: 843-820-7326
Date Made Active in Reports: 08/03/2021	Last EDR Contact: 08/05/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 11/22/2021
	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: 05/17/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/21/2021	Telephone: 703-603-0695
Date Made Active in Reports: 08/11/2021	Last EDR Contact: 05/21/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 09/06/2021
	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: 05/17/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/21/2021	Telephone: 703-603-0695
Date Made Active in Reports: 08/11/2021	Last EDR Contact: 05/21/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 09/06/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/22/2021

Date Data Arrived at EDR: 03/24/2021

Date Made Active in Reports: 06/17/2021

Number of Days to Update: 85

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 06/17/2021

Next Scheduled EDR Contact: 10/04/2021

Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 04/23/2021

Date Data Arrived at EDR: 04/23/2021

Date Made Active in Reports: 07/12/2021

Number of Days to Update: 80

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 07/22/2021

Next Scheduled EDR Contact: 11/08/2021

Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 04/23/2021

Date Data Arrived at EDR: 04/23/2021

Date Made Active in Reports: 07/12/2021

Number of Days to Update: 80

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 07/22/2021

Next Scheduled EDR Contact: 11/08/2021

Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/10/2021

Date Data Arrived at EDR: 05/11/2021

Date Made Active in Reports: 07/27/2021

Number of Days to Update: 77

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 08/10/2021

Next Scheduled EDR Contact: 11/22/2021

Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST: 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: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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 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 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

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/12/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/07/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/01/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/16/2020	Telephone: 415-972-3372
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/09/2020	Source: EPA Region 8
Date Data Arrived at EDR: 12/16/2020	Telephone: 303-312-6271
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 11/01/2021
	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: 09/30/2020	Source: EPA Region 7
Date Data Arrived at EDR: 12/22/2020	Telephone: 913-551-7003
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 11/01/2021
	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: 10/02/2020	Source: EPA Region 4
Date Data Arrived at EDR: 12/18/2020	Telephone: 404-562-8677
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 11/01/2021
	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: 10/01/2020	Source: EPA Region 1
Date Data Arrived at EDR: 12/16/2020	Telephone: 617-918-1313
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 11/01/2021
	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: 04/08/2020	Source: EPA Region 6
Date Data Arrived at EDR: 05/20/2020	Telephone: 214-665-6597
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 06/11/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 11/01/2021
	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: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 02/17/2021
Date Made Active in Reports: 03/22/2021
Number of Days to Update: 33

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/05/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 04/01/2021
Number of Days to Update: 23

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Semi-Annually

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: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
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: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
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: 10/07/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/09/2020
Date Data Arrived at EDR: 12/16/2020
Date Made Active in Reports: 03/12/2021
Number of Days to Update: 86

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 06/11/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 10/02/2020	Source: EPA Region 4
Date Data Arrived at EDR: 12/18/2020	Telephone: 404-562-9424
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 11/01/2021
	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: 11/12/2020	Source: EPA Region 10
Date Data Arrived at EDR: 12/16/2020	Telephone: 206-553-2857
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2020	Source: EPA, Region 1
Date Data Arrived at EDR: 12/16/2020	Telephone: 617-918-1313
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 11/01/2021
	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: 09/30/2020	Source: EPA Region 7
Date Data Arrived at EDR: 12/22/2020	Telephone: 913-551-7003
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/01/2020	Source: EPA Region 9
Date Data Arrived at EDR: 12/16/2020	Telephone: 415-972-3368
Date Made Active in Reports: 03/12/2021	Last EDR Contact: 06/11/2021
Number of Days to Update: 86	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 06/15/2021
Number of Days to Update: 142	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 04/23/2021
Date Data Arrived at EDR: 04/23/2021
Date Made Active in Reports: 07/12/2021
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/22/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
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: No Update Planned

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 10/04/2021
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: 03/15/2021
Date Data Arrived at EDR: 03/16/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/10/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/23/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/04/2021
Next Scheduled EDR Contact: 11/22/2021
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: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
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: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/18/2021	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 05/18/2021	Telephone: 202-307-1000
Date Made Active in Reports: 08/03/2021	Last EDR Contact: 05/22/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 09/06/2021
	Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 04/23/2021	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 04/23/2021	Telephone: 916-323-3400
Date Made Active in Reports: 07/12/2021	Last EDR Contact: 07/22/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 11/08/2021
	Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/20/2021	Telephone: 916-255-6504
Date Made Active in Reports: 04/08/2021	Last EDR Contact: 08/10/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/30/1995	Telephone: 916-227-4364
Date Made Active in Reports: 09/26/1995	Last EDR Contact: 01/26/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/27/2009
	Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 04/20/2021
Date Made Active in Reports: 07/07/2021
Number of Days to Update: 78

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 07/15/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/18/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 08/03/2021
Number of Days to Update: 77

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 02/24/2021
Date Data Arrived at EDR: 02/24/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/07/2021
Date Made Active in Reports: 07/23/2021
Number of Days to Update: 77

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 07/26/2021
Next Scheduled EDR Contact: 11/14/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/05/1995	Telephone: 916-341-5851
Date Made Active in Reports: 09/29/1995	Last EDR Contact: 12/28/1998
Number of Days to Update: 24	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 04/19/2021	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 04/20/2021	Telephone: 916-323-2514
Date Made Active in Reports: 07/07/2021	Last EDR Contact: 07/15/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/01/2021	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 03/03/2021	Telephone: 916-323-3400
Date Made Active in Reports: 05/20/2021	Last EDR Contact: 05/25/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 09/13/2021
	Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/27/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/03/2021	Telephone: 202-564-6023
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 08/04/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 10/11/2021
	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: 03/02/2021	Source: DTSC and SWRCB
Date Data Arrived at EDR: 03/03/2021	Telephone: 916-323-3400
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 05/28/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 09/13/2021
	Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/22/2021	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 03/24/2021	Telephone: 202-366-4555
Date Made Active in Reports: 06/17/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 10/04/2021
	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: 04/04/2021	Source: Office of Emergency Services
Date Data Arrived at EDR: 04/20/2021	Telephone: 916-845-8400
Date Made Active in Reports: 07/07/2021	Last EDR Contact: 07/15/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 11/01/2021
	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: 03/08/2021	Source: State Water Quality Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/31/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 22	Next Scheduled EDR Contact: 09/20/2021
	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: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/31/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 22	Next Scheduled EDR Contact: 09/20/2021
	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	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 05/04/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 85

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 08/30/2021
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 10/25/2021
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: 07/09/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/06/2021
Next Scheduled EDR Contact: 11/22/2021
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: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 06/17/2021
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 07/26/2021
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/15/2021
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 08/06/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 11/15/2021
	Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 06/17/2020	Telephone: 202-260-5521
Date Made Active in Reports: 09/10/2020	Last EDR Contact: 06/17/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 09/27/2021
	Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018	Source: EPA
Date Data Arrived at EDR: 08/14/2020	Telephone: 202-566-0250
Date Made Active in Reports: 11/04/2020	Last EDR Contact: 05/17/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 08/30/2021
	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: 04/19/2021	Source: EPA
Date Data Arrived at EDR: 04/20/2021	Telephone: 202-564-4203
Date Made Active in Reports: 07/16/2021	Last EDR Contact: 07/19/2021
Number of Days to Update: 87	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/27/2021	Source: EPA
Date Data Arrived at EDR: 05/03/2021	Telephone: 703-416-0223
Date Made Active in Reports: 05/19/2021	Last EDR Contact: 08/04/2021
Number of Days to Update: 16	Next Scheduled EDR Contact: 09/13/2021
	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: 05/07/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/13/2021	Telephone: 202-564-8600
Date Made Active in Reports: 08/03/2021	Last EDR Contact: 07/14/2021
Number of Days to Update: 82	Next Scheduled EDR Contact: 11/01/2021
	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	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	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: 12/30/2020	Source: EPA
Date Data Arrived at EDR: 01/14/2021	Telephone: 202-564-6023
Date Made Active in Reports: 03/05/2021	Last EDR Contact: 08/04/2021
Number of Days to Update: 50	Next Scheduled EDR Contact: 11/15/2021
	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: 11/19/2020	Source: EPA
Date Data Arrived at EDR: 01/08/2021	Telephone: 202-566-0500
Date Made Active in Reports: 03/22/2021	Last EDR Contact: 07/09/2021
Number of Days to Update: 73	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: No Update Planned

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: 03/08/2021
Date Data Arrived at EDR: 03/11/2021
Date Made Active in Reports: 05/11/2021
Number of Days to Update: 61

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 07/14/2021
Next Scheduled EDR Contact: 11/01/2021
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: 12/31/2019
Date Data Arrived at EDR: 12/01/2020
Date Made Active in Reports: 02/09/2021
Number of Days to Update: 70

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 08/06/2021
Number of Days to Update: 96	Next Scheduled EDR Contact: 11/15/2021
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 06/22/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: No Update Planned

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 01/28/2020	Telephone: 202-366-4595
Date Made Active in Reports: 04/17/2020	Last EDR Contact: 07/23/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 11/08/2021
	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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 07/14/2021
Date Made Active in Reports: 07/16/2021
Number of Days to Update: 2

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/02/2021
Next Scheduled EDR Contact: 10/18/2021
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: 12/31/2017
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 151

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/21/2021
Next Scheduled EDR Contact: 10/04/2021
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: 07/02/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Varies

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/23/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/12/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/27/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 08/04/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: No Update Planned

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: No Update Planned

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: 05/03/2021
Date Data Arrived at EDR: 05/25/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 78

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/06/2021
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: 05/27/2021
Date Data Arrived at EDR: 05/27/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 14

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 07/01/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 05/27/2021
Number of Days to Update: 97	Next Scheduled EDR Contact: 09/06/2021
	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: 03/23/2021	Source: Department of Interior
Date Data Arrived at EDR: 03/25/2021	Telephone: 202-208-2609
Date Made Active in Reports: 06/17/2021	Last EDR Contact: 06/14/2021
Number of Days to Update: 84	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2021	Source: EPA
Date Data Arrived at EDR: 03/03/2021	Telephone: (415) 947-8000
Date Made Active in Reports: 04/05/2021	Last EDR Contact: 05/18/2021
Number of Days to Update: 33	Next Scheduled EDR Contact: 09/13/2021
	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: 04/04/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/06/2021	Telephone: 202-564-2280
Date Made Active in Reports: 06/25/2021	Last EDR Contact: 07/01/2021
Number of Days to Update: 80	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018	Source: Department of Defense
Date Data Arrived at EDR: 07/02/2020	Telephone: 703-704-1564
Date Made Active in Reports: 09/17/2020	Last EDR Contact: 07/07/2021
Number of Days to Update: 77	Next Scheduled EDR Contact: 10/25/2021
	Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/21/2021
Next Scheduled EDR Contact: 09/06/2021
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: 05/14/2021
Date Data Arrived at EDR: 05/14/2021
Date Made Active in Reports: 08/03/2021
Number of Days to Update: 81

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/13/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/22/2021
Date Data Arrived at EDR: 03/23/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 79

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 06/17/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 08/13/2021
Next Scheduled EDR Contact: 11/22/2021
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: 05/18/2021
Date Data Arrived at EDR: 05/19/2021
Date Made Active in Reports: 08/05/2021
Number of Days to Update: 78

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/04/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 77

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Annually

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/26/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
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: 12/31/2018
Date Data Arrived at EDR: 06/16/2020
Date Made Active in Reports: 08/28/2020
Number of Days to Update: 73

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/10/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/16/2021
Date Data Arrived at EDR: 04/20/2021
Date Made Active in Reports: 07/07/2021
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 07/15/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/14/2021
Date Data Arrived at EDR: 04/15/2021
Date Made Active in Reports: 07/06/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/13/2021
Date Data Arrived at EDR: 05/13/2021
Date Made Active in Reports: 07/26/2021
Number of Days to Update: 74

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/04/2021
Next Scheduled EDR Contact: 11/22/2021
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/09/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/14/2021
Date Data Arrived at EDR: 05/14/2021
Date Made Active in Reports: 07/27/2021
Number of Days to Update: 74

Source: Department of Toxic Substances Control
Telephone: 877-786-9427
Last EDR Contact: 08/13/2021
Next Scheduled EDR Contact: 11/29/2021
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 [CALSTES]. 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: 05/14/2021
Date Data Arrived at EDR: 05/14/2021
Date Made Active in Reports: 07/27/2021
Number of Days to Update: 74

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/13/2021
Next Scheduled EDR Contact: 11/29/2021
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: 04/05/2021
Date Data Arrived at EDR: 04/06/2021
Date Made Active in Reports: 06/23/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/01/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/29/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/10/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 07/27/2021
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/13/2021
Next Scheduled EDR Contact: 11/22/2021
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: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 78

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/09/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/04/2021
Next Scheduled EDR Contact: 09/20/2021
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: 03/12/2021
Date Data Arrived at EDR: 03/16/2021
Date Made Active in Reports: 06/01/2021
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/31/2021
Number of Days to Update: 22

Source: Department of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 03/08/2021
Date Data Arrived at EDR: 03/09/2021
Date Made Active in Reports: 03/30/2021
Number of Days to Update: 21

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 11/19/2019	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 01/07/2020	Telephone: 559-445-5577
Date Made Active in Reports: 03/09/2020	Last EDR Contact: 07/01/2021
Number of Days to Update: 62	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 08/10/2021
Number of Days to Update: 9	Next Scheduled EDR Contact: 11/29/2021
	Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 06/15/2021
Number of Days to Update: 13	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/09/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 916-341-5810
Date Made Active in Reports: 03/31/2021	Last EDR Contact: 06/07/2021
Number of Days to Update: 22	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 05/19/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/19/2021	Telephone: 866-794-4977
Date Made Active in Reports: 08/12/2021	Last EDR Contact: 05/19/2021
Number of Days to Update: 85	Next Scheduled EDR Contact: 09/13/2021
	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: 04/19/2021	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 04/20/2021	Telephone: 916-323-2514
Date Made Active in Reports: 07/07/2021	Last EDR Contact: 07/15/2021
Number of Days to Update: 78	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 03/08/2021	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/09/2021	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2021	Last EDR Contact: 06/03/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 09/20/2021
	Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System Mineral Resources Data System

Date of Government Version: 04/06/2018	Source: USGS
Date Data Arrived at EDR: 10/21/2019	Telephone: 703-648-6533
Date Made Active in Reports: 10/24/2019	Last EDR Contact: 05/27/2021
Number of Days to Update: 3	Next Scheduled EDR Contact: 09/06/2021
	Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/08/2021	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 04/09/2021	Telephone: 916-324-2444
Date Made Active in Reports: 04/20/2021	Last EDR Contact: 06/29/2021
Number of Days to Update: 11	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011	Source: EPA, Office of Water
Date Data Arrived at EDR: 08/05/2011	Telephone: 202-564-2496
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 06/30/2021
Number of Days to Update: 55	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: No Update Planned

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014	Source: EPA
Date Data Arrived at EDR: 01/06/2015	Telephone: 202-564-2496
Date Made Active in Reports: 05/06/2015	Last EDR Contact: 06/30/2021
Number of Days to Update: 120	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: No Update Planned

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014	Source: EPA
Date Data Arrived at EDR: 02/05/2015	Telephone: 202-564-2497
Date Made Active in Reports: 03/06/2015	Last EDR Contact: 06/30/2021
Number of Days to Update: 29	Next Scheduled EDR Contact: 10/18/2021
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 03/17/2021
Date Data Arrived at EDR: 03/18/2021
Date Made Active in Reports: 03/25/2021
Number of Days to Update: 7

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 02/04/2021
Date Made Active in Reports: 04/23/2021
Number of Days to Update: 78

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 07/26/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing

Cupa facility list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 06/15/2021
Date Data Arrived at EDR: 06/16/2021
Date Made Active in Reports: 07/02/2021
Number of Days to Update: 16

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/15/2021
Next Scheduled EDR Contact: 10/04/2021
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: 07/26/2021
Next Scheduled EDR Contact: 11/15/2021
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: 04/21/2021
Date Data Arrived at EDR: 04/22/2021
Date Made Active in Reports: 07/12/2021
Number of Days to Update: 81

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 12/17/2020
Date Data Arrived at EDR: 01/28/2021
Date Made Active in Reports: 04/16/2021
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List CUPA facility list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/10/2021
Date Data Arrived at EDR: 05/12/2021
Date Made Active in Reports: 07/26/2021
Number of Days to Update: 75

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
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: 01/14/2021
Date Data Arrived at EDR: 01/15/2021
Date Made Active in Reports: 04/05/2021
Number of Days to Update: 80

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 06/23/2021
Next Scheduled EDR Contact: 10/11/2021
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: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List

CUPA facility list.

Date of Government Version: 05/17/2021
Date Data Arrived at EDR: 05/18/2021
Date Made Active in Reports: 05/20/2021
Number of Days to Update: 2

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List

Cupa facility list.

Date of Government Version: 04/14/2021
Date Data Arrived at EDR: 04/15/2021
Date Made Active in Reports: 07/06/2021
Number of Days to Update: 82

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

INYO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
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: 04/22/2021
Date Data Arrived at EDR: 04/30/2021
Date Made Active in Reports: 07/19/2021
Number of Days to Update: 80

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 01/19/2021
Date Data Arrived at EDR: 01/21/2021
Date Made Active in Reports: 01/28/2021
Number of Days to Update: 7

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/15/2021
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: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 05/10/2021
Date Data Arrived at EDR: 05/12/2021
Date Made Active in Reports: 07/26/2021
Number of Days to Update: 75

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/06/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Varies

LASSEN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
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: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 04/08/2021
Date Data Arrived at EDR: 04/13/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 76

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 06/29/2021
Next Scheduled EDR Contact: 10/18/2021
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/12/2021
Date Data Arrived at EDR: 04/13/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 76

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/09/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2021
Date Data Arrived at EDR: 02/18/2021
Date Made Active in Reports: 05/10/2021
Number of Days to Update: 81

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/06/2021
Next Scheduled EDR Contact: 10/25/2021
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: 06/17/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 02/04/2021	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 04/16/2021	Telephone: 626-458-6973
Date Made Active in Reports: 04/21/2021	Last EDR Contact: 07/12/2021
Number of Days to Update: 5	Next Scheduled EDR Contact: 10/25/2021
	Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 04/19/2021	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/17/2021	Telephone: 213-978-3800
Date Made Active in Reports: 06/28/2021	Last EDR Contact: 06/17/2021
Number of Days to Update: 11	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 06/17/2021
Number of Days to Update: 58	Next Scheduled EDR Contact: 10/04/2021
	Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/02/2021	Source: Community Health Services
Date Data Arrived at EDR: 04/16/2021	Telephone: 323-890-7806
Date Made Active in Reports: 07/06/2021	Last EDR Contact: 07/09/2021
Number of Days to Update: 81	Next Scheduled EDR Contact: 10/25/2021
	Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 07/06/2021
Number of Days to Update: 21	Next Scheduled EDR Contact: 10/25/2021
	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	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 562-570-2563
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 07/13/2021
Number of Days to Update: 65	Next Scheduled EDR Contact: 11/01/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST TORRANCE: City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
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: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
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: 06/22/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: No Update Planned

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 03/24/2021
Date Data Arrived at EDR: 04/07/2021
Date Made Active in Reports: 06/24/2021
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List CUPA facility list.

Date of Government Version: 05/13/2021
Date Data Arrived at EDR: 05/14/2021
Date Made Active in Reports: 07/26/2021
Number of Days to Update: 73

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 08/09/2021
Next Scheduled EDR Contact: 11/28/2021
Data Release Frequency: Varies

MONO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/02/2021
Next Scheduled EDR Contact: 09/06/3021
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/23/2021
Date Data Arrived at EDR: 06/23/2021
Date Made Active in Reports: 06/24/2021
Number of Days to Update: 1

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 06/22/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List CUPA facility list.

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 04/29/2021
Date Made Active in Reports: 07/15/2021
Number of Days to Update: 77

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/20/2021
Next Scheduled EDR Contact: 11/08/2021
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups Petroleum and non-petroleum spills.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 04/30/2021
Date Made Active in Reports: 07/19/2021
Number of Days to Update: 80

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/29/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 05/03/2021
Date Made Active in Reports: 05/12/2021
Number of Days to Update: 9

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 04/29/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 04/29/2021
Date Data Arrived at EDR: 04/30/2021
Date Made Active in Reports: 07/19/2021
Number of Days to Update: 80

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 07/29/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 05/26/2021
Date Made Active in Reports: 06/01/2021
Number of Days to Update: 6

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
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: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
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: 06/29/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 14

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 06/29/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 14

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/07/2021
Next Scheduled EDR Contact: 09/27/2021
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: 03/30/2021
Date Data Arrived at EDR: 04/01/2021
Date Made Active in Reports: 06/23/2021
Number of Days to Update: 83

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/01/2021
Next Scheduled EDR Contact: 10/11/2021
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: 03/30/2021
Date Data Arrived at EDR: 04/01/2021
Date Made Active in Reports: 06/25/2021
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 08/04/2021
Next Scheduled EDR Contact: 10/11/2021
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 04/29/2021
Date Made Active in Reports: 05/03/2021
Number of Days to Update: 4

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 07/26/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 05/19/2021
Date Data Arrived at EDR: 05/19/2021
Date Made Active in Reports: 06/07/2021
Number of Days to Update: 19

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/02/2021
Date Data Arrived at EDR: 03/03/2021
Date Made Active in Reports: 05/21/2021
Number of Days to Update: 79

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 05/28/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/01/2021
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: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/07/2021
Date Made Active in Reports: 07/23/2021
Number of Days to Update: 77

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
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: 05/06/2021
Date Data Arrived at EDR: 05/07/2021
Date Made Active in Reports: 07/23/2021
Number of Days to Update: 77

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/08/2021
Next Scheduled EDR Contact: 09/27/2021
Data Release Frequency: No Update Planned

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List

Cupa Facility List.

Date of Government Version: 05/07/2021
Date Data Arrived at EDR: 05/11/2021
Date Made Active in Reports: 05/14/2021
Number of Days to Update: 3

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
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: 06/10/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/02/2021
Next Scheduled EDR Contact: 09/20/2021
Data Release Frequency: No Update Planned

SANTA BARBARA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 02/24/2021
Date Data Arrived at EDR: 02/26/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 82

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/04/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/18/2021
Next Scheduled EDR Contact: 09/06/2021
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: 07/27/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: Varies

SHASTA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 08/10/2021
Next Scheduled EDR Contact: 11/29/2021
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: No Update Planned

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 03/23/2021
Date Data Arrived at EDR: 03/25/2021
Date Made Active in Reports: 06/10/2021
Number of Days to Update: 77

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/22/2021
Next Scheduled EDR Contact: 09/12/2021
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: 06/28/2021
Next Scheduled EDR Contact: 10/04/2021
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: 04/01/2021
Date Data Arrived at EDR: 04/01/2021
Date Made Active in Reports: 06/23/2021
Number of Days to Update: 83

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/15/2021
Next Scheduled EDR Contact: 10/04/2021
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List Cupa facility list

Date of Government Version: 05/14/2021
Date Data Arrived at EDR: 05/17/2021
Date Made Active in Reports: 08/03/2021
Number of Days to Update: 78

Source: Stanislaus County Department of Environmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/06/2021
Next Scheduled EDR Contact: 10/25/2021
Data Release Frequency: Varies

SUTTER COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 03/01/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 05/25/2021
Next Scheduled EDR Contact: 09/13/2021
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List

Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/15/2021
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List

Cupa facility list

Date of Government Version: 04/14/2021
Date Data Arrived at EDR: 04/15/2021
Date Made Active in Reports: 07/06/2021
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List

Cupa program facilities

Date of Government Version: 04/26/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 08/10/2021
Next Scheduled EDR Contact: 11/15/2021
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: Division of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 07/13/2021
Next Scheduled EDR Contact: 11/01/2021
Data Release Frequency: Varies

VENTURA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 03/29/2021	Source: Ventura County Environmental Health Division
Date Data Arrived at EDR: 04/22/2021	Telephone: 805-654-2813
Date Made Active in Reports: 07/12/2021	Last EDR Contact: 07/15/2021
Number of Days to Update: 81	Next Scheduled EDR Contact: 11/01/2021
	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	Source: Environmental Health Division
Date Data Arrived at EDR: 12/01/2011	Telephone: 805-654-2813
Date Made Active in Reports: 01/19/2012	Last EDR Contact: 06/22/2021
Number of Days to Update: 49	Next Scheduled EDR Contact: 10/11/2021
	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	Source: Environmental Health Division
Date Data Arrived at EDR: 06/24/2008	Telephone: 805-654-2813
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 08/04/2021
Number of Days to Update: 37	Next Scheduled EDR Contact: 11/22/2021
	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: 03/29/2021	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 04/21/2021	Telephone: 805-654-2813
Date Made Active in Reports: 04/23/2021	Last EDR Contact: 07/15/2021
Number of Days to Update: 2	Next Scheduled EDR Contact: 11/01/2021
	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: 03/01/2021	Source: Environmental Health Division
Date Data Arrived at EDR: 03/09/2021	Telephone: 805-654-2813
Date Made Active in Reports: 03/31/2021	Last EDR Contact: 06/04/2021
Number of Days to Update: 22	Next Scheduled EDR Contact: 09/20/2021
	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: 03/26/2021	Source: Yolo County Department of Health
Date Data Arrived at EDR: 04/01/2021	Telephone: 530-666-8646
Date Made Active in Reports: 06/23/2021	Last EDR Contact: 06/22/2021
Number of Days to Update: 83	Next Scheduled EDR Contact: 10/11/2021
	Data Release Frequency: Annually

YUBA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 04/21/2021

Date Data Arrived at EDR: 04/22/2021

Date Made Active in Reports: 05/12/2021

Number of Days to Update: 20

Source: Yuba County Environmental Health Department

Telephone: 530-749-7523

Last EDR Contact: 07/20/2021

Next Scheduled EDR Contact: 11/08/2021

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: 03/24/2021

Date Data Arrived at EDR: 05/11/2021

Date Made Active in Reports: 07/28/2021

Number of Days to Update: 78

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375

Last EDR Contact: 08/10/2021

Next Scheduled EDR Contact: 11/22/2021

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: 07/09/2021

Next Scheduled EDR Contact: 10/18/2021

Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019

Date Data Arrived at EDR: 04/29/2020

Date Made Active in Reports: 07/10/2020

Number of Days to Update: 72

Source: Department of Environmental Conservation

Telephone: 518-402-8651

Last EDR Contact: 07/29/2021

Next Scheduled EDR Contact: 11/08/2021

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: 07/07/2021

Next Scheduled EDR Contact: 10/25/2021

Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2019

Date Data Arrived at EDR: 02/11/2021

Date Made Active in Reports: 02/24/2021

Number of Days to Update: 13

Source: Department of Environmental Management

Telephone: 401-222-2797

Last EDR Contact: 08/11/2021

Next Scheduled EDR Contact: 11/29/2021

Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/03/2021
Next Scheduled EDR Contact: 09/20/2021
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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

RUTLEDGE PARCEL
26065 BYERS ROAD
SUN CITY, CA 92585

TARGET PROPERTY COORDINATES

Latitude (North):	33.741683 - 33° 44' 30.06"
Longitude (West):	117.216164 - 117° 12' 58.19"
Universal Transverse Mercator:	Zone 11
UTM X (Meters):	479977.0
UTM Y (Meters):	3733342.2
Elevation:	1432 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5641314 ROMOLAND, CA
Version Date:	2012
North Map:	5641330 PERRIS, CA
Version Date:	2012

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

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

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

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

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

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

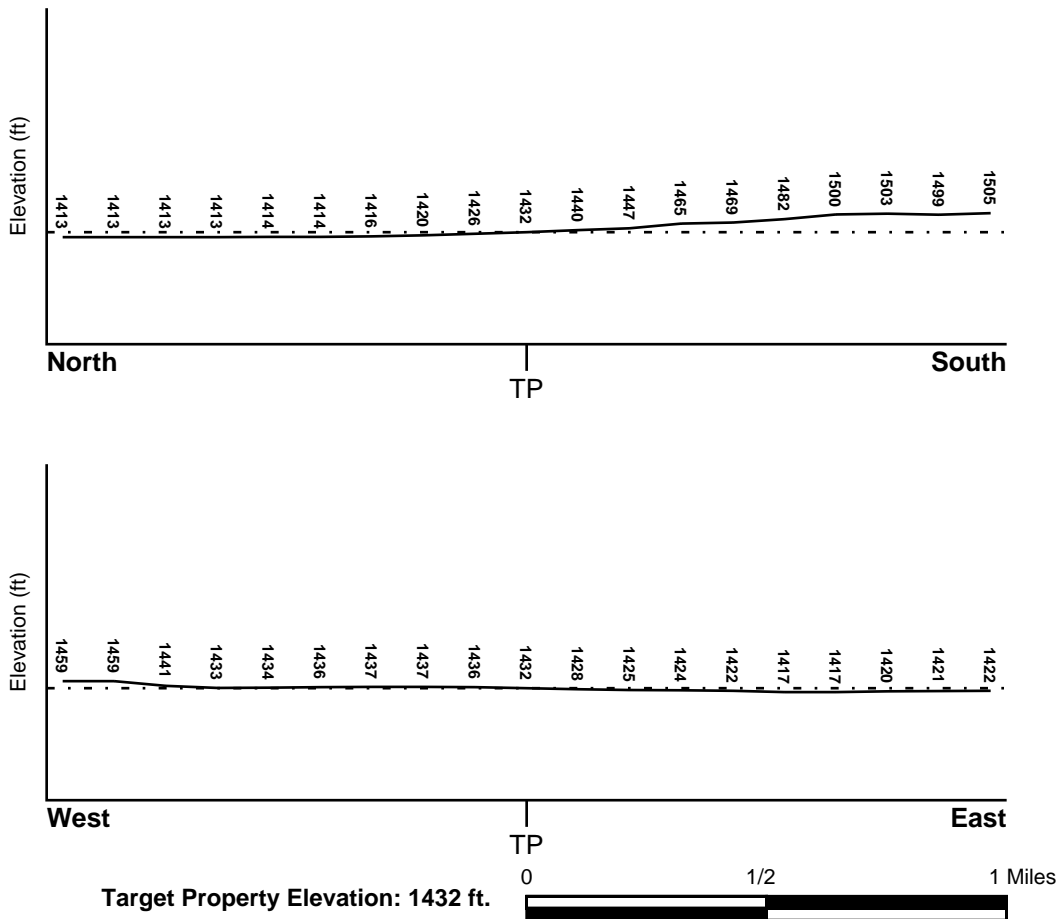
TOPOGRAPHIC INFORMATION

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

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NNE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06065C2055H	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06065C1440H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
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.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

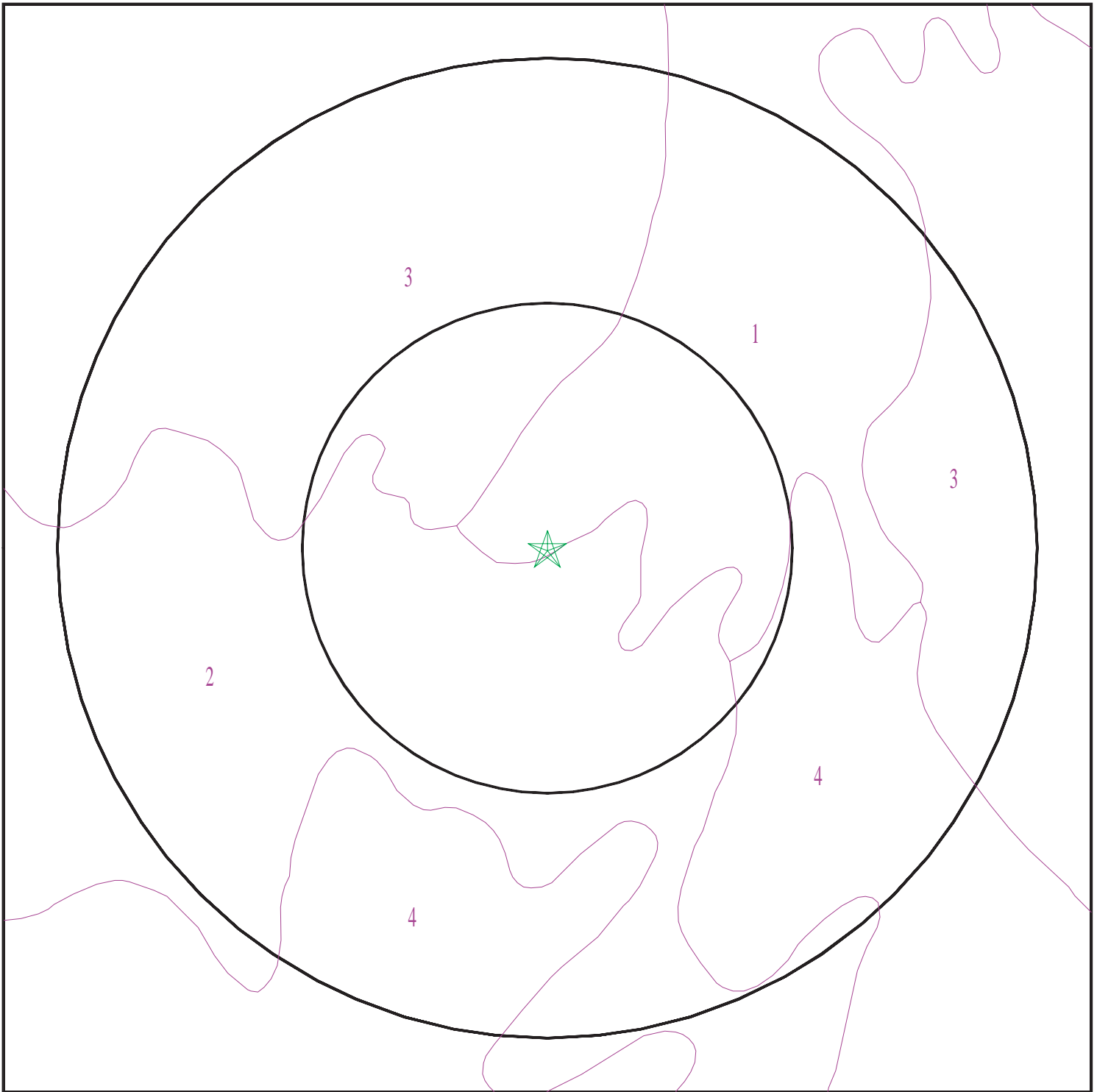
Era: Mesozoic
System: Cretaceous
Series: Cretaceous granitic rocks
Code: Kg *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6620490.2s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: Rutledge Parcel
ADDRESS: 26065 Byers Road
Sun City CA 92585
LAT/LONG: 33.741683 / 117.216164

CLIENT: Partner Engineering and Science, Inc.
CONTACT: Marisol Garcia
INQUIRY #: 6620490.2s
DATE: August 16, 2021 10:30 am

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: BUCHENAU

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
2	9 inches	51 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
3	51 inches	61 inches	cemented	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: LAS POSAS

Soil Surface Texture: loam

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

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.42 Min: 0	Max: Min:
2	11 inches	31 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.42 Min: 0	Max: Min:
3	31 inches	53 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.42 Min: 0	Max: Min:

Soil Map ID: 3

Soil Component Name: PORTERVILLE

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0.01	Max: Min:
2	7 inches	35 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0.01	Max: Min:
3	35 inches	40 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0.01	Max: Min:

Soil Map ID: 4

Soil Component Name: AULD

Soil Surface Texture: clay

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

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	27 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0	Max: Min:
2	27 inches	44 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0	Max: Min:
3	44 inches	48 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A2	USGS40000137694	1/2 - 1 Mile ESE
3	USGS40000137574	1/2 - 1 Mile SSE
B4	USGS40000137732	1/2 - 1 Mile East
6	USGS40000137534	1/2 - 1 Mile SSE
C7	USGS40000137659	1/2 - 1 Mile ESE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
---------------	----------------	-----------------------------

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

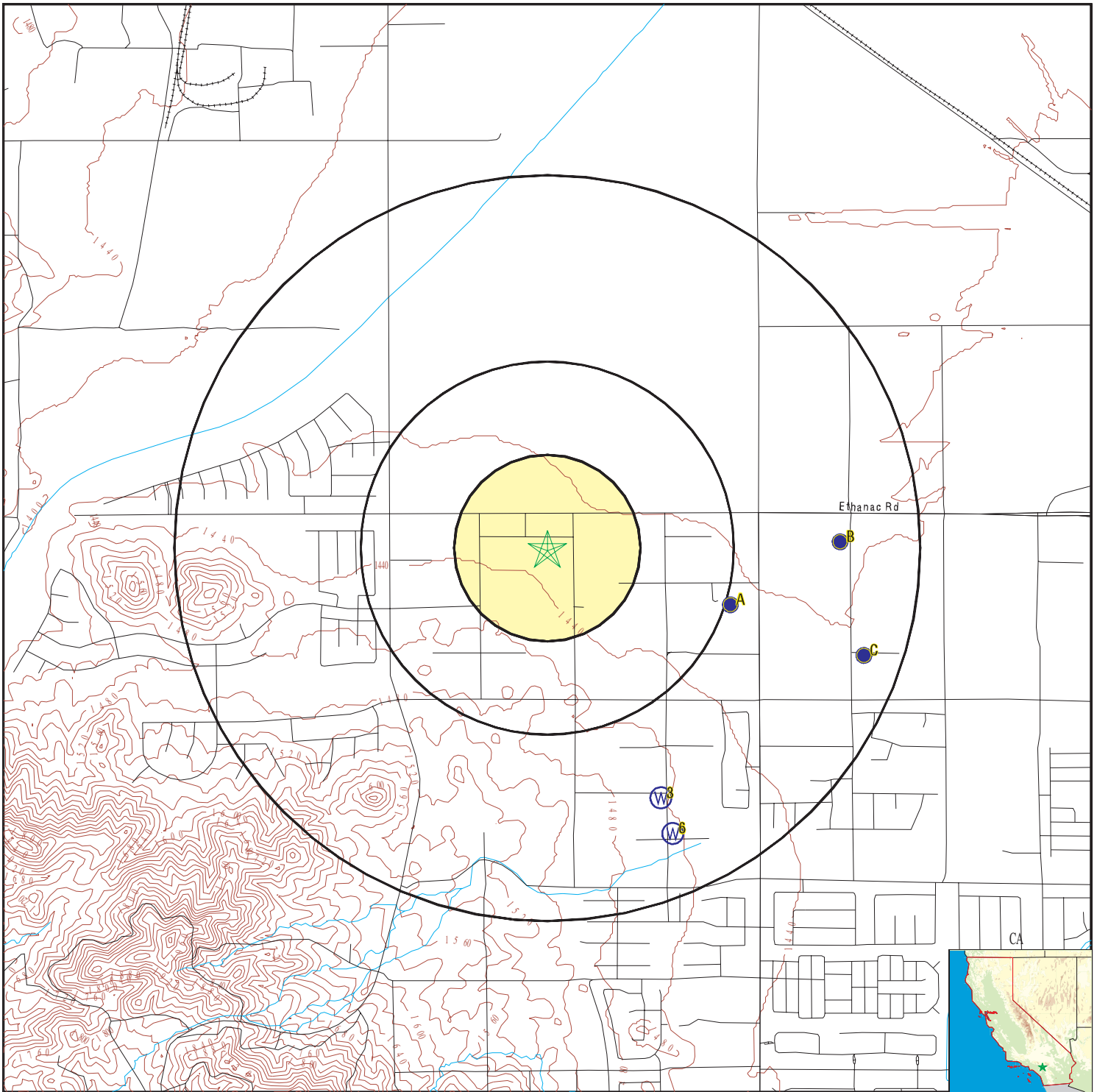
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

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

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	CADWR9000005258	1/4 - 1/2 Mile ESE
B5	CAUSGSN00017156	1/2 - 1 Mile East
C8	CAUSGSN00014749	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 6620490.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Rutledge Parcel
 ADDRESS: 26065 Byers Road
 Sun City CA 92585
 LAT/LONG: 33.741683 / 117.216164

CLIENT: Partner Engineering and Science, Inc.
 CONTACT: Marisol Garcia
 INQUIRY #: 6620490.2s
 DATE: August 16, 2021 10:30 am

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A1
ESE
1/4 - 1/2 Mile
Lower

CA WELLS CADWR9000005258

State Well #:	05S03W17A001S	Station ID:	6316
Well Name:	Not Reported	Basin Name:	San Jacinto
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

A2
ESE
1/2 - 1 Mile
Lower

FED USGS USGS40000137694

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S003W17A001S	Type:	Well
Description:	Not Reported	HUC:	18070202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19950206	Well Depth:	160
Well Depth Units:	ft	Well Hole Depth:	160
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1995-02-07
Feet below surface:	22	Feet to sea level:	Not Reported
Note:	Not Reported		

3
SSE
1/2 - 1 Mile
Higher

FED USGS USGS40000137574

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S003W17Q001S	Type:	Well
Description:	Not Reported	HUC:	18070202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Other aquifers	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	198809
Well Depth:	210	Well Depth Units:	ft
Well Hole Depth:	210	Well Hole Depth Units:	ft

B4
East
1/2 - 1 Mile
Lower

FED USGS USGS40000137732

Organization ID:	USGS-CA
Organization Name:	USGS California Water Science Center

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Monitor Location:	005S003W16D001S	Type:	Well
Description:	Not Reported	HUC:	18070202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	160
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

B5
East
1/2 - 1 Mile
Lower

CA WELLS CAUSGSN00017156

Well ID:	USGS-334431117120601	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-334431117120601	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&amp_date=&global_id=&assigned_name=USGS-334431117120601&store_num=		
GeoTracker Data:	Not Reported		

6
SSE
1/2 - 1 Mile
Higher

FED USGS USGS40000137534

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S003W17R002S	Type:	Well
Description:	Not Reported	HUC:	18070202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19920211	Well Depth:	220
Well Depth Units:	ft	Well Hole Depth:	220
Well Hole Depth Units:	ft		

C7
ESE
1/2 - 1 Mile
Lower

FED USGS USGS40000137659

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	005S003W16F001S	Type:	Well
Description:	Not Reported	HUC:	18070202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

C8
ESE
1/2 - 1 Mile
Lower

CA WELLS CAUSGSN00014749

Well ID:	USGS-334415117120201	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-334415117120201	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&stamp_date=&global_id=&assigned_name=USGS-334415117120201&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92585	6	0

Federal EPA Radon Zone for RIVERSIDE 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 RIVERSIDE COUNTY, CA

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.117 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.450 pCi/L	100%	0%	0%
Basement	1.700 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

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

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^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 California's 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 Health Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

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

California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

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

RADON

State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information

Source: USGS

Telephone: 703-356-4020

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

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

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

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

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

STREET AND ADDRESS INFORMATION

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APPENDIX D: QUALIFICATIONS

Education

Associates Degree of Language Arts, Olympia-Morata-Gymnasium (Germany)

Highlights

13 years in the due diligence industry conducting Phase I Environmental Site Assessments

Experience Summary

Ms. McCondichie has over 13 years of experience in the environmental industry. She has significant experience in due diligence assessments for a variety of property types and the needs and requirements of varied number of reporting standards, including ASTM standards, EPA's All Appropriate Inquiry (AAI), and customized client formats. Specifically, Ms. McCondichie has experience in environmental and air quality related fields and has conducted over 100 Phase I Environmental Site Assessment (ESA) projects.

In addition, Ms. McCondichie has performed and managed environmental site assessments on various industrial, commercial, institutional and residential properties. Assessments included limited and comprehensive surveys for asbestos, lead-based paint and lead-in-drinking-water analysis. She has also managed subsurface investigations to determine the presence of contamination in soil; prepared written reports in formats prescribed by various fiduciary institutions and performed peer reviews on environmental site assessments completed by other environmental firms.

Finally, Ms. McCondichie's diversity across residential and commercial environments is a major contribution in the Southwest region of the United States.

Education

Bachelor of Science in Environmental Studies, University of Utah, 2006

Registrations

Certified AHERA Asbestos Inspector (ASB #3633)

Training

OSHA 40-Hour HAZWOPER

OSHA 8-Hour HAZWOPER Refresher

Highlights

Over 10 years' experience in the environmental consulting industry

Over 10 years completing Phase I ESA Assessments

Over 10 years with Transaction Screen Assessments

NEPA Form 21 projects

Limited subsurface investigation sampling

Experience Summary

Ms. Pizzello currently holds the role of a Project Manager and her responsibilities include thorough site assessment and technical report writing in line with the American Society of Testing and Materials (ASTM) standard and US Environmental Protection Agency's All Appropriate Inquiry (AAI) as well as customized client formats. Ms. Pizzello has performed various Phase I Environmental Site Assessments, Environmental Transaction Screens, Environmental Desktop Reports, and Peer Reviews throughout the United States, and serves as a technical reviewer on environmental due diligence assessments.

Ms. Pizzello has performed Phase I Environmental Site Assessments and other related environmental assessments for a number of different commercial, residential, and industrial properties ranging in scope and complexity. Specifically, Ms. Pizzello has performed environmental assessments on large acreage agricultural field properties, large tracts of undeveloped land, residences, assisted living facilities, numerous multi-family housing properties, mobile home parks, medical clinics, and commercial office buildings, to more complicated sites, such as multi-family housing located on NPL Superfund sites, manufacturing facilities, warehouses located in former military bases, gasoline stations, automobile dealerships, a small municipal airport, industrial facilities, and numerous, large acreage multi-tenant strip malls. Ms. Pizzello has performed numerous assessments throughout a variety of states involving issues such as soil and groundwater contamination; asbestos identification and sampling; underground storage tank (UST) identification and research; mold assessment; and radon measurement. These assessments were conducted throughout a variety of states.

Project Experience

Phase I Environmental Site Assessment, Basic American Foods, Blackfoot, Idaho. Ms. Pizzello conducted a Phase I assessment on a 197-acre potato processing facility with associated large acreage agricultural fields. The plant specializes in processing potatoes into mashed and pieced food items. Two buildings located on the plant facility separate tenants, operating their own food production of dehydrated bean products and raw potato products. The facility has been in operation since the late 1950s. The plant itself consisted of 19

facility buildings, an on-site wastewater treatment facility with associated water aeration to the agricultural fields, a chlorine gas storage building, two well heads for on-site production use, two aboveground diesel fueling tanks, and abandoned and active railroad lines.

Phase I Environmental Site Assessment, Orchard Place Portfolio, Boise, Idaho. Ms. Pizzello conducted a Phase I assessment on a 18-acre business office complex consisting of a bank, television studio, the Idaho DEQ offices and state correctional offices. The complex had an extensive historical background which included former uses of the property such as a former bulk oil plant, automotive repair, and gas station, with several underground storage tanks removed from the property.

Phase I Environmental Site Assessment, Kelly's Foothill Mart, Logan, Utah. Ms. Pizzello conducted a Phase I assessment on an active gas station with convenience store, consisting of three underground storage tanks, three fueling island and six dispensers. The gas station was an active station from 1995 to present.

Phase I Environmental Site Assessment, Balmoral Apartments, Hailey, Idaho. Ms. Pizzello conducted a Phase I assessment on a 12-acre multi-family property, consisting of two speared residential villages, with a total of 19 residential buildings, and 192 residential units. A total of 20 radon canisters were placed in residential units over the course of the assessment.

Phase I Environmental Site Assessment, 222 South Main Street, Salt Lake City, Utah. Ms. Pizzello conducted a Phase I assessment on a 1.63-acre downtown mixed-use commercial building with main level retail tenants and upper level office space, consisting of a 426,657 square-foot building. Historical resources reviewed for the project showed the property was occupied by various and numerous retail tenants such as a livery, printing shop, men and women's clothing stores, furniture stores, barbershops, shoe stores, tailors and a dry-cleaning operation from at least 1884 through 2007.

Phase I Environmental Site Assessment, Hotel RL, Salt Lake City, Utah. Ms. Pizzello conducted a Phase I assessment on a 4.6-acre downtown hotel property, consisting of a 242,238 square-foot hotel building. The property was a former underground storage tank site. Two gas stations adjoined the hotel to the east and west. The eastern gas station was an active leaking underground storage tank site, with monitoring wells located on the property as part of ongoing investigations.

Phase I Environmental Site Assessment, Greenfield Townhomes and Wing Pointe Apartments, Heber, Utah. Ms. Pizzello conducted a Phase I assessment on a 14-acre multi-family property, consisting of two speared residential villages, with a total of 18 residential buildings, and 208 residential units. Active radon mitigation systems were already present for each respective building. A total of 18 radon canisters were placed in residential units over the course of the assessment.

Phase I Environmental Site Assessment, The Breakers, Denver, Colorado. Ms. Pizzello conducted a Phase I assessment on a 7.7-acre multi-family property, consisting of fourteen residential buildings, with a total of 160 residential units. A total of 12 radon canisters were placed in residential units over the course of the assessment.

Phase I Environmental Site Assessment, Vacant Manufacturing Building, Tooele, Utah. Ms. Pizzello conducted a Phase I assessment on a vacant manufacturing building located within the former Tooele Army Depot

facility. During the time the property was part of the Tooele Army Depot, two buildings were present which were used to store low-levels of radioactive waste in the form of transmitting tubes used to generate microwaves for radar systems and speedometers, luminous watch dial contaminated tools, and decontamination materials between 1943 and circa 1978. In addition, the property was located within a dissolved carbon tetrachloride and trichloroethene plume.

Phase I Environmental Site Assessment, Orbital ATK, West Valley City, Utah. Ms. Pizzello conducted two Phase I assessments, on land located within the Orbital ATK facility. Combined, the assessments were conducted on approximately 469 acres of land, sections of which were previously occupied by buildings related to the former processes conducted when manufacturing rocket fuel at the facility. The property was also located within a known perchlorate plume, volatile organic plume and Freon plume which are currently being regulated throughout the facility.

Phase I Environmental Site Assessment, Pearson Tire / Cooper Tire, Richfield, Utah. Ms. Pizzello conducted a Phase I assessment on a 1.38-acre tire and automotive shop, consisting of a main shop, muffler shop and warehouse. Underground hydraulic hoists and several floor drains were observed during site inspection. Historically, a gas station was present on the southeast corner of the property. Due to the former presence of the gas station, the property was identified as a former underground storage tank and current leaking underground storage tank site. A limited subsurface investigation was conducted to investigate the presence of the aged underground hoists and floor drains.

Phase I Environmental Site Assessment, Karcher Mall, Nampa, Idaho. Ms. Pizzello conducted a Phase I assessment on a 37-acre shopping mall complex consisting of a 534,000 square-foot shopping mall and three out buildings. The property was a former underground storage tank, leaking underground storage tank, and hazardous waste producer of PCE. A limited subsurface investigation was recommended due to the historical use and regulatory findings for the subject property.

Phase I Environmental Site Assessment, 515 Washington Boulevard, Marina Del Rey, California. Ms. Pizzello conducted a Phase I assessment on a small multi-tenant property. Historically and at the time of the assessment, a dry-cleaning operation was present at the site. Thorough record searches were conducted for the dry-cleaning tenant, and a limited subsurface investigation was recommended and conducted based on the historical and current presence of the dry-cleaning tenant.

Phase I Environmental Site Assessment, Dal Soglio Distributing, Sandy, Utah. Ms. Pizzello conducted two Phase I assessments on different Dal Soglio properties. One assessment was conducted on a gasoline station currently undergoing groundwater and soil remediation with oversight from the Utah DEQ. The second assessment was conducted on the Dal Soglio distribution facility, which consisted of interior and exterior bulk petroleum storage areas and a gasoline station.

Contact

apizzello@partneresi.com

Education

B.S. Environmental Sciences, University of Vermont, Rubenstein School of Environment & Natural Resources

Registrations

Certificate of Advanced Study in Real Estate Financing, NAIOP University

Highlights

Almost a decade in the Environmental and Engineering Consulting industry
Expertise in Environmental and Engineering Due Diligence Consulting
Expertise in Construction Risk Management Consulting

Experience Summary

Mr. Bertolino brings unique expertise and experience as an almost 10-year veteran of the environmental, engineering and construction consulting industry.

With a strong background in environmental science, coupled with a deep understanding of the commercial real estate business process, Mr. Bertolino has become an expert in all things relating to commercial real estate due diligence. He has gained valuable knowledge and experience from having been personally involved in the details of thousands of real estate transactions for various client types, and therefore understands the specific needs and scopes of work required for all parties involved in a transaction. Mr. Bertolino's due diligence resume includes advising lenders, real estate investors, asset managers, and attorneys on a wide gamut of due diligence. This knowledge allows him to offer the most efficient and cost-effective solutions for a wide array of commercial real estate transactions.

At Partner Engineering and Science, Inc. (Partner), Mr. Bertolino serves as a National Client Manager in the Torrance, CA office after starting his career as an Environmental Professional, conducting Phase 1 & II Environmental Site Assessments and working on large Remediation projects. In his current role, Mr. Bertolino collaborates with a multidisciplinary team out of 40 regional US offices to build, deepen, and influence a diverse set of client relationships who trust in Partner for engineering, environmental, construction and energy consulting services for commercial real estate assets.

Project Experience

Mr. Bertolino has extensive experience in testing soil, soil gas, and groundwater in the context of a real estate transaction, as well as under the supervision of state and federal regulators. Among his specialties is guiding landowners and prospective purchasers through the process of selling or acquiring an environmentally challenged site.

Mr. Bertolino has participated in the characterization of groundwater and soil contamination; quarterly groundwater monitoring; implementation of various systems such as soil vapor extraction systems, and soil excavation projects such as tank removals at several clean-up sites.

His demonstrated track record of project success includes providing acquisition-level due diligence to portfolio purchasers such as a purchase of 18 buildings – over \$200MM worth – throughout Arizona, Utah and Colorado. He also advised on a 26-property retail portfolio in Southern California where six of the

properties were impacted with dry cleaning-related contamination; Mr. Bertolino and team provided site mitigation via sub-slab depressurization and monitoring. He has consulted numerous buyers of class A office spaces in Southern California, including the acquisition of a large Class A Office complex, a \$260MM transaction in 2016. Bringing his signature solutions-oriented approach, Mr. Bertolino helped rescue a failed construction project of a large luxury condominium development and resort in Kauai, Hawaii by providing construction risk management services to carry it over the finish line within a reasonable time and budget.

Affiliations

Member, Mortgage Banker's Association
Member, California Mortgage Banker's Association
Member, International Council of Shopping Centers
Member, Construction Lender Risk Management Roundtable (CLRM)
Member, Environmental Facilities Management Roundtable (EFMR)

Contact

lbertolino@partneresi.com

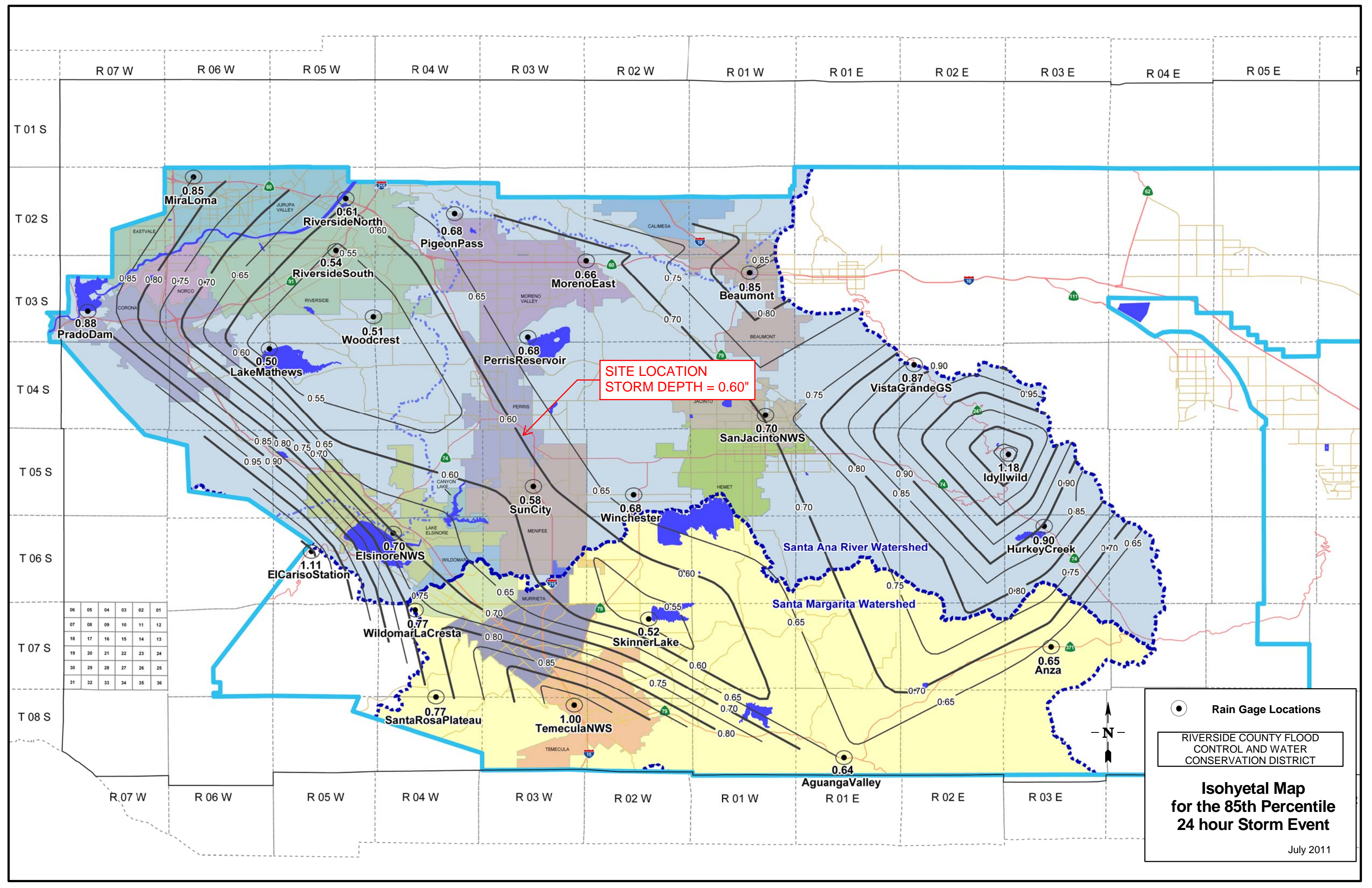
Appendix 5: LID Infeasibility

LID Technical Infeasibility Analysis

N/A

Appendix 6: BMP Design Details

BMP Sizing, Design Details and other Supporting Documentation



**SITE LOCATION
STORM DEPTH = 0.60"**

06	05	04	03	02	01
07	08	09	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Rain Gage Locations
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
Isohyetal Map for the 85th Percentile 24 hour Storm Event
 July 2011

Santa Ana Watershed - BMP Design Volume, V_{BMP}
(Rev. 10-2011)

Legend:

Required Entries

Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the LID BMP Design Handbook)*

Company Name Albert A. Webb Associates

Date 10/20/2022

Designed by ABE

Case No PLN21-0370

Company Project Number/Name

Capstone Menifee

BMP Identification

BMP NAME / ID BMP-A (Onsite)

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth,
from the Isohyetal Map in Handbook Appendix E

$D_{85} = 0.60$ inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
R-A	701204	Roofs	1	0.89	625474			
L-A	222860	Ornamental Landscaping	0.1	0.11	24616.7			
H-A	678320	Concrete or Asphalt	1	0.89	605061.4			
BMP-A	900	Ornamental Landscaping	0.1	0.11	99.4			
	1603284	Total			1255251.5	0.60	62762.6	63825

Notes:

For design assistance, drawings,
and pricing send completed worksheet to:
dyods@contech-cpi.com



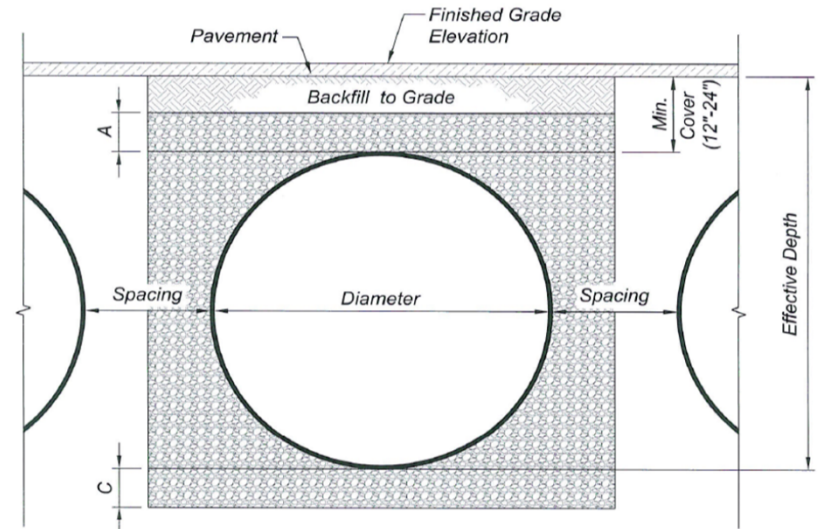
Project Summary

Date:	10/20/2022
Project Name:	Capstone Menifee (Ethanac and Byers)
City / County:	Menifee
State:	CA
Designed By:	ABE
Company:	Albert A. Webb Associates
Telephone:	(951) 686-1070

Enter Information in
Blue Cells

Corrugated Metal Pipe Calculator

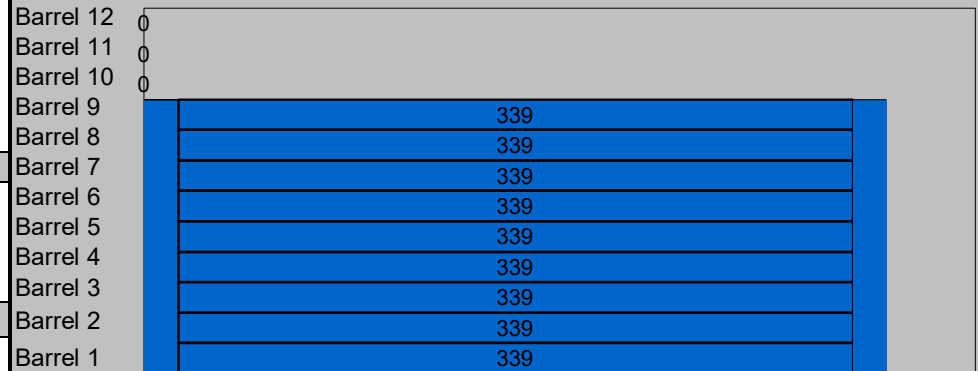
Storage Volume Required (cf):	225,985*	50.27 ft ² Pipe Area
Limiting Width (ft):	100.00	
Invert Depth Below Asphalt (ft):	11.00	
Solid or Perforated Pipe:	Perforated	
Shape Or Diameter (in):	96	
Number Of Headers:	2	
Spacing between Barrels (ft):	3.00	
Stone Width Around Perimeter of System (ft):	2	
Depth A: Porous Stone Above Pipe (in):	6	
Depth C: Porous Stone Below Pipe (in):	6	
Stone Porosity (0 to 40%):	40	



System Sizing

Pipe Storage:	163,011 cf	
Porous Stone Storage:	64,036 cf	
Total Storage Provided:	227,047 cf	100.5% Of Required Storage
Number of Barrels:	9 barrels	
Length per Barrel:	339.0 ft	
Length Per Header:	96.0 ft	
Rectangular Footprint (W x L):	100. ft x 359. ft	

System Layout



Barrel Footage (w/o headers)

CONTECH Materials

Total CMP Footage:	3,243 ft
Approximate Total Pieces:	143 pcs
Approximate Coupling Bands:	150 bands
Approximate Truckloads:	72 trucks

Construction Quantities**

Total Excavation:	14626 cy
Porous Stone Backfill For Storage:	5929 cy stone
Backfill to Grade Excluding Stone:	2659 cy fill

**Construction quantities are approximate and should be verified upon final design

*Please note: STORAGE VOLUME = VBMP + [V(UH,proposed) - V(UH,existing)]
VOLUME = 62763 + 163,222 = 225,985

Pump Rate Calculation

DMA-A

$$\frac{V_{BMP}}{t_{drain}} = Area * i = Q_{pump}$$

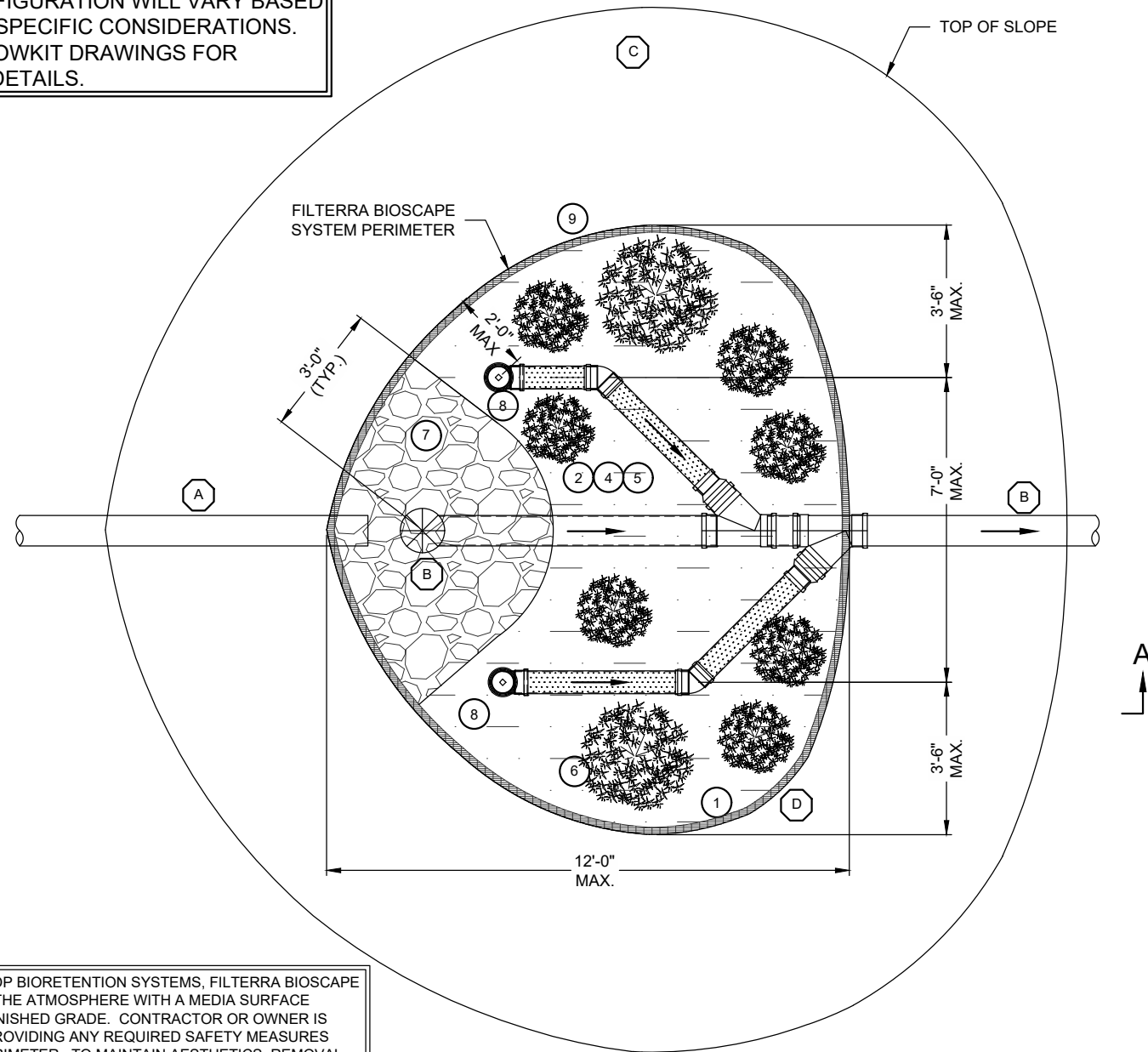
$$\frac{V_{BMP}}{t_{drain}} = Q_{pump}$$

$$Q_{pump} = \frac{ft^3}{hr} * \frac{1 hr}{3600 sec} * \frac{449 gpm}{1 \frac{ft^3}{sec}}$$

$$Q_{pump} = \frac{62,680 ft^3}{24 hr} * \frac{449 gpm}{3600 \frac{ft^3}{hr}} = 325 gpm$$

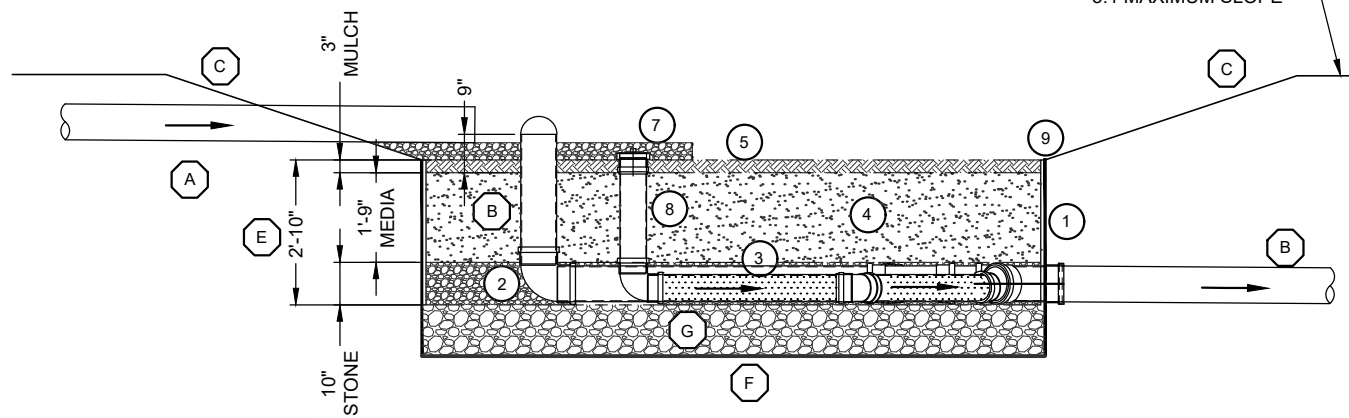
$$Q_{pump} = 330 gpm$$

THIS IS A SCHEMATIC LAYOUT ONLY. ACTUAL CONFIGURATION WILL VARY BASED ON THE SITE SPECIFIC CONSIDERATIONS. REFER TO FLOWKIT DRAWINGS FOR ADDITIONAL DETAILS.



PLAN VIEW

TOP OF SLOPE
3:1 MAXIMUM SLOPE



SECTION A-A VIEW

AS WITH ALL OPEN TOP BIORETENTION SYSTEMS, FILTERRA BIOSCAPE SYSTEM IS OPEN TO THE ATMOSPHERE WITH A MEDIA SURFACE RECESSED BELOW FINISHED GRADE. CONTRACTOR OR OWNER IS RESPONSIBLE FOR PROVIDING ANY REQUIRED SAFETY MEASURES AROUND SYSTEM PERIMETER. TO MAINTAIN AESTHETICS, REMOVAL OF HEAVY STORMWATER DEBRIS MAY BE NECESSARY BETWEEN REGULAR FILTERRA SYSTEM MAINTENANCE EVENTS.

BILL OF MATERIALS

COUNT	DESCRIPTION	INSTALLED BY
X	FILTERRA SURFACE AREA (SF)	CONTRACTOR
X	MULCH VOLUME (CY)	CONTRACTOR
XX	FILTERRA MEDIA VOLUME (CY)	CONTRACTOR
X	1/2" #4 ROUND AGGREGATE UNDERDRAIN STONE (CY)	CONTRACTOR
X	ENERGY DISSIPATION ROCK (CY)	CONTRACTOR
X	EROSION CONTROL (LF)	CONTRACTOR
X	FILTERRA FLOWKIT	CONTRACTOR

PLANTING SCHEDULE

*NOTE: PLANTS PROVIDED BY OTHERS

QUANTITY	FILTERRA BIOSCAPE SYSTEM PLANT PALETTE

GENERAL NOTES

- CONTRACTOR SHALL CONTACT CONTECH TO COORDINATE DELIVERY AND SUPERVISION OF PLACEMENT OF FILTERRA BIOSCAPE SYSTEM COMPONENTS (ACTIVATION). CONTRACTOR SHALL COMPLETE ITEMS IN THE LIST OF CONTRACTOR INSTALLATION RESPONSIBILITIES LISTED ON THIS DETAIL BEFORE CONTECH'S REPRESENTATIVE ATTENDS AND SUPERVISES THE ACTIVATION OF THE BIOSCAPE SYSTEM.
- PERFORM FILTERRA BIOSCAPE SYSTEM EXCAVATION ONLY AFTER ALL THE CONTRIBUTING DRAINAGE AREAS ARE PERMANENTLY STABILIZED. DO NOT CONSTRUCT FILTERRA BIOSCAPE SYSTEM IN AN AREA USED AS EROSION AND SEDIMENT CONTROL FACILITIES. DO NOT STOCKPILE MATERIALS NOR STORE EQUIPMENT IN THIS AREA.
- USE METHODS OF EXCAVATION THAT MINIMIZE COMPACTION OF THE UNDERLYING SOIL UNLESS THE SYSTEM IS TO BE LINED.
- CONTRACTOR SHALL COORDINATE WITH CONTECH BEFORE THE FILTERRA BIOSCAPE SYSTEM AREA IS EXCAVATED TO MINIMIZE TIME BETWEEN EXCAVATION AND DELIVERY AND ACTIVATION OF THE FILTERRA BIOSCAPE SYSTEM. ANY STANDING WATER THAT ACCUMULATES IN THE EXCAVATED AREA MUST BE REMOVED BY THE CONTRACTOR BEFORE CONTECH CAN PROVIDE ACTIVATION OF THE FILTERRA BIOSCAPE SYSTEM. ANY ADDITIONAL EXCAVATION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. EXCAVATION DIMENSIONS SHOULD BE PROVIDED TO CONTECH IN THE ACTIVATION REQUEST CHECKLIST.
- CONTRACTOR SHALL PROVIDE ACCESS TO THE EXCAVATED AREA(S) FOR USE DURING THE ACTIVATION OF THE FILTERRA BIOSCAPE SYSTEM(S). ACCESS SHALL NOT PROHIBIT LIGHT DUTY EQUIPMENT THAT MAY BE USED TO INSTALL THE COMPONENTS (STONE, MEDIA, ETC). THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY RE-STABILIZATION THAT MAY BE REQUIRED AFTER THE FILTERRA BIOSCAPE SYSTEM ACTIVATION.
- CONTECH AND/OR ITS REPRESENTATIVES MUST BE SCHEDULED TO BE ON SITE FOR THE LIST ENTITLED CONTRACTOR ACTIVATION RESPONSIBILITIES.

CONTRACTOR SITE PREPARATION RESPONSIBILITIES AS DENOTED BY (X) ON THIS DETAIL:

- CONTRACTOR SHALL INSTALL PIPE OR SWALE THAT CONVEYS INFLUENT FLOWS AS WELL AS ANY REQUIRED INLET AND OUTLET STRUCTURES.
- CONTRACTOR SHALL PROVIDE BYPASS PIPE AND RISER OR OTHER STRUCTURE AS SHOWN ON PLANS. THE BYPASS PIPE SHALL BE INSTALLED WITH WYE(S), OR OTHER PIPE FITTINGS, AND WITH REDUCER COUPLING(S) FOR CONNECTION OF UNDERDRAIN PIPE, PER PLANS. PIPES SHALL BE INSTALLED TO PROMOTE POSITIVE FLOW FROM THE FILTERRA BIOSCAPE SYSTEM.
- IF REQUIRED, CONTRACTOR TO PROVIDE SHOULDER ACCORDING TO DIMENSION AND SLOPE SHOWN ON PLANS OR AS DESIGNED BY ENGINEER OF RECORD. SLOPE FROM SHOULDER TO FILTERRA BIOSCAPE SYSTEM SURFACE AREA SHALL NOT EXCEED 3:1. SOD IS REQUIRED TO STABILIZE SIDE SLOPES OR ADJACENT GRADE.
- CONTRACTOR TO EXCAVATE MEDIA AREA CORRESPONDING TO THE SIZE OF THE FILTERRA BIOSCAPE SYSTEM SURFACE AREA AS SHOWN ON DETAIL AND ON PLAN SHEETS.
- CONTRACTOR SHALL EXCAVATE VERTICALLY FROM BOTTOM OF UNDERDRAIN STONE, OR DRAINAGE STONE, IF REQUIRED, TO ELEVATION OF MULCH AS SHOWN ON THIS DETAIL.
- CONTRACTOR TO PROVIDE AND INSTALL ANY GEOTEXTILE OR IMPERMEABLE LINER FOR BOTTOM OF THE FILTERRA BIOSCAPE SYSTEM IF REQUIRED PER THE PLANS.
- CONTRACTOR TO PROVIDE AND INSTALL ANY ADDITIONAL DRAINAGE STONE BELOW THE FILTERRA BIOSCAPE SYSTEM AS CALLED OUT ON THE PLANS.

CONTRACTOR ACTIVATION RESPONSIBILITIES AS DENOTED BY (#) ON THIS DETAIL:

- PLACE GEOTEXTILE FABRIC ALONG THE PERIMETER OF THE FILTERRA BIOSCAPE SYSTEM EXCAVATION.
- PLACE 10" OF UNDERDRAIN STONE - 2" UNDER THE PIPING, 6" AROUND THE PIPING AND 2" ABOVE THE PIPING USING LIGHT DUTY EQUIPMENT ONLY.
- PLACE 6" UNDERDRAIN PIPING UNLESS OTHERWISE APPROVED BY CONTECH, ASSOCIATED PIPING AND FITTINGS/ELBOWS TO CONNECT TO THE PIPING/FITTING(S) THAT IS PROVIDED BY CONTRACTOR (SEE CONTRACTOR INSTALLATION RESPONSIBILITIES THIS DETAIL).
- PLACE 21" FILTERRA MEDIA USING LIGHT DUTY EQUIPMENT ONLY. DO NOT COMPACT MEDIA.
- PLACE 3" DOUBLE SHREDDED HARDWOOD MULCH OVER ENTIRE FILTERRA BIOSCAPE SYSTEM SURFACE AREA USING LIGHT DUTY EQUIPMENT ONLY. DO NOT COMPACT MULCH.
- PROVIDE AND PLANT VEGETATION AS INDICATED IN TABLE ON THIS DETAIL OR ON SITE PLANS.
- PLACE ENERGY DISSIPATION ROCK APRON AS DESIGNED AND INDICATED ON THIS DETAIL OR PER ENGINEER OF RECORD PLANS.
- PLACE CLEANOUT ADAPTER, PLUG AND PIPING.
- PLACE ADDITIONAL EROSION CONTROL AROUND FILTERRA BIOSCAPE SYSTEM (IF REQUIRED).

I:\COMMON\CAD\TREATMENT\64 FILTERRA\40 STANDARD DRAWINGS\FTBS - BIOSCAPE SYSTEM (BOXLESS)\DWG\FILTERRA BIOSCAPE SUPERVISED SYSTEM - STD DETAIL.DWG 5/21/2020 8:57 AM



www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

FILTERRA BIOSCAPE™ SYSTEM
STANDARD DETAIL

Santa Ana Watershed - BMP Design Flow Rate, Q_{BMP}

(Rev. 10-2011)

Legend:

Required Entries

Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name **Albert A. Webb Associates**

Date **6/17/2022**

Designed by **ABE**

Case No **PLN21-0370**

Company Project Number/Name

Capstone Meniffee

BMP Identification

BMP NAME / ID **B-W (Off-Site Wheat Street)**

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

Design Rainfall Intensity

I = **0.20** in/hr

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type (use pull-down menu)	Effective Imperivous Fraction, I_p	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Rainfall Intensity (in/hr)	Design Flow Rate (cfs)	Proposed Flow Rate (cfs)
B-W	44360	Concrete or Asphalt	1	0.89	39569.1			
	44360		Total		39569.1	0.20	0.2	0.23

Notes:

Santa Ana Watershed - BMP Design Flow Rate, Q_{BMP}

(Rev. 10-2011)

Legend:

Required Entries

Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name **Albert A. Webb Associates**

Date **6/17/2022**

Designed by **ABE**

Case No **PLN21-0370**

Company Project Number/Name

Capstone Meniffee

BMP Identification

BMP NAME / ID **B-K-1 (Off-Site Kuffel Road)**

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

Design Rainfall Intensity

I = **0.20** in/hr

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type (use pull-down menu)	Effective Imperivous Fraction, I_p	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Rainfall Intensity (in/hr)	Design Flow Rate (cfs)	Proposed Flow Rate (cfs)
B-K-1	19830	Concrete or Asphalt	1	0.89	17688.4			
	19830		Total		17688.4	0.20	0.1	0.12

Notes:

Santa Ana Watershed - BMP Design Flow Rate, Q_{BMP}

(Rev. 10-2011)

Legend:

Required Entries

Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name **Albert A. Webb Associates**

Date **6/17/2022**

Designed by **ABE**

Case No **PLN21-0370**

Company Project Number/Name

Capstone Menifee

BMP Identification

BMP NAME / ID **B-K-2 (Off-Site Kuffel Road)**

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

Design Rainfall Intensity

I = **0.20** in/hr

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type (use pull-down menu)	Effective Imperivous Fraction, I_p	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Rainfall Intensity (in/hr)	Design Flow Rate (cfs)	Proposed Flow Rate (cfs)
B-K-2	16310	Concrete or Asphalt	1	0.89	14548.5			
	16310		Total		14548.5	0.20	0.1	0.12

Notes:

Santa Ana Watershed - BMP Design Flow Rate, Q_{BMP}

(Rev. 10-2011)

Legend:

Required Entries

Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name **Albert A. Webb Associates**

Date **6/17/2022**

Designed by **ABE**

Case No **PLN21-0370**

Company Project Number/Name

Capstone Meniffee

BMP Identification

BMP NAME / ID **B-B (Off-Site Byers Road)**

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

Design Rainfall Intensity

I = **0.20** in/hr

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type (use pull-down menu)	Effective Imperivous Fraction, I_p	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Rainfall Intensity (in/hr)	Design Flow Rate (cfs)	Proposed Flow Rate (cfs)
B-B	44800	Concrete or Asphalt	1	0.89	39961.6			
	44800		Total		39961.6	0.20	0.2	0.23

Notes:



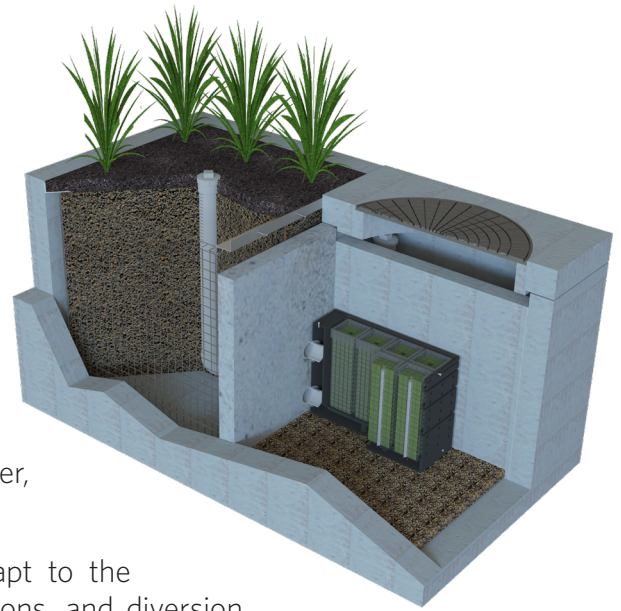
Modular Wetlands[®] Linear

A Stormwater Biofiltration Solution



OVERVIEW

The Modular Wetlands® Linear is the only biofiltration system to utilize patented horizontal flow, allowing for a smaller footprint, higher treatment capacity, and a wide range of adaptability. The Modular Wetlands® is also the only pre-packaged subsurface flow wetland for stormwater treatment. While most biofilters use little or no pretreatment, the Modular Wetlands Linear incorporates an advanced pretreatment chamber that includes separation and pre-filter boxes. In this chamber, sediment and hydrocarbons are removed from runoff before entering the biofiltration chamber, reducing maintenance costs and improving performance.



Horizontal flow also gives the system the unique ability to adapt to the environment through a variety of configurations, bypass orientations, and diversion applications.

The Urban Impact

For hundreds of years, natural wetlands surrounding our shores have played an integral role as nature's stormwater treatment system. But as cities grow and develop, our environment's natural filtration systems are blanketed with impervious roads, rooftops, and parking lots.

Bio Clean understands this loss and has spent years re-establishing nature's presence in urban areas, and rejuvenating waterways with the Modular Wetlands Linear.

*Also known as: Modular Wetlands®, Modular Wetlands® System Linear, Modwet™, or MWS Linear™.

PERFORMANCE

The Modular Wetlands Linear continues to outperform other treatment methods with superior pollutant removal for TSS, heavy metals, nutrients, hydrocarbons, and bacteria. The Modular Wetlands Linear is field-tested on numerous sites across the country and is proven to effectively remove pollutants through a combination of physical, chemical, and biological filtration processes.

66%
REMOVAL
OF
DISSOLVED
ZINC

69%
REMOVAL
OF TOTAL
ZINC

38%
REMOVAL
OF
DISSOLVED
COPPER

85%
REMOVAL
OF TSS

100%
REMOVAL
OF TRASH

45%
REMOVAL
OF
NITROGEN

50%
REMOVAL
OF TOTAL
COPPER

95%
REMOVAL
OF MOTOR
OIL

67%
REMOVAL
OF ORTHO
PHOSPHORUS

64%
REMOVAL
OF TOTAL
PHOSPHORUS

APPROVALS

The Modular Wetlands® Linear has successfully met years of challenging technical reviews and testing from some of the most prestigious and demanding agencies in the nation and perhaps the world.

Here is a list of some of the most high-profile approvals, certifications, and verifications from around the country.



Washington State Department of Ecology TAPE Approved

The Modular Wetlands Linear (MWS-Linear) is approved for General Use Level Designation (GULD) for Basic, Enhanced, and Phosphorus treatment at 1 gpm/ft² loading rate. The highest performing BMP on the market for all main pollutant categories.



California Water Resources Control Board, Full Capture Certification

The Modular Wetlands® Linear is the first biofiltration system to receive certification as a full capture trash treatment control device.



Virginia Department of Environmental Quality, Assignment

The Virginia Department of Environmental Quality assigned the Modular Wetlands Linear the highest phosphorus removal rating for manufactured treatment devices to meet the new Virginia Stormwater Management Program (VSMP) regulation technical criteria.



Maryland Department of the Environment, Approved ESD

Granted Environmental Site Design (ESD) status for new construction, redevelopment, and retrofitting when designed in accordance with the design manual.



MASTEP Evaluation

The University of Massachusetts at Amherst - Water Resources Research Center issued a technical evaluation report noting removal rates up to 84% TSS, 70% total phosphorus, 68.5% total zinc, and more.



Rhode Island Department of Environmental Management BMP Approval



Texas Commission on Environmental Quality (TCEQ) Approval



Atlanta Regional Commission Certification

ADVANTAGES

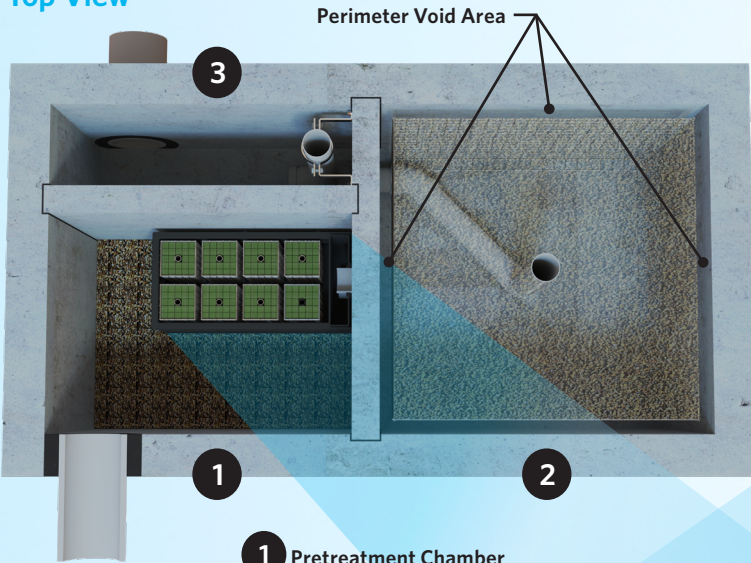
- HORIZONTAL FLOW BIOFILTRATION
- GREATER FILTER SURFACE AREA
- PRETREATMENT CHAMBER
- PATENTED PERIMETER VOID AREA
- FLOW CONTROL
- NO DEPRESSED PLANTER AREA
- AUTO DRAINDOWN MEANS NO MOSQUITO VECTOR

DIAGRAMS

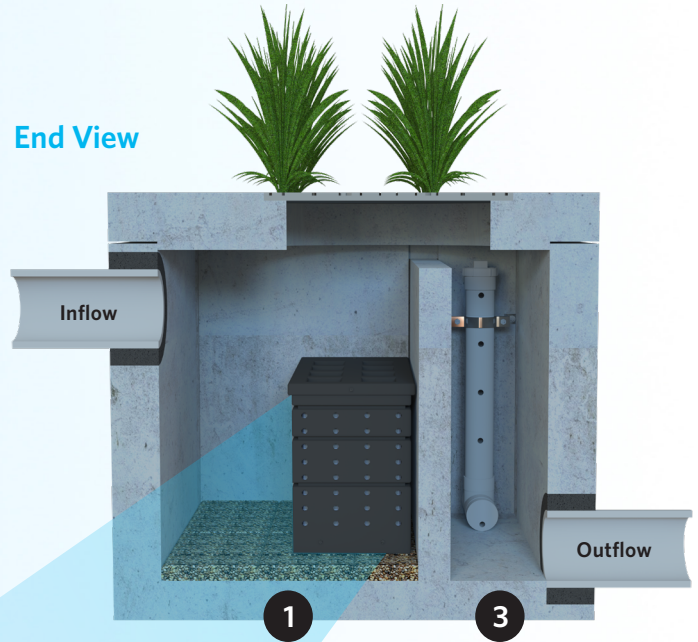
The Modular Wetlands® Linear biofilter supports superior root penetration and plant uptake of metals and nutrients with treatment that includes both aerobic and anaerobic zones.

Modular Wetlands Linear Display Unit - 4x8 Vault Type Unit

Top View

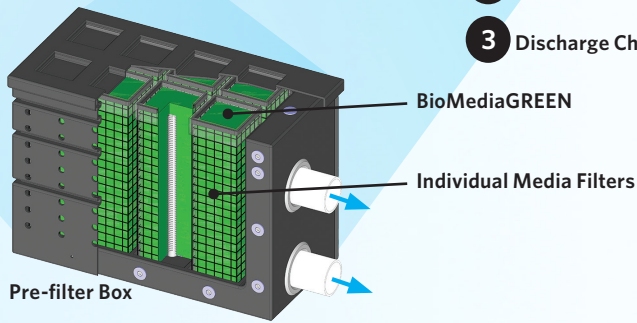


End View



- 1 Pretreatment Chamber
- 2 Biofiltration Chamber
- 3 Discharge Chamber

- 1 Pretreatment Chamber
- 3 Discharge Chamber

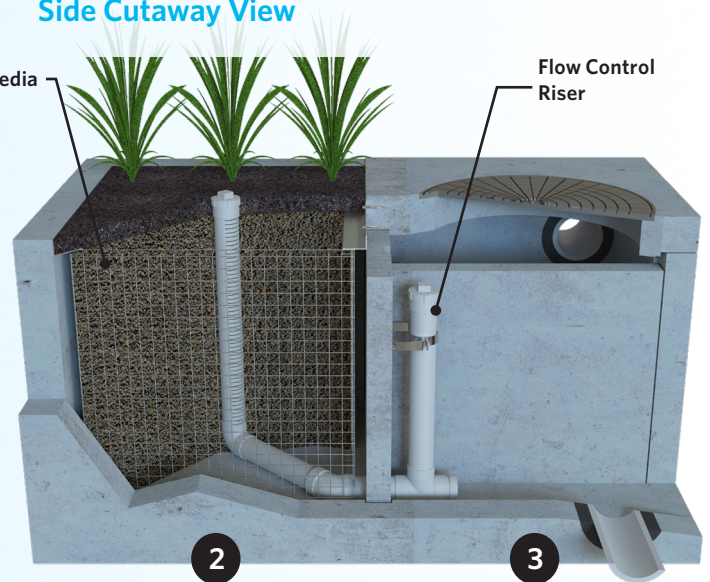


Side Cutaway View



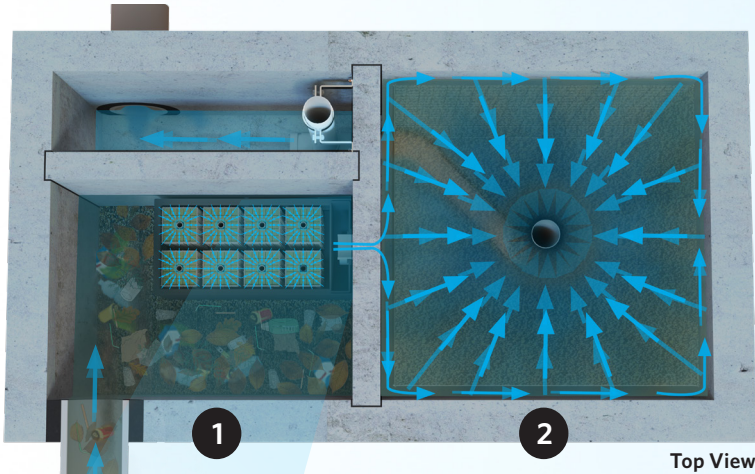
- 1 Pretreatment Chamber
- 2 Biofiltration Chamber

Side Cutaway View



- 2 Biofiltration Chamber
- 3 Discharge Chamber

OPERATION



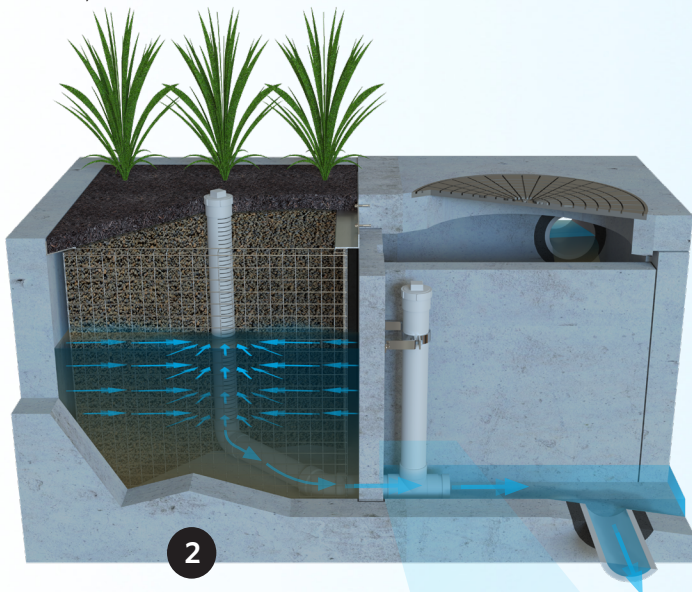
1 Pretreatment

Stormwater and other pollutants all enter the pretreatment chamber first. The larger material remains contained within the pretreatment stage as stormwater travels through the pre-filter boxes and on to the biofiltration chamber. This design enhances treatment, prevents clogging, and expedites the maintenance process.



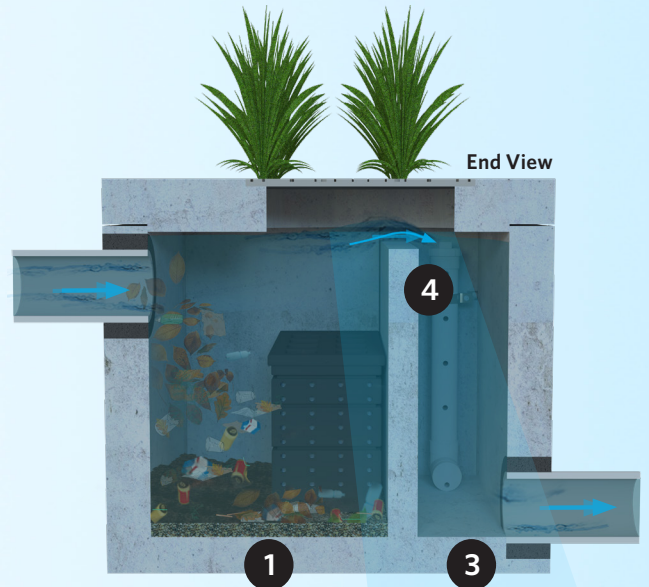
2 Biofiltration

As water leaves the pre-filter box and enters the biofiltration chamber, it initially fills the void space at the perimeter of the biofiltration chamber. The water's horizontal force grows, pushing it inward toward the centrally located vertical drain pipe, and out to discharge.



3 Discharge

In the final stage or discharge chamber, the flow control riser (shown in the close-up) and the orifice plate, control the flow of water through the media to a level lower than the media's capacity. This extends the life of the media and improves performance.



4 Bypass

In a side-by-side Modular Wetlands unit, the pretreatment and discharge chambers are adjacent to each other. Another unique advantage of horizontal flow. This allows unusually large flows to bypass the system to avoid flooding.

SIZING CHART

FLOW-BASED DESIGNS

The Modular Wetlands® Linear can be used in stand-alone applications to meet treatment flow requirements, and since it is the only biofiltration system that can accept inflow pipes several feet below the surface, it can be used in decentralized design applications as well as large central end-of-the-line applications.

Model #	Dimensions	WetlandMEDIA Surface Area (sq.ft.)	Treatment Flow Rate (cfs)
MWS-L-4-4	4'x4'	23	0.052
MWS-L-4-6	4'x6'	32	0.073
MWS-L-4-8	4'x8'	50	0.115
MWS-L-8-8	8'x8'	100	0.230
MWS-L-8-12	8'x12'	151	0.346
MWS-L-8-16	8'x16'	201	0.462
MWS-L-8-20	8'x20'	252	0.577
MWS-L-8-24	8'x24'	302	0.693

APPLICATIONS



The Modular Wetlands® Linear has been successfully used on numerous new construction and retrofit projects. The system's superior versatility makes it beneficial for a wide range of stormwater and waste water applications.

INDUSTRIAL

The Modular Wetlands has helped various sites meet difficult EPA-mandated effluent limits for dissolved metals and other pollutants.

RESIDENTIAL

Low to high density developments can benefit from the versatile design of the Modular Wetlands. The system can be used in both decentralized LID design and cost-effective end-of-the-line configurations.

STREETS

The Modular Wetlands is extremely space efficient, and adept to meeting special constraints of existing utilities on retrofit projects.

PARKING LOTS

Parking lots are designed to maximize space and the Modular Wetlands' 4 ft. standard planter width allows for easy integration into parking lot islands and other landscape medians.

COMMERCIAL

Compared to bioretention systems, the Modular Wetlands can treat far more area in less space, meeting treatment and volume control requirements.

More applications include:

- Agriculture
- Reuse
- Low Impact Development
- Waste Water
- Mixed Use

HORIZONTAL FLOW ADVANTAGES

VOLUME-BASED DESIGNS



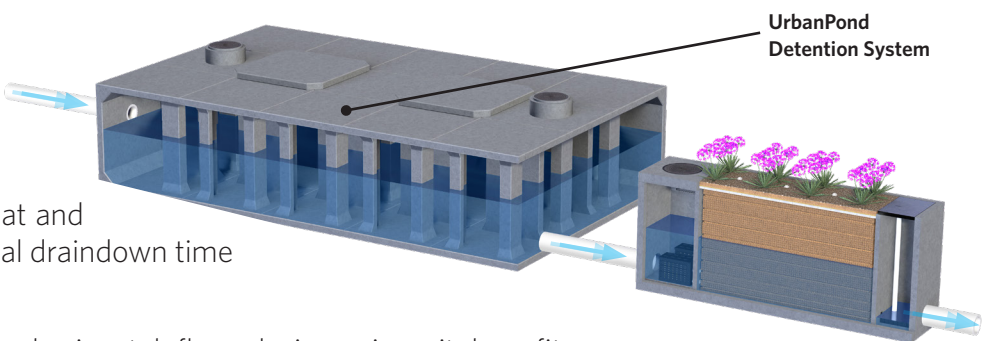
URBANPOND™ PRESTORAGE

In the example above, the Modular Wetlands Linear is installed downstream of the UrbanPond storage system. The Modular Wetlands Linear is designed for the water quality volume and will treat and discharge the required volume within local draindown time requirements.

The Modular Wetlands Linear's unique horizontal flow design, gives it benefits no other biofilter has - the ability to be placed downstream of detention ponds, extended dry detention basins, underground storage systems and permeable paver reservoirs. The system's horizontal flow configuration and built-in orifice control allows it to be installed with just 6" of fall between inlet and outlet pipe for a simple connection to projects with shallow downstream tie-in points.

DESIGN SUPPORT

Volume control and hydromodification regulations are expanding the need to decrease the cost and size of your biofiltration system. Bio Clean will help you realize these cost savings with the Modular Wetlands Linear. Bio Clean engineers are aware of state and local regulations, and they are trained to provide you with superior support, so they can optimize a system to maximize feasibility.

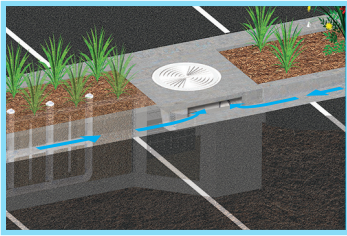


ADVANTAGES

- LOWER COST THAN FLOW-BASED DESIGN
- BUILT-IN ORIFICE CONTROL STRUCTURE
- MEETS LID REQUIREMENTS
- WORKS WITH DEEP INSTALLATIONS

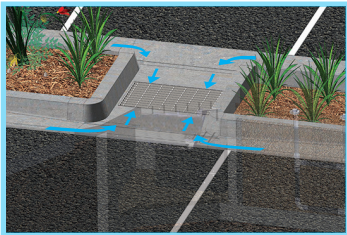
CONFIGURATIONS

The Modular Wetlands® Linear is the preferred biofiltration system of civil engineers across the country due to its versatile design. This highly versatile system has available “pipe-in” options on most models, along with built-in curb or grated inlets for simple integration into your storm drain design.



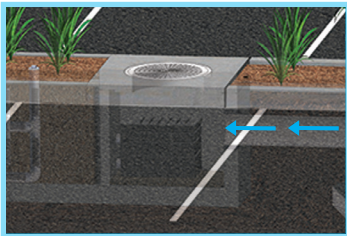
CURB TYPE

The Curb Type configuration accepts sheet flow through a curb opening and is commonly used along roadways and parking lots. It can be used in sump or flow-by conditions. Length of curb opening varies based on model and size.



GRATE TYPE

The Grate Type configuration offers the same features and benefits as the Curb Type but with a grated/drop inlet above the system's pretreatment chamber. It has the added benefit of allowing pedestrian access over the inlet. The Grate Type can also be used in scenarios where runoff needs to be intercepted on both sides of landscape islands.



VAULT TYPE

Modular Wetlands® can be used in end-of-the-line installations. This greatly improves feasibility over typical decentralized designs that are required with other biofiltration/bioretention systems. Another benefit of the “pipe-in” design is the ability to install the system downstream of underground detention systems to meet water quality volume requirements, or for traffic-rated designs (no plants).



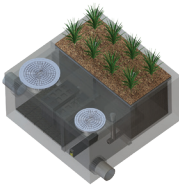
DOWNSPOUT TYPE

The Downspout Type is a variation of the Vault Type and is designed to accept a vertical downspout pipe from rooftop and podium areas. Some models have the option of utilizing an internal bypass, simplifying the overall design. The system can be installed as a raised planter, and the exterior can be stuccoed or covered with other finishes to match the look of adjacent buildings.

ORIENTATIONS

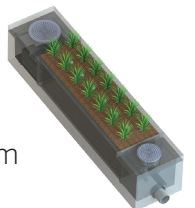
Side-by-Side (Internal Bypass)

The Side-by-Side orientation places the pretreatment and discharge chamber adjacent to one another with the biofiltration chamber running parallel on either side.



End-to-End

The End-To-End orientation places the pretreatment and discharge chambers on opposite ends of the biofiltration chamber, therefore minimizing the width of the system to 5 ft. (outside dimension).

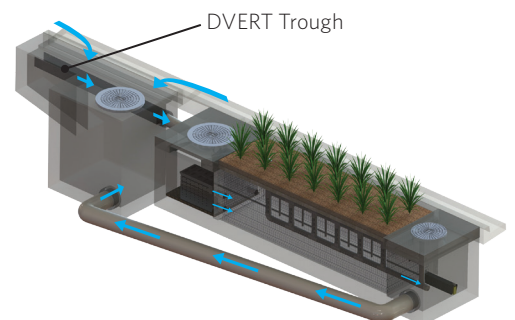


Dvert Low-Flow Diversion

A simple diversion trough can be installed in existing or new curb and grate inlets to divert the first flush to the Modular Wetlands Linear, and then back to the catch basin outlet.

External Diversion Weir Structure

This traditional offline diversion method can be used with the Modular Wetlands® Linear in scenarios where runoff is being piped to the system.



PLANT SELECTION

Abundant plants, trees, and grasses bring value and an aesthetic benefit to any urban setting, but those in the Modular Wetlands® System Linear do even more - they increase pollutant removal. What's not seen, but very important, is that below grade, the stormwater runoff/flow is being subjected to nature's secret weapon: a dynamic physical, chemical, and biological process working to break down and remove non-point source pollutants. The flow rate is controlled in the Modular Wetlands®, giving the plants more contact time so that pollutants are more successfully decomposed, volatilized, and incorporated into the biomass of the Modular Wetlands'® micro/macro flora and fauna.



A wide range of plants are suitable for use in the Modular Wetlands®, but selections vary by location and climate. View suitable plants by visiting biocleanenvironmental.com/plants.

INSTALLATION



The Modular Wetlands® is simple, easy to install, and has a space-efficient design that offers lower excavation and installation costs compared to traditional tree-box type systems. The structure of the system resembles precast catch basin or utility vaults and is installed in a similar fashion.

The system is delivered fully assembled for quick installation. Generally, the structure can be unloaded and set in place in 15 minutes. Our experienced team of field technicians is available to supervise installations and provide technical support.

MAINTENANCE



Reduce your maintenance costs, man hours, and materials with the Modular Wetlands®. Unlike other biofiltration systems that provide no pretreatment, the Modular Wetlands® is a self-contained treatment train which incorporates simple and effective pretreatment.

Maintenance requirements for the biofilter itself are almost completely eliminated, as the pretreatment chamber removes and isolates trash, sediments, and hydrocarbons. What's left is the simple maintenance of an easily accessible pretreatment chamber that can be cleaned by hand or with a standard vac truck. Only periodic replacement of low-cost media in the pre-filter cartridges is required for long-term operation, and there is absolutely no need to replace expensive biofiltration media.







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855.566.3938
stormwater@forterrabp.com
biocleanenvironmental.com

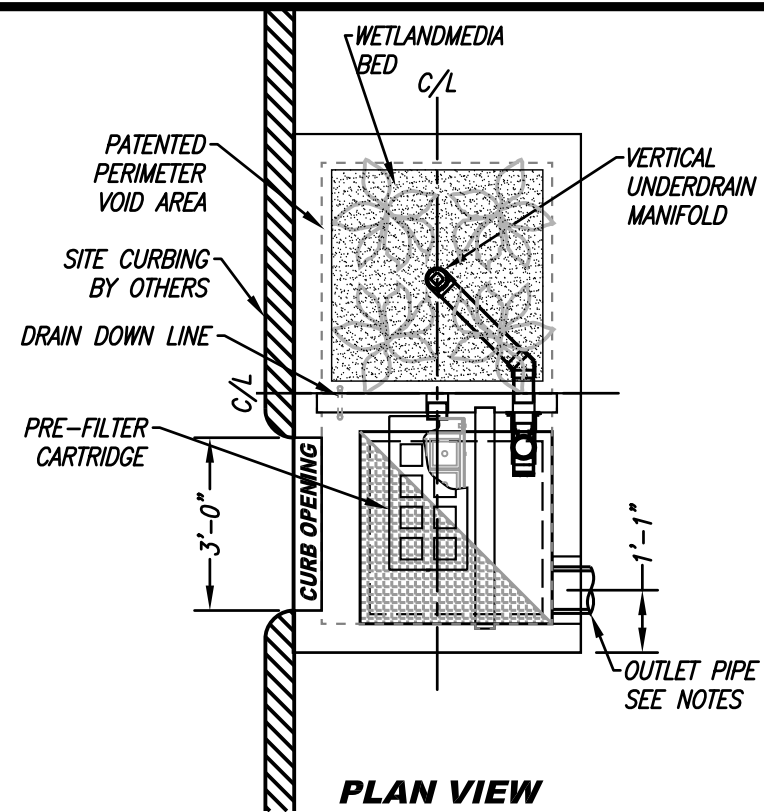
SITE SPECIFIC DATA			
PROJECT NUMBER			
ORDER NUMBER			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
TREATMENT HGL AVAILABLE (FT)			
PEAK BYPASS REQUIRED (CFS) – IF APPLICABLE			
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PEDESTRIAN	OPEN PLANTER	PEDESTRIAN
FRAME & COVER	36" X 36"	N/A	N/A
WETLANDMEDIA VOLUME (CY)		TBD	
ORIFICE SIZE (DIA. INCHES)		TBD	
NOTES: PRELIMINARY NOT FOR CONSTRUCTION.			

INSTALLATION NOTES

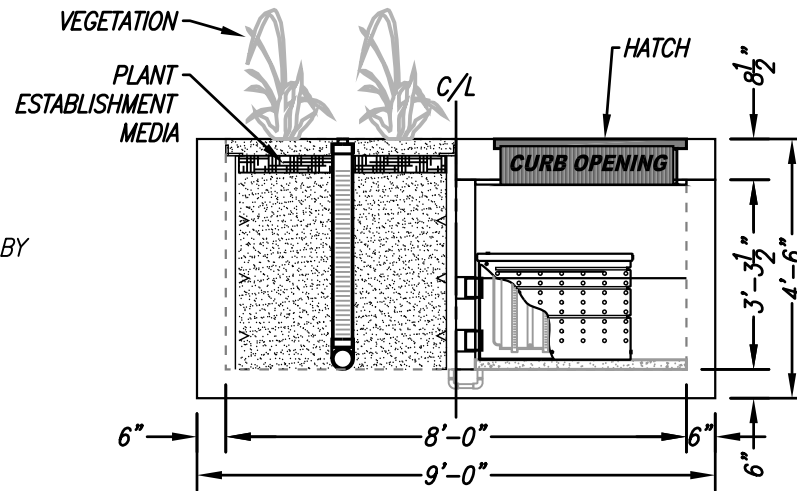
- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURERS CONTRACT.
- UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE TO VERIFY PROJECT ENGINEERS RECOMMENDED BASE SPECIFICATIONS.
- CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE. (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATER TIGHT PER MANUFACTURERS STANDARD CONNECTION DETAIL.
- CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
- VEGETATION SUPPLIED AND INSTALLED BY OTHERS. ALL UNITS WITH VEGETATION MUST HAVE DRIP OR SPRAY IRRIGATION SUPPLIED AND INSTALLED BY OTHERS.
- CONTRACTOR RESPONSIBLE FOR CONTACTING BIO CLEAN FOR ACTIVATION OF UNIT. MANUFACTURERS WARRANTY IS VOID WITH OUT PROPER ACTIVATION BY A BIO CLEAN REPRESENTATIVE.

GENERAL NOTES

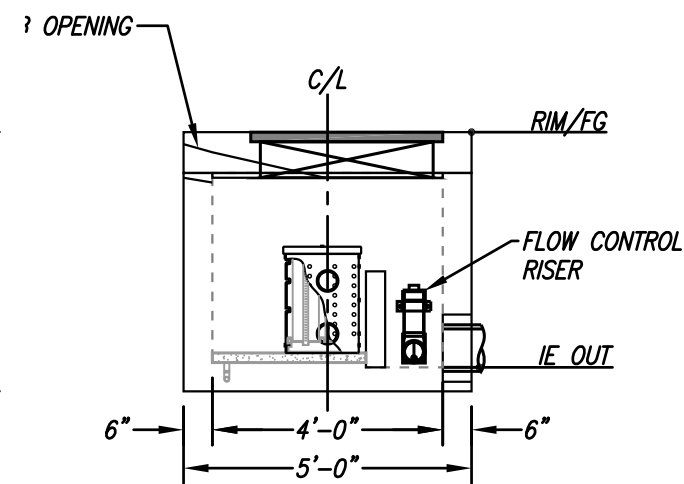
- MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT BIO CLEAN.



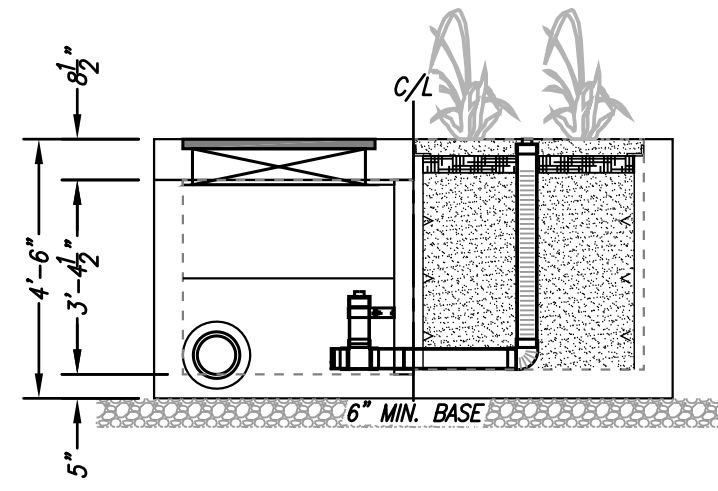
PLAN VIEW



LEFT END VIEW

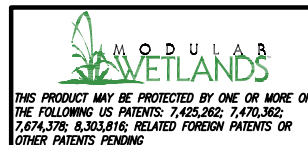


ELEVATION VIEW



RIGHT END VIEW

TREATMENT FLOW (CFS)	0.115
OPERATING HEAD (FT)	3.4
PRETREATMENT LOADING RATE (GPM/SF)	2.0
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0



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MWS-L-4-8-C
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL

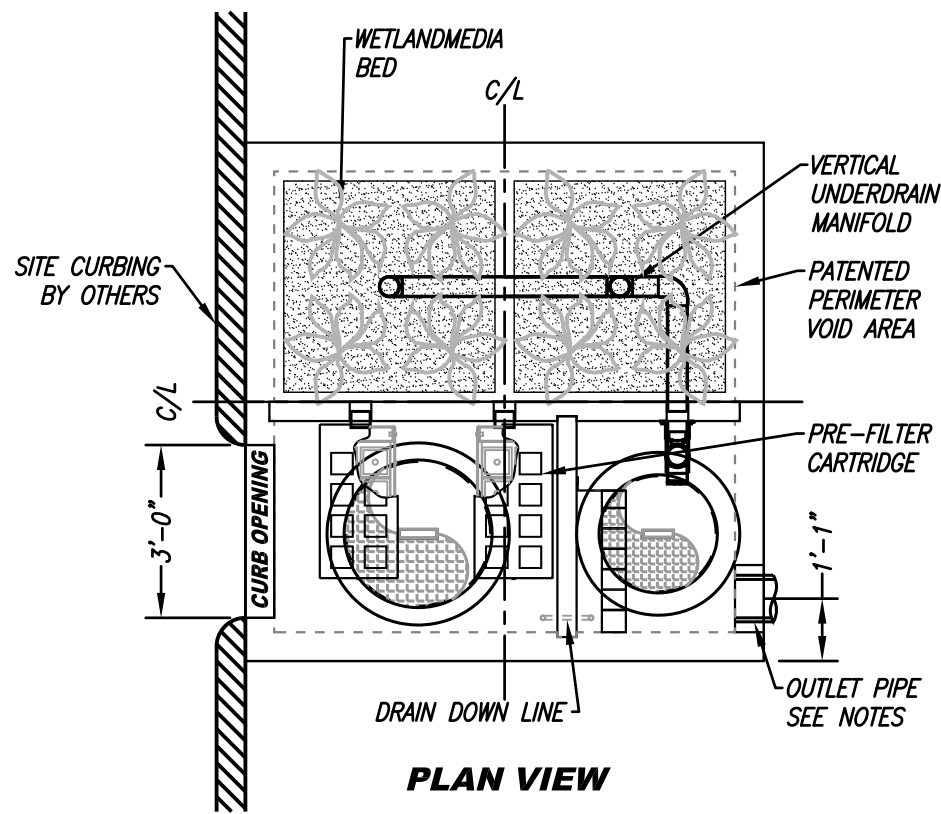
SITE SPECIFIC DATA			
PROJECT NUMBER			
ORDER NUMBER			
PROJECT NAME			
PROJECT LOCATION			
STRUCTURE ID			
TREATMENT REQUIRED			
VOLUME BASED (CF)		FLOW BASED (CFS)	
TREATMENT HGL AVAILABLE (FT)			
PEAK BYPASS REQUIRED (CFS) – IF APPLICABLE			
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD	PEDESTRIAN	OPEN PLANTER	PEDESTRIAN
FRAME & COVER	ø30"	N/A	ø24"
WETLANDMEDIA VOLUME (CY)			TBD
ORIFICE SIZE (DIA. INCHES)			TBD
NOTES: PRELIMINARY NOT FOR CONSTRUCTION.			

INSTALLATION NOTES

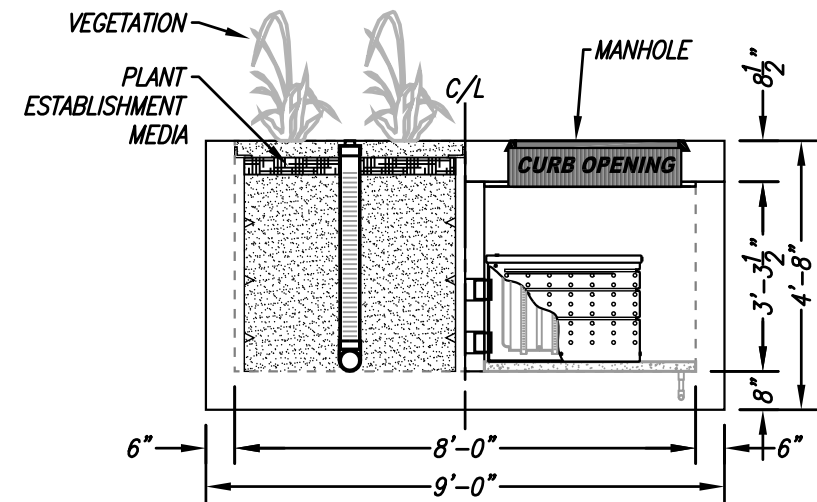
1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURERS CONTRACT.
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7. CONTRACTOR RESPONSIBLE FOR CONTACTING BIO CLEAN FOR ACTIVATION OF UNIT. MANUFACTURERS WARRANTY IS VOID WITH OUT PROPER ACTIVATION BY A BIO CLEAN REPRESENTATIVE.

GENERAL NOTES

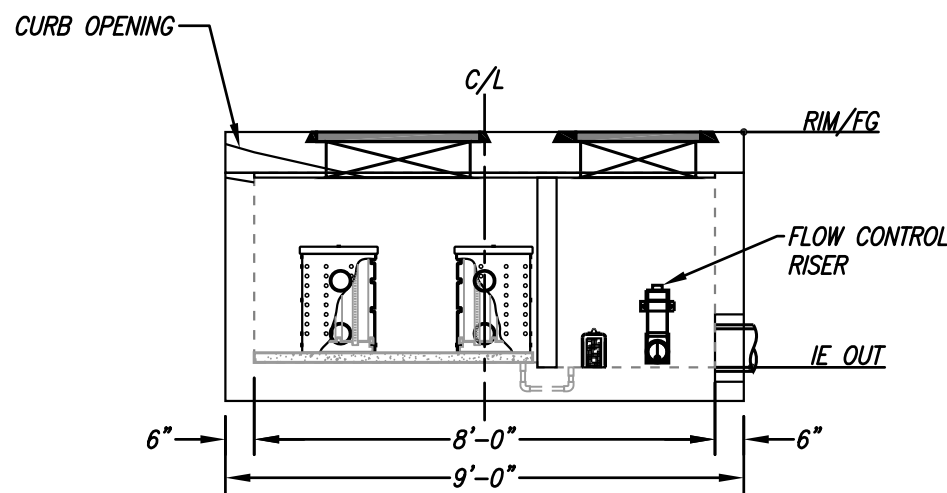
1. MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
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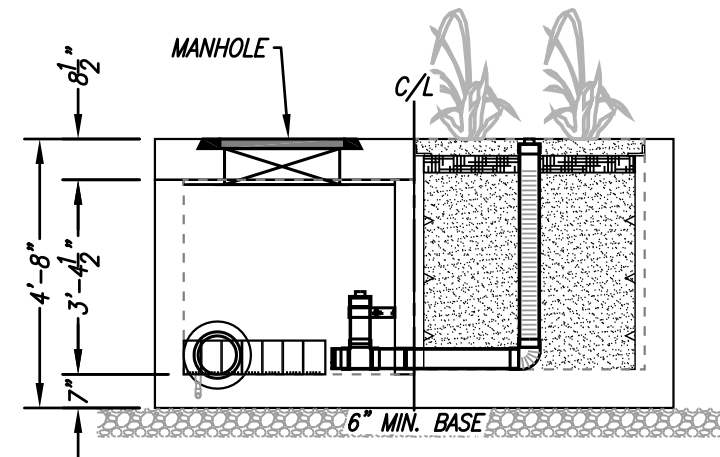
PLAN VIEW



LEFT END VIEW

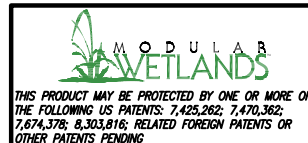


ELEVATION VIEW



RIGHT END VIEW

TREATMENT FLOW (CFS)	0.231
OPERATING HEAD (FT)	3.4
PRETREATMENT LOADING RATE (GPM/SF)	2.0
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0



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MWS-L-8-8-C
STORMWATER BIOFILTRATION SYSTEM
STANDARD DETAIL

Appendix 7: Hydromodification

Supporting Detail Relating to Hydrologic Conditions of Concern

Existing Condition Unit Hydrograph (2-year, 24-hour)

EXUH242

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
Study date 10/18/22 File: EXUH242.out

+++++

Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 4010

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

21-0035 - Capstone Ethanac
Onsite Unit Hydrograph Analysis
Existing Condition, 2-Year 24-Hour
FN: EXUH242.out - ABE

Drainage Area = 36.80(Ac.) = 0.057 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 36.80(Ac.) = 0.057 Sq. Mi.
Length along longest watercourse = 1320.00(Ft.)
Length along longest watercourse measured to centroid = 640.00(Ft.)
Length along longest watercourse = 0.250 Mi.
Length along longest watercourse measured to centroid = 0.121 Mi.
Difference in elevation = 25.00(Ft.)
Slope along watercourse = 100.0000 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.079 Hr.
Lag time = 4.77 Min.
25% of lag time = 1.19 Min.
40% of lag time = 1.91 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
36.80	1.90	69.92

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
36.80	4.75	174.80

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 1.900(In)
Area Averaged 100-Year Rainfall = 4.750(In)

Point rain (area averaged) = 1.900(In)
Areal adjustment factor = 99.99 %

Adjusted average point rain = 1.900(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
28.200	86.00	0.000
8.600	89.00	0.000
Total Area Entered = 36.80(Ac.)		

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
86.0	86.0	0.176	0.000	0.176	0.766	0.135
89.0	89.0	0.141	0.000	0.141	0.234	0.033

Sum (F) = 0.168

Area averaged mean soil loss (F) (In/Hr) = 0.168

Minimum soil loss rate ((In/Hr)) = 0.084

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.900

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)
1	0.083	104.839	20.680
2	0.167	209.677	48.689
3	0.250	314.516	14.948
4	0.333	419.355	6.810
5	0.417	524.193	3.794
6	0.500	629.032	2.428
7	0.583	733.871	1.456
8	0.667	838.709	1.194
Sum = 100.000			Sum= 37.088

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr)		Effective (In/Hr)
			Max	Low	
1	0.08	0.07	0.015	(0.297)	0.014
2	0.17	0.07	0.015	(0.296)	0.014
3	0.25	0.07	0.015	(0.295)	0.014
4	0.33	0.10	0.023	(0.294)	0.021
5	0.42	0.10	0.023	(0.293)	0.021
6	0.50	0.10	0.023	(0.291)	0.021
7	0.58	0.10	0.023	(0.290)	0.021
8	0.67	0.10	0.023	(0.289)	0.021
9	0.75	0.10	0.023	(0.288)	0.021
10	0.83	0.13	0.030	(0.287)	0.027
11	0.92	0.13	0.030	(0.286)	0.027
12	1.00	0.13	0.030	(0.285)	0.027
13	1.08	0.10	0.023	(0.283)	0.021
14	1.17	0.10	0.023	(0.282)	0.021
15	1.25	0.10	0.023	(0.281)	0.021
16	1.33	0.10	0.023	(0.280)	0.021
17	1.42	0.10	0.023	(0.279)	0.021
18	1.50	0.10	0.023	(0.278)	0.021
19	1.58	0.10	0.023	(0.277)	0.021
20	1.67	0.10	0.023	(0.276)	0.021
21	1.75	0.10	0.023	(0.275)	0.021

EXUH242

22	1.83	0.13	0.030	(0.273)	0.027	0.003
23	1.92	0.13	0.030	(0.272)	0.027	0.003
24	2.00	0.13	0.030	(0.271)	0.027	0.003
25	2.08	0.13	0.030	(0.270)	0.027	0.003
26	2.17	0.13	0.030	(0.269)	0.027	0.003
27	2.25	0.13	0.030	(0.268)	0.027	0.003
28	2.33	0.13	0.030	(0.267)	0.027	0.003
29	2.42	0.13	0.030	(0.266)	0.027	0.003
30	2.50	0.13	0.030	(0.265)	0.027	0.003
31	2.58	0.17	0.038	(0.264)	0.034	0.004
32	2.67	0.17	0.038	(0.263)	0.034	0.004
33	2.75	0.17	0.038	(0.261)	0.034	0.004
34	2.83	0.17	0.038	(0.260)	0.034	0.004
35	2.92	0.17	0.038	(0.259)	0.034	0.004
36	3.00	0.17	0.038	(0.258)	0.034	0.004
37	3.08	0.17	0.038	(0.257)	0.034	0.004
38	3.17	0.17	0.038	(0.256)	0.034	0.004
39	3.25	0.17	0.038	(0.255)	0.034	0.004
40	3.33	0.17	0.038	(0.254)	0.034	0.004
41	3.42	0.17	0.038	(0.253)	0.034	0.004
42	3.50	0.17	0.038	(0.252)	0.034	0.004
43	3.58	0.17	0.038	(0.251)	0.034	0.004
44	3.67	0.17	0.038	(0.250)	0.034	0.004
45	3.75	0.17	0.038	(0.249)	0.034	0.004
46	3.83	0.20	0.046	(0.248)	0.041	0.005
47	3.92	0.20	0.046	(0.247)	0.041	0.005
48	4.00	0.20	0.046	(0.246)	0.041	0.005
49	4.08	0.20	0.046	(0.245)	0.041	0.005
50	4.17	0.20	0.046	(0.243)	0.041	0.005
51	4.25	0.20	0.046	(0.242)	0.041	0.005
52	4.33	0.23	0.053	(0.241)	0.048	0.005
53	4.42	0.23	0.053	(0.240)	0.048	0.005
54	4.50	0.23	0.053	(0.239)	0.048	0.005
55	4.58	0.23	0.053	(0.238)	0.048	0.005
56	4.67	0.23	0.053	(0.237)	0.048	0.005
57	4.75	0.23	0.053	(0.236)	0.048	0.005
58	4.83	0.27	0.061	(0.235)	0.055	0.006
59	4.92	0.27	0.061	(0.234)	0.055	0.006
60	5.00	0.27	0.061	(0.233)	0.055	0.006
61	5.08	0.20	0.046	(0.232)	0.041	0.005
62	5.17	0.20	0.046	(0.231)	0.041	0.005
63	5.25	0.20	0.046	(0.230)	0.041	0.005
64	5.33	0.23	0.053	(0.229)	0.048	0.005
65	5.42	0.23	0.053	(0.228)	0.048	0.005
66	5.50	0.23	0.053	(0.227)	0.048	0.005
67	5.58	0.27	0.061	(0.226)	0.055	0.006
68	5.67	0.27	0.061	(0.225)	0.055	0.006
69	5.75	0.27	0.061	(0.224)	0.055	0.006
70	5.83	0.27	0.061	(0.223)	0.055	0.006
71	5.92	0.27	0.061	(0.222)	0.055	0.006
72	6.00	0.27	0.061	(0.221)	0.055	0.006
73	6.08	0.30	0.068	(0.220)	0.062	0.007
74	6.17	0.30	0.068	(0.219)	0.062	0.007
75	6.25	0.30	0.068	(0.218)	0.062	0.007
76	6.33	0.30	0.068	(0.217)	0.062	0.007
77	6.42	0.30	0.068	(0.216)	0.062	0.007
78	6.50	0.30	0.068	(0.215)	0.062	0.007
79	6.58	0.33	0.076	(0.214)	0.068	0.008
80	6.67	0.33	0.076	(0.213)	0.068	0.008
81	6.75	0.33	0.076	(0.212)	0.068	0.008
82	6.83	0.33	0.076	(0.212)	0.068	0.008
83	6.92	0.33	0.076	(0.211)	0.068	0.008
84	7.00	0.33	0.076	(0.210)	0.068	0.008
85	7.08	0.33	0.076	(0.209)	0.068	0.008
86	7.17	0.33	0.076	(0.208)	0.068	0.008
87	7.25	0.33	0.076	(0.207)	0.068	0.008

EXUH242

88	7.33	0.37	0.084	(0.206)	0.075	0.008
89	7.42	0.37	0.084	(0.205)	0.075	0.008
90	7.50	0.37	0.084	(0.204)	0.075	0.008
91	7.58	0.40	0.091	(0.203)	0.082	0.009
92	7.67	0.40	0.091	(0.202)	0.082	0.009
93	7.75	0.40	0.091	(0.201)	0.082	0.009
94	7.83	0.43	0.099	(0.200)	0.089	0.010
95	7.92	0.43	0.099	(0.199)	0.089	0.010
96	8.00	0.43	0.099	(0.198)	0.089	0.010
97	8.08	0.50	0.114	(0.197)	0.103	0.011
98	8.17	0.50	0.114	(0.197)	0.103	0.011
99	8.25	0.50	0.114	(0.196)	0.103	0.011
100	8.33	0.50	0.114	(0.195)	0.103	0.011
101	8.42	0.50	0.114	(0.194)	0.103	0.011
102	8.50	0.50	0.114	(0.193)	0.103	0.011
103	8.58	0.53	0.122	(0.192)	0.109	0.012
104	8.67	0.53	0.122	(0.191)	0.109	0.012
105	8.75	0.53	0.122	(0.190)	0.109	0.012
106	8.83	0.57	0.129	(0.189)	0.116	0.013
107	8.92	0.57	0.129	(0.188)	0.116	0.013
108	9.00	0.57	0.129	(0.187)	0.116	0.013
109	9.08	0.63	0.144	(0.187)	0.130	0.014
110	9.17	0.63	0.144	(0.186)	0.130	0.014
111	9.25	0.63	0.144	(0.185)	0.130	0.014
112	9.33	0.67	0.152	(0.184)	0.137	0.015
113	9.42	0.67	0.152	(0.183)	0.137	0.015
114	9.50	0.67	0.152	(0.182)	0.137	0.015
115	9.58	0.70	0.160	(0.181)	0.144	0.016
116	9.67	0.70	0.160	(0.180)	0.144	0.016
117	9.75	0.70	0.160	(0.180)	0.144	0.016
118	9.83	0.73	0.167	(0.179)	0.150	0.017
119	9.92	0.73	0.167	(0.178)	0.150	0.017
120	10.00	0.73	0.167	(0.177)	0.150	0.017
121	10.08	0.50	0.114	(0.176)	0.103	0.011
122	10.17	0.50	0.114	(0.175)	0.103	0.011
123	10.25	0.50	0.114	(0.174)	0.103	0.011
124	10.33	0.50	0.114	(0.174)	0.103	0.011
125	10.42	0.50	0.114	(0.173)	0.103	0.011
126	10.50	0.50	0.114	(0.172)	0.103	0.011
127	10.58	0.67	0.152	(0.171)	0.137	0.015
128	10.67	0.67	0.152	(0.170)	0.137	0.015
129	10.75	0.67	0.152	(0.169)	0.137	0.015
130	10.83	0.67	0.152	(0.169)	0.137	0.015
131	10.92	0.67	0.152	(0.168)	0.137	0.015
132	11.00	0.67	0.152	(0.167)	0.137	0.015
133	11.08	0.63	0.144	(0.166)	0.130	0.014
134	11.17	0.63	0.144	(0.165)	0.130	0.014
135	11.25	0.63	0.144	(0.164)	0.130	0.014
136	11.33	0.63	0.144	(0.164)	0.130	0.014
137	11.42	0.63	0.144	(0.163)	0.130	0.014
138	11.50	0.63	0.144	(0.162)	0.130	0.014
139	11.58	0.57	0.129	(0.161)	0.116	0.013
140	11.67	0.57	0.129	(0.160)	0.116	0.013
141	11.75	0.57	0.129	(0.160)	0.116	0.013
142	11.83	0.60	0.137	(0.159)	0.123	0.014
143	11.92	0.60	0.137	(0.158)	0.123	0.014
144	12.00	0.60	0.137	(0.157)	0.123	0.014
145	12.08	0.83	0.190	0.156 (0.171)		0.034
146	12.17	0.83	0.190	0.156 (0.171)		0.034
147	12.25	0.83	0.190	0.155 (0.171)		0.035
148	12.33	0.87	0.198	0.154 (0.178)		0.043
149	12.42	0.87	0.198	0.153 (0.178)		0.044
150	12.50	0.87	0.198	0.153 (0.178)		0.045
151	12.58	0.93	0.213	0.152 (0.192)		0.061
152	12.67	0.93	0.213	0.151 (0.192)		0.062
153	12.75	0.93	0.213	0.150 (0.192)		0.063

EXUH242

154	12.83	0.97	0.220	0.150	(0.198)	0.071
155	12.92	0.97	0.220	0.149	(0.198)	0.072
156	13.00	0.97	0.220	0.148	(0.198)	0.072
157	13.08	1.13	0.258	0.147	(0.233)	0.111
158	13.17	1.13	0.258	0.147	(0.233)	0.112
159	13.25	1.13	0.258	0.146	(0.233)	0.113
160	13.33	1.13	0.258	0.145	(0.233)	0.113
161	13.42	1.13	0.258	0.144	(0.233)	0.114
162	13.50	1.13	0.258	0.144	(0.233)	0.115
163	13.58	0.77	0.175	0.143	(0.157)	0.032
164	13.67	0.77	0.175	0.142	(0.157)	0.033
165	13.75	0.77	0.175	0.141	(0.157)	0.033
166	13.83	0.77	0.175	0.141	(0.157)	0.034
167	13.92	0.77	0.175	0.140	(0.157)	0.035
168	14.00	0.77	0.175	0.139	(0.157)	0.036
169	14.08	0.90	0.205	0.139	(0.185)	0.067
170	14.17	0.90	0.205	0.138	(0.185)	0.067
171	14.25	0.90	0.205	0.137	(0.185)	0.068
172	14.33	0.87	0.198	0.136	(0.178)	0.061
173	14.42	0.87	0.198	0.136	(0.178)	0.062
174	14.50	0.87	0.198	0.135	(0.178)	0.063
175	14.58	0.87	0.198	0.134	(0.178)	0.063
176	14.67	0.87	0.198	0.134	(0.178)	0.064
177	14.75	0.87	0.198	0.133	(0.178)	0.065
178	14.83	0.83	0.190	0.132	(0.171)	0.058
179	14.92	0.83	0.190	0.132	(0.171)	0.058
180	15.00	0.83	0.190	0.131	(0.171)	0.059
181	15.08	0.80	0.182	0.130	(0.164)	0.052
182	15.17	0.80	0.182	0.130	(0.164)	0.053
183	15.25	0.80	0.182	0.129	(0.164)	0.053
184	15.33	0.77	0.175	0.128	(0.157)	0.047
185	15.42	0.77	0.175	0.128	(0.157)	0.047
186	15.50	0.77	0.175	0.127	(0.157)	0.048
187	15.58	0.63	0.144	0.126	(0.130)	0.018
188	15.67	0.63	0.144	0.126	(0.130)	0.019
189	15.75	0.63	0.144	0.125	(0.130)	0.019
190	15.83	0.63	0.144	0.124	(0.130)	0.020
191	15.92	0.63	0.144	0.124	(0.130)	0.021
192	16.00	0.63	0.144	0.123	(0.130)	0.021
193	16.08	0.13	0.030	(0.122)	0.027	0.003
194	16.17	0.13	0.030	(0.122)	0.027	0.003
195	16.25	0.13	0.030	(0.121)	0.027	0.003
196	16.33	0.13	0.030	(0.121)	0.027	0.003
197	16.42	0.13	0.030	(0.120)	0.027	0.003
198	16.50	0.13	0.030	(0.119)	0.027	0.003
199	16.58	0.10	0.023	(0.119)	0.021	0.002
200	16.67	0.10	0.023	(0.118)	0.021	0.002
201	16.75	0.10	0.023	(0.118)	0.021	0.002
202	16.83	0.10	0.023	(0.117)	0.021	0.002
203	16.92	0.10	0.023	(0.116)	0.021	0.002
204	17.00	0.10	0.023	(0.116)	0.021	0.002
205	17.08	0.17	0.038	(0.115)	0.034	0.004
206	17.17	0.17	0.038	(0.115)	0.034	0.004
207	17.25	0.17	0.038	(0.114)	0.034	0.004
208	17.33	0.17	0.038	(0.113)	0.034	0.004
209	17.42	0.17	0.038	(0.113)	0.034	0.004
210	17.50	0.17	0.038	(0.112)	0.034	0.004
211	17.58	0.17	0.038	(0.112)	0.034	0.004
212	17.67	0.17	0.038	(0.111)	0.034	0.004
213	17.75	0.17	0.038	(0.111)	0.034	0.004
214	17.83	0.13	0.030	(0.110)	0.027	0.003
215	17.92	0.13	0.030	(0.110)	0.027	0.003
216	18.00	0.13	0.030	(0.109)	0.027	0.003
217	18.08	0.13	0.030	(0.108)	0.027	0.003
218	18.17	0.13	0.030	(0.108)	0.027	0.003
219	18.25	0.13	0.030	(0.107)	0.027	0.003

EXUH242

220	18.33	0.13	0.030	(0.107)	0.027	0.003
221	18.42	0.13	0.030	(0.106)	0.027	0.003
222	18.50	0.13	0.030	(0.106)	0.027	0.003
223	18.58	0.10	0.023	(0.105)	0.021	0.002
224	18.67	0.10	0.023	(0.105)	0.021	0.002
225	18.75	0.10	0.023	(0.104)	0.021	0.002
226	18.83	0.07	0.015	(0.104)	0.014	0.002
227	18.92	0.07	0.015	(0.103)	0.014	0.002
228	19.00	0.07	0.015	(0.103)	0.014	0.002
229	19.08	0.10	0.023	(0.102)	0.021	0.002
230	19.17	0.10	0.023	(0.102)	0.021	0.002
231	19.25	0.10	0.023	(0.101)	0.021	0.002
232	19.33	0.13	0.030	(0.101)	0.027	0.003
233	19.42	0.13	0.030	(0.100)	0.027	0.003
234	19.50	0.13	0.030	(0.100)	0.027	0.003
235	19.58	0.10	0.023	(0.100)	0.021	0.002
236	19.67	0.10	0.023	(0.099)	0.021	0.002
237	19.75	0.10	0.023	(0.099)	0.021	0.002
238	19.83	0.07	0.015	(0.098)	0.014	0.002
239	19.92	0.07	0.015	(0.098)	0.014	0.002
240	20.00	0.07	0.015	(0.097)	0.014	0.002
241	20.08	0.10	0.023	(0.097)	0.021	0.002
242	20.17	0.10	0.023	(0.096)	0.021	0.002
243	20.25	0.10	0.023	(0.096)	0.021	0.002
244	20.33	0.10	0.023	(0.096)	0.021	0.002
245	20.42	0.10	0.023	(0.095)	0.021	0.002
246	20.50	0.10	0.023	(0.095)	0.021	0.002
247	20.58	0.10	0.023	(0.094)	0.021	0.002
248	20.67	0.10	0.023	(0.094)	0.021	0.002
249	20.75	0.10	0.023	(0.094)	0.021	0.002
250	20.83	0.07	0.015	(0.093)	0.014	0.002
251	20.92	0.07	0.015	(0.093)	0.014	0.002
252	21.00	0.07	0.015	(0.093)	0.014	0.002
253	21.08	0.10	0.023	(0.092)	0.021	0.002
254	21.17	0.10	0.023	(0.092)	0.021	0.002
255	21.25	0.10	0.023	(0.091)	0.021	0.002
256	21.33	0.07	0.015	(0.091)	0.014	0.002
257	21.42	0.07	0.015	(0.091)	0.014	0.002
258	21.50	0.07	0.015	(0.090)	0.014	0.002
259	21.58	0.10	0.023	(0.090)	0.021	0.002
260	21.67	0.10	0.023	(0.090)	0.021	0.002
261	21.75	0.10	0.023	(0.089)	0.021	0.002
262	21.83	0.07	0.015	(0.089)	0.014	0.002
263	21.92	0.07	0.015	(0.089)	0.014	0.002
264	22.00	0.07	0.015	(0.088)	0.014	0.002
265	22.08	0.10	0.023	(0.088)	0.021	0.002
266	22.17	0.10	0.023	(0.088)	0.021	0.002
267	22.25	0.10	0.023	(0.088)	0.021	0.002
268	22.33	0.07	0.015	(0.087)	0.014	0.002
269	22.42	0.07	0.015	(0.087)	0.014	0.002
270	22.50	0.07	0.015	(0.087)	0.014	0.002
271	22.58	0.07	0.015	(0.087)	0.014	0.002
272	22.67	0.07	0.015	(0.086)	0.014	0.002
273	22.75	0.07	0.015	(0.086)	0.014	0.002
274	22.83	0.07	0.015	(0.086)	0.014	0.002
275	22.92	0.07	0.015	(0.086)	0.014	0.002
276	23.00	0.07	0.015	(0.085)	0.014	0.002
277	23.08	0.07	0.015	(0.085)	0.014	0.002
278	23.17	0.07	0.015	(0.085)	0.014	0.002
279	23.25	0.07	0.015	(0.085)	0.014	0.002
280	23.33	0.07	0.015	(0.085)	0.014	0.002
281	23.42	0.07	0.015	(0.085)	0.014	0.002
282	23.50	0.07	0.015	(0.084)	0.014	0.002
283	23.58	0.07	0.015	(0.084)	0.014	0.002
284	23.67	0.07	0.015	(0.084)	0.014	0.002
285	23.75	0.07	0.015	(0.084)	0.014	0.002

EXUH242

286	23.83	0.07	0.015	(0.084)	0.014	0.002
287	23.92	0.07	0.015	(0.084)	0.014	0.002
288	24.00	0.07	0.015	(0.084)	0.014	0.002

(Loss Rate Not Used)

Sum =	100.0	Sum =	4.0
Flood volume =	Effective rainfall	0.34(In)	
times area	36.8(Ac.)/[(In)/(Ft.)] =	1.0(Ac.Ft)	
Total soil loss =	1.56(In)		
Total soil loss =	4.796(Ac.Ft)		
Total rainfall =	1.90(In)		
Flood volume =	44887.0 Cubic Feet		
Total soil loss =	208904.4 Cubic Feet		

Peak flow rate of this hydrograph = 4.184(CFS)

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24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0001	0.01	Q				
0+10	0.0003	0.04	Q				
0+15	0.0007	0.05	Q				
0+20	0.0011	0.06	Q				
0+25	0.0016	0.07	Q				
0+30	0.0021	0.08	Q				
0+35	0.0027	0.08	Q				
0+40	0.0033	0.08	Q				
0+45	0.0038	0.08	Q				
0+50	0.0044	0.09	Q				
0+55	0.0052	0.10	Q				
1+ 0	0.0059	0.11	Q				
1+ 5	0.0066	0.10	Q				
1+10	0.0073	0.09	Q				
1+15	0.0079	0.09	Q				
1+20	0.0085	0.09	Q				
1+25	0.0091	0.09	Q				
1+30	0.0096	0.09	Q				
1+35	0.0102	0.08	Q				
1+40	0.0108	0.08	Q				
1+45	0.0114	0.08	Q				
1+50	0.0120	0.09	Q				
1+55	0.0127	0.10	Q				
2+ 0	0.0135	0.11	Q				
2+ 5	0.0142	0.11	Q				
2+10	0.0150	0.11	Q				
2+15	0.0158	0.11	Q				
2+20	0.0166	0.11	Q				
2+25	0.0173	0.11	Q				
2+30	0.0181	0.11	Q				
2+35	0.0189	0.12	Q				
2+40	0.0198	0.13	Q				
2+45	0.0208	0.14	Q				
2+50	0.0217	0.14	Q				
2+55	0.0227	0.14	Q				
3+ 0	0.0237	0.14	Q				
3+ 5	0.0246	0.14	Q				
3+10	0.0256	0.14	Q				
3+15	0.0266	0.14	QV				
3+20	0.0275	0.14	QV				
3+25	0.0285	0.14	QV				
3+30	0.0295	0.14	QV				

3+35	0.0305	0.14	QV
3+40	0.0314	0.14	QV
3+45	0.0324	0.14	QV
3+50	0.0334	0.15	QV
3+55	0.0345	0.16	QV
4+ 0	0.0357	0.16	QV
4+ 5	0.0368	0.17	QV
4+10	0.0380	0.17	QV
4+15	0.0391	0.17	QV
4+20	0.0403	0.17	QV
4+25	0.0416	0.19	QV
4+30	0.0429	0.19	QV
4+35	0.0443	0.19	QV
4+40	0.0456	0.20	QV
4+45	0.0470	0.20	QV
4+50	0.0484	0.20	QV
4+55	0.0499	0.22	QV
5+ 0	0.0514	0.22	QV
5+ 5	0.0529	0.21	Q V
5+10	0.0541	0.19	Q V
5+15	0.0554	0.18	Q V
5+20	0.0566	0.18	Q V
5+25	0.0579	0.19	Q V
5+30	0.0593	0.19	Q V
5+35	0.0606	0.20	Q V
5+40	0.0621	0.22	Q V
5+45	0.0636	0.22	Q V
5+50	0.0652	0.22	Q V
5+55	0.0667	0.22	Q V
6+ 0	0.0683	0.22	Q V
6+ 5	0.0699	0.23	Q V
6+10	0.0716	0.25	Q V
6+15	0.0733	0.25	Q V
6+20	0.0750	0.25	QV
6+25	0.0767	0.25	QV
6+30	0.0785	0.25	Q V
6+35	0.0803	0.26	Q V
6+40	0.0821	0.27	Q V
6+45	0.0841	0.28	Q V
6+50	0.0860	0.28	Q V
6+55	0.0879	0.28	Q V
7+ 0	0.0899	0.28	Q V
7+ 5	0.0918	0.28	Q V
7+10	0.0937	0.28	Q V
7+15	0.0957	0.28	Q V
7+20	0.0977	0.29	Q V
7+25	0.0997	0.30	Q V
7+30	0.1018	0.31	Q V
7+35	0.1040	0.31	Q V
7+40	0.1063	0.33	Q V
7+45	0.1086	0.33	Q V
7+50	0.1109	0.34	Q V
7+55	0.1134	0.36	Q V
8+ 0	0.1159	0.36	Q V
8+ 5	0.1184	0.38	Q V
8+10	0.1212	0.40	Q V
8+15	0.1241	0.41	Q V
8+20	0.1269	0.42	Q V
8+25	0.1298	0.42	Q V
8+30	0.1327	0.42	Q V
8+35	0.1357	0.43	Q V
8+40	0.1387	0.44	Q V
8+45	0.1418	0.45	Q V
8+50	0.1449	0.45	Q V
8+55	0.1482	0.47	Q V
9+ 0	0.1514	0.47	Q V

9+ 5	0.1548	0.49	Q	V				
9+10	0.1584	0.52	Q	V				
9+15	0.1620	0.53	Q	V				
9+20	0.1657	0.54	Q	V				
9+25	0.1695	0.55	Q	V				
9+30	0.1733	0.56	Q	V				
9+35	0.1772	0.57	Q	V				
9+40	0.1812	0.58	Q	V				
9+45	0.1853	0.59	Q	V				
9+50	0.1894	0.60	Q	V				
9+55	0.1936	0.61	Q	V				
10+ 0	0.1978	0.62	Q	V				
10+ 5	0.2018	0.58	Q	V				
10+10	0.2051	0.48	Q	V				
10+15	0.2082	0.45	Q	V				
10+20	0.2113	0.44	Q	V				
10+25	0.2143	0.43	Q	V				
10+30	0.2172	0.43	Q	V				
10+35	0.2203	0.45	Q	V				
10+40	0.2239	0.52	Q	V				
10+45	0.2277	0.54	Q	V				
10+50	0.2314	0.55	Q	V				
10+55	0.2353	0.56	Q	V				
11+ 0	0.2391	0.56	Q	V				
11+ 5	0.2430	0.56	Q	V				
11+10	0.2467	0.54	Q	V				
11+15	0.2504	0.54	Q	V				
11+20	0.2542	0.54	Q	V				
11+25	0.2579	0.54	Q	V				
11+30	0.2615	0.54	Q	V				
11+35	0.2652	0.52	Q	V				
11+40	0.2686	0.50	Q	V				
11+45	0.2719	0.49	Q	V				
11+50	0.2753	0.49	Q	V				
11+55	0.2788	0.50	Q	V				
12+ 0	0.2823	0.50	Q	V				
12+ 5	0.2868	0.66	Q	V				
12+10	0.2938	1.02	Q	Q	V			
12+15	0.3018	1.15	Q	Q	V			
12+20	0.3106	1.29	Q	Q	V			
12+25	0.3208	1.48	Q	Q	V			
12+30	0.3316	1.57	Q	Q	V			
12+35	0.3436	1.74	Q	Q	V			
12+40	0.3578	2.06	Q	Q	V			
12+45	0.3729	2.18	Q	Q	V			
12+50	0.3888	2.31	Q	Q	V			
12+55	0.4060	2.50	Q	Q	V			
13+ 0	0.4238	2.59	Q	Q	V			
13+ 5	0.4440	2.93	Q	Q	V			
13+10	0.4693	3.66	Q	Q	V			
13+15	0.4962	3.91	Q	Q	V			
13+20	0.5240	4.04	Q	Q	V			
13+25	0.5524	4.12	Q	Q	V			
13+30	0.5812	4.18	Q	Q	V			
13+35	0.6059	3.59	Q	Q	V			
13+40	0.6206	2.12	Q	Q	V			
13+45	0.6322	1.69	Q	Q	V			
13+50	0.6425	1.50	Q	Q	V			
13+55	0.6523	1.41	Q	Q	V			
14+ 0	0.6617	1.36	Q	Q	V			
14+ 5	0.6725	1.58	Q	Q	V			
14+10	0.6871	2.12	Q	Q	V			
14+15	0.7030	2.31	Q	Q	V			
14+20	0.7193	2.36	Q	Q	V			
14+25	0.7350	2.29	Q	Q	V			
14+30	0.7509	2.30	Q	Q	V			

14+35	0.7668	2.32		Q		V	
14+40	0.7830	2.35		Q		V	
14+45	0.7994	2.37		Q		V	
14+50	0.8154	2.33		Q		V	
14+55	0.8307	2.22		Q		V	
15+ 0	0.8458	2.20		Q		V	
15+ 5	0.8606	2.15		Q		V	
15+10	0.8746	2.02		Q		V	
15+15	0.8884	2.00		Q		V	
15+20	0.9018	1.94		Q		V	
15+25	0.9143	1.82		Q		V	
15+30	0.9266	1.79		Q		V	
15+35	0.9374	1.56		Q		V	
15+40	0.9444	1.02		Q		V	
15+45	0.9504	0.87		Q		V	
15+50	0.9560	0.81		Q		V	
15+55	0.9614	0.79		Q		V	
16+ 0	0.9668	0.79		Q		V	
16+ 5	0.9713	0.65		Q		V	
16+10	0.9735	0.31		Q		V	
16+15	0.9749	0.21		Q		V	
16+20	0.9761	0.17		Q		V	
16+25	0.9771	0.15		Q		V	
16+30	0.9780	0.13		Q		V	
16+35	0.9788	0.12		Q		V	
16+40	0.9795	0.09		Q		V	
16+45	0.9801	0.09		Q		V	
16+50	0.9807	0.09		Q		V	
16+55	0.9813	0.09		Q		V	
17+ 0	0.9818	0.09		Q		V	
17+ 5	0.9825	0.10		Q		V	
17+10	0.9834	0.12		Q		V	
17+15	0.9843	0.13		Q		V	
17+20	0.9852	0.14		Q		V	
17+25	0.9862	0.14		Q		V	
17+30	0.9871	0.14		Q		V	
17+35	0.9881	0.14		Q		V	
17+40	0.9891	0.14		Q		V	
17+45	0.9900	0.14		Q		V	
17+50	0.9910	0.14		Q		V	
17+55	0.9918	0.12		Q		V	
18+ 0	0.9926	0.12		Q		V	
18+ 5	0.9934	0.12		Q		V	
18+10	0.9942	0.11		Q		V	
18+15	0.9950	0.11		Q		V	
18+20	0.9958	0.11		Q		V	
18+25	0.9965	0.11		Q		V	
18+30	0.9973	0.11		Q		V	
18+35	0.9980	0.11		Q		V	
18+40	0.9987	0.09		Q		V	
18+45	0.9993	0.09		Q		V	
18+50	0.9999	0.08		Q		V	
18+55	1.0003	0.07		Q		V	
19+ 0	1.0007	0.06		Q		V	
19+ 5	1.0012	0.07		Q		V	
19+10	1.0017	0.08		Q		V	
19+15	1.0023	0.08		Q		V	
19+20	1.0029	0.09		Q		V	
19+25	1.0036	0.10		Q		V	
19+30	1.0043	0.11		Q		V	
19+35	1.0051	0.10		Q		V	
19+40	1.0057	0.09		Q		V	
19+45	1.0063	0.09		Q		V	
19+50	1.0068	0.08		Q		V	
19+55	1.0073	0.07		Q		V	
20+ 0	1.0077	0.06		Q		V	

EXUH242

20+ 5	1.0082	0.07	Q				V
20+10	1.0087	0.08	Q				V
20+15	1.0093	0.08	Q				V
20+20	1.0098	0.08	Q				V
20+25	1.0104	0.08	Q				V
20+30	1.0110	0.08	Q				V
20+35	1.0116	0.08	Q				V
20+40	1.0121	0.08	Q				V
20+45	1.0127	0.08	Q				V
20+50	1.0133	0.08	Q				V
20+55	1.0137	0.07	Q				V
21+ 0	1.0141	0.06	Q				V
21+ 5	1.0146	0.06	Q				V
21+10	1.0151	0.08	Q				V
21+15	1.0157	0.08	Q				V
21+20	1.0162	0.08	Q				V
21+25	1.0166	0.06	Q				V
21+30	1.0171	0.06	Q				V
21+35	1.0175	0.06	Q				V
21+40	1.0180	0.08	Q				V
21+45	1.0186	0.08	Q				V
21+50	1.0191	0.08	Q				V
21+55	1.0196	0.06	Q				V
22+ 0	1.0200	0.06	Q				V
22+ 5	1.0204	0.06	Q				V
22+10	1.0209	0.08	Q				V
22+15	1.0215	0.08	Q				V
22+20	1.0220	0.08	Q				V
22+25	1.0225	0.06	Q				V
22+30	1.0229	0.06	Q				V
22+35	1.0233	0.06	Q				V
22+40	1.0237	0.06	Q				V
22+45	1.0241	0.06	Q				V
22+50	1.0245	0.06	Q				V
22+55	1.0249	0.06	Q				V
23+ 0	1.0252	0.06	Q				V
23+ 5	1.0256	0.06	Q				V
23+10	1.0260	0.06	Q				V
23+15	1.0264	0.06	Q				V
23+20	1.0268	0.06	Q				V
23+25	1.0272	0.06	Q				V
23+30	1.0276	0.06	Q				V
23+35	1.0280	0.06	Q				V
23+40	1.0284	0.06	Q				V
23+45	1.0287	0.06	Q				V
23+50	1.0291	0.06	Q				V
23+55	1.0295	0.06	Q				V
24+ 0	1.0299	0.06	Q				V
24+ 5	1.0302	0.04	Q				V
24+10	1.0303	0.02	Q				V
24+15	1.0304	0.01	Q				V
24+20	1.0304	0.01	Q				V
24+25	1.0304	0.00	Q				V
24+30	1.0305	0.00	Q				V
24+35	1.0305	0.00	Q				V

Proposed Condition Unit Hydrograph (2-year, 24-hour)

Unit Hydrograph Analysis

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2008, Version 8.1
Study date 10/18/22 File: PRUH242.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

Program License Serial Number 4010

English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

21-0035 - Capstone Ethanac
Onsite Unit Hydrograph Analysis
Proposed Condition, 2-Year 24-Hour
FN: PRUH242.out - ABE

Drainage Area = 36.80(Ac.) = 0.057 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 36.80(Ac.) = 0.057 Sq. Mi.
Length along longest watercourse = 1795.00(Ft.)
Length along longest watercourse measured to centroid = 465.00(Ft.)
Length along longest watercourse = 0.340 Mi.
Length along longest watercourse measured to centroid = 0.088 Mi.
Difference in elevation = 24.00(Ft.)
Slope along watercourse = 70.5961 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.042 Hr.
Lag time = 2.54 Min.
25% of lag time = 0.63 Min.
40% of lag time = 1.01 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
36.80	1.90	69.92

100 YEAR Area rainfall data:

Area(Ac.)[1]	Rainfall(In)[2]	Weighting[1*2]
36.80	4.75	174.80

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 1.900(In)
Area Averaged 100-Year Rainfall = 4.750(In)

Point rain (area averaged) = 1.900(In)
Areal adjustment factor = 99.99 %

Adjusted average point rain = 1.900(In)

Sub-Area Data:

Area(Ac.)	Runoff Index	Impervious %
28.200	69.00	0.900
8.600	75.00	0.900
Total Area Entered = 36.80(Ac.)		

RI	RI	Infil. Rate	Impervious	Adj. Infil. Rate	Area%	F
AMC2	AMC-2	(In/Hr)	(Dec.%)	(In/Hr)	(Dec.)	(In/Hr)
69.0	69.0	0.373	0.900	0.071	0.766	0.054
75.0	75.0	0.303	0.900	0.058	0.234	0.013

Sum (F) = 0.068

Area averaged mean soil loss (F) (In/Hr) = 0.068

Minimum soil loss rate ((In/Hr)) = 0.034

(for 24 hour storm duration)

Soil low loss rate (decimal) = 0.180

Unit Hydrograph
VALLEY S-Curve

Unit Hydrograph Data

Unit time period (hrs)	Time % of lag	Distribution Graph %	Unit Hydrograph (CFS)	
1	0.083	197.156	42.905	15.912
2	0.167	394.312	43.567	16.158
3	0.250	591.468	8.911	3.305
4	0.333	788.624	3.482	1.291
5	0.417	985.779	1.135	0.421
Sum = 100.000			Sum=	37.087

The following loss rate calculations reflect use of the minimum calculated loss rate subtracted from the Storm Rain to produce the maximum Effective Rain value

Unit Time (Hr.)	Pattern Percent	Storm Rain (In/Hr)	Loss rate(In./Hr) Max Low	Effective (In/Hr)
1	0.08	0.07	(0.120) 0.003	0.012
2	0.17	0.07	(0.120) 0.003	0.012
3	0.25	0.07	(0.119) 0.003	0.012
4	0.33	0.10	(0.119) 0.004	0.019
5	0.42	0.10	(0.118) 0.004	0.019
6	0.50	0.10	(0.118) 0.004	0.019
7	0.58	0.10	(0.117) 0.004	0.019
8	0.67	0.10	(0.117) 0.004	0.019
9	0.75	0.10	(0.116) 0.004	0.019
10	0.83	0.13	(0.116) 0.005	0.025
11	0.92	0.13	(0.115) 0.005	0.025
12	1.00	0.13	(0.115) 0.005	0.025
13	1.08	0.10	(0.115) 0.004	0.019
14	1.17	0.10	(0.114) 0.004	0.019
15	1.25	0.10	(0.114) 0.004	0.019
16	1.33	0.10	(0.113) 0.004	0.019
17	1.42	0.10	(0.113) 0.004	0.019
18	1.50	0.10	(0.112) 0.004	0.019
19	1.58	0.10	(0.112) 0.004	0.019
20	1.67	0.10	(0.111) 0.004	0.019
21	1.75	0.10	(0.111) 0.004	0.019
22	1.83	0.13	(0.111) 0.005	0.025
23	1.92	0.13	(0.110) 0.005	0.025
24	2.00	0.13	(0.110) 0.005	0.025

PRUH242

25	2.08	0.13	0.030	(0.109)	0.005	0.025
26	2.17	0.13	0.030	(0.109)	0.005	0.025
27	2.25	0.13	0.030	(0.108)	0.005	0.025
28	2.33	0.13	0.030	(0.108)	0.005	0.025
29	2.42	0.13	0.030	(0.107)	0.005	0.025
30	2.50	0.13	0.030	(0.107)	0.005	0.025
31	2.58	0.17	0.038	(0.107)	0.007	0.031
32	2.67	0.17	0.038	(0.106)	0.007	0.031
33	2.75	0.17	0.038	(0.106)	0.007	0.031
34	2.83	0.17	0.038	(0.105)	0.007	0.031
35	2.92	0.17	0.038	(0.105)	0.007	0.031
36	3.00	0.17	0.038	(0.104)	0.007	0.031
37	3.08	0.17	0.038	(0.104)	0.007	0.031
38	3.17	0.17	0.038	(0.103)	0.007	0.031
39	3.25	0.17	0.038	(0.103)	0.007	0.031
40	3.33	0.17	0.038	(0.103)	0.007	0.031
41	3.42	0.17	0.038	(0.102)	0.007	0.031
42	3.50	0.17	0.038	(0.102)	0.007	0.031
43	3.58	0.17	0.038	(0.101)	0.007	0.031
44	3.67	0.17	0.038	(0.101)	0.007	0.031
45	3.75	0.17	0.038	(0.101)	0.007	0.031
46	3.83	0.20	0.046	(0.100)	0.008	0.037
47	3.92	0.20	0.046	(0.100)	0.008	0.037
48	4.00	0.20	0.046	(0.099)	0.008	0.037
49	4.08	0.20	0.046	(0.099)	0.008	0.037
50	4.17	0.20	0.046	(0.098)	0.008	0.037
51	4.25	0.20	0.046	(0.098)	0.008	0.037
52	4.33	0.23	0.053	(0.098)	0.010	0.044
53	4.42	0.23	0.053	(0.097)	0.010	0.044
54	4.50	0.23	0.053	(0.097)	0.010	0.044
55	4.58	0.23	0.053	(0.096)	0.010	0.044
56	4.67	0.23	0.053	(0.096)	0.010	0.044
57	4.75	0.23	0.053	(0.095)	0.010	0.044
58	4.83	0.27	0.061	(0.095)	0.011	0.050
59	4.92	0.27	0.061	(0.095)	0.011	0.050
60	5.00	0.27	0.061	(0.094)	0.011	0.050
61	5.08	0.20	0.046	(0.094)	0.008	0.037
62	5.17	0.20	0.046	(0.093)	0.008	0.037
63	5.25	0.20	0.046	(0.093)	0.008	0.037
64	5.33	0.23	0.053	(0.093)	0.010	0.044
65	5.42	0.23	0.053	(0.092)	0.010	0.044
66	5.50	0.23	0.053	(0.092)	0.010	0.044
67	5.58	0.27	0.061	(0.091)	0.011	0.050
68	5.67	0.27	0.061	(0.091)	0.011	0.050
69	5.75	0.27	0.061	(0.091)	0.011	0.050
70	5.83	0.27	0.061	(0.090)	0.011	0.050
71	5.92	0.27	0.061	(0.090)	0.011	0.050
72	6.00	0.27	0.061	(0.089)	0.011	0.050
73	6.08	0.30	0.068	(0.089)	0.012	0.056
74	6.17	0.30	0.068	(0.089)	0.012	0.056
75	6.25	0.30	0.068	(0.088)	0.012	0.056
76	6.33	0.30	0.068	(0.088)	0.012	0.056
77	6.42	0.30	0.068	(0.087)	0.012	0.056
78	6.50	0.30	0.068	(0.087)	0.012	0.056
79	6.58	0.33	0.076	(0.087)	0.014	0.062
80	6.67	0.33	0.076	(0.086)	0.014	0.062
81	6.75	0.33	0.076	(0.086)	0.014	0.062
82	6.83	0.33	0.076	(0.085)	0.014	0.062
83	6.92	0.33	0.076	(0.085)	0.014	0.062
84	7.00	0.33	0.076	(0.085)	0.014	0.062
85	7.08	0.33	0.076	(0.084)	0.014	0.062
86	7.17	0.33	0.076	(0.084)	0.014	0.062
87	7.25	0.33	0.076	(0.084)	0.014	0.062
88	7.33	0.37	0.084	(0.083)	0.015	0.069
89	7.42	0.37	0.084	(0.083)	0.015	0.069
90	7.50	0.37	0.084	(0.082)	0.015	0.069

91	7.58	0.40	0.091	(0.082)	0.016	0.075
92	7.67	0.40	0.091	(0.082)	0.016	0.075
93	7.75	0.40	0.091	(0.081)	0.016	0.075
94	7.83	0.43	0.099	(0.081)	0.018	0.081
95	7.92	0.43	0.099	(0.081)	0.018	0.081
96	8.00	0.43	0.099	(0.080)	0.018	0.081
97	8.08	0.50	0.114	(0.080)	0.021	0.093
98	8.17	0.50	0.114	(0.079)	0.021	0.093
99	8.25	0.50	0.114	(0.079)	0.021	0.093
100	8.33	0.50	0.114	(0.079)	0.021	0.093
101	8.42	0.50	0.114	(0.078)	0.021	0.093
102	8.50	0.50	0.114	(0.078)	0.021	0.093
103	8.58	0.53	0.122	(0.078)	0.022	0.100
104	8.67	0.53	0.122	(0.077)	0.022	0.100
105	8.75	0.53	0.122	(0.077)	0.022	0.100
106	8.83	0.57	0.129	(0.076)	0.023	0.106
107	8.92	0.57	0.129	(0.076)	0.023	0.106
108	9.00	0.57	0.129	(0.076)	0.023	0.106
109	9.08	0.63	0.144	(0.075)	0.026	0.118
110	9.17	0.63	0.144	(0.075)	0.026	0.118
111	9.25	0.63	0.144	(0.075)	0.026	0.118
112	9.33	0.67	0.152	(0.074)	0.027	0.125
113	9.42	0.67	0.152	(0.074)	0.027	0.125
114	9.50	0.67	0.152	(0.074)	0.027	0.125
115	9.58	0.70	0.160	(0.073)	0.029	0.131
116	9.67	0.70	0.160	(0.073)	0.029	0.131
117	9.75	0.70	0.160	(0.073)	0.029	0.131
118	9.83	0.73	0.167	(0.072)	0.030	0.137
119	9.92	0.73	0.167	(0.072)	0.030	0.137
120	10.00	0.73	0.167	(0.072)	0.030	0.137
121	10.08	0.50	0.114	(0.071)	0.021	0.093
122	10.17	0.50	0.114	(0.071)	0.021	0.093
123	10.25	0.50	0.114	(0.070)	0.021	0.093
124	10.33	0.50	0.114	(0.070)	0.021	0.093
125	10.42	0.50	0.114	(0.070)	0.021	0.093
126	10.50	0.50	0.114	(0.069)	0.021	0.093
127	10.58	0.67	0.152	(0.069)	0.027	0.125
128	10.67	0.67	0.152	(0.069)	0.027	0.125
129	10.75	0.67	0.152	(0.068)	0.027	0.125
130	10.83	0.67	0.152	(0.068)	0.027	0.125
131	10.92	0.67	0.152	(0.068)	0.027	0.125
132	11.00	0.67	0.152	(0.067)	0.027	0.125
133	11.08	0.63	0.144	(0.067)	0.026	0.118
134	11.17	0.63	0.144	(0.067)	0.026	0.118
135	11.25	0.63	0.144	(0.066)	0.026	0.118
136	11.33	0.63	0.144	(0.066)	0.026	0.118
137	11.42	0.63	0.144	(0.066)	0.026	0.118
138	11.50	0.63	0.144	(0.065)	0.026	0.118
139	11.58	0.57	0.129	(0.065)	0.023	0.106
140	11.67	0.57	0.129	(0.065)	0.023	0.106
141	11.75	0.57	0.129	(0.065)	0.023	0.106
142	11.83	0.60	0.137	(0.064)	0.025	0.112
143	11.92	0.60	0.137	(0.064)	0.025	0.112
144	12.00	0.60	0.137	(0.064)	0.025	0.112
145	12.08	0.83	0.190	(0.063)	0.034	0.156
146	12.17	0.83	0.190	(0.063)	0.034	0.156
147	12.25	0.83	0.190	(0.063)	0.034	0.156
148	12.33	0.87	0.198	(0.062)	0.036	0.162
149	12.42	0.87	0.198	(0.062)	0.036	0.162
150	12.50	0.87	0.198	(0.062)	0.036	0.162
151	12.58	0.93	0.213	(0.061)	0.038	0.174
152	12.67	0.93	0.213	(0.061)	0.038	0.174
153	12.75	0.93	0.213	(0.061)	0.038	0.174
154	12.83	0.97	0.220	(0.060)	0.040	0.181
155	12.92	0.97	0.220	(0.060)	0.040	0.181
156	13.00	0.97	0.220	(0.060)	0.040	0.181

PRUH242

157	13.08	1.13	0.258	(0.060)	0.047	0.212
158	13.17	1.13	0.258	(0.059)	0.047	0.212
159	13.25	1.13	0.258	(0.059)	0.047	0.212
160	13.33	1.13	0.258	(0.059)	0.047	0.212
161	13.42	1.13	0.258	(0.058)	0.047	0.212
162	13.50	1.13	0.258	(0.058)	0.047	0.212
163	13.58	0.77	0.175	(0.058)	0.031	0.143
164	13.67	0.77	0.175	(0.057)	0.031	0.143
165	13.75	0.77	0.175	(0.057)	0.031	0.143
166	13.83	0.77	0.175	(0.057)	0.031	0.143
167	13.92	0.77	0.175	(0.057)	0.031	0.143
168	14.00	0.77	0.175	(0.056)	0.031	0.143
169	14.08	0.90	0.205	(0.056)	0.037	0.168
170	14.17	0.90	0.205	(0.056)	0.037	0.168
171	14.25	0.90	0.205	(0.055)	0.037	0.168
172	14.33	0.87	0.198	(0.055)	0.036	0.162
173	14.42	0.87	0.198	(0.055)	0.036	0.162
174	14.50	0.87	0.198	(0.055)	0.036	0.162
175	14.58	0.87	0.198	(0.054)	0.036	0.162
176	14.67	0.87	0.198	(0.054)	0.036	0.162
177	14.75	0.87	0.198	(0.054)	0.036	0.162
178	14.83	0.83	0.190	(0.053)	0.034	0.156
179	14.92	0.83	0.190	(0.053)	0.034	0.156
180	15.00	0.83	0.190	(0.053)	0.034	0.156
181	15.08	0.80	0.182	(0.053)	0.033	0.150
182	15.17	0.80	0.182	(0.052)	0.033	0.150
183	15.25	0.80	0.182	(0.052)	0.033	0.150
184	15.33	0.77	0.175	(0.052)	0.031	0.143
185	15.42	0.77	0.175	(0.052)	0.031	0.143
186	15.50	0.77	0.175	(0.051)	0.031	0.143
187	15.58	0.63	0.144	(0.051)	0.026	0.118
188	15.67	0.63	0.144	(0.051)	0.026	0.118
189	15.75	0.63	0.144	(0.051)	0.026	0.118
190	15.83	0.63	0.144	(0.050)	0.026	0.118
191	15.92	0.63	0.144	(0.050)	0.026	0.118
192	16.00	0.63	0.144	(0.050)	0.026	0.118
193	16.08	0.13	0.030	(0.049)	0.005	0.025
194	16.17	0.13	0.030	(0.049)	0.005	0.025
195	16.25	0.13	0.030	(0.049)	0.005	0.025
196	16.33	0.13	0.030	(0.049)	0.005	0.025
197	16.42	0.13	0.030	(0.048)	0.005	0.025
198	16.50	0.13	0.030	(0.048)	0.005	0.025
199	16.58	0.10	0.023	(0.048)	0.004	0.019
200	16.67	0.10	0.023	(0.048)	0.004	0.019
201	16.75	0.10	0.023	(0.048)	0.004	0.019
202	16.83	0.10	0.023	(0.047)	0.004	0.019
203	16.92	0.10	0.023	(0.047)	0.004	0.019
204	17.00	0.10	0.023	(0.047)	0.004	0.019
205	17.08	0.17	0.038	(0.047)	0.007	0.031
206	17.17	0.17	0.038	(0.046)	0.007	0.031
207	17.25	0.17	0.038	(0.046)	0.007	0.031
208	17.33	0.17	0.038	(0.046)	0.007	0.031
209	17.42	0.17	0.038	(0.046)	0.007	0.031
210	17.50	0.17	0.038	(0.045)	0.007	0.031
211	17.58	0.17	0.038	(0.045)	0.007	0.031
212	17.67	0.17	0.038	(0.045)	0.007	0.031
213	17.75	0.17	0.038	(0.045)	0.007	0.031
214	17.83	0.13	0.030	(0.044)	0.005	0.025
215	17.92	0.13	0.030	(0.044)	0.005	0.025
216	18.00	0.13	0.030	(0.044)	0.005	0.025
217	18.08	0.13	0.030	(0.044)	0.005	0.025
218	18.17	0.13	0.030	(0.044)	0.005	0.025
219	18.25	0.13	0.030	(0.043)	0.005	0.025
220	18.33	0.13	0.030	(0.043)	0.005	0.025
221	18.42	0.13	0.030	(0.043)	0.005	0.025
222	18.50	0.13	0.030	(0.043)	0.005	0.025

PRUH242

223	18.58	0.10	0.023	(0.043)	0.004	0.019
224	18.67	0.10	0.023	(0.042)	0.004	0.019
225	18.75	0.10	0.023	(0.042)	0.004	0.019
226	18.83	0.07	0.015	(0.042)	0.003	0.012
227	18.92	0.07	0.015	(0.042)	0.003	0.012
228	19.00	0.07	0.015	(0.042)	0.003	0.012
229	19.08	0.10	0.023	(0.041)	0.004	0.019
230	19.17	0.10	0.023	(0.041)	0.004	0.019
231	19.25	0.10	0.023	(0.041)	0.004	0.019
232	19.33	0.13	0.030	(0.041)	0.005	0.025
233	19.42	0.13	0.030	(0.041)	0.005	0.025
234	19.50	0.13	0.030	(0.040)	0.005	0.025
235	19.58	0.10	0.023	(0.040)	0.004	0.019
236	19.67	0.10	0.023	(0.040)	0.004	0.019
237	19.75	0.10	0.023	(0.040)	0.004	0.019
238	19.83	0.07	0.015	(0.040)	0.003	0.012
239	19.92	0.07	0.015	(0.040)	0.003	0.012
240	20.00	0.07	0.015	(0.039)	0.003	0.012
241	20.08	0.10	0.023	(0.039)	0.004	0.019
242	20.17	0.10	0.023	(0.039)	0.004	0.019
243	20.25	0.10	0.023	(0.039)	0.004	0.019
244	20.33	0.10	0.023	(0.039)	0.004	0.019
245	20.42	0.10	0.023	(0.038)	0.004	0.019
246	20.50	0.10	0.023	(0.038)	0.004	0.019
247	20.58	0.10	0.023	(0.038)	0.004	0.019
248	20.67	0.10	0.023	(0.038)	0.004	0.019
249	20.75	0.10	0.023	(0.038)	0.004	0.019
250	20.83	0.07	0.015	(0.038)	0.003	0.012
251	20.92	0.07	0.015	(0.038)	0.003	0.012
252	21.00	0.07	0.015	(0.037)	0.003	0.012
253	21.08	0.10	0.023	(0.037)	0.004	0.019
254	21.17	0.10	0.023	(0.037)	0.004	0.019
255	21.25	0.10	0.023	(0.037)	0.004	0.019
256	21.33	0.07	0.015	(0.037)	0.003	0.012
257	21.42	0.07	0.015	(0.037)	0.003	0.012
258	21.50	0.07	0.015	(0.037)	0.003	0.012
259	21.58	0.10	0.023	(0.036)	0.004	0.019
260	21.67	0.10	0.023	(0.036)	0.004	0.019
261	21.75	0.10	0.023	(0.036)	0.004	0.019
262	21.83	0.07	0.015	(0.036)	0.003	0.012
263	21.92	0.07	0.015	(0.036)	0.003	0.012
264	22.00	0.07	0.015	(0.036)	0.003	0.012
265	22.08	0.10	0.023	(0.036)	0.004	0.019
266	22.17	0.10	0.023	(0.036)	0.004	0.019
267	22.25	0.10	0.023	(0.035)	0.004	0.019
268	22.33	0.07	0.015	(0.035)	0.003	0.012
269	22.42	0.07	0.015	(0.035)	0.003	0.012
270	22.50	0.07	0.015	(0.035)	0.003	0.012
271	22.58	0.07	0.015	(0.035)	0.003	0.012
272	22.67	0.07	0.015	(0.035)	0.003	0.012
273	22.75	0.07	0.015	(0.035)	0.003	0.012
274	22.83	0.07	0.015	(0.035)	0.003	0.012
275	22.92	0.07	0.015	(0.035)	0.003	0.012
276	23.00	0.07	0.015	(0.035)	0.003	0.012
277	23.08	0.07	0.015	(0.034)	0.003	0.012
278	23.17	0.07	0.015	(0.034)	0.003	0.012
279	23.25	0.07	0.015	(0.034)	0.003	0.012
280	23.33	0.07	0.015	(0.034)	0.003	0.012
281	23.42	0.07	0.015	(0.034)	0.003	0.012
282	23.50	0.07	0.015	(0.034)	0.003	0.012
283	23.58	0.07	0.015	(0.034)	0.003	0.012
284	23.67	0.07	0.015	(0.034)	0.003	0.012
285	23.75	0.07	0.015	(0.034)	0.003	0.012
286	23.83	0.07	0.015	(0.034)	0.003	0.012
287	23.92	0.07	0.015	(0.034)	0.003	0.012
288	24.00	0.07	0.015	(0.034)	0.003	0.012

(Loss Rate Not Used)

Sum = 100.0 Sum = 18.7
 Flood volume = Effective rainfall 1.56(In)
 times area 36.8(Ac.)/[(In)/(Ft.)] = 4.8(Ac.Ft)
 Total soil loss = 0.34(In)
 Total soil loss = 1.049(Ac.Ft)
 Total rainfall = 1.90(In)
 Flood volume = 208108.9 Cubic Feet
 Total soil loss = 45682.4 Cubic Feet

 Peak flow rate of this hydrograph = 7.862(CFS)

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24 - H O U R S T O R M
 R u n o f f H y d r o g r a p h

 Hydrograph in 5 Minute intervals ((CFS))

Time(h+m)	Volume Ac.Ft	Q(CFS)	0	2.5	5.0	7.5	10.0
0+ 5	0.0014	0.20	Q				
0+10	0.0041	0.40	VQ				
0+15	0.0072	0.44	VQ				
0+20	0.0110	0.56	V Q				
0+25	0.0156	0.66	V Q				
0+30	0.0203	0.68	V Q				
0+35	0.0250	0.69	V Q				
0+40	0.0298	0.69	V Q				
0+45	0.0346	0.69	V Q				
0+50	0.0400	0.79	V Q				
0+55	0.0462	0.89	V Q				
1+ 0	0.0525	0.91	V Q				
1+ 5	0.0582	0.82	V Q				
1+10	0.0631	0.72	V Q				
1+15	0.0680	0.70	V Q				
1+20	0.0728	0.70	V Q				
1+25	0.0776	0.69	V Q				
1+30	0.0823	0.69	V Q				
1+35	0.0871	0.69	V Q				
1+40	0.0919	0.69	V Q				
1+45	0.0967	0.69	V Q				
1+50	0.1021	0.79	V Q				
1+55	0.1083	0.89	V Q				
2+ 0	0.1146	0.91	V Q				
2+ 5	0.1209	0.92	V Q				
2+10	0.1273	0.92	V Q				
2+15	0.1337	0.92	V Q				
2+20	0.1401	0.92	V Q				
2+25	0.1464	0.92	V Q				
2+30	0.1528	0.92	V Q				
2+35	0.1598	1.02	V Q				
2+40	0.1676	1.12	V Q				
2+45	0.1755	1.15	V Q				
2+50	0.1834	1.15	V Q				
2+55	0.1914	1.16	V Q				
3+ 0	0.1994	1.16	V Q				
3+ 5	0.2073	1.16	V Q				
3+10	0.2153	1.16	V Q				
3+15	0.2232	1.16	V Q				
3+20	0.2312	1.16	V Q				
3+25	0.2392	1.16	V Q				
3+30	0.2471	1.16	V Q				
3+35	0.2551	1.16	V Q				
3+40	0.2631	1.16	V Q				
3+45	0.2710	1.16	V Q				

3+50	0.2797	1.26	V	Q					
3+55	0.2890	1.36	V	Q					
4+ 0	0.2985	1.38	V	Q					
4+ 5	0.3080	1.38	V	Q					
4+10	0.3176	1.39	V	Q					
4+15	0.3271	1.39	V	Q					
4+20	0.3374	1.49	V	Q					
4+25	0.3483	1.59	V	Q					
4+30	0.3594	1.61	V	Q					
4+35	0.3705	1.62	V	Q					
4+40	0.3817	1.62	V	Q					
4+45	0.3928	1.62	V	Q					
4+50	0.4046	1.72	V	Q					
4+55	0.4172	1.82	V	Q					
5+ 0	0.4298	1.84	V	Q					
5+ 5	0.4412	1.65	V	Q					
5+10	0.4512	1.45	V	Q					
5+15	0.4609	1.41	V	Q					
5+20	0.4711	1.49	V	Q					
5+25	0.4821	1.59	V	Q					
5+30	0.4931	1.61	V	Q					
5+35	0.5050	1.72	V	Q					
5+40	0.5175	1.82	V	Q					
5+45	0.5301	1.84	V	Q					
5+50	0.5429	1.85	V	Q					
5+55	0.5556	1.85	V	Q					
6+ 0	0.5684	1.85	V	Q					
6+ 5	0.5818	1.95	V	Q					
6+10	0.5959	2.05	V	Q					
6+15	0.6101	2.07	V	Q					
6+20	0.6245	2.08	V	Q					
6+25	0.6388	2.08	V	Q					
6+30	0.6531	2.08	V	Q					
6+35	0.6681	2.18	V	Q					
6+40	0.6839	2.28	V	Q					
6+45	0.6997	2.30	V	Q					
6+50	0.7156	2.31	V	Q					
6+55	0.7315	2.31	V	Q					
7+ 0	0.7475	2.31	V	Q					
7+ 5	0.7634	2.31	V	Q					
7+10	0.7793	2.31	V	Q					
7+15	0.7952	2.31	V	Q					
7+20	0.8118	2.41	V	Q					
7+25	0.8291	2.51	V	Q					
7+30	0.8466	2.53	V	Q					
7+35	0.8648	2.64	V	Q					
7+40	0.8837	2.74	V	Q					
7+45	0.9027	2.76	V	Q					
7+50	0.9225	2.87	V	Q					
7+55	0.9430	2.97	V	Q					
8+ 0	0.9636	3.00	V	Q					
8+ 5	0.9856	3.20	V	Q					
8+10	1.0091	3.41	V	Q					
8+15	1.0328	3.45	V	Q					
8+20	1.0567	3.46	V	Q					
8+25	1.0806	3.47	V	Q					
8+30	1.1045	3.47	V	Q					
8+35	1.1290	3.57	V	Q					
8+40	1.1543	3.67	V	Q					
8+45	1.1797	3.69	V	Q					
8+50	1.2059	3.80	V	Q					
8+55	1.2327	3.90	V	Q					
9+ 0	1.2597	3.92	V	Q					
9+ 5	1.2881	4.13	V	Q					
9+10	1.3180	4.33	V	Q					
9+15	1.3481	4.37	V	Q					

9+20	1.3790	4.49	V	Q			
9+25	1.4106	4.59	V	Q			
9+30	1.4424	4.61	V	Q			
9+35	1.4749	4.72	V	Q			
9+40	1.5081	4.82	V	Q			
9+45	1.5415	4.85	V	Q			
9+50	1.5756	4.95	V	Q			
9+55	1.6104	5.06	V	Q			
10+ 0	1.6454	5.08	V	Q			
10+ 5	1.6756	4.39	V	Q			
10+10	1.7010	3.69		Q			
10+15	1.7254	3.54		Q			
10+20	1.7494	3.49		QV			
10+25	1.7733	3.47		QV			
10+30	1.7972	3.47		QV			
10+35	1.8245	3.96		Q			
10+40	1.8553	4.47		VQ			
10+45	1.8868	4.57		VQ			
10+50	1.9185	4.61		VQ			
10+55	1.9504	4.62		VQ			
11+ 0	1.9822	4.62		VQ			
11+ 5	2.0134	4.53		VQ			
11+10	2.0439	4.42		Q			
11+15	2.0742	4.40		Q			
11+20	2.1045	4.40		Q			
11+25	2.1347	4.39		Q			
11+30	2.1650	4.39		QV			
11+35	2.1939	4.19		QV			
11+40	2.2214	3.99		QV			
11+45	2.2486	3.95		QV			
11+50	2.2764	4.04		QV			
11+55	2.3049	4.13		QV			
12+ 0	2.3334	4.15		QV			
12+ 5	2.3669	4.85		Q			
12+10	2.4052	5.56		VQ			
12+15	2.4445	5.71		VQ			
12+20	2.4848	5.86		VQ			
12+25	2.5260	5.98		VQ			
12+30	2.5674	6.00		VQ			
12+35	2.6101	6.21		VQ			
12+40	2.6543	6.41		VQ			
12+45	2.6987	6.45		VQ			
12+50	2.7440	6.57		VQ			
12+55	2.7899	6.67		VQ			
13+ 0	2.8360	6.70		VQ			
13+ 5	2.8856	7.20		VQ			
13+10	2.9387	7.71		V	Q		
13+15	2.9925	7.81		V	Q		
13+20	3.0465	7.85		V	Q		
13+25	3.1007	7.86		V	Q		
13+30	3.1548	7.86		V	Q		
13+35	3.2014	6.77		VQ			
13+40	3.2404	5.66		Q	V		
13+45	3.2779	5.44		Q	V		
13+50	3.3147	5.35		Q	V		
13+55	3.3513	5.32		Q	V		
14+ 0	3.3880	5.32		Q	V		
14+ 5	3.4273	5.72		Q	V		
14+10	3.4695	6.12		Q	V		
14+15	3.5122	6.20		Q	V		
14+20	3.5544	6.13		Q	V		
14+25	3.5960	6.04		Q	V		
14+30	3.6375	6.02		Q	V		
14+35	3.6789	6.01		Q	V		
14+40	3.7203	6.01		Q	V		
14+45	3.7617	6.01		Q	V		

14+50	3.8025	5.91					Q		V	
14+55	3.8425	5.81					Q		V	
15+ 0	3.8824	5.79					Q		V	
15+ 5	3.9215	5.68					Q		V	
15+10	3.9599	5.58					Q		V	
15+15	3.9982	5.56					Q		V	
15+20	4.0358	5.45					Q		V	
15+25	4.0726	5.35					Q		V	
15+30	4.1093	5.33					Q		V	
15+35	4.1433	4.92					Q		V	
15+40	4.1744	4.52					Q		V	
15+45	4.2049	4.44					Q		V	
15+50	4.2353	4.40					Q		V	
15+55	4.2655	4.39					Q		V	
16+ 0	4.2958	4.39					Q		V	
16+ 5	4.3158	2.91					Q		V	
16+10	4.3254	1.39					Q		V	
16+15	4.3329	1.09					Q		V	
16+20	4.3395	0.96					Q		V	
16+25	4.3459	0.92					Q		V	
16+30	4.3522	0.92					Q		V	
16+35	4.3579	0.83					Q		V	
16+40	4.3629	0.72					Q		V	
16+45	4.3678	0.70					Q		V	
16+50	4.3726	0.70					Q		V	
16+55	4.3773	0.69					Q		V	
17+ 0	4.3821	0.69					Q		V	
17+ 5	4.3883	0.89					Q		V	
17+10	4.3958	1.09					Q		V	
17+15	4.4036	1.13					Q		V	
17+20	4.4115	1.15					Q		V	
17+25	4.4195	1.16					Q		V	
17+30	4.4275	1.16					Q		V	
17+35	4.4354	1.16					Q		V	
17+40	4.4434	1.16					Q		V	
17+45	4.4513	1.16					Q		V	
17+50	4.4586	1.06					Q		V	
17+55	4.4652	0.96					Q		V	
18+ 0	4.4717	0.94					Q		V	
18+ 5	4.4780	0.93					Q		V	
18+10	4.4844	0.92					Q		V	
18+15	4.4908	0.92					Q		V	
18+20	4.4972	0.92					Q		V	
18+25	4.5035	0.92					Q		V	
18+30	4.5099	0.92					Q		V	
18+35	4.5156	0.83					Q		V	
18+40	4.5206	0.72					Q		V	
18+45	4.5254	0.70					Q		V	
18+50	4.5295	0.60					Q		V	
18+55	4.5329	0.49					Q		V	
19+ 0	4.5362	0.47					Q		V	
19+ 5	4.5401	0.56					Q		V	
19+10	4.5446	0.66					Q		V	
19+15	4.5493	0.68					Q		V	
19+20	4.5548	0.79					Q		V	
19+25	4.5609	0.89					Q		V	
19+30	4.5672	0.91					Q		V	
19+35	4.5729	0.82					Q		V	
19+40	4.5779	0.72					Q		V	
19+45	4.5828	0.70					Q		V	
19+50	4.5869	0.60					Q		V	
19+55	4.5903	0.49					Q		V	
20+ 0	4.5935	0.47					Q		V	
20+ 5	4.5974	0.56					Q		V	
20+10	4.6020	0.66					Q		V	
20+15	4.6067	0.68					Q		V	

PRUH242

20+20	4.6114	0.69	Q				V	
20+25	4.6162	0.69	Q				V	
20+30	4.6210	0.69	Q				V	
20+35	4.6258	0.69	Q				V	
20+40	4.6305	0.69	Q				V	
20+45	4.6353	0.69	Q				V	
20+50	4.6394	0.59	Q				V	
20+55	4.6428	0.49	Q				V	
21+ 0	4.6461	0.47	Q				V	
21+ 5	4.6500	0.56	Q				V	
21+10	4.6545	0.66	Q				V	
21+15	4.6592	0.68	Q				V	
21+20	4.6633	0.59	Q				V	
21+25	4.6667	0.49	Q				V	
21+30	4.6700	0.47	Q				V	
21+35	4.6739	0.56	Q				V	
21+40	4.6784	0.66	Q				V	
21+45	4.6831	0.68	Q				V	
21+50	4.6872	0.59	Q				V	
21+55	4.6906	0.49	Q				V	
22+ 0	4.6939	0.47	Q				V	
22+ 5	4.6977	0.56	Q				V	
22+10	4.7023	0.66	Q				V	
22+15	4.7070	0.68	Q				V	
22+20	4.7111	0.59	Q				V	
22+25	4.7145	0.49	Q				V	
22+30	4.7177	0.47	Q				V	
22+35	4.7209	0.47	Q				V	
22+40	4.7241	0.46	Q				V	
22+45	4.7273	0.46	Q				V	
22+50	4.7305	0.46	Q				V	
22+55	4.7337	0.46	Q				V	
23+ 0	4.7369	0.46	Q				V	
23+ 5	4.7401	0.46	Q				V	
23+10	4.7432	0.46	Q				V	
23+15	4.7464	0.46	Q				V	
23+20	4.7496	0.46	Q				V	
23+25	4.7528	0.46	Q				V	
23+30	4.7560	0.46	Q				V	
23+35	4.7592	0.46	Q				V	
23+40	4.7624	0.46	Q				V	
23+45	4.7655	0.46	Q				V	
23+50	4.7687	0.46	Q				V	
23+55	4.7719	0.46	Q				V	
24+ 0	4.7751	0.46	Q				V	
24+ 5	4.7769	0.26	Q				V	
24+10	4.7773	0.06	Q				V	
24+15	4.7775	0.02	Q				V	
24+20	4.7775	0.01	Q				V	

Stage-Storage-Outflow

The project site does not meet the HCOC exemptions in Section F.1, therefore CMP chamber systems with orifice outlets provided will mitigate flows to be within 10% of the pre-development flows for the 2-year, 24-hour storm event to meet the condition C in Section F.2. There are no offsite flows from the perimeter streets entering the project site. Therefore, the proposed CMP chamber and orifice systems will only mitigate onsite flows. The 2-year, 24-hour unit hydrograph was analyzed for the existing and proposed condition to determine the peak flow rates and volumes. For preliminary sizing during this entitlement phase, the difference in existing and proposed volumes was used to size onsite CMP chamber systems. During final engineering, a routing analysis will need to be performed to determine the required orifice outlet sizing and to demonstrate that the proposed CMP chamber system has substantial volume needed to mitigate flows to existing condition flow rate.

Table Hydrologic Conditions of Concern Mitigation Summary

	2 year – 24 hour storm event		
	Existing	Proposed	Difference
Peak Flow Rate (cfs)	4.2	7.9	*
Volume (Cubic Feet)	44,887	208,109	163,222

**More information will be provided in final engineering.*

For design assistance, drawings,
and pricing send completed worksheet to:
dyods@contech-cpi.com



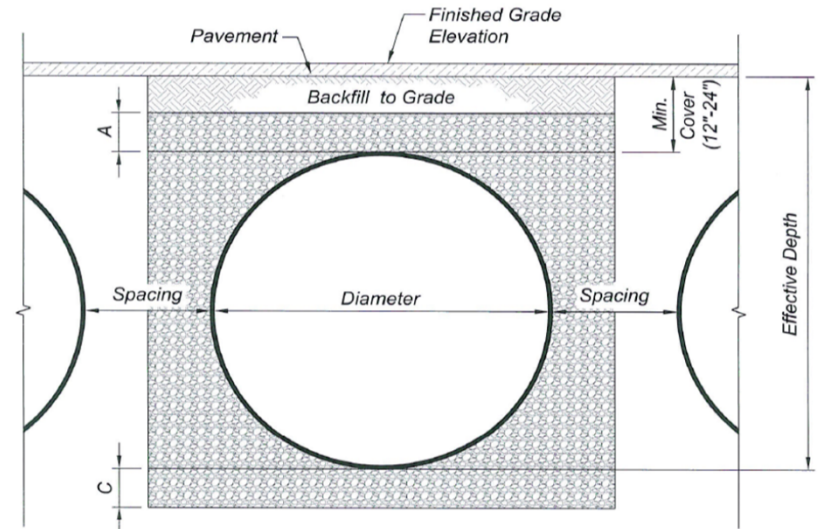
Project Summary

Date:	10/20/2022
Project Name:	Capstone Menifee (Ethanac and Byers)
City / County:	Menifee
State:	CA
Designed By:	ABE
Company:	Albert A. Webb Associates
Telephone:	(951) 686-1070

Enter Information in
Blue Cells

Corrugated Metal Pipe Calculator

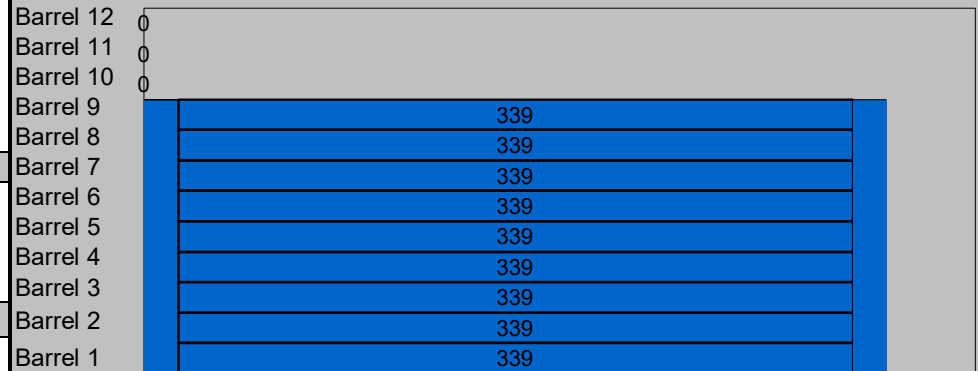
Storage Volume Required (cf):	225,985*	50.27 ft ² Pipe Area
Limiting Width (ft):	100.00	
Invert Depth Below Asphalt (ft):	11.00	
Solid or Perforated Pipe:	Perforated	
Shape Or Diameter (in):	96	
Number Of Headers:	2	
Spacing between Barrels (ft):	3.00	
Stone Width Around Perimeter of System (ft):	2	
Depth A: Porous Stone Above Pipe (in):	6	
Depth C: Porous Stone Below Pipe (in):	6	
Stone Porosity (0 to 40%):	40	



System Sizing

Pipe Storage:	163,011 cf	
Porous Stone Storage:	64,036 cf	
Total Storage Provided:	227,047 cf	100.5% Of Required Storage
Number of Barrels:	9 barrels	
Length per Barrel:	339.0 ft	
Length Per Header:	96.0 ft	
Rectangular Footprint (W x L):	100. ft x 359. ft	

System Layout



Barrel Footage (w/o headers)

CONTECH Materials

Total CMP Footage:	3,243 ft
Approximate Total Pieces:	143 pcs
Approximate Coupling Bands:	150 bands
Approximate Truckloads:	72 trucks

Construction Quantities**

Total Excavation:	14626 cy
Porous Stone Backfill For Storage:	5929 cy stone
Backfill to Grade Excluding Stone:	2659 cy fill

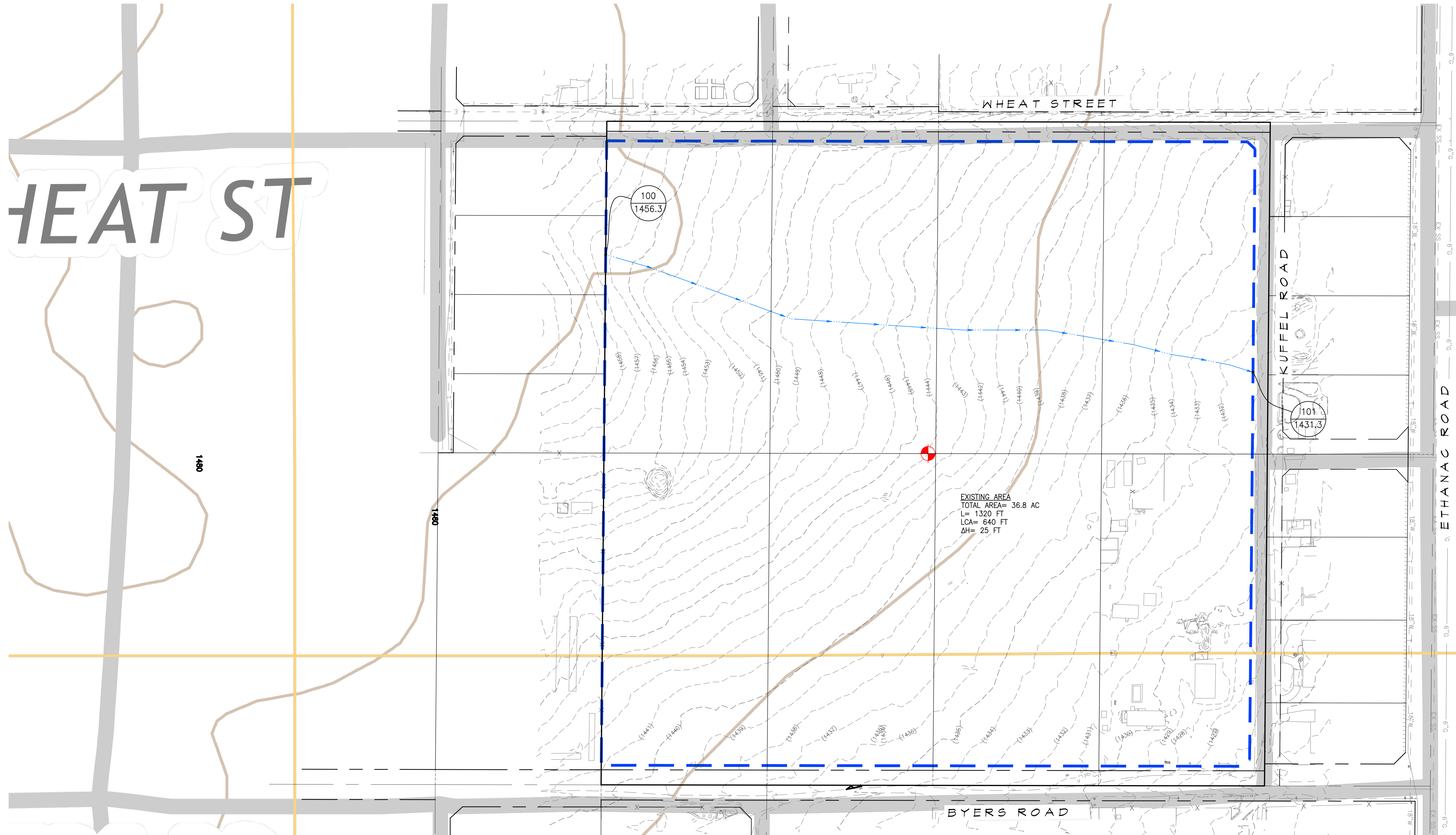
**Construction quantities are approximate and should be verified upon final design

*Please note: STORAGE VOLUME = VBMP + [V(UH,proposed) - V(UH,existing)]
VOLUME = 62763 + 163,222 = 225,985

Basin Routing

To be Included in FWQMP

Unit Hydrograph Hydrology Maps



- LEGEND**
- WATERSHED BOUNDARY
 - WATER COURSE
 - FLOW DIRECTION
 - ###
XXXX.X
NODE
ELEVATION

HEAT ST

WHEAT STREET

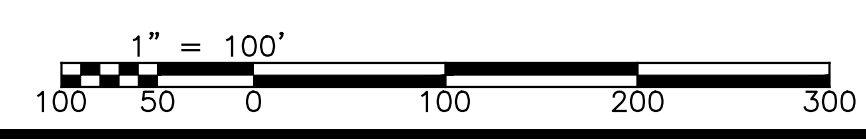
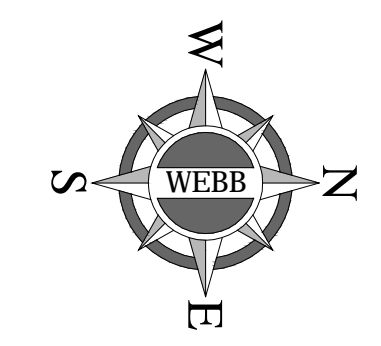
KUFFEL ROAD

ETHNAC ROAD

BYERS ROAD

EXISTING AREA
TOTAL AREA= 36.8 AC
L= 1320 FT
LCA= 640 FT
ΔH= 25 FT

**ONSITE UNIT HYDROGRAPH
UNDEVELOPED CONDITION HYDROLOGY MAP**



ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE, CA. 92506
PH. (951) 686-1070
FAX (951) 788-1256

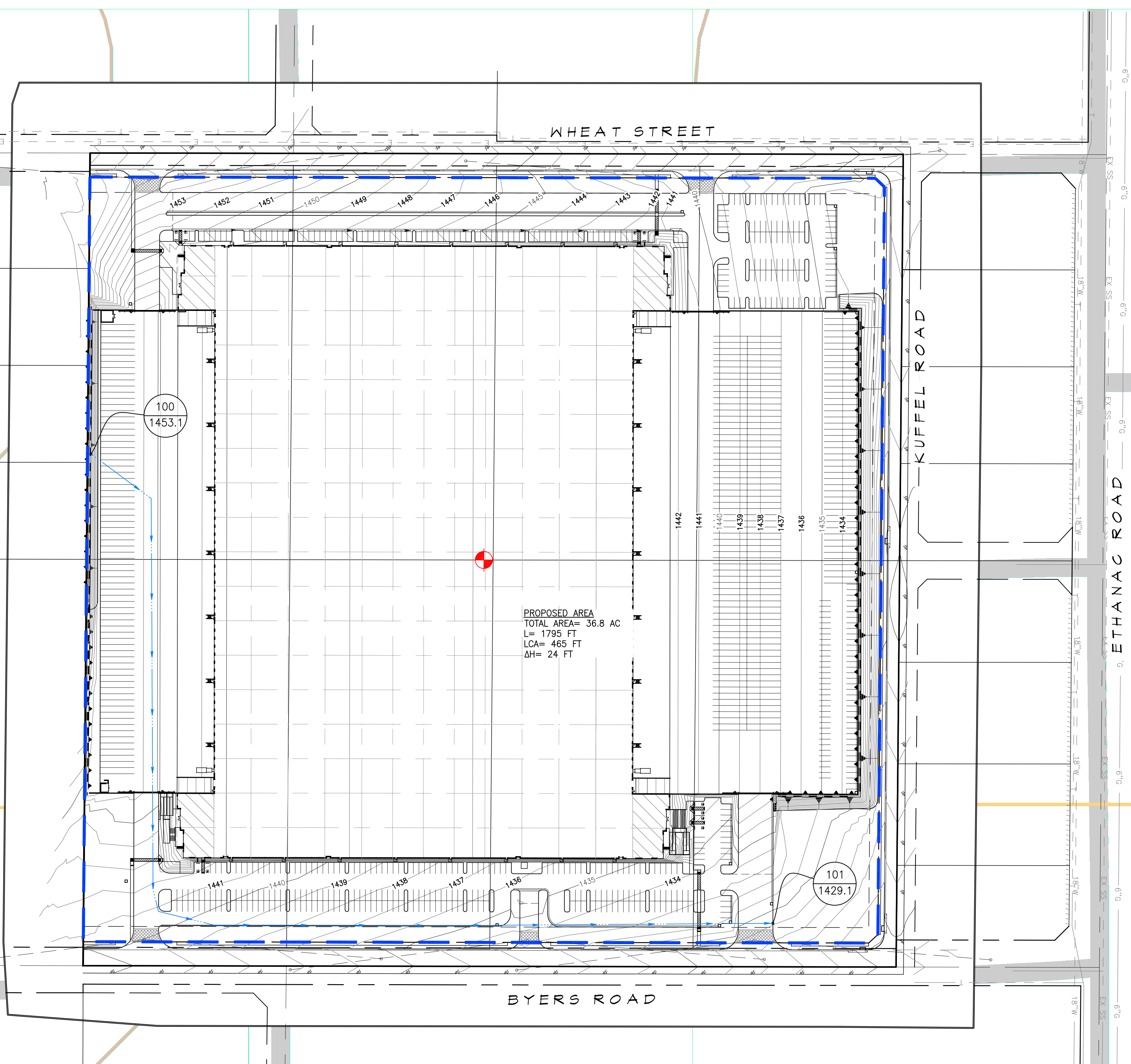
W.O. 2021-0035
SHEET
1
OF 2 SHEETS

PRELIMINARY

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HEAT ST

EDC DD



- LEGEND**
- WATERSHED BOUNDARY
 - WATER COURSE
 - FLOW DIRECTION
 - ###
XXXX.X
NODE ELEVATION

ONSITE UNIT HYDROGRAPH DEVELOPED CONDITION HYDROLOGY MAP

PRELIMINARY

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Appendix 8: Source Control

Pollutant Sources/Source Control Checklist

To be Included in FWQMP

Appendix 9: O&M

Operation and Maintenance Plan and Documentation of Finance, Maintenance and Recording Mechanisms

To be Included in FWQMP

Appendix 10: Educational Materials

BMP Fact Sheets, Maintenance Guidelines and Other End-User BMP Information

To be Included in FWQMP